



# Council Meeting Agenda

Wednesday 26 March 2025

6:00 pm

Maryborough Town Hall, 71 Clarendon Street, Maryborough and livestreamed on the internet.

## Contents

<b>1 Commencement Of Meeting .....</b>	<b>3</b>
<b>2 Apologies .....</b>	<b>3</b>
<b>3 Leave Of Absence.....</b>	<b>3</b>
<b>4. Conflict of Interest.....</b>	<b>3</b>
<b>5 Confirmation Of Minutes From Previous Council Meetings.....</b>	<b>6</b>
<b>6 Minutes Of Delegated And Advisory Committees .....</b>	<b>21</b>
<b>7 Petitions.....</b>	<b>21</b>
<b>8 Officer Reports.....</b>	<b>21</b>
8.1 Corporate Performance .....	21
8.1.1 Chief Executive Officer Employment and Remuneration Policy .....	21
8.2 Infrastructure Assets And Planning .....	30
8.2.1 Carisbrook Flood Management Plan Reference Group Membership .....	30
8.2.2 DO 44- 23 42 Victoria Street Carisbrook .....	38
8.2.3 DO 031-24 39 Clarkes Road Moolort Report.....	54
<b>9 Councillor Reports And General Business .....</b>	<b>399</b>
<b>10 Notices Of Motion .....</b>	<b>399</b>
<b>11 Urgent Business .....</b>	<b>399</b>
<b>12 Confidential Business .....</b>	<b>399</b>



## 1 Commencement of Meeting

Councils must, in the performance of its role, give effect to the overarching governance principles in the Local Government Act 2020.

These are included below to guide Councillor consideration of issues and Council decision making.

- a. Council decisions are to be made, and actions taken in accordance with the relevant law;
- b. priority is to be given to achieving the best outcomes for the municipal community, including future generations;
- c. the economic, social, and environmental sustainability of the municipal district, including mitigation and planning for climate change risks, is to be promoted;
- d. the municipal community is to be engaged in strategic planning and strategic decision making;
- e. innovation and continuous improvement is to be pursued;
- f. collaboration with other Councils and Governments and statutory bodies is to be sought;
- g. the ongoing financial viability of the Council is to be ensured;
- h. regional, state, and national plans and policies are to be taken into account in strategic planning and decision making;
- i. the transparency of Council decisions, actions and information is to be ensured.

## 2 Apologies

Council's Governance Rules require that the minutes of Council meetings record the names of Councillors present and the names of any Councillors who apologised in advance for their non-attendance.

The annual report will list councillor attendance at Council meetings. Councillor attendance at Councillor briefings is also recorded.

## 3 Leave of Absence

One reason that a Councillor ceases to hold the office of Councillor (and that office becomes vacant) is if a Councillor is absent from Council meetings for a period of four consecutive months without leave obtained from the Council. (There are some exceptions to this – see section 35 for more information.)

A Councillor can request a leave of absence. Any reasonable request for leave must be granted. Leave of absence is approved by Council.

Any request will be dealt with in this item which is a standing item on the agenda. The approvals of leave of absence will be noted in the minutes of Council in which it is granted. It will also be noted in the minutes of any Council meeting held during the period of the leave of absence.

## 4 Conflict of Interest

Conflicts of Interest must be disclosed at the commencement of a Council meeting or Councillor briefing, or as soon as a Councillor recognises that they have a conflict of interest.

The relevant provisions in the Local Government Act 2020 include those in Part 6, Division 2 (from section 126). Failing to disclose a conflict of interest and excluding themselves from the decision-making process is an offence.

### Disclosures at Council meetings

Under the Governance Rules:

A Councillor who has a conflict of interest in a matter being considered at a Council meeting at which he or she:

1. is present must disclose that conflict of interest by explaining the nature of the conflict of interest to those present at the Council meeting immediately before the matter is considered; or
2. intends to be present must disclose that conflict of interest by providing to the Chief Executive Officer before the Council meeting commences a written notice:

- 2.1. advising of the conflict of interest;
- 2.2. explaining the nature of the conflict of interest; and
- 2.3. detailing, if the nature of the conflict of interest involves a Councillor’s relationship with or a gift from another person, the:
  - a. name of the other person;
  - b. nature of the relationship with that other person or the date of receipt, value and type of gift received from the other person; and
  - c. nature of that other person’s interest in the matter, and then immediately before the matter is considered at the meeting announcing to those present that he or she has a conflict of interest and that a written notice has been given to the Chief Executive Officer under this sub- Rule.

The Councillor must, in either event, leave the Council meeting immediately after giving the explanation or making the announcement (as the case may be) and not return to the meeting until after the matter has been disposed of.

**Disclosures at councillor briefings (and other meetings)**

Also under the Governance Rules, a Councillor who has a conflict of interest in a matter being considered by a meeting held under the auspices of Council at which he or she is present must:

- 1. disclose that conflict of interest by explaining the nature of the conflict of interest to those present at the meeting immediately before the matter is considered;
- 2. absent himself or herself from any discussion of the matter; and
- 3. as soon as practicable after the meeting concludes provide to the Chief Executive Officer a written notice recording that the disclosure was made and accurately summarising the explanation given to those present at the meeting.

**Councillor form to disclose conflicts of interest**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Meeting type:

- Briefing
- Meeting
- Other \_\_\_\_\_

Nature of the conflict of interest (describe):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If the nature of the conflict of interest involves a Councillor’s relationship with or a gift from another person:

- name of the other person (gift giver): \_\_\_\_\_
- nature of the relationship with that other person or the date of receipt, value and type of gift received from the other person: \_\_\_\_\_
- nature of that other person’s interest in the matter: \_\_\_\_\_

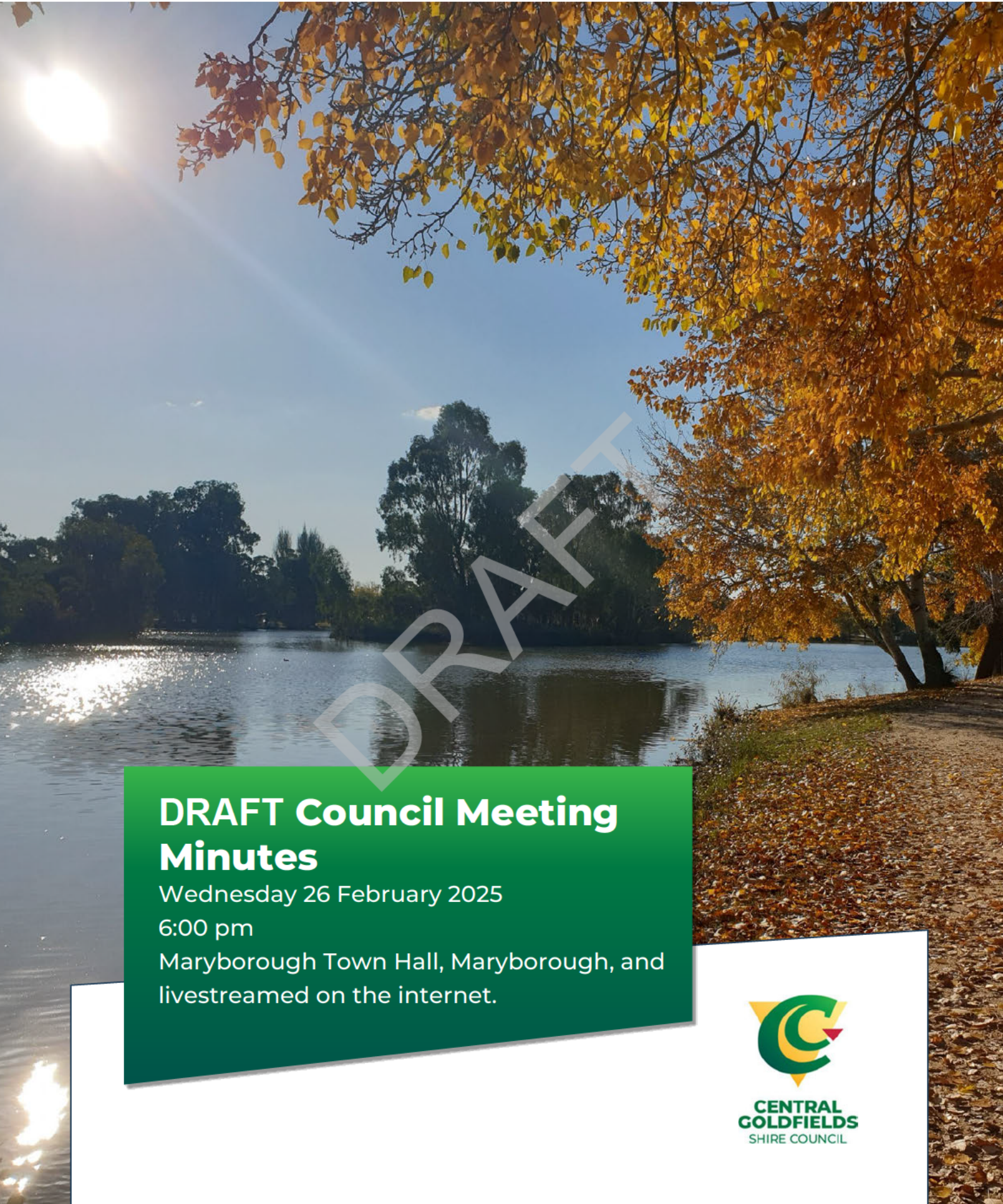


## **5 Confirmation of Minutes from Previous Council Meetings**

### **RECOMMENDATION**

That Council confirm the following Minutes dated 26 February 2025 and Special Council Meeting 12 March 2025 as a true and accurate record of the meeting:

1. 26 February 2025 DRAFT Council Meeting Minutes [**5.1.1**]
2. Special Council Meeting 12 March 2025 DRAFT Council Meeting Minutes [**5.1.2**]



**DRAFT Council Meeting Minutes**  
Wednesday 26 February 2025  
6:00 pm  
Maryborough Town Hall, Maryborough, and  
livestreamed on the internet.





## 1 Commencement of Meeting

### Membership:

#### Councillors:

Grace La Vella (Mayor)  
Ben Green (Deputy Mayor)  
Anna de Villiers  
Geoff Bartlett  
Gerard Murphy  
Jake Meyer  
Liesbeth Long

DRAFT

The Mayor commenced the meeting at 6pm, welcoming all present, with an Acknowledgement of Country and the Council Prayer.

**Present**

**Councillors:**

Grace La Vella (Mayor)  
Ben Green (Deputy Mayor)  
Anna de Villiers  
Geoff Bartlett  
Gerard Murphy  
Jake Meyer  
Liesbeth Long

**Officers:**

Interim Chief Executive Officer Sally Jones  
General Manager Community Wellbeing Emma Little  
General Manager Assets Infrastructure and Planning Amber Ricks  
Acting General Manager Corporate Performance Veronica Hutcheson  
Manager Governance Property and Risk Cecilia Conellan

**Welcome / Mayoral Statement**

**Acknowledgement of Country**

I would like to start the meeting by acknowledging and extending my appreciation for the Dja Dja Wurrung People, the traditional owners of the land we're standing on today. Today we pay our respects to leaders and elders past, present and emerging for they hold the memories, traditions, the culture, and the hopes of all Dja Dja Wurrung People

**Council Prayer**

Almighty God, we ask you to be present in this Council. Direct and guide our deliberations. We ask you to grant us wisdom and sensitivity as we deal with the business of Central Goldfields Shire. May each decision that we make advance the wellbeing of all our residents. This we pray. Amen



**2 Apologies**

Nil

**3 Leave of Absence**

Nil

**4 Conflict of Interest**

Nil

DRAFT

## 5 Confirmation of Minutes from Previous Council Meetings

### MOTION

*That Council confirm the following Minutes dated 17 December 2024 as a true and accurate record of the meeting:*

1. 20241217 Draft Council Meeting Minutes [5.1.1]

Moved: Cr Gerard Murphy

Seconder: Cr Geoff Bartlett

Carried

Councillor(s) who spoke to motion:

## 6 Minutes of Delegated and Advisory Committees

Nil

## 7 Petitions

### 7.1 Petition Response LGBTIQA+ Action Plan

#### SUMMARY/PURPOSE

The purpose of this report is to provide an update in response to a petition presented to Council for consideration at the 17 December 2024 Council Meeting, requesting Central Goldfields Shire Council develop a LGBTIQA+ Action Plan.

### MOTION

That Council:

- 1) accept the submitted petition as prescribed by the Governance Rules
- 2) thank the petitioner submitter and those who signed the petition
- 3) acknowledge the ongoing work that Officers are conducting to implement and deliver the Rainbow Readiness Roadmap.

Moved: Cr Gerard Murphy

Seconder: Cr Anna de Villiers

Carried

Councillor(s) who spoke to motion: Cr Murphy

## 8 Officer Reports

### 8.1 Corporate Performance

#### 8.1.1 Quarterly Finance Report - December 2024

##### SUMMARY/PURPOSE

The purpose of this report is to provide information on the Quarterly Finance Report for December 2024.

##### MOTION

That Council;

1. receives and notes the Quarterly Finance Report December 2024 at Attachment 1 to this report.
2. Note the statement by the Chief Executive Officer that a revised budget will not be required for the 2024-25 financial year.

Moved: Cr Anna de Villiers

Seconder: Deputy Mayor Ben Green

Carried

Councillor(s) who spoke to motion: Cr de Villiers,

#### 8.1.2 Annual Action Plan Quarter 2 Report

##### SUMMARY/PURPOSE

The purpose of this report is to provide Council with an update on the status of the actions identified in the Council Plan Annual Action Plan 2024-2025, for the quarter ending 31 December 2024.

##### MOTION

That Council note the Council Plan Action Plan Quarterly Action Items quarter two.

Moved: Cr Anna de Villiers

Seconder: Cr Gerard Murphy

Carried

Councillor(s) who spoke to motion: Cr de Villiers,

8.1.3 Audit and Risk Committee Charter

**SUMMARY/PURPOSE**

The report presents the updated Audit and Risk Committee Charter to Council, for consideration for adoption.

**MOTION**

That Council adopt the amended Audit and Risk Committee Charter as attached.

Moved: Cr Anna de Villiers

Seconder: Cr Geoff Bartlett

Carried

Councillor(s) who spoke to motion: Cr de Villiers

8.1.4 Governance and Statutory Compliance Frameworks

**SUMMARY/PURPOSE**

The purpose of this report is to recommend the approval of two newly developed frameworks proposed as a part of CGSC governance policies refresh review and seeks endorsement for the documents.

The governance frameworks are a key element of the council's governance and accountability structures that are aimed at enhancing transparency, accountability and operational efficiency while providing leadership to foster integrity and appropriately address misconduct if it occurs.

These frameworks outline the process structures and rules by which Central Goldfields Shire Council implement and manage good governance.

They are instrumental in good decision making and encompass performance, responsible stewardship, ethical behaviour, decision making, leadership, trust, inclusion, accountability, legitimacy, responsiveness, transparency, and fairness.

**MOTION**

That Council:

1. adopt the Governance Framework and;
2. adopt the Statutory Compliance Framework

Moved: Cr Liesbeth Long

Seconder: Cr Jake Meyer

Carried



Councillor(s) who spoke to motion: Cr Long

8.1.5 Councillor and Staff Interaction Policy

**SUMMARY/PURPOSE**

The purpose of this report is to present to Council, the updated Staff and Councillor Interaction Policy Draft for review and adoption.

<p><b>MOTION</b></p> <p>That Council adopt the draft Staff and Councillor Interaction Policy.</p> <p>Moved: Cr Gerard Murphy</p> <p>Seconder: Cr Anna de Villiers</p> <p style="text-align: right;">Carried</p>
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Councillor(s) who spoke to motion: Cr Murphy

Division Results

**For:** Mayor Grace La Vella, Deputy Mayo Ben Green, Cr Anna de Villiers, Cr Gerard Murphy, Cr Jake Meyer and Cr Liesbeth Long

**Against:** Cr Geoff Bartlett

**8.2 Community Wellbeing**

8.2.0 Nil Reports

Nil Reports

**8.3 Office of the CEO**

8.3.0 Nil Reports

Nil Reports

**8.4 Infrastructure Assets and Planning**

8.4.0 Nil Reports

Nil Reports

## 9 Councillor Reports and General Business

### 10 Notices of Motion

#### 10.1 Carisbrook Railway Station

**Councillor:** Cr Anna De Villiers

The following motion was received as a notice of motion in accordance with Central Goldfields Shire Council Governance Rules: S23 *Councillors May Propose Notices of Motion* and S24 *Notice of Motion*.

The Carisbrook Railway Station is a historically significant site with considerable potential for adaptive use.

The goods shed and office building can serve as essential spaces for a community hub that promotes local history, cultural activities, and regional connectivity.

This initiative aligns council priorities to:

- Preserve heritage assets
- Foster community engagement and well-being
- Support tourism and economic development.

The proposed use of these facilities will benefit the community in multiple ways.

#### **RECOMMENDATION**

That Council;

1. requests the CEO investigate the feasibility of a lease agreement with Vic Track, for the Carisbrook Railway Station and;
2. Present a report to Council regarding the intention of repurposing the spaces as a Community Hub, including all associated financial impacts and funding opportunities

### 11 Urgent Business

Nil

### 12 Confidential Business

Nil

### 13 Meeting Closure

The meeting closed at 6:22 pm.



**DRAFT Special Council Meeting Minutes**  
Wednesday 12 March 2025  
6:00 pm  
Community Hub, Burns Street  
Maryborough.





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- d. the municipal community is to be engaged in strategic planning and strategic decision making;
- e. innovation and continuous improvement is to be pursued;
- f. collaboration with other Councils and Governments and statutory bodies is to be sought;
- g. the ongoing financial viability of the Council is to be ensured;
- h. regional, state, and national plans and policies are to be taken into account in strategic planning and decision making;
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## 2 Apologies

Council's Governance Rules require that the minutes of Council meetings record the names of Councillors present and the names of any Councillors who apologised in advance for their non-attendance.

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**The following Councillors were granted Leave of Absence:**

- Cr Anna de Villers

## 4 Conflict of Interest

Conflicts of Interest must be disclosed at the commencement of a Council meeting or Councillor briefing, or as soon as a Councillor recognises that they have a conflict of interest.

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  - b. nature of the relationship with that other person or the date of receipt, value and type of gift received from the other person; and
  - c. nature of that other person's interest in the matter, and then immediately before the matter is considered at the meeting announcing to those present that he or she has a conflict of interest and that a written notice has been given to the Chief Executive Officer under this sub- Rule.

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3. as soon as practicable after the meeting concludes provide to the Chief Executive Officer a written notice recording that the disclosure was made and accurately summarising the explanation given to those present at the meeting.

**Councillor form to disclose conflicts of interest**

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Meeting type:

- Briefing
- Meeting
- Other \_\_\_\_\_

Nature of the conflict of interest (describe):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

If the nature of the conflict of interest involves a Councillor’s relationship with or a gift from another person:

- name of the other person (gift giver): \_\_\_\_\_
- nature of the relationship with that other person or the date of receipt, value and type of gift received from the other person: \_\_\_\_\_
- nature of that other person’s interest in the matter: \_\_\_\_\_

**5 Officer Reports**

**5.1 Infrastructure Assets and Planning**

**5.1.1 Maryborough Olympic Pool Complex State Government Grant Application**

**SUMMARY/PURPOSE**

The purpose of this report is to make a recommendation to Council to support a funding application to the Victorian Governments’ Regional Community Sports Infrastructure Fund (RCSIF), for Stage One of the Maryborough Olympic Outdoor Pool Complex project.

<p><b>MOTION</b></p> <p>That Council:</p> <ol style="list-style-type: none"> <li>1. Supports an application to the Victorian Governments’ Regional Community Sports and Infrastructure Fund for \$3M for the Maryborough Olympic Pool Complex Project Stage One; and</li> <li>2. Approves a co-contribution of \$1.5M, including \$150K in the 2025-26 Annual Budget and \$1.35M in future borrowings in the 2026-27 Annual Budget.</li> </ol> <p>Moved: Cr Anna de Villiers</p> <p>Seconder: Deputy Mayor Ben Green</p> <p style="text-align: right;">Carried</p>
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Special Council Meeting - 12 March 2025 Minutes

Wednesday 12 March 2025

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Councillor(s) who spoke to motion: Cr de Villiers, Cr Bartlett, Cr Green, Cr Long, Cr La Vella

Spoke against motion: Cr Bartlett, Cr Long

Spoke for motion: Cr Green

Right of Reply: Cr de Villiers

## **6 Confidential Business**

Nil

## **7 Meeting Closure**

The meeting closed at 6:18 pm.

DRAFT

## 6 Minutes of Delegated and Advisory Committees

Nil

## 7 Petitions

Nil Petitions Received.

## 8 Officer Reports

### 8.1 Corporate Performance

#### 8.1.1 Chief Executive Officer Employment and Remuneration Policy

**Author:** Manager Governance Property and Risk

**Responsible Officer:** Acting General Manager Corporate Performance

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

### SUMMARY/PURPOSE

The purpose of this report is to recommend the adoption of the Chief Executive Officer Employment and Remuneration Policy

#### RECOMMENDATION

That Council adopt the amended Chief Executive Officer Employment and Remuneration Policy as attachment 1 to this report.

### LEGISLATION AND POLICY CONTEXT

Central Goldfields Shire Council's Council Plan 2021-2025:

The Community's vision: **Leading Change**  
 4. Good planning, governance, and service delivery.  
 4. Transparent decision making.

Initiative: Governance Policy Refresh

### BACKGROUND INFORMATION

Governance policies are critical for guiding the organisation's decision-making, accountability structures, and operational practices.

Regular reviews ensure these policies remain current with:

- Legislative and regulatory changes.
- Best practices within the industry.
- Feedback from stakeholders.

The Local Government Amendment (Governance and Integrity) Act 2020 made a range of changes to the Local Government Act 2020 and introduced a number of new or amended regulations.

It is good governance and recommended that Councils update their policies at the start of each new term.

### REPORT



The Chief Executive Officer Employment and Remuneration Policy has been updated to reflect the changes to the committee structure as adopted at the 26 November 2024 statutory meeting.

In addition to the above changes the amended version of the policy now includes:

- A copy of Local Government Act 2020 section 45 (1) and (2)
- An updated role of committee section
- An updated list of administration support services

### **CONSULTATION/COMMUNICATION**

Updating Governance policies and frameworks is a necessary step to ensure the Council operates effectively, transparently, and in compliance with current standards.

The updates provide a robust framework to meet present and future challenges while reinforcing stakeholder confidence.

### **FINANCIAL& RESOURCE IMPLICATIONS**

There are no financial or resources implications in the adoption of this policy.

### **RISK MANAGEMENT**

This report addresses Council's strategic risk: Governance - Failure to transparently govern and embrace good governance practices by ensuring the Council's decision-making and accountability structure are best practice and align with current legislative and regulatory requirements.

### **CONCLUSION**

Updating governance related policies is a necessary step to ensure the organisation operates effectively, transparently, and in compliance with current standards and legislation.

### **ATTACHMENTS**

1. Chief Executive Officer Employment and Remuneration Policy [8.1.1.1]

# Chief Executive Officer Employment and Remuneration Policy



Directorate:	Corporate Performance
Responsible Manager:	General Manager Corporate Performance
Review Due:	March 2029
Adoption:	Council
Date Adopted:	26 March 2025

## Acknowledgement

Central Goldfields Shire Council acknowledges and extends appreciation for the Dja Dja Wurrung People, the Traditional Owners of the land that we are on.

We pay our respects to leaders and Elders past, present and emerging for they hold the memories, the traditions, the culture, and the hopes of all Dja Dja Wurrung People.

## 1. Purpose

This policy reinforces Council's commitment to good governance practices and provides a consistent, fair and transparent framework for employment matters relating to the Chief Executive Officer (CEO) including recruitment, contract terms, performance monitoring and annual review. This policy is a requirement of the *Local Government Act 2020* and outlines the Council's approach to managing the recruitment and appointment of its CEO.

The Policy ensures compliance with section 45 of the *Local Government Act 2020 (the Act)*.

Section 45(1) of the Act provides that 'a Council must develop, adopt and keep in force a Chief Executive Officer Employment and Remuneration Policy.'

Section 45(2) of the Act provides that 'the Chief Executive Officer Employment and Remuneration Policy must:

- a) provide for the Council to obtain independent professional advice in relation to the matters dealt with in the Chief Executive Officer Employment and Remuneration Policy; and
- b) provide for the following—
  - (i) the recruitment and appointment process;
  - (ii) provisions to be included in the contract of employment;
  - (iii) performance monitoring;
  - (iv) an annual review; and
- c) include any other matters prescribed by the regulations.'

## CHIEF EXECUTIVE OFFICER EMPLOYMENT AND REMUNERATION POLICY

## 2. Scope

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Sections 45 and 46 of the Act contain specific provisions regarding the appointment and functions of the CEO.

## 3. Council Responsibilities

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Under the Act, Council is responsible for:

- Developing, adopting and keeping in force the CEO Employment and Remuneration Policy
- Undertaking the recruitment and appointment of a CEO when a vacancy occurs in the office of CEO
- Appointing an Acting CEO when there is a vacancy in the office of the CEO, including a temporary vacancy.

The Mayor has a responsibility to take a leadership role in ensuring the regular review of the performance of the CEO.<sup>1</sup>

To implement the requirements of the Act, Council will:

- Establish a CEO Employment Matters Advisory Committee (Committee) to oversee the implementation of the Policy
- Appoint an independent member(s) to the Committee to assist with and advise on the implementation of this Policy
- In the case of a vacancy, appoint an Acting CEO for a maximum of 12 months only
- Determine the rate of remuneration of the Independent Member(s) of the Committee
- Consider reports and recommendations from the Committee
- Review this Policy within six (6) months of a Council election

### 3.1. Appointment of Acting CEO

Council must appoint an Acting CEO when there is a vacancy in the office of the CEO, or the CEO is unable to perform their duties for a period exceeding 28 days. The Committee may advise Council on the selection and appointment of an Acting CEO in accordance with this Policy. The appointment of the Acting CEO must be made by a resolution of Council unless the Acting CEO is appointed for a period not exceeding 28 days, in which case the CEO may appoint an Acting CEO under delegation from Council pursuant to section 11(3) of the Act.

For Acting CEO appointment of less than 28 days the CEO has been delegated the authority to appoint the position.

## 4. CEO Employment Matters Advisory Committee

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### 4.1. Role of Committee

The purposes of the Committee are to advise the Council on the implementation of this Policy, by considering, and making recommendations to Council with respect to:

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Warning – uncontrolled when printed – the current version of the document is kept in Council's Records Management System

CHIEF EXECUTIVE OFFICER EMPLOYMENT AND REMUNERATION POLICY

- the selection and appointment of the Independent Member;
- independent advice received from time to time from the Independent Member;
- performance monitoring of the CEO, including with respect to achievement of the CEO confidential KPIs;
- mid-year and annual reviews of the CEO's performance, including against the KPIs;
- the CEO's remuneration;
- recruitment and appointment of a CEO, if required;
- provisions to be included in the Contract of Employment from time to time;
- appointment of an Acting CEO, if required.

The Committee is advisory only and has no delegated decision-making power or authority.

**4.2. Membership of Committee**

The Chief Executive Officer Employment Matters Advisory Committee will comprise of:

- The Mayor
- The Deputy Mayor
- Up to 5 Councillors, as determined by Council from time to time and
- an Independent Member

The Committee is chaired by:

- The Independent Member or
- if the Independent Member is absent, the Mayor, or if the Mayor is absent, the Deputy Mayor.

The Committee will provide a report to the next available Council meeting following each Committee meeting describing its activities and making recommendations about any action to be taken by Council.

For the avoidance of doubt, nothing in this Policy requires Council to accept any or all of the Committee's recommendations.

**4.3. Terms of Appointment of Committee**

- Appointment of the Councillor members of this committee will occur annually at the Statutory Meeting of Council.
- Appointment of the Independent Chairperson will be for a two-year term with an option to extend for a further two-years, with the commencement date being the engagement date of the Independent Chairperson.

## CHIEF EXECUTIVE OFFICER EMPLOYMENT AND REMUNERATION POLICY

- The operations of the Committee will be evaluated annually to ensure it continues to be effective and contemporary.
- The Committee must meet at a minimum annually, or more frequently as directed by Council.
- Ensuring there is protection of confidential information under the Local Government Act section 3(f) personal information, being information which if released would result in the unreasonable disclosure of information about any person or their personal affairs.

#### 4.4. Accountability and Extent of Authority

Council authorises the Committee within its scope of responsibilities to make recommendations to Council on matters relating to the Chief Executive Officer or the person appointed to act as the Chief Executive Officer including the following:

- Appointment of the Chief Executive Officer
- The remuneration and conditions of appointment of the Chief Executive Officer (including annual remuneration review)
- Negotiating any extension of the appointment of the Chief Executive Officer under section 44(3) of the Act
- Conduct of the annual performance review of the Chief Executive Officer; and
- Performing other functions as required in supporting the performance review and performance development of the Chief Executive Officer.

#### 4.5. Conduct of committee members

In performing the role of Committee Member, a person must:

- act with **integrity**
- **impartially** exercise his or her responsibilities in the interests of the local community
- **not improperly** seek to confer an advantage or disadvantage
- **avoid conflicts** between his or her public duties and his or her personal interests and obligations
- commit to **regular attendance** at meetings.

#### 4.6. Committee member Confidentiality and Use of Information

Committee Members agree to comply with their obligations under section 28 of the Act in relation to confidential briefings or information as defined under the Act and recognise that this obligation extends to ensuring the safekeeping of confidential information. Committee Members must not make improper use of information acquired because of their position or release information that the member knows, or should reasonably know, is confidential information.



## CHIEF EXECUTIVE OFFICER EMPLOYMENT AND REMUNERATION POLICY

All information relating to the recruitment, selection and performance review process must be kept strictly confidential. Councillors and staff involved in the process must take all reasonable steps to maintain confidentiality and respect the privacy of all persons involved.

#### 4.7. Independent Chairperson

The Independent Chairperson of the Chief Executive Officer Employment Matters Advisory Committee must—

- not be a Councillor; and
- not be a member of Council staff; and
- be suitably qualified with regard to the selection criteria.

The following selection criteria applies to the appointment of the Independent Chairperson:

- A clear understanding of the objectives, roles, duties and obligations of the Chief Executive Officer and Council.
- Ability to exhibit clear leadership.
- Ability to work effectively with Councillors and the Chief Executive Officer.
- Demonstrated human resource management skills, senior business experience and relevant qualifications.
- Experience in senior management recruitment and development.
- Understanding of performance management processes and procedural fairness.
- Senior Level experience within a government framework and sound knowledge of governance and legal obligations.
- Previous experience working with Councillors, Executive Governance bodies or Board Members in advisory and/or facilitation roles.
- Price

Council will pay a set fee, to be determined on an hourly, or per meeting basis, to the Independent Chairperson as determined through a competitive procurement process. The amount of the fee has regard to the specific roles and responsibilities the chairperson will undertake. The Chairperson of the Committee will also be reimbursed for any transport costs they have incurred in participating in meetings and related activities.

#### 4.8. Selection process for Independent Chairperson

The Chair of the Chief Executive Officer Employment Matters Advisory Committee must be appointed by Council and must be an Independent Representative. Any extension of term must be made by Council in accordance with part 4.3 above.

The selection committee for the Independent Chairperson will include the Mayor, any interested Councillors and the General Manager Corporate Performance. The Committee will assess the nominations against the selection criteria and recommend an appointment to Council.

CHIEF EXECUTIVE OFFICER EMPLOYMENT AND RENUMERATION POLICY

**4.9. Reporting of the Committee**

The committee must provide a report on the Chief Executive Officer's performance review and a recommendation on the Chief Executive Officer's remuneration, annually to a meeting of the Council, within two months of the Chief Executive Officer's employment anniversary.

**4.10. Administration Support**

Administration support will be provided by the office of the General Manager Corporate Performance, their nominee being responsible for providing:

- information and any necessary training to members of the Committee in relation to their responsibilities under the Act;
- advice with respect to matters before the Committee for consideration; and
- administrative, secretarial and logistical support to the Committee.
- Council acknowledges that, in implementing this Policy, it, the Committee and/or the Independent Member will from time to time require the assistance of other members of Council staff, including assistance in relation to governance and human resources matters and procurement and contract management.
- Council, the Committee and/or the Independent Member may from time to time request a member of Council staff to provide assistance in implementing this Policy, recognising that the position of the member of Council staff is made difficult because they are accountable to the CEO (or a person acting as CEO). Requests for assistance therefore need to be limited to no more than those which are reasonably necessary.

**5. Roles and Responsibilities**

Person/s responsible	Accountability
<b>Council</b>	To appoint members of the committee To appoint an Independent Chairperson
<b>Committee members</b>	To undertake the duties set out in this policy in accordance with the terms of the policy
<b>General Manager Corporate Performance</b>	To provide administrative support to the committee, as required.

**6. Review**

This Policy must be reviewed a minimum of once every 4 years and within six (6) months after each Council election.

## CHIEF EXECUTIVE OFFICER EMPLOYMENT AND RENUMERATION POLICY

## 7. Human Rights Statement

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It is considered that this policy does not impact negatively on any rights identified in *the Charter of Human Rights and Responsibilities Act (2006)*. Central Goldfields Shire Council is committed to consultation and cooperation between management and employees.

## 8. Relevant Legislation and Council Policies

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- <sup>1</sup> page 2 - Local Government Act 2020 s 18 (1) (g)
- *Local Government Act 2020*– specifically:
  - Section 44 outlines the required CEO appointment process
  - Section 45 outlines the required Chief Executive Officer Employment and Remuneration Policy
  - Section 46 outlines the functions of the CEO
  - Section 66(2)(a) lists the consideration of confidential information as a specified circumstance. Confidential information is defined under section 3(1)(f) of the Act as personal information which would result in the unreasonable disclosure of information about a person.
- Victorian Independent Remuneration Tribunal and Improving Parliamentary Standards Act 2019
- *Fair Work Act 2009*
- *Gender Equality Act 2020*
- *Charter of Human Rights and Responsibilities Act 2006*

**8.2 Infrastructure Assets and Planning**

8.2.1 Carisbrook Flood Management Plan Reference Group Membership

**Author:** General Manager Infrastructure Assets and Planning

**Responsible Officer:** General Manager Infrastructure Assets and Planning

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

**SUMMARY/PURPOSE**

The purpose of this report is to brief Council on the development of an updated Carisbrook Flood Management Plan, including project scope and outputs, as well as the proposed membership of the Carisbrook Flood Plan Advisory Reference Group (FSARG) and associated Terms of Reference.

A Public Expression of Interest (EOI) process was undertaken for the selection of two (2) community members to join the Reference Group and one (1) community member to serve on both the Reference Group and the Tender Panel.

While the committee is not a statutory committee of Council, officers propose that Council formally appoint the community members and a Councillor to the committee by resolution of Council given the public interest in flood mitigation.

**RECOMMENDATION**

That Council:

1. endorses the Draft Flood Study Advisory and Reference Group Terms of Reference;
2. appoints three (3) community members to the Flood Study Advisory and Reference Group as noted in the Draft Terms of Reference, one of whom will serve on the tender panel for the procurement of the project consultant; and
3. Appoints Tullaroop Ward Councillor Anna de Villiers to the Flood Study Advisory and Reference Group to provide community support.

## LEGISLATION AND POLICY CONTEXT

Central Goldfields Shire Council's Council Plan 2021-2025:

The Community's vision:

### Leading Change

- 4. Activated, engaged, and informed citizens who have a say, volunteer, get involved in community matters.
- 4. Good planning, governance, and service delivery.
- 4. Transparent decision making.

Initiative:

Carisbrook Flood Management Plan

## BACKGROUND INFORMATION

In 2024, the North Central Catchment Management Authority (NCCMA) secured \$300,000 through the Victorian Governments' Flood Study Reclamation Funding program for Central Goldfields Shire Council (project lead) to deliver a review and update to the Carisbrook Flood and Drainage Management Plan, 2013.

In 2013 a flood management plan was produced for Carisbrook and recommendations of this plan have since been implemented, including levee construction, waterway maintenance, drainage works, updated intelligence in the Municipal Flood Emergency Plan and a planning scheme amendment.

The previous study modelled floods up to and including the 1 in 200 AEP flood event.

There is now a need to better understand the flood risk for Carisbrook for the full range of flood events, extending the mapping area to include Flagstaff, and to reassess potential mitigation options for the town that may complement existing mitigation. The project presents an opportunity to:

- Update the original modelling by adopting improved modelling practices introduced by Australian Rainfall and Runoff 2019, utilising recent advances in flood modelling software and incorporating the latest climate change science; and
- Consider and incorporate any recommendations that arise from the independent review undertaken by Fred Spain, NSW Public Works Department.

Central Goldfields Shire Council will project manage the flood study with technical support from the NCCMA.

The project will include a full review of and update to the Carisbrook Flood and Drainage Management Plan (2013). The project proposes to include:

- Hydrologic and hydraulic modelling to determine flood information for the full range of flood events up to and including the probable maximum flood.
- Calibration to historical flood events, particularly floods that have occurred since the original study was completed in 2013.
- Modelling of climate change scenarios based on recently revised recommendations.
- Assessment of the feasibility of a range of potential mitigation options including recommendations from the independent review.
- The information produced will enhance the flood resilience of the Carisbrook community by improving and building on the available flood information. The project outputs will be used for land use and development planning, emergency management planning and response, and community education. The project will include consultation with the local community to collate local knowledge and assess potential mitigation options.



- The information and mapping produced by the study will be made freely available to the public and will also be used to inform VICSES Floodsafe programs.

This report presents information on the establishment of the Flood Plan Advisory Reference Group which will include Carisbrook residents, Council officers, a Councillor, the NCCMA and other agency stakeholders to provide guidance, expertise, and stakeholder perspectives on the development of the plan.

## **REPORT**

Carisbrook is a township of 1,192 residents (2021 Census), located 66km north of Ballarat in Central Victoria. Carisbrook lies on a natural floodplain and has a history of regular flooding.

The township lies at the confluence of McCallum Creek and Tullaroop Creek within the Loddon River Catchment.

The combined catchment of the two creeks at Carisbrook is approximately 1,240km<sup>2</sup>.

The smaller McCallum Creek catchment encompasses the towns of Waubra, Talbot, and Majorca, whilst Tullaroop Creek catchment includes Clunes, Creswick, Learmonth, and Springmount to the south.

Tullaroop Reservoir is situated on Tullaroop Creek, approximately 7km upstream from Carisbrook.

The reservoir has the closest flow gauge station and the potential to attenuate peak flows on Tullaroop Creek.

Tullaroop Reservoir has a capacity of just under 73 GL and covers an area of 550 Ha. It primarily is used to store water for supplies to irrigated properties along Tullaroop Creek and the Loddon River and to supply water to Maryborough.

Flooding in Carisbrook can be caused by overland flooding from the local catchment between Carisbrook and Maryborough, as well as riverine flooding from Tullaroop Creek, McCallum Creek or a combination of each.

In 2023, the Carisbrook levee, which was a key mitigation recommendation for the Carisbrook Flood and Drainage Management Plan 2013, was completed.

This levee substantially reduces flood risk due to overland flow from the local catchment to the southwest of the town, however it does not reduce flood risk from McCallum and Tullaroop creeks.

The study area is shown below and will include modelling of the waterways and major overland flow paths in this area.

Carisbrook has a history of regular flooding.

The January 2011 flood event is thought to be the largest flood event in Carisbrook on record larger than the 1% (1 in 100) AEP design event, close to a 0.5% (1 in 200) AEP.

There has also been recent flooding in 2016 and in October 2022.

The flood in October 2022 was slightly larger than the modelled 2% (1 in 50) AEP flood, reaching the crest of the Pyrenees Highway and resulting in inundation along the lower lying floodplain, but with little inundation in the township area. Prior to these events, major flood events are also reported to have occurred in 1900, 1964, 1975, 1981, 1993 and 1999.

## **Project scope**

This project will build upon and update the Carisbrook Flood and Drainage Management Plan 2013. It is anticipated that this will include the following:

- Collation and review of the available data including survey, asset information and past studies.
- Identification of gaps in the available data and obtain data necessary to address these gaps and complete the project.

- Community consultation to gain an understanding of past flood events for calibration, seek community input on mitigation options and to communicate study updates and outcomes.
- Undertake a suitable hydrologic investigation in accordance with Australian Rainfall and Runoff (ARR) which may include assembling a hydrologic model or adapting an existing hydrologic model, calibration and validating the results against other estimation methods with due regard for tributary and other inflows and/or outflows that extend beyond the study boundaries. The assessment shall explicitly account for all inflows to the study area, including any minor tributaries and drainage flows. The assessment will also include a flood frequency analysis of relevant streamflow gauges.
- Specify, assemble, calibrate, and validate a suitable hydraulic model in accordance with ARR which may include adapting an existing hydraulic model.
- Determination and documentation of flood levels, extents, depths, velocities, and hazard for the 20%, 10%, 5%, 2%, 1%, 0.5%, 0.2%, 0.1%, 0.05% AEP and PMF events in addition to any historical events modelled.
- Flood modelling will consider the existing flood mitigation works that have been completed since the previous study.
- Determination and documentation of flood information for applicable climate change scenarios in accordance with the recommendations of ARR.
- Flood mapping linked to regular gauge height intervals.
- Review and modelling of flood class levels.
- Analysis of the data to produce flood intelligence such as identifying roads impacted and buildings that may experience above-floor flooding, for inclusion in the Central Goldfields Municipal Flood Emergency Plan.
- Review and provide any updated recommendations regarding the total flood warning system, noting the recent Carisbrook Flood Warning System Review 2023.
- Assessment of flood damages.
- Identification and preliminary feasibility assessment of a suite of structural and non-structural measures for reducing flood damages and/or reducing/treating flood risk within Carisbrook.
- Detailed costings and assessment of preferred structural mitigation measures. This will also take into consideration the outcomes of the Independent Review of the Carisbrook Levee which was completed in September 2024.
- Deliver time step video animations of flood progression through the townships to cover a minimum of four (4) modelled design floods.
- Documenting results in a report that clearly and transparently summarises the work undertaken, the process followed and the findings.
- Delivery of all flood related data and outputs in ESRI format including fully attributed datasets that are compliant with DEECA's Spatial Data Specification.
- Floor level survey of remaining properties in town not included in available floor level survey.

The project will also seek to address several medium-long term actions in the Carisbrook Levee Review Draft Implementation Plan which resulted from the Independent Levee Review undertaken by Mr Fred Spain of NSW Public Works in late 2024.

### **Establishment of the Flood Study Advisory Reference Group (FSARG)**

The purpose of the FSARG is to provide guidance, expertise, and stakeholder perspectives to Central Goldfields Shire Council (CGSC) in the development and implementation of the updated Carisbrook Flood Management Plan (CFMP). The role of the FSARG includes:

- a) Offering feedback on the findings and proposals presented within the study, drawing on their expertise, knowledge, and understanding of the potential impacts on the local community.
- b) Reviewing and providing feedback on draft key documents as the study progresses.
- c) Serving as a forum for discussion, review, and advice on key project matters.
- d) Supplying locally sourced information to support the successful delivery of the project.

The group is proposed to comprise of:

- 1 x Local SES Representative
- 1 x Representative from the Department of Energy, Environment and Climate Action (DEECA)
- 1 x Representative from the North Central Catchment Management Authority (NCCMA)
- 3 x Council Officers (2 x Project Services and Asset Management team and 1 x Emergency Management team)
- Tullaroop Ward Councillor
- 1 x Local CFA Representative
- 1 x Representative from Department of Transport and Planning (DTP)
- Consultant/s
- 3 x community members by Public Expression of Interest.

The FSARG will meet bi-monthly and will serve for the duration of the project which is anticipated to take approximately 20 months.

The FSARG may be extended or dissolved at the discretion of Central Goldfields Shire Council depending on the needs of the project.

Council will be the ultimate decisionmaker in response to the recommendations and outcomes from the project, and how any actions might be implemented/funded.

A Draft Terms of Reference is included as an attachment to this report for consideration. Officers are recommending that Council endorse the Terms of Reference.

### **Expression of Interest Process**

A public Expression of Interest (EOI) for membership to the FSARG was advertised from 20 January 2025 until 14th February 2025, and then subsequently extended an additional week.

The opportunity was advertised via the Carisbrook Mercury, Maryborough Advertiser, Councils Social Media channels and on Councils website.

The EOI sought to appoint three community members for the FSARG, one of whom would also have a role on the Tender Panel for the project consultant.

The EOI was open to residents of Carisbrook and interested applicants were asked to submit a written Expression of Interest outlining their skills, experience, and reasons for wanting to join the FSARG and/or Tender Panel.

The selection criteria for membership included applicants being a resident of Carisbrook and:

- Having a genuine interest in flood management, community safety, and the resilience of the town,
- Demonstrate the ability to collaborate and contribute to decision-making processes.

The council received six submissions.

Three of the submissions were non-confirming: two applicants were not residents of Carisbrook, and one applicant submitted a blank form with no responses to the criteria or contact details.

Officers recommend that Council appoint the following applicants to the FSARG:

- Martin Mackay
- Aaron Beaton
- Giuliano Marcon (who will also serve on the Tender Evaluation Panel)

An additional recommendation includes that the Council appoint Ward Councillor Anna de Villiers to the FSARG to provide additional community support.

### **CONSULTATION/COMMUNICATION**

Council staff have engaged with relevant stakeholders (agencies) and community members through the engagement page, social media, and local newspapers to ensure that the composition of the Advisory Reference Group and Tender Panel reflects the diverse needs and priorities of the community. Appointing community members through a public EOI process aims to encourage broad community involvement and transparency.

### **FINANCIAL & RESOURCE IMPLICATIONS**

The costs associated with facilitating the EOI and subsequent evaluation of submissions has been absorbed within Council's existing budget.

This includes advertising the EOI, processing applications, and will include future provision of support to the Council appointed members for their participation.

The total project budget is \$300K, which is fully funded through the Victorian Governments' Flood Study Reclamation Funding Program.

It should be noted that Council cannot recover any administrative or project management costs through the fund.

All human resources allocated to the project will be funded through Council's annual budget.

### **RISK MANAGEMENT**

This report addresses Council's strategic risk:

Climate change -adaptation - Failure to appropriately respond to or prepare for the impacts of climate change.

Community engagement- Inadequate stakeholder management or engagement impacting brand reputation and community satisfaction in Council decision making.

### **CONCLUSION**

This report presents the background and overview of the updated Carisbrook Flood Management Plan Project, and expression of interest process undertaken to appoint three community members to the Flood Plan Advisory and Reference Group.

Officers recommend that Council endorse the FSARG Terms of Reference, appoint three community members and Cr Anna De Villiers to the FSARG.

### **ATTACHMENTS**

1. DRAFT Carisbrook Flood Management Advisory Reference Group Terms of Refer [8.2.1.1]

### **Carisbrook Flood Management Advisory Reference Group Terms of Reference**

#### **Composition:**

- Community members: Martin Mackay, Aaron Beaton, Giuliano Marco (who will also serve on the Tender Evaluation Panel)
- 3 Council Officers; 2 x members of the Project Services and Asset Management team and 1 x member of Emergency Management team
- Tullaroop Ward Councillor Anna De Villiers
- 1 x Local SES Representative
- 1 x Representative from the Department of Energy, Environment and Climate Action (DEECA)
- 1 x Representative from the North Central Catchment Management Authority (NCCMA)
- 1 x Local CFA Representative
- 1 x Representative from Department of Transport and Planning (DTP)
- Consultant/s

#### **Membership:**

- Consistent membership throughout the project. No back-up members if people cannot attend.
- Guests with expertise may be invited to meetings to provide advice or specialist knowledge at the discretion of the Project Manager.

#### **Role of Members:**

The purpose of the FSARG is to provide guidance, expertise, and stakeholder perspectives to Central Goldfields Shire Council (CGSC) in the development and implementation of the updated Carisbrook Flood Management Plan (CFMP). The role of the FSARG includes:

- Offering feedback on the findings and proposals presented within the study, drawing on their expertise, knowledge, and understanding of the potential impacts on the local community.
- Reviewing and providing feedback on draft key documents as the study progresses.
- Providing advice on how best to consult with the broader community.
- Serving as a forum for discussion, review, and advice on key project matters.
- Supplying locally sourced information to support the successful delivery of the project.

#### **Expectations**

- Members are to appreciate perspectives that may differ from their own, and information that may not support their point of view.
- Members will commit to a collaborative effort and to work toward closure of outstanding issues.
- All members will share responsibility for the success of meetings

**Meeting Cadence and Length of Membership**

The FSARG will meet bi-monthly and will be appointed for the duration of the project which is anticipated to take approximately 20 months. The FSARG may be extended or dissolved at the discretion of Central Goldfields Shire Council depending on the needs of the project.

**Record of meetings**

Meeting agendas and minutes will be prepared by officers of Council and distributed to the Group in a timely manner.

**Reporting**

The group will provide guidance to the Project Manager to prepare quarterly updates to Council on the progress of the project.

DRAFT



**8.2.2 DO 44- 23 42 Victoria Street Carisbrook**

<b>Author:</b>	Manager Statutory Services
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**Responsible Officer:** General Manager Infrastructure Assets and Planning

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

**SUMMARY/PURPOSE**

The purpose of this report is to seek a Council adoption for planning permit application no. D044/23 for the two-lot subdivision of the land at 42 Victoria Street, Carisbrook and subdivision adjacent to a road in Transport Zone 2.

Public notice of the application has been given and four objections received.

A permit decision was deferred at the Council meeting held on the 28<sup>th</sup> of November 2023.

The Application has been assessed against the Central Goldfields Planning Scheme, and it is considered that the proposed subdivision is appropriate.

A peer review of the planning assessment has been completed.

Following briefing, Councillors called the application in to recommence the decision process.

**RECOMMENDATION**

That Council:

Having caused notice of planning permit application no. D044/23 to be given under section 52 of the Planning and Environment Act 1987 and the Central Goldfields Planning Scheme and having considered all the matters generally required, resolves to grant a planning permit and issue a Notice of Decision to Grant a Permit in respect of planning permit application no. D044/23 for the land known and described as 42 Victoria Street, Carisbrook, for the 2 lot subdivision of the land, creation of access to and subdivision adjacent to a road in a Transport Zone 2 in accordance with the endorsed plans and subject to the following conditions:

**Endorsed plans.**

1. *Before the Plan of Subdivision is certified, amended plans must be submitted and when approved by the Responsible Authority the endorsed plans will form part of the permit. These plans must be in accordance with plans submitted, must be:
 
  - a. a separate plan of subdivision in pdf format:
  - b. Surveyed by a Licensed Land Surveyor
  - c. Including a restriction on the plan of subdivision advising the future owners of the need to have a licensed surveyor determine the flood levels that apply to this site.*
2. *The layout of the subdivision permitted by this permit as shown on the endorsed plan(s) and/or described in the endorsed documents must not be altered or modified (for any reason) except with the prior written consent of the responsible authority.*

**Formal plan of subdivision**

3. *The formal plan of subdivision submitted for certification must be in accordance with the endorsed plan and must not be modified except to comply with statutory requirements or with the further written consent of the responsible authority.*

**Fencing**

4. *Prior to a statement of compliance issuing boundary fencing is to be constructed.*

5. *All fencing must be suitable fencing design to allow for the flow of water (refer to NCCMA document titled Fencing Guidelines for Flood-Prone Areas, March 2020)*

**Construction activities**

6. *The development must be managed during construction to the satisfaction of the responsible authority so that the amenity of the area is not detrimentally affected through the:*
  - d) *Transport of materials, goods, or commodities to or from the land.*
  - d) *Appearance of any building works or materials.*
  - d) *Emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, litter, dust, wastewater, waste products, grit, or oil.*
  - d) *Presence of vermin or animals.*

**Public open space contribution**

7. *Prior to the issue of the Statement of Compliance, a monetary contribution of an amount equal to 5% of the current value of all the land within the subdivision shall be paid to the responsible authority. If the land is subdivided in stages; the contribution may be paid proportionally to the area of the lots being created.*
8. *The permit holder or landowner must pay on demand the Council's reasonable costs and expenses to provide valuation for payment in lieu of open space.*

**Mandatory subdivision conditions**

9. *The owner of the land must enter into agreements with the relevant authorities for the provision of water supply, drainage, sewerage facilities, electricity and gas (where it is proposed to be connected) services to each lot shown on the endorsed plan in accordance with the authority's requirements and relevant legislation at the time.*
10. *All existing and proposed easements and sites for existing or required utility services and roads on the land must be set aside in the plan of subdivision submitted for certification in favour of the relevant authority for which the easement or site is to be created.*
11. *The plan of subdivision submitted for certification under the Subdivision Act 1988 must be referred to the relevant authority in accordance with Section 8 of that Act.*
12. *The owner of the land must enter into an agreement with:*
  - b) *a telecommunications network or service provider for the provision of telecommunication services to each lot shown on the endorsed plan in accordance with the provider's requirements and relevant legislation at the time; and*
  - b) *a suitably qualified person for the provision of fibre ready telecommunication facilities to each lot shown on the endorsed plan in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can demonstrate that the land is in an area where the National Broadband Network (NBN) will not be provided by optical fibre.*
13. *Before the issue of a Statement of Compliance for any stage of the subdivision under the Subdivision Act 1988, the owner of the land must provide written confirmation from:*
  - b) *a telecommunications network or service provider that all lots are connected to or are ready for connection to telecommunications services in accordance with the provider's requirements and relevant legislation at the time; and*
  - b) *a suitably qualified person that fibre ready telecommunications facilities have been provided in accordance with any industry specifications or any standards set by the Australian Communications and Media Authority, unless the applicant can*

*demonstrate that the land is in an area where the National Broadband Network will not be provided by optical fibre.*

**Engineering**

14. *Prior to the issue of a Statement of Compliance (or as otherwise stated) the following must be undertaken by the permit holder/landowner to the requirements and satisfaction of the responsible authority (alternative requirements may be approved, in writing, by Council's Manager Infrastructure):*

**Access**

15. *Vehicular access to Lot 1 must be provided from Victoria Street (Pyrenees Highway) in accordance with the requirements of the Department of Transport vehicle.*

**Drainage**

16. *All stormwaters must be accommodated and treated within the subject land.*
17. *The owner/applicant must design a drainage system to drain the lots to the legal point of discharge.*
18. *The legal point of stormwater discharge for both lots shall be Victoria Street.*

**Landscaping**

19. *Upon completion of all works, all nature strips must be levelled, topsoiled, and seeded. Alternate landscaping methods may be undertaken, but must be approved in writing, by the responsible authority prior to being undertaken.*

**Asset Protection**

20. *At any time, the permit holder must ensure that the operation and condition of Council assets (including street trees, drainage pits and covers, footpaths and kerb and channel) are not damaged by the site construction works.*

*If the Responsible Authority deems Council assets have been detrimentally affected or damaged by development construction access, then the assets will be required to be repaired and reinstated by the permit holder to the satisfaction of the Responsible Authority.*

**Department of Transport**

21. *Prior to the issue of a Statement of Compliance, the following must be completed to the satisfaction of and at no cost to the Head, Transport for Victoria, and the Responsible Authority:*
  - a. *Access to both lots and associated works must be provided and available for use and be:*
    1. *Constructed in accordance with VicRoads Guideline Drawing GD4010 for passenger vehicles.*
    2. *Formed to such levels and drained so that they can be used in accordance with the endorsed plans.*
    3. *Treated with an all-weather seal or some other durable surface.*
    - 4.
22. *Driveways must be maintained in a fit and proper state so as not to compromise the ability of vehicles to enter and exit the site in a safe manner or compromise operational efficiency of the road or public safety (e.g., by spilling gravel onto the roadway).*

**Permit expiry**

23. *This permit will expire if one of the following circumstances applies.*
  - b) *The plan of subdivision is not certified within two (2) years of the date of this permit.*

- b) *Registration of the plan of subdivision is not completed within five (5) years of the certification of the plan of subdivision under the Subdivision Act 1988.*

*The authority responsible may extend the time to certify the plan if a request is made in writing before the permit expires, or within six months afterwards.*

**Permit Notes**

NCCMA

Flood levels for the 1% AEP (100-year ARI) flood event have been determined for this area under provisions of the Water Act 1989.

The applicable 1% AEP flood level for the location described above is 193.9 meters AHD, which was obtained from Carisbrook Flood and Drainage Management Plan (2013).

North Central CMA advises that in the event of a 1% AEP flood event it is possible that the property may be subject to inundation from overland flows and McCallum Creek. However, it is recommended that a licensed surveyor be engaged to determine the exact effect of the applicable flood level on the property.

**LEGISLATION AND POLICY CONTEXT**

Central Goldfields Shire Council's Council Plan 2021-2025:

The Community's vision: **Leading Change**  
4. Transparent decision making.

Initiative: Provide financial sustainability and good governance

This report has been developed in accordance with the *Planning and Environment Act 1987* (the Act), and the *Central Goldfields Planning Scheme* (planning scheme).

**BACKGROUND INFORMATION**

Planning permit application no. D044/23 was lodged on 18 April 2023. The application proposes the 2-lot subdivision of the land, and subdivision adjacent to a road in a Transport Zone 2, at 42 Victoria Street, Carisbrook.

There are no other relevant planning permits on the site.

The application has previously been presented to Council for a decision, including:

- 28 November 2023 – recommendation for approval (notice of decision), motion to defer pending the recommendations and outcomes of the Land Use Framework Plan.
- 4 December 2024 (briefing) – recommendation for approval (notice of decision), application deferred and action for peer review of assessment.

Council officers engaged UDM Pty Ltd to complete a peer review of the assessment.

The scope of the review required an analysis of:

- The purpose of and difference between the Land Subject to Inundation Overlay, as compared with the Flood Overlay.
- The role of the North Central Catchment Management Authority in the referral and decision.
- The role of Planning's assessment and recommendation.
- A determination if any identified deficiencies exist in the assessment and risks associated with the recommendation.

The review of the delegates briefing report found that it accurately described the application, site and surrounds, and correctly identified the relevant planning permit triggers.

The review confirmed the following assessment elements;

- GRZ1 assessment is reasonable.
- EMO assessment is reasonable.
- LSIO assessment is based on the information provided and reaches reasonable conclusions. Given the circumstances and context of the application, this section could have been expanded to provide specific reference to each decision guideline to clearly demonstrate it has been considered and responded to.
- Other matters included in this section is reasonable.

## **REPORT**

### **Proposal**

Planning application D044/23 proposed the subdivision of the land into 2 lots.

Lot one will contain the existing dwelling and shed and will have a lot size of 706m<sup>2</sup>. Proposed lot two is 1,257m<sup>2</sup> and will have a battle-axe configuration.

It is proposed both lots will use the existing crossing on Victoria Street with a small section of common property to allow for shared access.

The application has shown that it meets the objectives and standards of Clause 56 contained within the Central Goldfields Planning Scheme.

Refer to Attachment 8.4.1: Development plans.

### **Site and Surrounds**

The land is described as Lot 2 on Plan of Subdivision (Lodged Plan) LP021054 and has a rectangular shape with an area of 1,964.1m<sup>2</sup>.

The land is on the southern side of Victoria Street and contains an existing dwelling and sheds.

The site is relatively flat and open and has a small number of established trees and shrubs mainly along the rear and side fence of proposed Lot 2.

The site has connected to all reticulated services, and it is proposed to connect lot 2 to the same services.

The land is in the General Residential Zone, Schedule 1 (GRZ1) and affected by the Erosion Management Overlay and Land Subject to Inundation Overlay.

The surrounding area is predominantly in the General Residential Zone, mostly containing residential dwellings on the lots with some vacant residential land.

To the South and to the West is predominantly Rural Land in the Rural Living Zone and Farming Zone. To the west is the Main Drain for Carisbrook.

Refer to Attachment 2: Site and surrounding area.

### **Planning Permit Triggers**

Under the planning scheme, a planning permit is required for the following:

- Pursuant to clause 32.08-3, a permit is required to subdivide land in the GRZ1.
- Pursuant to clause 44.01-5, a permit is required to subdivide land in the EMO.
- Pursuant to clause 44.04-3, a permit is required to subdivide land in the LSIO.
- Pursuant to clause 52.29-2, a permit is required to subdivide land adjacent to a road in a Transport Zone 2.

### **Planning Policy Framework**

The following clauses of the Planning Policy Framework (PPF) are relevant in the consideration of this application:

### **Municipal Planning Strategy**

The following clauses of the Municipal Planning Strategy (MPS) are relevant to this application:

#### **Clause 02-03-1 Settlement**

This policy identifies Carisbrook as a Local community centre acting as a satellite town to Maryborough and providing town centre services.

Established townships and settlements in the shire are to be supported by:

- *Primarily directing development to Maryborough as a sub-regional centre.*
- *Encouraging medium density housing in the vicinity of the Maryborough Central Business Area.*
- *Maintaining the network of smaller urban centres to ensure reasonable access to jobs and services and lifestyle choices.*
- *Directing development to infill lots that are suitable for development in the smaller townships of Dunolly, Carisbrook, Bealiba, Talbot, and Majorca.*
- *Limiting low density residential development at the periphery of Maryborough, Carisbrook, Dunolly, Majorca, and Timor to locations that can be economically and efficiently provided with water, electricity, and suitable road access.*
- *Encouraging a more compact urban form for Carisbrook, Dunolly, and Talbot.*

#### **Clause 02.04 Central Goldfields Strategic Framework Plans**

The land is identified in the Carisbrook Structure Plan as within the township boundary. The plan directs that new development is to be limited to within township boundaries.

### **Zone**

#### 32.08 General Residential Zone

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To encourage development that respects the neighbourhood character of the area.
- To encourage a diversity of housing types and housing growth particularly in locations offering good access to services and transport.
- To allow educational, recreational, religious, community and a limited range of other non-residential uses to serve local community needs in appropriate locations.

### **Overlays**

#### **44.01 Erosion Management Overlay**

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To protect areas prone to erosion, landslip, other land degradation or coastal processes by minimising land disturbance and inappropriate development.

#### **44.04 Land Subject to Inundation Overlay**

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To identify flood prone land in a riverine or coastal area affected by the 1 in 100 (1 per cent Annual Exceedance Probability) year flood or any other area determined by the floodplain management authority.



- To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, responds to the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
- To minimise the potential flood risk to life, health and safety associated with development.
- To reflect a declaration under Division 4 of Part 10 of the Water Act, 1989.
- To protect water quality and waterways as natural resources by managing urban stormwater, protecting water supply catchment areas, and managing saline discharges to minimise the risks to the environmental quality of water and groundwater.
- To ensure that development maintains or improves river, marine, coastal and wetland health, waterway protection and floodplain health.

### **Particular Provisions**

#### **Clause 52.29 Land Adjacent to the Principal Road Network**

- To ensure appropriate access to the Principal Road Network or land planned to form part of the Principal Road Network.
- To ensure appropriate subdivision of land adjacent to Principal Road Network or land planned to form part of the Principal Road Network.

#### **Clause 53.01 Public Open Space Contribution and Subdivision**

- A person who proposes to subdivide land must contribute to the council for public open space in an amount specified in the schedule to this clause (being a percentage of the land intended to be used for residential, industrial, or commercial purposes, or a percentage of the site value of such land, or a combination of both). If no amount is specified, a contribution for public open space may still be required under section 18 of the *Subdivision Act 1988*.

#### **56 Residential Subdivision**

- To implement the Municipal Planning Strategy and the Planning Policy Framework.
- To create liveable and sustainable neighbourhoods and urban places with character and identity.
- To achieve residential subdivision outcomes that appropriately respond to the site and its context for:
  - o Metropolitan Melbourne growth areas.
  - o Infill sites within established residential areas.
  - o Regional cities and towns.
- To ensure residential subdivision design appropriately provides for:
  - o Policy implementation.
  - o Liveable and sustainable communities.
  - o Residential lot design.
  - o Urban landscape.
  - o Access and mobility management.
  - o Integrated water management.
  - o Site management.
  - o Utilities.

### **General Provisions**

## **65.02 Approval of an Application to Subdivide Land**

Before deciding on an application to subdivide land, the responsible authority must also consider, as appropriate:

- The suitability of the land for subdivision.
- The existing use and possible future development of the land and nearby land.
- The availability of subdivided land in the locality, and the need for the creation of further lots.
- The effect of development on the use or development of other land which has a common means of drainage.
- The subdivision pattern having regard to the physical characteristics of the land including existing vegetation.
- The density of the proposed development.
- The area and dimensions of each lot in the subdivision.
- The layout of roads has regard to their function and relationship to existing roads.
- The movement of pedestrians and vehicles throughout the subdivision and the ease of access to all lots.
- The provision and location of reserves for public open space and other community facilities.
- The staging of the subdivision.
- The design and siting of buildings having regard to safety and the risk of spread of fire.
- The provision of off-street parking.
- The provision and location of common property.
- The functions of any body corporate.
- The availability and provision of utility services, including water, sewerage, drainage, electricity, and gas.
- If the land is not sewered and no provision has been made for the land to be sewered, the capacity of the land to treat and retain all sewage and sullage within the boundaries of each lot.
- Whether, in relation to subdivision plans, native vegetation can be protected through subdivision and siting of open space areas.
- The impact the development will have on the current and future development and operation of the transport system.

## **Operational Provisions**

### **71.01 Operation of the Municipal Planning Strategy**

The Municipal Planning Strategy (MPS) provides an overview of important local planning issues in an introductory context, sets out the vision for future use and development in the municipality and establishes strategic directions about how the municipality is expected to change through the implementation of planning policy and the planning scheme.

A responsible authority must take into account and give effect to the MPS when it makes a decision under this planning scheme.

### **Clause 71.02 Operation of the Planning Policy Framework**

The PPF seeks to ensure that the objectives of planning in Victoria, as set out in section 4 of the Act are fostered through appropriate land use and development planning policies and practices that integrate relevant environmental, social, and economic factors in the interests of net community benefit and sustainable development.

Society has various needs and expectations such as land for settlement, protection of the environment, economic wellbeing, various social needs, proper management of resources and infrastructure. Planning aims to meet these needs and expectations by addressing aspects of economic, environmental, and social wellbeing affected by land use and development.

Planning and responsible authorities should endeavour to integrate the range of planning policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations.

**Referrals**

The following table outlines referrals undertaken under section 55 of the Act and clause 66 of the planning scheme.

Organisation	Response
North Central Catchment Management Authority (NCCMA) cl. 66.03 – 44.04-7 (LSIO) (Recommending)	Unconditional consent
Department of Transport cl. 66.03 – 52.29-4 – to subdivide adjacent to, a road in a Transport Zone 2	Conditional Consent

The application was also referred within the Council for comments and/or conditions.

Department	Response
Council Engineering	Conditional consent

**ASSESSMENT OF APPLICATION**

The following assessment addresses the planning scheme, the objectives of planning in Victoria, objections and other submissions that have been received, any decision and comments of a referral authority, any significant effects the proposal may have on the environment or that the environment may have on the proposal, and any significant social and economic effects.

In this regard, the assessment of the application is consistent with section 60 of the Act.

**General Residential Zone, Schedule 1**

The proposal is considered to accord with the Planning Policy Framework.

Additionally, it is considered to accord with the purpose of the zone in encouraging future development to aid housing growth and affordability.

The site is within an area set out for residential development.

The location of this development and subdivision is within a well- connected area in terms of reticulated services, road access and proximity to the town services within Carisbrook.

The proposal creates an opportunity to help in the housing crisis and add to the Shire’s housing stock in an accessible area with the site being inside the existing urban area boundary of Carisbrook.

The proposal is considered to largely reflect the pattern of surrounding settlement and not considered out of place in its context being an expected form of development within the GRZ1.

An application to subdivide land must meet the requirements of clause 56.

An assessment of clause 56 is contained further below. The proposal is considered to meet the purpose of the GRZ1 and creates an opportunity for infill development within an area zoned for and used for residential use.

### **Erosion Management Overlay**

The site is wholly affected by the Erosion Management Overlay. The proposed subdivision will not alter the site conditions and will not cause any additional land degradation.

There are no trees to be removed or construction activities as part of the proposal. Any buildings and works proposed will need to be considered under the Erosion Management Overlay.

### **Land Subject to Inundation Overlay**

The site is wholly affected by the Land Subject to Inundation Overlay.

The subdivision will not alter overland flow or add to flooding in the area. Any future proposal for buildings and works will need to ensure it is designed to further manage stormwater discharge.

The NCCMA has advised that it is possible in the 1% AEP (100-year ARI) flood event the property may be subject to inundation from overland flows and McCallum Creek, however a licensed surveyor could determine the specific flood levels for the site.

This will be considered when any buildings and works permits are applied for and the buildings will need to have a certain finished floor level above the determined 1% AEP flood level.

Condition 1 includes the requirement to add a restriction to the plan of subdivision which will advise the owners of proposed lot 2 about the need to get a land surveyor to determine the sites flood levels.

All boundary fences will be required to be built to a standard suitable in flood-prone areas.

### **Land Adjacent to the Principal Road Network**

The application is adjacent to Victoria Street which is part of the Principal Road Network. Victoria Street is a Transport Zone 2, and a permit is required for subdivisions adjacent to it.

The application was referred to the Department of Transport who provided conditional consent.

### **Public Open Space Contribution and Subdivision**

The schedule to clause 53.01 does not specify land within the Central Goldfields Shire area.

Under section 18(1A) of the Subdivision Act 1988, a public open space contribution is required as the proposal is for a two-lot subdivision with the potential for further subdivision in the future and the additional lots will potentially increase the use and maintenance of public open spaces within the shire.

An appropriate condition will be included on any permit that is issued.

### **Residential subdivision**

Clause 56 contains the following:

- **Objectives:** An objective describes the desired outcome to be achieved in the completed subdivision.
- **Standards.** A standard contains the requirements to meet the objective. A standard should normally be met. However, if the responsible authority is satisfied that an application for an alternative design solution meets the objective, the alternative design solution may be considered.
- **Decision guidelines:** The decision guidelines set out the matters that the responsible authority must consider before deciding if an application meets the objectives.

Regarding the above, a residential subdivision:

- Must meet all the objectives of this clause.
- Should meet all the standards of this clause.

A two-lot subdivision must respond to Clauses 56.03-5, 56.04-2, 56.04-3, 56.04-5, 56.06-8 to 56.09-2. An assessment of the proposed subdivision is set out in the table below.

<b>56.03</b>	<b>Liveable and Sustainable Communities</b>	
<b>56.03-5</b>	<b>Built environment.</b> <ul style="list-style-type: none"> <li>• To create urban places with identity and character.</li> </ul>	<b>C5</b>
	COMPLIES – The proposed subdivision respects the neighbourhood character by providing one additional lot and both lots having generous lot sizes within the context of the General Residential Zone.	
<b>56.04</b>	<b>Lot Design</b>	
<b>56.04-2</b>	<b>Lot area and building envelopes.</b> <ul style="list-style-type: none"> <li>• To provide lots with areas and dimensions that enable the appropriate siting and construction of a dwelling, solar access, private open space, vehicle access and parking, water management, easements and the retention of significant vegetation and site features.</li> </ul>	<b>C8</b>
	COMPLIES – The subdivision creates lots greater than 500m <sup>2</sup> , Lot one contains the existing dwelling and lot two would easily fit a building envelope of 10 by 15 metres.	
<b>56.04-3</b>	<b>Solar orientation of lots</b>	<b>C9</b>
	<ul style="list-style-type: none"> <li>• To provide good solar orientation of lots and solar access for future dwellings.</li> </ul>	
	COMPLIES – The lots have sufficient solar orientation with each lot having an axis of approximately North 20 degrees East.	
<b>56.04-5</b>	<b>Common area</b> <ul style="list-style-type: none"> <li>• To identify common areas and the purpose for which the area is commonly held.</li> <li>• To ensure the provision of common area is appropriate and that necessary management arrangements are in place.</li> <li>• To maintain direct public access throughout the neighbourhood street network.</li> </ul>	<b>C11</b>
	COMPLIES – there is a small section of common property to create a shared access,	
<b>56.06</b>	<b>Access and Mobility Management</b>	
<b>56.06-8</b>	<b>Lot access</b> <ul style="list-style-type: none"> <li>• To provide for safe vehicle access between roads and lots.</li> </ul>	<b>C21</b>

	COMPLIES – both lots are to use a single access point to maintain the safety of Victoria Street.	
<b>56.07</b>	<b>Integrated Water Management</b>	
<b>56.07-1</b>	<b>Drinking water supply</b> <ul style="list-style-type: none"> <li>To reduce the use of drinking water.</li> <li>To provide an adequate, cost-effective supply of drinking water.</li> </ul>	<b>C22</b>
	COMPLIES – Drinking water supply is available to the site and will be required to be provided to the satisfaction of Central Highlands Water.	
<b>56.07-2</b>	<b>Reused and recycled water</b> <ul style="list-style-type: none"> <li>To provide for the substitution of drinking water for non-drinking purposes with reused and recycled water.</li> </ul>	<b>C23</b>
	N/A – Recycled water is not proposed or required for a development of this nature.	
<b>56.07-3</b>	<b>Wastewater management</b> <ul style="list-style-type: none"> <li>To provide a wastewater system that is adequate for the maintenance of public health and the management of effluent in an environmentally friendly manner.</li> </ul>	<b>C24</b>
	COMPLIES – Reticulated wastewater is available to the site and will be required to be provided to the satisfaction of Central Highlands Water.	
<b>56.07-4</b>	<b>Stormwater management</b> <ul style="list-style-type: none"> <li>To minimise damage to properties and inconvenience to residents from stormwater.</li> </ul>	<b>C25</b>
	<ul style="list-style-type: none"> <li>To ensure that the street operates adequately during major storm events and provides for public safety.</li> <li>To minimise increases in stormwater and protect the environmental values and physical characteristics of receiving water from degradation by stormwater.</li> <li>To encourage stormwater management that maximises the retention and reuse of stormwater.</li> <li>To encourage stormwater management that contributes to cooling, local habitat improvements and provision of attractive and enjoyable spaces.</li> </ul>	
	COMPLIES – Stormwater management will be applied through appropriate engineering conditions included on any permit issued. All stormwater is to be managed onsite and will drain into the legal point of discharge in Victoria Street.	
<b>56.08</b>	<b>Site Management</b>	
<b>56.08-1</b>	<b>Site management</b> <ul style="list-style-type: none"> <li>To protect drainage infrastructure and receiving water from sedimentation and contamination.</li> <li>To protect the site and surrounding area from environmental degradation or nuisance prior to and during construction of subdivision works.</li> <li>To encourage the re-use of materials from the site and recycled materials in the construction of subdivisions where practicable.</li> </ul>	<b>C26</b>



	COMPLIES VIA CONDITIONS – Relevant conditions will be included in any permit to manage the site and surrounds during the subdivision works including that drainage infrastructure and receiving waters, are protected from degradation, sedimentation.	
<b>56.09</b>	<b>Utilities</b>	
<b>56.09-1</b>	<b>Shared trenching</b> <ul style="list-style-type: none"> <li>To maximise the opportunities for shared trenching.</li> <li>To minimise constraints on landscaping within street reserves.</li> </ul>	<b>C27</b>
	COMPLIES – Trenching can be shared where possible. It is noted that only Lot 2 will require new connections.	
<b>56.09-2</b>	<b>Electricity, telecommunications, and gas</b> <ul style="list-style-type: none"> <li>To provide public utilities to each lot in a timely, efficient, and cost-effective manner.</li> <li>To reduce greenhouse gas emissions by supporting generation and use of electricity from renewable sources.</li> </ul>	<b>C28</b>
	COMPLIES – Relevant utilities are available and can be provided in a timely, efficient, and cost-effective manner. Telecommunications will be the responsibility of the permit holder/landowner and confirmation of this service being provided will be required prior to the Statement of Compliance being issued.	

**CONSULTATION/COMMUNICATION**

The application was advertised to adjoining and surrounding owners and occupiers of land via letters in the mail, an advertising sign was placed on the site and the permit application documents were placed on the Council website and available for inspection at the Nolan Street office.

The application has received four objections.

The objections are summarised below:

**Objection 1**

- Whether the lots will have single or multiple dwellings.
- Additional flooding caused by dwellings that will be constructed.
- Levy has not been proven to work yet, and objector is against all subdivisions until it is shown to work.

**Objection 2**

- The stormwater discharge from the property and its potential to cause further flooding.

**Objection 3**

- The stormwater discharge from the property and its potential to cause further flooding.

**Objection 4**

- The stormwater discharge from the property and its potential to cause further flooding.
- Whether the lots will have single dwellings or multiple dwellings on each.

**Planning officer response to objections**

- The role of the planning department is to assess the suitability of the proposal against the planning scheme.

The subject site is within an appropriate zone (GRZ) and within the existing urban boundary of Carisbrook.

The proposal has been assessed under the overlays and referred to the relevant floodplain authority (NCCMA).

- The subdivision will not alter the site in any significant way and will not add extra overland flow to the surrounding properties.
- This is a matter to be dealt with through any future buildings and works proposals. All fencing will be constructed to allow for the continuing flow of water.
- Any dwelling would require a further planning permit under the Erosion Management and Land Subject to inundation Overlays and are not a matter for consideration under this permit.
- The North Central Catchment Management Authority has provided unconditional consent to the subdivision proposal and Council Engineers have provided conditions which will manage the stormwater on site.

### **FINANCIAL& RESOURCE IMPLICATIONS**

The assessment of planning permit applications is within the normal operational budget of Council.

Should any party appeal any decision that Council makes there would be a VCAT hearing. Additional costs will be incurred if a VCAT hearing occurs.

### **RISK MANAGEMENT**

This report addresses Council's strategic risk Governance - Failure to transparently govern and embrace good governance practices by ensuring our assessment of the application meets all relevant legislation and regulations.

The risk management issues in relation to this planning permit application have been discussed above.

There is a risk to Council should it not decide within the statutory timeframes of a 'failure to determine' appeal at VCAT.

Should the proposal be approved by Council and VCAT (upon appeal) there is a risk to non-compliance with the permit conditions.

Council has a planning compliance function to mitigate this risk.

### **CONCLUSION**

Planning permit application D044/23 seeks approval for the 2-lot subdivision of the land at 42 Victoria Street, Carisbrook.

A Council determination is sought on the application as four objections have been received, including one objection that has been signed by several residents.

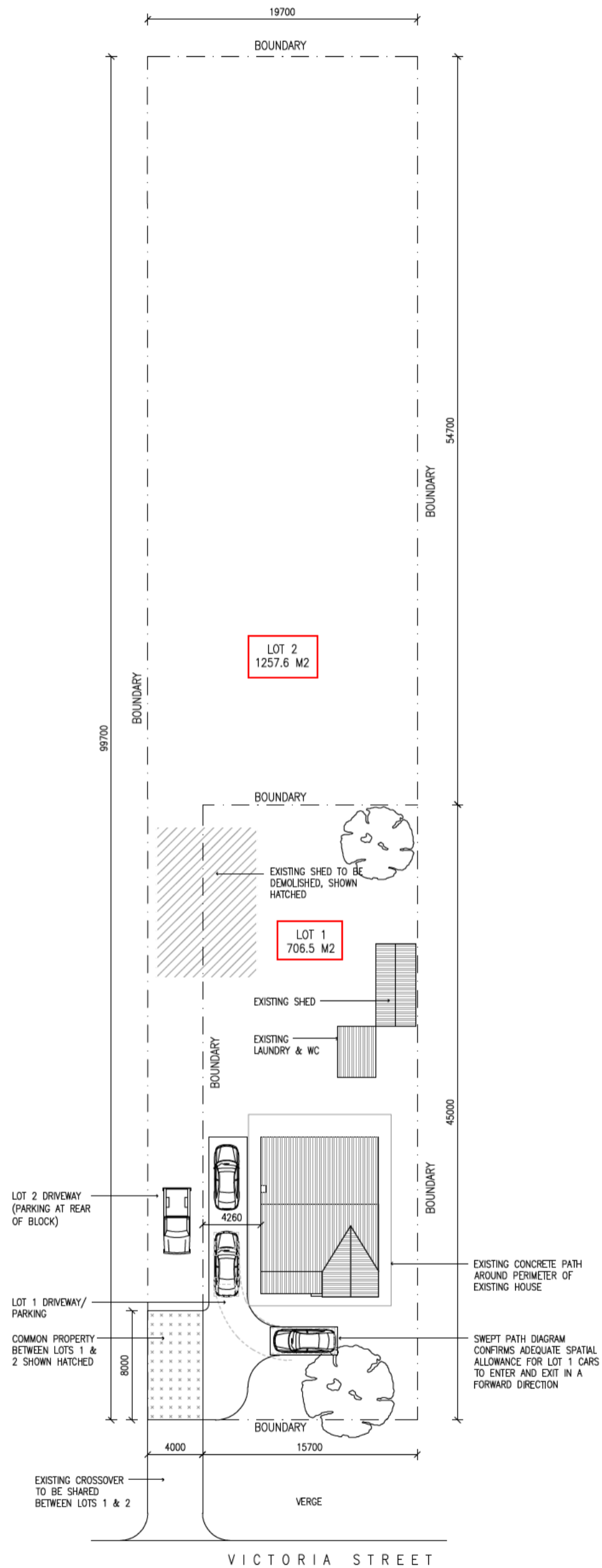
This report recommendation is that a planning permit be granted and a Notice of Decision to Grant a Permit be issued.

Council must determine a position on the planning permit application and take one of the following options:

1. Grant a planning permit subject to conditions and issue a Notice of Decision to Grant a Permit; or
2. Refuse to grant a permit on any ground it thinks fit and issue a Notice of Decision to Refuse to Grant a Permit.

### **ATTACHMENTS**

1. D 044-23 42 Victoria Street, Carisbrook - Attachment 1 - Site plan [8.2.2.1]
2. D044 23 42 Victoria Street Carisbrook Attachment 2 Site and surrounding a [8.2.2.2]

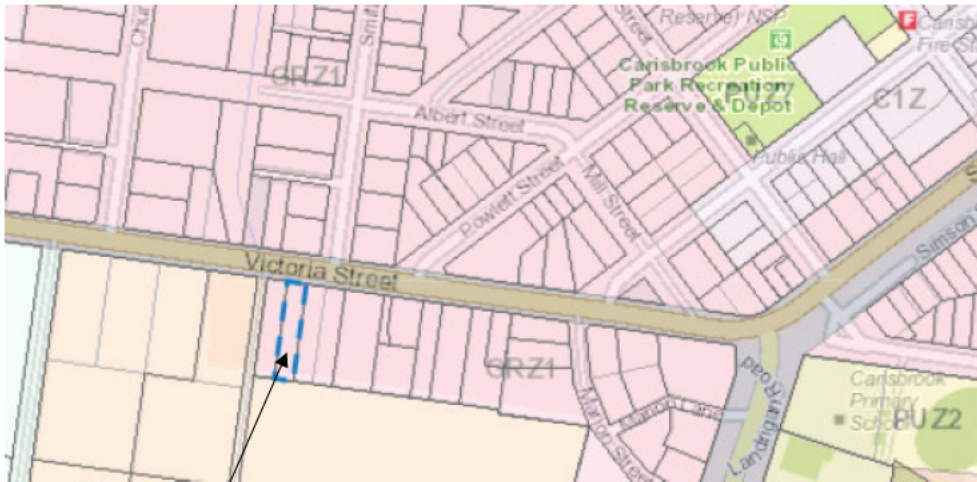


PROPOSED SITE PLAN  
42 VICTORIA ROAD,  
CARISBROOK

1:300@A3

17.10.23

D044/23 – Attachment 2 – Site and Surrounding Area



Subject Site

8.2.3 DO 031-24 39 Clarkes Road Moolort Report

<b>Author:</b>	Manager Statutory Services
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**Responsible Officer:** General Manager Infrastructure Assets and Planning

*The Officer presenting this report, having made enquiries with relevant members of staff, reports that no disclosable interests have been raised in relation to this report.*

**SUMMARY/PURPOSE**

The purpose of this report is to seek a Council determination for planning permit application for DO 031-24 use and development of the land for a Farm Cluster broiler farm for up to 445,000 birds and two caretakers’ houses with associated buildings and works at 39 Clarkes Road, Moolort, and 141 Clarkes Road, Strathlea.

Notice of the application has been given as the proposal is classified as a Farm Cluster broiler farm under the *Victorian Code for Broiler Farms 2009 (plus 2018 amendments)*.

As a result, eleven (11) objections and two (2) neutral submissions have been received (at the time of reporting).

The application has been assessed against all matters that the responsible authority must consider, pursuant to section 60 of the *Planning and Environment Act 1987*.

**RECOMMENDATION**

That Council, as the responsible authority and pursuant to section 61 of the Planning and Environment Act 1987, decides to grant a permit subject to conditions and issue a Notice of Decision to Grant a Permit in respect of planning permit application no. 031-24 for the use and development of the land for a Farm Cluster broiler farm for up to 445,000 birds and two caretakers’ houses with associated buildings and works at 39 Clarkes Road, Moolort, and 141 Clarkes Road, Strathlea. The following conditions will apply to this permit:

- 1) Before the development commences, amended plans to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When approved, the plans will be endorsed and then form a part of this permit. The plans must be generally in accordance with the plans substituted with the application (being plans prepared by FocusCDS Consultants, dated April 2024, Reference 2632R01, but modified to include:
  - a) Recommendations of the Environmental Management Plan (EMP) required by condition six.
  - b) The revised Landscaping Plan required by condition eight.
  - c) Recommendations of the Surface Water Management Plan (Water Technology, 5 April 2024) required by condition eleven.
  - d) Recommendations of the Stormwater Management Plan required by condition twenty-nine.
  - e) The Acoustic Assessment (WMG, 8 April 2024) required by condition twelve.

- f) The Odour Environmental Risk Assessment ((GHD, 10 April 2024)
  - g) The Landscape and Visual Assessment (Landform, February 2024) required by condition fourteen.
  - h) Detailed design details and cross sections of the storage dam, sedimentation, and vegetated swales.
  - i) Dust suppression mitigation measures for the loading and unloading of litter and spent litter trucks at the shed locations.
  - j) Areas identified for temporary storage of litter and associated details.
  - k) Location of chemical storage.
  - l) Floor plan of the caretakers' houses.
  - m) Recommendations of an updated Land Capability Assessment required by condition fifteen.
- 2) The layout of the site and size of the buildings and works, as shown on the approved endorsed plans shall not be altered or modified without the consent in writing of the responsible authority. Any substantive changes, in the opinion of the responsible authority, will require a new application and permit.
- 3) The use and development hereby permitted must at all times be carried out in accordance with the endorsed documentation to the satisfaction of the responsible authority.

**Use to cease if certain land not used in-conjunction with the broiler farm.**

- 4) Prior to the commencement of the development, Crown Allotments 2, 2A and 3 (No. 39 & 141 Clarkes Road Strathlea) must be consolidated to the satisfaction of the responsible authority.

**Environment Management Plan**

- 5) Prior to the commencement of the use hereby permitted, an Environmental Management Plan (EMP) for the operation of the broiler farm must be submitted to and be to the satisfaction of the responsible authority and Goulburn Murray Water. When approved by the responsible authority and Goulburn Murray Water, the EMP will be endorsed and then form part of this permit. The EMP must be in generally in accordance with the EMP submitted with the application (prepared by FocusCDS Consultants dated April 2024) and the Victorian Code for Broiler Farms 2009 (as may be amended from time to time), but amended to include the following additional requirements:
- a) bird-pickup trucks which are attending the site between 10pm and 7am must have broadband (non-audible) reverse beepers;
  - b) no deliveries of feed are to occur between 10pm and 7am;
  - c) any faulty fans are to be immediately decommissioned and are to be repaired within three business days (unless otherwise agreed by the responsible authority);
  - d) measures to ensure compliance with the traffic management plan, including information to be provided to drivers to ensure they follow the route required by the traffic management plan;
  - e) a requirement for the maintenance of the existing site-specific weather monitoring station, to the satisfaction of the responsible authority, with data from this monitoring station be provided to the responsible authority on request;



- f) placement of birds is to be co-ordinated with the existing broiler farms at No. 1480 Rodborough Road, Moolort so that it is staggered in a manner which is generally in accordance with the assumptions of the odour modelling carried out by GHD as part of the permit application process;
  - g) shed clean out to be carried out during the day-time period and not at a time when prevailing weather conditions are likely to be conducive to offsite odour impacts;
  - h) litter and dead bird stockpiling, spreading or disposal is not to occur on the site, nor on other adjoining land associated with the broiler farm (including No. 39 Clarkes Rd, Moolort and No. 1480 Rodborough Road, Moolort);
  - i) litter, dead birds and other waste from other broiler farms is not to be accepted, disposed of, stockpiled on, or spread on or over the land; and
  - j) there is to be a nominated community liaison person/s which is independent of the operation of the broiler farm. This liaison person/s is to be appointed by the applicant, after consultation with the local community, and is to be to satisfaction of Council. The nominated community liaison person/s is to be a point of contact between the broiler farm operators and the community, including in relation to complaint resolution. The nominated community liaison person/s is to be provided with access to the farm logbook required to be kept by 2.6.1 of the EMP, as appropriate to assist in resolving complaint.
- 6) Site performance inspections, site audits and reviews of the Environmental Management Plan must be undertaken in accordance with the endorsed Environmental Management Plan. Any revision to the Environmental Management Plan must be submitted to and approved by the responsible authority and Goulburn Murray Water. When approved such revised Environmental Management Plan will be endorsed as evidence of its approval and will thereby become part of the endorsed plan of this permit.

### **Landscape Plan**

- 7) Prior to the commencement of the use hereby permitted, a revised Landscape Plan must be submitted to and be to the satisfaction of the responsible authority. The revised Landscape Plan must be prepared by a person suitably qualified or experienced in landscape design to ensure substantial visual screening to the satisfaction of the responsible authority. When approved by the responsible authority, the revised Landscape Plan will be endorsed and then form part of this permit. The revised Landscape Plan must be generally in accordance with the landscape plan prepared by, Landform, Draing No. Ls1, dated 15/02/2024 and must include:
- a) Vegetation details of the drainage swales;
  - b) species and number of the trees, shrubs, and ground covers to be planted;
  - c) The use of semi-mature species for tree planting;
  - d) details of the methods to be used when planting, including deep ripping before planting as appropriate;
  - e) the timeline for planting, with the planting to be commenced at the commencement of construction and completed within 12 months of the construction of the broiler sheds; and

- f) a short-term (1-3 years) and long-term (3 years +) maintenance plan, including a requirement for replacement planting of dead or diseased plants, appropriate irrigation methods and regular weed control.
- 8) The landscaping and maintenance, as detailed in the endorsed plans, must be carried out to the satisfaction of the responsible authority. Once landscaped the landscaped areas as shown on the endorsed plan(s) must not be used for any other purpose except with the prior written consent of the responsible authority.
- 9) A landscape performance bond to the satisfaction of the responsible authority must be established in accordance with Approved measure E4 M1.8 of the Victorian Code for Broiler Farms 2009.

**Surface Water Management Plan**

- 10) Prior to the commencement of the use or any earthworks on the site hereby permitted, the submitted Surface Water Management Plan (Water Technology 5 April 2024) must be amended to the satisfaction of the responsible authority and Goulburn Murray Water. When approved by the responsible authority and Goulburn Murray Water, the Surface Water Management Plan will be endorsed and then form part of this permit. The Surface Water Management Plan must detail all proposed storm water quality works within the site during construction and operation of the broiler farm development. Such plan must be prepared by a person suitably qualified and may detail staging of works in line with the development proposed to the satisfaction of the Responsible Authority. The Surface Water Management Plan must be generally in accordance with the plan submitted with the application (prepared by Water Technology, dated 8 April 2024), but amended to include the following additional requirements:
  - a) Details of loading on the sedimentation basin and details and timing of desilting of the sedimentation basin.
  - b) Any impacts from the temporary storage of litter.

**Acoustic Assessment**

- 11) Prior to the commencement of development, the Acoustic Assessment (Watson Moss Growcott, dated 8 April 2024) must be endorsed under this planning permit.

**Odour Environmental Risk Assessment**

- 12) Prior to the commencement of development, the Odour Environmental Risk Assessment (GHD, dated 10 April 2024) must be endorsed under this planning permit.

**Landscape and Visual Assessment**

- 13) Prior to the commencement of development, the Landscape and Visual Review (Landform, February 2024) must be endorsed under this planning permit

**Land Capability Assessment**

- 14) Prior to the commencement of development, a Land Capability Assessment must be submitted responding the proposed development including requirements for the two caretakers' houses and staff amenities.

**Amenity**

- 15) The amenity of the area must not be detrimentally affected by the use or development through the: -
  - a) Transport of materials, goods, or commodities to or from the site.
  - b) Appearance of any building works or materials. The site shall be kept orderly and tidy to the satisfaction of the responsible authority.
  - c) Emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, wastewater, waste products.

- d) The presence of vermin.
  - e) Dust and particulate matter resulting from deliveries and pick-ups at and from the sheds.
- 16) The permit holder/operator shall use all appropriate broiler farm management techniques to the satisfaction of the responsible authority to minimise emissions beyond the site to the detriment of any person or the amenity of the neighbourhood of any broiler and/or chemical, disinfectant, or associated odour.
- 17) In the event of the responsible authority receiving any complaint regarding the operation of the broiler farm, the operator will be informed of such complaint by the responsible authority and the operator shall immediately investigate the reason for the complaint and take appropriate remedial action, as required, to comply with this permit to the satisfaction of the responsible authority.
- 18) If the responsible authority determines, in its opinion, that the amenity of nearby residents is adversely affected by the emission of an unreasonable level of odour, noise, dust or traffic noise from the broiler farm, the operators must immediately take actions and/or undertake works, which are directed by the responsible authority and may include adjusting stocking density in the sheds, removing unsatisfactory spent litter promptly, or any other actions including provision of mechanical odour or dust mitigation devices to rectify the emission of offensive, odour, dust or noise, all to the satisfaction and specification of the responsible authority.
- 19) In the event of the EMP Nuisance Complaint Handling provisions not rectifying any complaint, in the opinion of the responsible authority, particularly in the areas of Odour Emissions or Dust complaints, the responsible authority may, in its sole discretion, direct the operator under the Permit and EMP, to undertake a Supplementary Audit, at the cost of the farm operator, to identify the complaint causes and recommend appropriate ongoing, in shed remedies, to mitigate the sources of the complaint and implement such remedies deemed appropriate by the responsible authority, at its sole discretion and to the satisfaction of the responsible authority.
- 20) Should the in-shed remedies recommended in the above condition not be successful in mitigating or eliminating any amenity or nuisance complaint/s to the satisfaction of the responsible authority, the responsible authority may direct appropriate in-shed or ex-shed environmental amenity control plant & equipment, to be installed to a specification and to a time scheduled, all to the satisfaction of the responsible authority.
- 21) The broiler farm sheds, and all feed stores must be vermin and bird proof to the satisfaction of the responsible authority.
- 22) The permit holder must use its best endeavours to ensure that all trucks and heavy vehicles used in transporting livestock and litter do not cause any detriment to the amenity by noise or excessive vehicle movements. The permit holder must ensure that contractors engaged comply with all necessary Victorian vehicle design (ADR) and maintenance (roadworthy) requirements.
- 23) No external floodlighting shall be installed without the written permission of the responsible authority.
- 24) The use of chemicals in association with the use and development of the site must be in accordance with the endorsed EMP to the satisfaction of the responsible authority.

**Environmental Health conditions**

25) Prior to the commencement of use of the broiler farm the following must be undertaken by the permit holder/operator to the requirements and satisfaction of the responsible authority:

- a) An updated Land Capability Assessment which takes into account full water balance and nutrient loads from the two proposed dwellings and is prepared following the Municipal Association of Victoria Model LCA Report must be submitted to Council demonstrating that the site is capable of treating and retaining all wastewater from the two proposed dwellings in accordance with relevant legislation and standards.
- b) Prior to the commencement of construction of the proposed dwellings and any associated structures, an Application for a Permit to Install an Onsite Wastewater Management System must be submitted to Council and approved by Council prior to any installation.

### **Engineering conditions**

Prior to the commencement of use of the broiler farm the following must be undertaken by the permit holder/operator to the requirements and satisfaction of the responsible authority:

26) Road

- a) A Traffic Management Plan must be submitted and endorsed detailing access to and from the broiler farm site. Access must be via Clarkes Road from Rodborough Road. No alternative routes are permitted without approval from the Responsible Authority.
- b) Clarkes Road must be upgraded from Rodborough Road to twenty-five metres south of the developments entrance to the Council rural industrial Road hierarchy standard as per the Central Goldfields Shire Council Road Management Plan 2024.
- c) An annual maintenance fee of \$11,800, indexed annually from the 2024/2025 Financial Year, is required to be paid to Council for unsealed road maintenance of the upgraded section of Clarkes Road for the additional road maintenance costs due to the extent of heavy vehicle traffic imposed by the Broiler Farm Development.
- d) The intersection of Rodborough Road and Clarkes Road is to be asphalt overlaid with a 40mm thick 10mm aggregate Type H Asphalt for fifty metres in length (25 metres into Clarkes Road).
- e) Prior to the commencement of any road works the permit holder/operator must submit detailed construction plans and make further application for, and have approved, a Consent for Works permit. All works constructed or carried out must be in accordance with the approved plans/permit(s) and to the satisfaction of the responsible authority.
- f) All signs and line marking are to be included as per AS.1742.2.2022
- g) All line marking is to be thermoplastic permanent paint.

### **Access**

- h) Crossover to the development must be to at least the standard of the Infrastructure Design Manual drawing 255.
- i) Once constructed/upgraded crossovers must be thereafter maintained by the landowners to the satisfaction of the Responsible Authority.

- j) An internal driveway from the fence line to the enclosures must be provided as an all-weather driveway with dimensions adequate to accommodate emergency vehicles to the satisfaction of the Responsible Authority.

**Drainage**

- k) No effluent or contaminated stormwater may enter the Council drainage system.
- l) All stormwater and surface water drainage from the proposed buildings, hard standing areas, driveways, and yards must be designed to be contained within the site and designed for storm water quality and quantity to comply with the Best Practice Environmental Management Guidelines for Urban Stormwater (CSIRO) 1999 to the satisfaction of the Responsible Authority.
- m) All stormwater and surface water drainage from the proposed buildings, hard standing areas, driveways, and yards is to be collected and discharged to the proposed retention dam on the development.
- n) A Stormwater Management Strategy detailing all proposed stormwater quality works within the subject land during construction and operation of the broiler farm development must be submitted to and approved by the Responsible Authority prior to the commencement of any drainage works on site.
- o) The developer/applicant/owner must restrict sediment discharges from the construction site in accordance with Construction Techniques for Sediment Pollution Control (EPA 1991) and Environmental Guidelines for the Major Construction Sites (EPA 1995).

**Signage**

- p) Trucks entering signage must be placed on Clarkes Road and Rodborough Road to the satisfaction of the Responsible Authority.

**Loading/Unloading**

- q) The loading and unloading of vehicles and the delivery of goods to and from the site must always be undertaken entirely within the boundaries of the site and be so conducted as to cause minimum interference with other traffic to the satisfaction of the Responsible Authority.

**Waste Disposal**

- r) The treatment of waste and litter from the operation of the site is to be undertaken in accordance with the endorsed Environmental Management Plan.
- s) No stockpiling of waste or litter is to occur on the site, all waste is to be disposed off-site to the satisfaction of the responsible authority.
- t) All waste pick-up vehicles/trucks to be covered with secure covers, which are used to prevent dust or spillage of waste on departure from the site.

**Developers' Defect Liability**

- u) The developers' defect liability period for road related assets is 12 months from completion of construction.

**Rural Road Numbers**

- 27) Rural Road Numbers as assigned by Council's Rates Officer must be clearly displayed at the main access points for the site.

**Goulburn Murray Water (GMW) conditions**

- 28) All construction and ongoing activities must be in accordance with EPA Publication 1834.1 Civil Construction, Building and Demolition Guide (September 2023).
- 29) All wastewater from the two dwellings must be treated and disposed of using an approved system. The system must have a certificate of conformity issued by the Conformity Assessment Body (or equivalent approval) and be installed, operated, and maintained in accordance with the relevant Australian Standard and EPA Code of Practice.
- 30) The wastewater disposal area for this system must be located at least: 100 metres from any waterways, 40m from any drainage line, 60m from any dams and 20m from any bores.
- 31) The wastewater disposal area must be kept free of stock, buildings, driveways, and service trenching and must be planted with appropriate vegetation to maximise its performance. Stormwater must be diverted away. A reserve wastewater disposal field of equivalent size to the primary disposal field must be provided for use in the event that the primary field requires resting or has failed.
- 32) The development must be undertaken in accordance with the requirements of the Victorian Code for Broiler Farms, 2009 (including 2018 amendments).
- 33) The floor of the sheds must be constructed with impervious surface such as concrete or of clay compacted to achieve a design permeability of  $1 \times 10^{-9}$  m/sec. The shed must be designed to ensure that all litter can be retained within the shed until removal is required.
- 34) Contaminated litter removed from the sheds must be transported off site by an approved contractor to an approved site.
- 35) There must be no spent litter from the sheds stockpiled on the site. Any temporary storage areas for wet litter must have an impermeable base and bunding to ensure contaminated run-off does not discharge from the temporary storage area.
- 36) No land application of contaminated litter is to occur.
- 37) Stormwater and drainage from hard stand areas and the areas around the shed must be directed to a retention dam which must be designed with a capacity and freeboard to enable the run-off from a 1 in 10-year storm to be retained. Any overflow from the dam must not cause erosion.
- 38) The retention dam must be lined with an impervious liner and if clay is used it must be compacted to a seepage rate of not greater than  $1 \times 10^{-9}$  m/sec. The dam must be operated to a minimum level to ensure the liner does not dry out and crack. There must be no overflow of water from the dam directed to any waterways.
- 39) All soil removed during construction of the dam must be reused, stabilized, or vegetated on-site to ensure that no sediment can be transported off-site.
- 40) All dead birds must be disposed of off-site or managed on-site to the satisfaction of the Environment Protection Authority.
- 41) Any chemicals stored on-site must be kept in accordance with the EPA Publication 1698 Liquid Storage and Handling Guidelines (June 2018).

**EPA conditions**

- 42) Noise emitted from the premises must not exceed the recommended levels as set out in Noise from Industry in Regional Victoria (NIRV; EPA Publication 1411, 2011) or as amended.
- 43) Discharge of wastewater to land must not adversely affect the land.
- 44) Management of farm waste at the premises should be in accordance with EPA Publication IWRG641 Farm Waste Management June 2009 or as amended.

45) Stormwater contaminated with effluent must not be discharged beyond the boundary of the premises.

46) Nuisance dust must not be discharged beyond the boundaries of the premises.

**Expiry**

47) This permit will expire if: -

- a) the development of the first shed is not commenced within four (4) years of the date of this permit; or
- b) the development of the final shed is not completed or the use is not commenced within six (6) years of the date of this permit.

In accordance with section 69 of the *Planning and Environment Act 1987*, an application may be submitted to the responsible authority for an extension of the periods referred to in this condition.

**Notes**

The Environment Protection Act 2017 came into effect on 1 July 2021 and imposes new duties on individuals and/or businesses undertaking the activity permitted by the permit. If your business engages in activities that may give rise to a risk of human health or the environment from pollution or waste, you must understand those risks and take action to minimise them as far as reasonably practicable.

For further information on what the laws mean for Victorian businesses go to: <https://www.epa.vic.gov.au/for-business/new-laws-and-your-business>.

For further information on what the new laws will mean for individuals and the community go to: <https://www.epa.vic.gov.au/about-epa/laws/new-laws/the-new-act-for-the-community>.

The storage dam may require a permit/licence from the catchment management authority, a Hazard Potential Classification and an ANCOLD.

**LEGISLATION AND POLICY CONTEXT**

Central Goldfields Shire Council’s Council Plan 2021-2025:   Leading Change

The Community’s vision:                                   Our Growing Economy  
 2. A vibrant and thriving economy with a growing population.

Initiative:   Transparent decision making

**BACKGROUND INFORMATION**

N/A

**REPORT**

**Proposal**

The application proposes the use and development of the land for a Farm Cluster broiler farm for up to 445,000 birds and two caretakers’ houses with associated buildings and works at 39 Clarkes Road, Moolort, and 141 Clarkes Road, Strathlea. Refer to Attachment 1: Proposed plans. The applicant is ProTen Victoria Ltd (ProTen), who are represented chiefly by FocusCDS Consultants. The proposal is also known as Grandview 3 (GV3) by ProTen.

**Broiler sheds**

Primarily, the proposal is for the construction of eight broiler sheds that would house a maximum of 445,000 birds. The sheds would be 176m in length and 18.7m in width (floor area of 3,291m<sup>2</sup>), with a maximum height of 4.28m reducing to 2.9m at the eaves.

They would be constructed using a concrete dwarf wall with polyisocyanurate sandwich panels above that are clad in Colourbond with a pale green finish.

The sheds are proposed to be roofed with galvanised iron, while the shed floors would be concrete. The eight sheds would be constructed in parallel with a gap of 37.4m between them, which are the range areas for the birds.

The surface level of each shed floor would be at least 350mm above the inverts that collect stormwater in the range areas to ensure that the floors remain dry.

Along most of both long sides of each shed, there would be range doors in the concrete dwarf walls to allow birds to move to and from range areas.

Similarly, along most of both long sides of each shed, there would be air vents below roof level. Minimum ventilation will occur through a minimum ventilation fan fitted with a stub stack on each end of each shed.

Tunnel ventilation will occur through extractor fans at the eastern end of both long sides of each shed, which will draw air through cooling pads that are at the western end of both long sides of each shed.

Finally, there will be a control room constructed at the western end of each shed. The submitted Planning Report that accompanies the application further describes shed ventilation, including minimum ventilation and tunnel ventilation, as well as temperature control.

Finally, LED lights will be installed at each end of each shed; the application documentation states that this lighting will only be used while bird pick up occurs and will not spill beyond the site boundaries.

### **Associated buildings and works**

Associated buildings and works include:

- A 16m by 10m machinery and staff amenities building to the west of the broiler sheds.
- A 15.10m by 5.8m pump shed to the west of the broiler sheds.
- A 5.6m by 5.8m generator shed to the east of the broiler sheds.
- A 6m by 2.4m dead bird freezer building northwest of the broiler sheds and near to the site entrance.
- Twelve feed silos spread through the western part of the range areas; each 3.6m in diameter and 8.2m high.
- Three water storage tanks to the west of the broiler sheds.
- LPG storage tanks to the west of the broiler sheds.
- Internal car park to the west of the broiler sheds as well as an off-site car park near to the site entrance to Clarkes Road.
- A vehicle wheel wash and biosecurity gate at the site entrance.
- Fenced free range areas on either side of each shed.
- An earthen bund to the north, east, and south of the sheds.
- Internal access roads/areas throughout the site to Clarkes Road.
- Sedimentation basin and dam as well as drainage swales.
- Extensive landscaping to the north, south, east, and west of the buildings and works.

### **Caretakers' houses**



Further, it is proposed to construct two caretakers' houses.

These are proposed to house the farm manager and assistant manager, as staff are always required to be available.

The caretakers' houses are located to the north of the broiler sheds on land that is part of 39 Clarkes Road and will be accessed via an internal all-weather road.

Both caretakers' houses have a 4-bed layout with an open-plan living/kitchen/dining area and a double garage. The single-storey buildings would be clad in brick and roofed in custom orb corrugated steel.

### **Conventional and free range**

The application documentation generally depicts the proposal as a conventional broiler farm, where birds are permanently in the sheds.

However, the design allows for operation as a free-range broiler farm, where birds have access to a range.

The Broiler Code sets out that a change between conventional and free-range operations is not a change in use.

When operating as a free-range broiler farm, birds can move outside the sheds during daylight hours to the adjacent range areas via the range doors.

The range areas will be pastured, shaded, fenced from predators, and managed to ensure continuous healthy pasture is available.

Range areas are provided on both sides of each shed.

### **Operational arrangements**

The broiler farm is proposed to operate 24 hours a day, 365 days a year. Birds will be brought onto the site in batches approximately every 65 days, with a batch generally arriving over a 2-to-3-day period.

The production cycle involves a growing period of approximately 7-8 weeks and approximately a 10-to-14-day period for clean-up and turn around. It is anticipated that 5.6 batches per annum will be grown.

The submitted Planning Report that accompanies the application provides detail on operational arrangements for feed, water, litter management, vermin control, removal of dead and diseased birds, odour control, bird pickup, shed cleaning, waste water, power failure, biosecurity, and free-range areas.

Particular points of note include:

- Feed will be delivered by enclosed bulk delivery trucks and blown through an enclosed system into the feed silos. From the silos, the feed will go through an enclosed system into an automatic feeding system within each shed.
- Drinking water for the sheds would be provided from the dam. Supply will be supplemented by water from a bore located to the west of GV2 and supplied through a private main.
- Before a new batch of birds, litter will be distributed over the entirety of each shed floor. Litter allows the droppings of the birds to decompose via micro-organic activity. Spent litter is removed from the sheds after each batch, taken off-site, and replaced with new litter.
- A fully enclosed feed delivery, storage, and distribution system will ensure that there is no spillage of feed to attract vermin. The concrete floors and dwarf walls will further prevent the entry of vermin into the sheds. The management regime will also include the regular use of target-specific, environmentally safe bait stations.
- Dead and diseased birds will be collected daily and stored in the freezer building to be located adjacent to the access road. Frozen birds will be removed off-site.

- Routine checking of the shed environment will be a daily management task. If any damp litter is found, it will be removed and replaced with fresh litter.
- Proper temperature control and ventilation of the sheds will be achieved through the computer-controlled tunnel ventilation system.
- Most bird pickups occur at night; however, daytime collection may be required to meet market demands.
- After each time that birds are picked up, equipment will be raised up, litter removed from the sheds, the floors swept clean, and then the interior of the shed and all equipment will be cleaned using high pressure, low volume sprays. No water will leave the sheds. The sheds are then sanitised and allowed to dry while any maintenance is undertaken. Fresh litter will be placed in the sheds and equipment repositioned for a new batch to arrive.
- No contaminated water or wastewater will be discharged from the sheds at any time. The concrete floors and dwarf walls are impermeable.
- An alarm system will be installed that contacts staff in the event of power supply, water supply and environmental issues. These alarms will be regularly tested as part of routine management procedures. If there is a power failure, emergency diesel generators can maintain normal operating conditions.
- The sheds and their immediate environs are within a biosecurity area.
- All persons entering this area must adhere to biosecurity protocols, which will minimise the potential for contamination from external sources.
- A wheel wash will be located on the access road into the broiler farm, which all vehicles must pass through before entering the biosecurity area.

### **Access**

Access to the broiler farm will be from Clarkes Road via Rodborough Road to the north, with the entrance to the farm road (i.e. the vehicle crossing) being designed and constructed to allow access and manoeuvring for the largest approved vehicle.

The gate at the entrance will be set back 120m from the road to ensure that no vehicles need to be parked on Clarkes Road.

The proposal anticipates two hundred truck visits per batch or 1120 truck visits per year based on 5.6 batches annually.

Trucks picking up birds are expected to normally arrive and depart between the evening and morning; these night-time vehicle movements make up about 35% of all truck visits with remaining vehicle movements during daytime hours.

### **Landscaping**

The proposal includes a variety of landscaping treatments, including bunding.

Shrub and tree planting will be undertaken on batters/bunds that more immediately surround the sheds and associated buildings and works.

Bunds will be constructed to be 1.6m higher than the floor level of the sheds.

Beyond, the sheds and other buildings and works will be further surrounded by forestry planting with species including Yellow Gum, Grey Gum, Yellow Box, Drooping She-oak, Golden Wattle, Gold-dust Wattle and Sweet Bursaria.

A concept Landscape Plan has been submitted that shows a variety of landscaping widths in different parts of the site.

The applicant has separately advised that swales will be planted with grass species.

### **Stormwater**

Stormwater from building roofs (including the sheds), range areas and hardstand areas would be collected in drainage swales and directed to the dam via a vegetated buffer strip and the sedimentation basin.

The dam will provide water for the birds, cooling requirements, and landscape watering.

The dam will also act as a retarding basin for rainfall events of 1 in 10-year recurrence interval.

Flows from the dam outlet pipe will be discharged to a contoured swale from where it will be dispersed to natural surface consistent with current flow conditions on the property.

The vegetated buffer strip, sedimentation basin and dam are designed to ensure that the sediments or nutrients entrained in the stormwater flows will be filtered out prior to any discharge from the dam.

The vegetated filter strip will be sized in accordance with *Egg Industry Environmental Guidelines (Edition 11 – McGahan et al., 2018)*. The swales will generally have a slope gradient of 1 in 200 and will be planted with grass species.

### **Relevant background**

#### **Planning permit T120/16 / VCAT reference no. P672/2017 / permit application no. PA120/16**

- In September 2016, the previous property owner lodged planning permit application no. PA120/16 to use and develop a broiler farm with seven sheds and up to 377,000 birds at 141 Clarkes Road.
- In February 2017, the application was amended to six sheds and up to 325,000 birds.
- On 6 March 2017, Council issued a Notice of Decision to Refuse to Grant a Permit.
- The permit applicant subsequently appealed Council's decision to the Victorian Civil and Administrative Tribunal (VCAT).
- On 14 December 2017, VCAT ordered that Council's decision be set aside, and a planning permit be issued subject to conditions (*Grandview Poultry Pty Ltd v Central Goldfields SC [2017] VCAT 2090*).
- On 19 December 2017, Council issued planning permit T120/16 to allow the use and development of the land for a 325,000 bird (six shed) broiler farm.
- The permit remains active, having been extended on 15 December 2021 and 31 October 2023.
- The current expiry dates are 19 December 2025 for commencement of development and 19 December 2027 for completion of development.
- The approved proposal has similarities to the current proposal while being located further to the south within 141 Clarkes Road and having a smaller capacity.
- This planning permit application came about after a previous planning permit application was refused by VCAT – see below.

#### **VCAT reference nos. P481/2014 and P623/2014 / permit application no. 071/13**

- In September 2013, the previous property owner lodged planning permit application no. 071/13 to use and develop a broiler farm with eight sheds and up to 380,000 birds at 141 Clarkes Road.
- In March 2014, Council issued a Notice of Decision to Grant a Planning Permit.
- Objectors appealed the decision, while the permit applicant appealed some of the conditions that were imposed.
- On 14 April 2015, VCAT ordered that Council's decision be set aside, and no planning permit be issued. The reasons for this decision generally related to odour and visual impacts.

### **Broiler farm to the north**

The applicants for the current proposal, Proten, operate a broiler farm on a property immediately to the north at 1480 Rodborough Road, Moolort.

The broiler farm consists of two units, each comprising eight broiler sheds with a combined permitted capacity of 884,000 birds.

These are known as Grandview 1 (GV1) and Grandview 2 (GV2). Amended planning permits 14/08-A1 (relating to GV1) and 038/10-A1 (relating to GV2) were issued on 21 February 2024.

The effect of these were to allow three new broiler sheds immediately to the south of the existing sheds on GV1; to allow associated buildings and works including new silos, concrete pads, hardstand areas, and vehicle access areas; require further landscaping around the new sheds; and alter the allowed capacity at GV1 and GV2 while keeping the combined permitted capacity at 884,000. The amendment applications were made because of the introduction of the RSPCA Approved Farming Scheme Standard: Meat Chickens, which reduced the maximum stocking density for broiler farms.

### **The Broiler Code**

The Broiler Code classifies broiler farms according to different levels of environmental and amenity risk and applies different approval requirements and notification and review rights to planning permit applications.

The classification is dependent on the number of birds kept on the farm, the ability to contain the 'separation distance' within the broiler farm boundary, and the proximity to other existing and proposed broiler farms.

The Broiler Code sets out that the 'separation distance' is the distance from the nearest external edge of the new or existing broiler shed to the nearest external edge of the sensitive use (such as a dwelling) on land beyond the broiler farm property. It excludes sensitive uses directly associated with the broiler farm operations, such as dwellings on the broiler farm property. The separation distance is therefore the distance from the new or existing broiler sheds within which no sensitive use is located. The Broiler Code sets out how the separation distance is calculated, which is essentially a function of the capacity of a broiler farm. The Broiler Code states that the separation distance is required to minimise the risk of routine and abnormal odour and dust emissions from the broiler sheds adversely impacting on nearby sensitive uses.

The currently proposed broiler farm is classified as a Farm Cluster under the Broiler Code. The Farm Cluster classification applies to broiler farm where:

- The minimum separation distance requirement overlaps with the minimum separation distance requirement of any existing broiler farm, a broiler farm approved by a planning permit or a proposed broiler farm that is the subject of a permit application that has been lodged with the responsible authority.
- The combined farm capacity of the broiler farms with overlapping minimum separation distances is greater than 400,000 birds.

If a broiler farm is a Farm Cluster, the Broiler Code sets out the following requirements:

- An Odour Environmental Risk Assessment (Odour ERA) must be completed in accordance with section 6 of the Broiler Code.
- Under Clause 66.05 of the Victoria Planning Provisions and all planning schemes, notice of an application must be given to the Environment Protection Authority (EPA) Victoria in accordance with section 52(1)(c) of the Act.

Both above requirements have been satisfied.

It is considered that the proposal could alternatively be classified as a Special Class broiler farm as opposed to a Farm Cluster under the Broiler Code.

However, it is inconsequential as the same requirements apply between the two classifications in relation the need for an Odour ERA and the necessity for notice to the EPA Victoria.

### **Site and surrounds**

**The site**

The site is located at 39 Clarkes Road, Moolort, and 141 Clarkes Road, Strathlea – approximately 10.5km west of Newstead and 13.5km southeast of Carisbrook. Refer to Attachment 2: Site and surrounding area. The land is legally described as Crown Allotment 2 and Crown Allotment 2A Parish of Rodborough (39 Clarkes Road) as well as Crown Allotment 3 Parish of Rodborough (141 Clarkes Road).

The northern part of the site is made up of land at 39 Clarkes Road while the southern part of the site is made up of land at 141 Clarkes Road. Combined, the site has an area of approximately 256ha with an irregular shape and the eastern side of Clarkes Road.

The site is currently used primarily for agricultural purposes, although there is an existing dwelling in the eastern part of the 39 Clarkes Road land which fronts onto Strathlea Road.

The remainder of the land is clear of buildings apart from minor structures like fencing, while the sites are also largely clear of native vegetation.

Joyces Creek runs generally from south to north through the eastern part of the site. Land to the west of Joyces Creek is within the Central Goldfields municipality and land to the east is within the Mount Alexander municipality.

The land slopes gradually downwards from west to east, towards Joyces Creek. Clarkes Road is an unsealed gravel road

Under the Planning Scheme, the site is entirely within the Farming Zone (FZ). The eastern part of the site, generally around Joyces Creek, is affected by the Environmental Significance Overlay (ESO), the Salinity Management Overlay (SMO), and the Land Subject to Inundation Overlay (LSIO), although no use or development is proposed on land affected by these overlays.

Land 200m on either side of Joyces Creek is an area of Aboriginal cultural heritage sensitivity, although similarly no use or development is proposed on this land. Further, the site is within a declared special water supply catchment area (Cairn Curran).

**The surrounds**

The surrounding area is characterised by agricultural uses, mainly broad acre cropping and grazing, along with scattered dwellings that are mostly associated with farming.

Other items of note include the Cairn Curran Reservoir about 3.7km to the northeast (at the closest point) within the Public Use Zone (PUZ), the Tullaroop Reservoir about 6.5km to the west (at the closest point) within the Public Use Zone (PUZ) and the Sandon State Forest about 3km to the east (at the closest point) within the Public Conservation and Resource Zone (PCRZ).

The nearest edge of the existing broiler sheds at ProTen’s Broiler Farm Units 1 (GV1) and 2 (GV2) are located, respectively, approximately 1,322m and 1,171m to the north of the broiler sheds at the currently proposed broiler farm.

Apart from any existing or proposed dwellings on the site or in the applicant’s ownership, the nearest third-party/off-site dwellings to the proposed sheds include:

• 1,351m to the southeast	(63 Hurns Road, Strathlea)
• 1,605m to the northwest	(1366 Rodborough Road, Moolort)
• 1,731m to the east	(321 Strathlea Road, Strathlea)
• 1,766m to the east	(355 Strathlea Road, Strathlea)
• 1,831m to the southeast	(9 Hurns Road, Strathlea)
• 1,900m to the south	(375 Clarkes Road, Strathlea)
• 2144m to the northeast	(159 Strathlea Road, Joyces Creek)

• 2,200m to the southeast	(410 Strathlea Road, Strathlea)
• 2,350m to the southeast	(457 Strathlea Road, Strathlea)
• 2,400m to the northwest	(1290 Rodborough Road, Moolort)
• 2,450m to the southeast	(472 Strathlea Road, Strathlea)

All these dwellings are within the FZ.

**Registered Restrictions**

Pursuant to section 61(4) of the Act, the responsible authority must refuse to grant a permit if it would authorise anything that would result in a breach of a registered restrictive covenant. The subject land is not affected by any such registered restriction.

**Permit triggers**

Under the Planning Scheme, a permit is required pursuant to the following:

- Clause 35.07-1, a permit is required for a broiler farm as a Section 2 use of the land in the FZ, with the relevant condition being satisfied that the requirements of Clause 53.09 ‘Poultry farm’ must be met.
- Clause 35.07-1, a permit is required for the two caretakers’ houses as a Section 2 use of the land in the FZ, with the relevant condition being satisfied that the requirements of Clause 35.07-2 ‘Use of land for a dwelling, small second dwelling or rural worker accommodation’ must be met.
- Clause 35.07-4, a permit is required to construct a building or carry out works associated with a use in Section 2 of Clause 35.07-1.

**Definitions**

Clause 73.03 of the Planning Scheme sets out the definitions of various land use terms, including:

- Broiler farm: *Land used to keep broiler chickens for the production of meat.*
  - A broiler farm is nested within the land use term of ‘poultry farm,’ which in turn is in nested within the land use term of ‘animal production,’ which in turn is in nested within the land use term of ‘animal husbandry,’ which in turn is in nested within the land use term of ‘agriculture’
- Caretaker's house: *A dwelling on the same site as a building, operation, or plant, and occupied by a supervisor of that building, operation, or plant.*
  - A caretaker’s house is nested within the land use term of ‘dwelling,’ which in turn is in nested within the land use term of ‘accommodation.’

**Planning Scheme considerations**

The following lists the relevant clauses of the Planning Scheme and their relevant content, purposes, or decision guidelines:

**00 Purpose and Vision**

**02 Municipal Planning Strategy**

**02.01 Context**

- The Shire contains significant areas of remnant vegetation, notably its stands of Box Ironbark Forest. Central Goldfields is located within the heart of the Box Ironbark ecosystem, which provides a habitat for a wide diversity of flora and fauna that is unique to this ecosystem. The Moolort Plains wetlands are a unique wetland complex situated in the Volcanic Plains in the Shire’s east.
- The Shire is located south-west from the Loddon River catchment. Several creeks including the Bet Bet, Emu, Timor, Tullaroop and McCallums Creeks, traverse the Shire and the Avoca River forms part of its western boundary with the Pyrenees and Northern Grampians Shires. Other major water features include Lake Cairn Curran and Tullaroop Reservoirs.

- The Shire's productive agricultural land is a finite and important resource. Cropping, grazing, fodder conservation and horticulture are ongoing agricultural activities. Conflicts between farming, industry and residential uses are an ongoing challenge for the Shire. Agricultural uses are further impacted by climate change and soil degradation from erosion, salinity, and prior mining activities.
- Central Goldfields Shire has a number of industries that are driving the local economy, such as primary industries and trades; population driven industries; knowledge and public sector industries and tourism. Despite agriculture declining as an employment source, there are opportunities for improving supply chains, increased food manufacturing and diversified farming practices.
- The Shire is part of the Goldfields Tourist Region, which celebrates its gold and mining heritage. There are also significant Aboriginal sites and an emerging arts and culture sector in the Shire which present unique cultural tourism experiences. Central Goldfields is well serviced by a road network, with limited public transport options available. Active transport is emerging as an important resource for the sub-regional centre of Maryborough and within the district towns. The Shire features a diverse array of open space and recreation facilities.

### **02.02 Vision**

- Our vision is "to be a vibrant, thriving, inclusive community" (Council Plan 2017-2021).
- Central Goldfields Shire Council seeks to create a shire that:
  - Has a supported, cohesive community, living a full and healthy life.
  - Has a vibrant local economy which contributes to the municipality's economic prosperity.
  - Celebrates the rich built and natural heritage and a sustainable environment.

### **02.03 Strategic Directions**

#### **02.03-2 Environmental and landscape values**

- Landscape
  - Prominent features of the natural landscape include Paddy's Ranges State Park, Mt Bealiba Range, Moolort Plains, the Cairn Curran Reservoir and Talbot's volcanic rises. Several creeks including the Bet Bet, Burnt, Emu, Timor, Tullarooop and McCallums Creeks traverse the Shire, and the Avoca River forms part of the western boundary with the Pyrenees and Northern Grampians Shires.
- Biodiversity
  - A rich diversity of plants, animals and habitats exist across the Shire. As part of the north central catchment, the Bealiba/Dalyenong, Moolort Plains and Upper Loddon are recognised as priority biodiversity areas.
  - The Moolort Plains Wetlands is a unique wetland complex located within the Volcanic Plains in the eastern part of the Shire.

The catchment of the wetlands is Victoria's only National Biodiversity hotspot and is the habitat for many native animals, particularly waterbirds, and a number of threatened fauna species. The wetlands contain different wetland types, although their precise location, characteristics and biodiversity is not well understood. Recognised threats to the unique wetlands complex situated in the Volcanic Plains are cropping, pest plants and animals. Threatened flora species within the Box Ironbark Forests, include Buloke, Small Milkwort, Clover Glycine and Scented Bush-pea. Threatened fauna species include Swift Parrot, Powerful Owl, Brush-tailed Phascogale and Striped Legless Lizard.

- Council seeks to protect environmental and landscape values by:
  - Support mechanisms to identify and protect the Moolort Wetlands and the Bealiba/Dalyenong area.

- o Protecting the water quality of the Loddon and Avoca Rivers and Bet Bet Creek waterway systems.
- o Protecting the Talbot district volcanic rises and the Cairn Curran Reservoir as significant landscapes.

### **02.03-3 Environmental risks and amenity**

Natural environmental hazards including bushfire, land degradation and flooding present risks and constraints for land use and development in Central Goldfields Shire. Climate change has the potential to have adverse impacts on agriculture, tourism and on economic prosperity and viability in general. The interface between industrial uses and neighbouring residential uses are an ongoing challenge in the Shire. Emerging industries, such as intensive agriculture, greyhound keeping and training, can create amenity conflicts between land uses.

- Council seeks to address environmental risks and amenity by:
  - o Minimising the potential impact of development on water pollution, land degradation and risk of salinity and erosion.
  - o Ensuring land capability supports land use and development, particularly in areas of environmental risk.

### **02.03-4 Natural resource management**

- Agricultural land
  - o Agricultural land in the Shire is a resource that must be maintained for productive use. Viable land in the Shire includes the high riverine plains in the Dunolly, Bealiba and Natte Yallock areas; volcanic plains and rises at the Moolort Plains, Talbot and east of Carisbrook; metamorphic plains and ridges south of Bealiba and west of Dunolly; granite to the south and south-east of Bealiba; and the sedimentary hills and rises around Maryborough, Dunolly and Carisbrook.
  - o Agricultural industries include cropping, sheep and cattle grazing and fodder conservation. There are emerging specialisations in less traditional agricultural activities such as fruit and vegetable growing, poultry farming, nursery, and floriculture, as well as emerging industries such as intensive agriculture and renewable energy production.
  - o Land use conflict can occur between agriculture and residential land uses. This has the potential to affect the operation of farms and reduce their productive capacity.
  - o The future of the agricultural industry is dependent on sustainable agricultural practices. Issues such as soil salinity, erosion and maintaining water quality and quantity are threats to agricultural production.
  - o Intensive agriculture industries have the potential to cause effluent disposal problems and affect the amenity of adjacent land uses and greyhound keeping and training can cause conflict for nearby residential uses.
  - o Council aims to protect agricultural and environmental values by:
    - o Promoting sustainable agricultural activities and land management practices that minimise adverse impacts on the primary production and environmental values of surrounding land and the catchment.
- Water
  - o The Central Goldfields Shire is situated in the Loddon dry land catchment and is part of the wider Avoca Loddon-Campaspe catchment.
  - o With a significant area of the Shire situated in the catchment of the Tullaroop and Laanecoorie Reservoirs and Lake Cairn Curran, there is a need for sustainable land management in water supply catchment areas.



- Protection of water quality and maintaining water supply are priorities. Poor land use planning decisions, illegal and unsafe dams, unplanned incremental change, and inadequate land management can influence both water quality and quantity in the catchments.
- Council aims to protect the viability of natural resources by:
  - Discouraging the subdivision of land or conversion to land uses that take the land out of productive use.
  - Promoting alternative cropping, intensive agriculture and value adding enterprises.
  - Minimising conflicts between agriculture and residential uses to ensure productive agricultural capacity is not reduced.
  - Supporting emerging agricultural industries that are compatible with existing agricultural practices, including horticulture, intensive animal production, niche agriculture, value adding industries and renewables.
  - Protecting the environs and water catchments of Tullaroop and Laanecoorie Reservoirs and Lake Cairn Curran.

### **02.03-7 Economic development**

The Central Goldfields Shire's economy is small compared to the Loddon Campaspe region, which is attributed to its lower population base. The main areas of economic activity are primary industries (agriculture, construction, manufacture, and transport); population driven industries (retail, hospitality, personal and household services); knowledge and public sector industries (health, education, and government agencies) and tourism (accommodation, hospitality, arts, and recreation services).

- Rural enterprises
  - Agricultural activities are primarily cropping, sheep and cattle grazing and fodder conservation. Beef and sheep farming are high employers within the sector. There are emerging specialisations in less traditional agricultural activities such as fruit and vegetable growing, poultry farming, nursery, and floriculture, as well as a growing interest in intensive agriculture, horticulture, contributing to supply chain networks and renewable energy production.
- Tourism
  - Tourism is an emerging industry in the Shire, which is part of the Goldfields Tourist Region and on the Golden Way Touring Route between Ballarat and Bendigo. Each of the Shire's towns and hamlets have heritage streetscapes and landscapes which are complemented by environmental features such as the Box Ironbark forests, Moolort Plains, volcanic ridges, and Aboriginal assets. The Shire encourages events, emerging arts, and cultural initiatives to further strengthen the tourism industry.
- Council seeks to promote economic development by:
  - Facilitating the development of the Shire's tourism industry of small gold towns, goldfields, Aboriginal cultural tourism, and environmental assets.

### **02.03-8 Transport**

- Road network
  - Central Goldfields Shire is well served by roads, including the Pyrenees Highway that provides important links to the Calder and Sunraysia Highways. The Wimmera Highway is located in the northern tip of the Shire near Moliagul.
- Active transport
  - Active transport is an important transport mode within the towns and as a tourism drawcard, with rail trails an emerging interest.

### **02.03-9 Infrastructure**

- Integrated water management
  - Council recognises the interconnection of water systems, including urban areas, water supply catchments, receiving environments and agricultural water users.

#### **02.04 Central Goldfields Strategic Framework Plans**

- Central Goldfields Shire Strategic Framework Plan to Clause 2.04
  - Shows the proposed broiler farm being within an area of 'high quality cropping land,' within a 'significant wetland area,' and within the Cairn Curran special water supply catchment.
- Central Goldfields Shire Environmental and Landscape Values Plan to Clause 2.04
  - Shows the proposed broiler farm being adjacent to an area of ESO, within a 'significant wetland area,' near several waterbodies, and within the Cairn Curran special water supply catchment.
- Central Goldfields Environmental Hazards Plan to Clause 2.04
  - Shows the proposed broiler farm being adjacent to an area of LSIO, adjacent to an area of SMO, and near several waterbodies.
- Central Goldfields Economic Development Plan to Clause 2.04
  - Shows the proposed broiler farm being within an area of 'high quality cropping land' and within the FZ.

### **10 Planning Policy Framework**

#### **12 Environmental and landscape values**

##### **12.01-1S Protection of biodiversity**

- Objective: To protect and enhance Victoria's biodiversity.
- Strategies:
  - Ensure that decision making takes into account the impacts of land use and development on Victoria's biodiversity, including consideration of:
    - Cumulative impacts.
    - Fragmentation of habitat.
    - The spread of pest plants, animals, and pathogens into natural ecosystems.
  - Avoid impacts of land use and development on important areas of biodiversity.
  - Consider impacts of any change in land use or development that may affect the biodiversity value of national parks and conservation reserves or nationally and internationally significant sites; including wetlands and wetland wildlife habitat designated under the Convention on Wetlands of International Importance (the Ramsar Convention) and sites utilised by species listed under the Japan-Australia Migratory Birds Agreement (JAMBA), the China-Australia Migratory Birds Agreement (CAMBA), or the Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA).

##### **12.03-1S River and riparian corridors, waterways, lakes, wetlands, and billabongs**

- Objective To protect and enhance waterway systems including river and riparian corridors, waterways, lakes, wetlands, and billabongs.
- Strategies:
  - Protect the environmental, cultural, landscape values of all waterway systems as significant economic, environmental, and cultural assets.
  - Conserve waterway systems and the landscapes and environmental values surrounding them by protecting ecological values, indigenous vegetation, terrestrial and aquatic habitats and encouraging biodiversity.

- o Sensitively design and site development to maintain and enhance the waterway system and the surrounding landscape setting, environmental assets, and ecological and hydrological systems.

### **12.05-2S Landscapes**

- Objective: To protect and enhance significant landscapes and open spaces that contribute to character, identity, and sustainable environments.
- Strategy:
  - o Ensure development does not detract from the natural qualities of significant landscape areas.

### **13 Environmental risks and amenity**

#### **13.01-1S Natural hazards and climate change**

- Objective: To minimise the impacts of natural hazards and adapt to the impacts of climate change through risk-based planning.
- Strategy:
  - o Site and design development to minimise risk to life, health, property, the natural environment, and community infrastructure from natural hazards.

#### **13.02-1S Bushfire planning**

- Objective: To strengthen the resilience of settlements and communities to bushfire through risk-based planning that prioritises the protection of human life.

#### **13.03-1S Floodplain management**

- Objective: To assist the protection of:
  - o Life, property, and community infrastructure from flood hazard, including coastal inundation, riverine and overland flow.
  - o The natural flood carrying capacity of rivers, streams, and floodway.
  - o The flood storage function of floodplains and waterways.
  - o Floodplain areas of environmental significance or of importance to river, wetland, or coastal health.

#### **13.04-3S Salinity**

- Objective: To minimise the impact of salinity and rising water tables on land uses, buildings and infrastructure in rural and urban areas and areas of environmental significance and reduce salt load in rivers.

#### **13.05-1S Noise management**

- Objective: To assist the management of noise effects on sensitive land uses.

#### **13.06-1S Air quality management**

- Objective: To assist the protection and improvement of air quality.

#### **13.07-1S Land use compatibility**

- Objective: To protect community amenity, human health and safety while facilitating appropriate commercial, industrial, infrastructure or other uses with potential adverse off-site impacts.
- Strategies:
  - o Ensure that use or development of land is compatible with adjoining and nearby land uses.

- Avoid or otherwise minimise adverse off-site impacts from commercial, industrial, and other uses through land use separation, siting, building design and operational measures.

#### **14 Natural resource management**

##### **14.01-1S Protection of agricultural land**

- Objective: To protect the state's agricultural base by preserving productive farmland.
- Strategies:
  - Avoid permanent removal of productive agricultural land from the state's agricultural base without consideration of the economic importance of the land for the agricultural production and processing sectors.
  - Protect productive farmland that is of strategic significance in the local or regional context.
  - Protect productive agricultural land from unplanned loss due to permanent changes in land use.
  - Protect strategically important agricultural and primary production land from incompatible uses.
  - In considering a proposal to use, subdivide or develop agricultural land, consider the:
    - Desirability and impacts of removing the land from primary production, given its agricultural productivity.
    - Impacts on the continuation of primary production on adjacent land, with particular regard to land values and the viability of infrastructure for such production.
    - Compatibility between the proposed or likely development and the existing use of the surrounding land.
    - The potential impacts of land use and development on the spread of plant and animal pests from areas of known infestation into agricultural areas.
    - Land capability.
    - Balance the potential off-site effects of a use or development proposal (such as degradation of soil or water quality and land salinisation) against the benefits of the proposal.

##### **14.01-1L Protection of agricultural land - Central Goldfields**

- Objective: To protect productive agricultural land and its supporting infrastructure.
- Strategies:
  - Restrict the subdivision and alienation of productive agricultural land as identified in the Strategic Framework Plan and discourage its conversion to land uses that take the land out of productive use.
  - Limit development where it cannot be adequately serviced with septic systems without impacting the water catchment and encourage farm consolidation.
  - Locate poultry abattoirs and finished poultry product processing facilities where they do not adversely affect any dwelling or agricultural land.

##### **14.01-2S Sustainable agricultural land use**

- Objective: To encourage sustainable agricultural land use.
- Strategies:
  - Ensure agricultural and productive rural land use activities are managed to maintain the long-term sustainable use and management of existing natural resources.

- Support the development of innovative and sustainable approaches to agricultural and associated rural land use practices.
- Support adaptation of the agricultural sector to respond to the potential risks arising from climate change.
- Encourage diversification and value-adding of agriculture through effective agricultural production and processing, rural industry, and farm-related retailing.
- Assist genuine farming enterprises to embrace opportunities and adjust flexibly to market changes.
- Support agricultural investment through the protection and enhancement of appropriate infrastructure.
- Facilitate ongoing productivity and investment in high value agriculture.
- Facilitate the establishment and expansion of cattle feedlots, pig farms, poultry farms and other intensive animal industries in a manner consistent with orderly and proper planning and protection of the environment.
- Ensure that the use and development of land for animal keeping or training is appropriately located and does not detrimentally impact the environment, the operation of surrounding land uses and the amenity of the surrounding area.

#### **14.01-2L Sustainable agricultural land use - Central Goldfields**

- Objective: To encourage ecologically sustainable farm management practices.
- Strategy:
  - Ensure intensive agriculture is located to minimise risks associated with effluent disposal and protect the amenity of adjacent land uses.

#### **14.02-1S Catchment planning and management**

- Objective: To assist the protection and restoration of catchments, waterways, estuaries, bays, water bodies, groundwater, and the marine environment.
- Strategies:
  - Ensure the continued availability of clean, high-quality drinking water by protecting water catchments and water supply facilities.
  - Consider the impacts of catchment management on downstream water quality and freshwater, coastal and marine environments.
  - Undertake measures to minimise the quantity and retard the flow of stormwater from developed areas.
  - Require appropriate measures to filter sediment and wastes from stormwater prior to its discharge into waterways, including the preservation of floodplain or other land for wetlands and retention basins
  - Ensure land use and development minimises nutrient contributions to water bodies and the potential for the development of algal blooms.

#### **14.02-2S Water quality**

- Objective: To protect water quality.
- Strategies:
  - Protect reservoirs, water mains and local storage facilities from potential contamination.
  - Ensure that land use activities potentially discharging contaminated runoff or wastes to waterways are sited and managed to minimise such discharges and to protect the quality of surface water and groundwater resources, rivers, streams, wetlands, estuaries, and marine environments.

#### **14.02-2L Water quality - Central Goldfields**

- Objective: Maintain and protect water quality in the Bealiba, Laanecoorie, Tullaroop and Cairn Curran catchments and the Loddon and Avoca Rivers and Bet Bet Creek waterways systems.
- Strategy:
  - Prioritise land capability in the assessment of land use and development applications

### **15.01 Built environment**

#### **15.01-6S Design for rural areas**

- Objective: To ensure development respects valued areas of rural character.
- Strategies:
  - Ensure that the siting, scale, and appearance of development protects and enhances rural character.
  - Protect the visual amenity of valued rural landscapes and character areas along township approaches and sensitive tourist routes by ensuring new development is sympathetically located.
  - Site and design development to minimise visual impacts on surrounding natural scenery and landscape features including ridgelines, hill tops, waterways, lakes, and wetlands.

### **16 Housing**

#### **16.01-3S Rural residential development**

- Objective: To identify land suitable for rural residential development.
- Strategy:
  - Manage development in rural areas to protect agriculture and avoid inappropriate rural residential development.

### **17 Economic development**

#### **17.01-1S Diversified economy**

- Objective: To strengthen and diversify the economy.

#### **17.04-1S Facilitating tourism**

- Objective: To encourage tourism development to maximise the economic, social, and cultural benefits of developing the state as a competitive domestic and international tourist destination.

#### **17.04-1L Tourism - Central Goldfields**

- Objective: To promote Central Goldfields Shire's natural and cultural heritage tourism assets to maximise social and economic benefits.

### **18 Transport**

#### **18.01-1S Land use and transport integration**

- Objective: To facilitate access to social, cultural, and economic opportunities by effectively integrating land use and transport.

#### **18.01-3S Sustainable and safe transport**

- Objective: To facilitate an environmentally sustainable transport system that is safe and supports health and wellbeing.

#### **18.02-4S Roads**

- Objective: To facilitate an efficient and safe road network that integrates all movement networks and makes best use of existing infrastructure.

### **19 Infrastructure**

**19.03-3S Integrated water management**

- Objective: To sustainably manage water supply and demand, water resources, wastewater, drainage, and stormwater through an integrated water management approach.

**19.03-3L 07 Integrated water management - Central Goldfields**

- Strategies:
  - Ensure effluent disposal systems can be contained within the site.
  - Minimise the potential for pollution if reticulated sewerage is not available by using any recommendations from a land capability assessment and considering conditions of relevant referral authorities.

**30 Zones****35.07 Farming zone**

- Purpose
  - To implement the Municipal Planning Strategy and the Planning Policy Framework.
  - To provide for the use of land for agriculture.
  - To encourage the retention of productive agricultural land.
  - To ensure that non-agricultural uses, including dwellings, do not adversely affect the use of land for agriculture.
  - To encourage the retention of employment and population to support rural communities.
  - To encourage use and development of land based on comprehensive and sustainable land management practices and infrastructure provision.
  - To provide for the use and development of land for the specific purposes identified in a schedule to this zone.
- Decision guidelines
  - General issues
    - The Municipal Planning Strategy and the Planning Policy Framework.
    - The capability of the land to accommodate the proposed use or development, including the disposal of effluent.
    - How the use or development relates to sustainable land management.
    - Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses.
    - How the use and development makes use of existing infrastructure and services.
  - Agricultural issues and the impacts from non-agricultural uses
    - Whether the use or development will support and enhance agricultural production.
    - Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production.
    - The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses.
    - The capacity of the site to sustain the agricultural use.
    - The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.
  - Accommodation issues
    - Whether the dwelling will result in the loss or fragmentation of productive agricultural land.

- Whether the dwelling will be adversely affected by agricultural activities on adjacent and nearby land due to dust, noise, odour, use of chemicals and farm machinery, traffic, and hours of operation.
- Whether the dwelling will adversely affect the operation and expansion of adjoining and nearby agricultural uses.
- The potential for the proposal to lead to a concentration or proliferation of dwellings in the area and the impact of this on the use of the land for agriculture.
- Environmental issues
  - The impact of the proposal on the natural physical features and resources of the area, in particular on soil and water quality.
  - The impact of the use or development on the flora and fauna on the site and its surrounds.
  - The need to protect and enhance the biodiversity of the area, including the retention of vegetation and faunal habitat and the need to revegetate land including riparian buffers along waterways, gullies, ridgelines, property boundaries and saline discharge and recharge area.
  - The location of on-site effluent disposal areas to minimise the impact of nutrient loads on waterways and native vegetation.
  - Design and siting issues
    - The need to locate buildings in one area to avoid any adverse impacts on surrounding agricultural uses and to minimise the loss of productive agricultural land.
    - The impact of the siting, design, height, bulk, colours, and materials to be used, on the natural environment, major roads, vistas and water features and the measures to be undertaken to minimise any adverse impacts.
    - The impact on the character and appearance of the area or features of architectural, historic, or scientific significance or of natural scenic beauty or importance.
    - The location and design of existing and proposed infrastructure including roads, gas, water, drainage, telecommunications, and sewerage facilities.
    - Whether the use and development will require traffic management measures.

#### **40 Overlays**

##### **42.01 Environmental significance overlay**

- Purpose
  - To implement the Municipal Planning Strategy and the Planning Policy Framework.
  - To identify areas where the development of land may be affected by environmental constraints.
  - To ensure that development is compatible with identified environmental values.

##### **44.02 Salinity management overlay**

- Purpose
  - To implement the Municipal Planning Strategy and the Planning Policy Framework.
  - To identify areas subject to saline ground water discharge or high ground water recharge.
  - To facilitate the stabilisation of areas affected by salinity.
  - To encourage revegetation of areas which contribute to salinity.



- o To encourage development to be undertaken in a manner which brings about a reduction in salinity recharge.
- o To ensure development is compatible with site capability and the retention of vegetation and complies with the objectives of any salinity management plan for the area.
- o To prevent damage to buildings and infrastructure from saline discharge and high-water table.

#### **44.04 Land subject to inundation overlay**

- Purpose
  - o To implement the Municipal Planning Strategy and the Planning Policy Framework.
  - o To identify flood prone land in a riverine or coastal area affected by the 1 in 100 (1 per cent Annual Exceedance Probability) year flood or any other area determined by the floodplain management authority.
  - o To ensure that development maintains the free passage and temporary storage of floodwaters, minimises flood damage, responds to the flood hazard and local drainage conditions and will not cause any significant rise in flood level or flow velocity.
  - o To minimise the potential flood risk to life, health and safety associated with development.
  - o To reflect a declaration under Division 4 of Part 10 of the *Water Act, 1989*.
  - o To protect water quality and waterways as natural resources by managing urban stormwater, protecting water supply catchment areas, and managing saline discharges to minimise the risks to the environmental quality of water and groundwater.
  - o To ensure that development maintains or improves river, marine, coastal and wetland health, waterway protection and floodplain health.

#### **50 Particular provisions**

##### **52.06 Car parking**

- Purpose
  - o To ensure that car parking is provided in accordance with the Municipal Planning Strategy and the Planning Policy Framework.
  - o To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.
  - o To support sustainable transport alternatives to the motor car.
  - o To promote the efficient use of car parking spaces through the consolidation of car parking facilities.
  - o To ensure that car parking does not adversely affect the amenity of the locality.
  - o To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.

##### **53.09 Poultry farm**

- Purpose
  - o To facilitate the establishment and expansion of poultry farms, including broiler farms, in a manner that is consistent with orderly and proper planning and the protection of the environment.
- Requirement – Broiler farm
  - o An application to use land or construct a building or construct or carry out works for a broiler farm must comply with the *Victorian Code for Broiler Farms 2009 (plus 2018 amendments)*.

- Decision guidelines
  - The purpose of the relevant zone.
  - The design, height, setback, and appearance of the proposed buildings and works.
  - The proposed landscaping.
  - The need to protect amenity of existing uses on adjoining land.
  - The impact of the use of the land on the surrounding area, including from the emission of noise, light, vibration, odour, dust, or waste products.
  - The impact of the proposal on any wetlands, waterways, or water bodies.
  - The likely environmental impact on the natural physical features and biodiversity of the land, including consideration of any Nutrient Management Plan submitted with the application.
  - Whether the development will support and enhance agricultural production.

## **60 General provisions**

### **65.01 Approval of an application or plan**

- The matters set out in section 60 of the Act.
- Any significant effects the environment, including the contamination of land, may have on the use or development.
- The Municipal Planning Strategy and the Planning Policy Framework.
- The purpose of the zone, overlay, or other provision.
- Any matter required to be considered in the zone, overlay, or other provision.
- The orderly planning of the area.
- The effect on the environment, human health, and amenity of the area.
- The proximity of the land to any public land.
- Factors likely to cause or contribute to land degradation, salinity or reduce water quality.
- Whether the proposed development is designed to maintain or improve the quality of stormwater within and exiting the site.
- The extent and character of native vegetation and the likelihood of its destruction.
- Whether native vegetation is to be or can be protected, planted, or allowed to regenerate.
- The degree of flood, erosion or fire hazard associated with the location of the land and the use, development, or management of the land so as to minimise any such hazard.
- The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts.
- The impact the use or development will have on the current and future development and operation of the transport system.

## **70 Operational provisions**

### **71.01 Operation of the Municipal Planning Strategy**

- The Municipal Planning Strategy at Clause 02 provides an overview of important local planning issues in an introductory context, sets out the vision for future use and development in the municipality and establishes strategic directions about how the municipality is expected to change through the implementation of planning policy and the planning scheme.
- A responsible authority must take into account and give effect to the Municipal Planning Strategy when it makes a decision under this planning scheme.

**Clause 71.02 Operation of the Planning Policy Framework**

- The Planning Policy Framework provides a context for spatial planning and decision making by planning and responsible authorities. The Planning Policy Framework is dynamic and will be built upon as planning policy is developed and refined and changed as the needs of the community change.
- The Planning Policy Framework seeks to ensure that the objectives of planning in Victoria (as set out in section 4 of the Act) are fostered through appropriate land use and development planning policies and practices that integrate relevant environmental, social, and economic factors in the interests of net community benefit and sustainable development.
- Victorians have various needs and expectations such as land for settlement, protection of the environment, economic wellbeing, various social needs, proper management of resources and infrastructure. Planning aims to meet these needs and expectations by addressing aspects of economic, environmental, and social wellbeing affected by land use and development.
- The Planning Policy Framework operates together with the remainder of the scheme to deliver integrated decision making. Planning and responsible authorities should endeavour to integrate the range of planning policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations. However, in bushfire affected areas, planning and responsible authorities must prioritise the protection of human life over all other policy considerations.
- Planning authorities should identify the potential for regional impacts in their decision making and coordinate strategic planning with their neighbours and other public bodies to achieve sustainable development and effective and efficient use of resources.

**Referral**

The following table outlines referrals undertaken under section 55 of the Act and clause sixty-six of the Planning Scheme.

Organisation	Response
Goulburn-Murray Water (GMW) Clause 66.02-5 Determining referral authority	Does not object if the permit is subject to specified conditions  (Refer to Attachment 3)

The application was also referred within the Central Goldfields Shire Council for comments and/or recommended conditions:

Department	Response
Engineering	Recommended conditions
Environmental Health	Recommended conditions

**Notice**

In accordance with section 52 of the Act, notice of the application was given in the prescribed form. Notice was given by placing a sign at the site, by publishing a notice in the Carisbrook Mercury, and sending it by post. Notice was given to the owners and occupiers of adjoining and surrounding land as well as to the EPA Victoria (as required by Clause 66.05 of the Planning Scheme). Informal notice was also provided to Agriculture Victoria.

As a result, eleven (11) objections were received alongside neutral submissions from the EPA Victoria (Refer to Attachment 4) and Agriculture Victoria (Refer to Attachment 5). A summary of the matters raised in the eleven objections are provided immediately below, followed by a summary of

the matters raised in the submissions from the EPA Victoria and Agriculture Victoria. The matters raised in both the objections and submissions are addressed in the assessment that follows.

### **Summary of matters raised in objections**

- Impacts from odour.
- Impacts from noise, including from heavy vehicles.
- Impacts from lighting disturbance.
- General proximity to dwellings including visual amenity impacts.
- Cumulative impacts of several broiler farms in an area.
- Impacts on landscape character.
- Ability of roads to safely and efficiently accommodate increased heavy vehicles.
- Impacts on water quality, including drinking water.
- Impacts on groundwater, including the wider catchment.
- Impacts on wetlands.
- Impacts on flora and fauna / biodiversity.
- Impacts on air quality.
- High quality agricultural land not suitable for broiler farms.
- Location not suitable for industrial scale agriculture.
- The broiler farm will limit the operation of nearby agricultural uses.
- Biosecurity concerns, including from disease and pests.
- Compliance issues with existing broiler farms.
- Concerns with environmental management measures of broiler farms.
- Proposal not in accordance with the Broiler Code.
- Incompatibility of broiler farms with purpose of the FZ.
- Proposal should be subject to an Environmental Impact Assessment.
- Impacts on property values.
- Inhumane conditions of broiler farms.
- The necessity for two caretakers' houses.

### **Summary of EPA Victoria submission**

In accordance with Section 52 of the *Planning and Environment Act 1987* notice was given to EPA Victoria. In their response they note they are not a statutory referral authority as the proposal:

- *“Does not require an operating licence or development licence or amendment to a licence.*
- *Is not proposed to be used for an industry, utility installation or warehouse for a purpose listed in the table to Clause 53.10 shown with a threshold distance not specified or for which the threshold distance cannot be met; and*
- *Is not a proposed extractive industry intended to be used at a later date for a landfill.”*

They did assess the Odour Environmental Risk Assessment (Odour ERA) and beyond that they have not further involvement in the assessment of broiler farms as that is the jurisdiction of Agriculture Victoria.

EPA Victoria undertook a technical review of the Odour ERA and advise that:

- The OERA has incorporate EPA publication 1883 Guidance for assessing odour. These include:
  - Comparison with similar operations.
  - Risk assessment using field odour surveillance data.
  - Complaint data analysis.
  - Community surveys.
  - Dispersion modelling.

The EPA advise that the assessment points to an acceptable risk given the site context and on that basis the EPA is satisfied that the findings of the Odour ERA are reasonable.

They conclude that:

- The Odour ERA has been appropriately conducted.
- The Odour ERA can be relied upon to inform Council's decision on this matter.
- The Odour ERA has been undertaken in a manner which is consistent with the objectives of the *Environment Protection Act 2017*.

### **Summary of Agriculture Victoria submission**

Agriculture Victoria provided advice relating to:

- The planning context.
- An assessment against the *Victorian Code for Broiler Farms 2009 Plus 2018 Amendments* (the Code).
- A review of the application against the Central Goldfields Planning Scheme strategic objectives.

With respect to the planning context, Agriculture Victoria confirm officers' advice in this report that the proposed use is a Section 2 (permit required) use. They note the area of proposed development does not encroach into any of the areas of the site affected by overlays and they further confirm the whole of the site is located within the Cairn Curran Special Water Supply catchment area.

They also confirm that an Odour Environmental Risk Assessment (Odour ERA) must be conducted and that notice of the application must be given to EPA Victoria.

Agriculture Victoria provided a detailed response of the proposal against the requirements of the Code. This assessment largely identified that conditions of the Code were met. They did recommend some revisions relating to the formatting and presentation of information.

With respect to the Surface Water Management Plan (Water Technology, 5 April 2024) they recommended it be amended so that stormwater from free-range areas be collected separately so as not to ultimately be used for drinking water for the birds.

Further advice was sought from the permit applicant. It is evident that a robust process is proposed to ensure the drinking water is safe for the birds. In addition to the treatment with vegetated swales and a sedimentation basin. The runoff goes through a process of osmosis and a chlorination plant prior to being stored in the water tanks for drinking water for the birds.

It is also noted that despite the application allowing for free-range, the dwarf walls don't currently provide doors to allow the birds outside and if a permit should issue, and the operator wishes to pursue free-range, then further planning permission will be required by either a secondary consent or an amended planning permit.

If run-off from the free-range area was to be collected separately, the sheds would require the construction of gutters and there would be a decreased supply to the dam, relying further upon augmentation of the dam's water supply from the bore.

It is recommended that the collection of surface water as proposed be allowed.

Agriculture Victoria also recommended the Land Capability Assessment (ehpic, November 2016) be updated to include the two caretakers' residences.

The Environmental Management Plan allows for up to 10 days of temporary litter stockpiling as a contingency if off-site removal of litter is delayed. However, no litter stockpile area is identified on the plans so no distance can be established. Agriculture Victoria have asked for a revision to the plans to address this.

External cladding of the broiler sheds is proposed to be a 'Colourbond' pale green for the walls with a roof of corrugated galvanised iron. Agriculture Victoria suggest this should be revised so the roofs are also Colourbond, to reduce glare from the roofs which could cause amenity issues.

They refer to a previous VCAT decision relating to permit 120/16 for 141 Clarkes Road Strathlea which required the use of Colourbond roofing in preference to galvanised iron.

Agriculture Victoria also request revisions to provide engineering design details for the access from Clarkes Road, internal roads, and the carpark. This matter is considered to be addressed by engineering conditions that can be included on a planning permit.

A revision was also recommended to identify an area for the storage of chemicals and chemical waste.

It is considered most of the above can be facilitated by conditions of a planning permit. It is noted the applicant prefers a reflective roof material to reflect heat. The issue of offsite amenity impacts, and bird health need to be weighed up. Given the farming use of the surrounding area and distance to the nearest dwellings and the evidence provided by the submitted visual analysis, it is recommended that the galvanised roof material be allowed in the interests of bird health.

## **Assessment**

### **The relevance of previous VCAT decisions**

The subject site has a relevant planning and VCAT history.

Planning permit application 071/13 was submitted to Council in September 2013. This was for eight sheds and 380,000 birds. Council issued a Notice of Decision to Grant a Planning Permit in March 2014. Objectors lodged an application for review to VCAT. In April 2015 VCAT ordered the Council decision be set aside and no planning permit be issued *Lewis v Central Goldfields SC [2015] VCAT 410 (14 April 2015)*

In September 2016, an application was lodged to Council for a seven shed, 377,000 bird broiler farm. The application was subsequently amended to a six shed, 325,000 bird broiler farm. Council refused this application, and the permit applicant lodged an application for review to VCAT [Grandview Poultry v Central Goldfields SC 2017]. In December 2017 VCAT ordered the Council decision be set aside and a planning permit be issued subject to conditions. Planning Permit T120/16 was subsequently issued on 19 December 2017. This permit has been extended.

The current application involves the addition of 39 Clarkes Road and two caretakers' houses, eight sheds (increased from six) and 445,000 birds (increased from 325,000).

Regardless it is considered that the VCAT decision (P672/2027) resulting in the granting of planning permit T120/16 is relevant and provides a strong basis and guidance for the determination of the current proposal.

It is also noted that the previous decisions were based upon a Class B broiler farm and the current proposal is classified as a Cluster farm.

An extension of time has been granted for T120/16 for the first shed to be commenced by 19 December 2019 and the final shed to be completed by 19 December 2027.

Key considerations include the differences between the proposal refused by VCAT in 2015 and the proposal approved by VCAT in 2017. The former provided for less birds (380,000) birds and the same number of sheds. However, it is evident from the VCAT refusal that the extent of supporting

information was less and did not include a visual landscape assessment. Nor were they satisfied with the odour assessment.

The supporting information submitted with the current proposal is robust and no objections have been provided by external referrals including GMW, EPA Victoria and Agriculture Victoria.

In the 2015 decision (VCAT refusal) VCAT was not persuaded that the separation distances relied upon by the permit applicant with respect to the Code, Approved Measure E1 M1.3, or that Standard E1 S1 and the objective of E1 are met with respect to odour.

Standard E1 S1 Amenity protection states:

*“Adverse impacts on the amenity of the surrounding area are minimised by ensuring broiler sheds, temporary litter stockpiles, compost piles and litter spreading areas are adequately separated from existing and planned residential and rural living areas, sensitive uses and broiler farm property boundaries.”*

Approved Measure E1 M1.3 of the Code states:

*“Prevailing meteorological conditions and topographical features are taken into account in determining the adequacy of separation distances to nearby sensitive uses. The minimum separation distances (as prescribed by Formula 1 of the Code) may need to be greater for some limited site-specific circumstances. For example, the separation distance to a sensitive use located downslope in a drainage valley may need to be increased to minimise the risk of odour impacts.”*

In response it is noted that the Odour ERA submitted with the application considered meteorological conditions and topographical features. Furthermore, the Agriculture Victoria response assessed this requirement as being met (refer to page 10 of Agriculture Victoria response dated 13/11/2024).

EPA Victoria also advised the Odour ERA can be relied upon for decision making

In the same 2015 decision VCAT was also not persuaded that the visual impacts of the proposed broiler farm in the public realm were entirely satisfactory or complied fully with the code. It appears that application was not accompanied by a visual assessment, as opposed to the application that formed the basis of the 2017 VCAT decision and the current application.

The 2017 VCAT decision and Planning Permit T120/16 required external material to be non-reflective materials and a cream/white/off-white roof for all broiler farm sheds.

The Agriculture Victoria response to the current application when assessing Standard E2 S1 Protecting the Visual Quality of the Landscape recommended the use of muted Colourbond roofing materials.

The applicant has advised the preference is for galvanised roofing to assist in climate control of the sheds for the welfare of the birds. Given the outcomes of the visual assessment submitted with the application, the rural landscape context and welfare of the birds, it is considered that galvanised roofing will be appropriate.

In light of previous VCAT advice and the information submitted with the application it is considered appropriate to support the current application subject to conditions.

### **Odour impacts**

An Odour ERA was prepared by GHD, dated 10 April 2024. This report included consideration of the additional three sheds at Grandview 1 Farm (GV1) and the reduction of birds at Grandview 2 Farm (GV2) as well as the proposed new farm (GV3), subject to this application.

The Odour ERA was undertaken in accordance with the requirements of EPA *Publication 1883 – Guidance for assessing odour and Agrifutures – Planning and environment guideline for establishing meat chicken farms: Guide 1 – Assessment Guide*.

- The EPA publication 1883 provides three levels of assessment including:

- Level 1 – Gateway assessment of emissions duration, wind direction and cumulative odour sources.
- Level 2 – Source-Pathway-Receptor assessment.
- Level 3 – Detailed risk assessment that could include:
  - Comparisons with similar operations or case studies.
  - Risk assessment using field odour surveillance data.
  - Complaint assessment.
  - Community odour surveys/questionnaires and odour diaries.
  - The use of dispersion modelling.

The GHD report adopted a Level 3 assessment and included:

- Complaint assessment.
- Odour surveys.
- Odour dispersion modelling.

The GHD report identified sensitive receptors, all dwellings, within a 2km radius of the site. It is noted that the GHD report also included an assessment for GV1 and GV2, as well as GV3.

It did not isolate the sensitive receptors for GV3, so the assessment can be considered conservative in nature with respect to the consideration of GV3.

Each sensitive receptor is identified by its property address in Table 5 of the GHD report and includes the distance from the site boundary. There are a total of twenty sensitive receptors identified.

The dispersion modelling was based on the five-odour unit (OU) 99.ninth percentile 3-minute average of odour modelling.

As stated in the GHD report this *“is generally used to assess the predicted downwind odour concentrations during short time worst-case, poor dispersive meteorological conditions. This 99.ninth percentile is generally taken as the level that if the odour is obvious and has an offensive character, it may lead to nuisance and resultant complaint.”*

Of the identified twenty sensitive receptors, ten were identified as being subject to 99.ninth percentile offsite concentrations predicted at above the 5 OU. A further assessment was undertaken of these ten to consider the likelihood of adverse odour impact.

Table 10 in the GHD report identifies the overall risk of odour impacts from current farms and Table 11 identifies the overall risk of odour impacts from current and proposed farms.

Table 11 identified that one sensitive receptor (R17) is likely to experience offensive odour from the current and proposed farms, whilst the other nineteen sensitive receptors are unlikely to experience offensive odour from the current and proposed farms.

The GHD report goes on to state that odour level needs to almost treble before an increase in perceived intensity is registered.

GHD also recalibrated the dispersion model and compared the modelled results with odour survey observations.

They identified the likely modelled odour concentrations that could describe the ‘obvious’ odour experienced by surveyors to be 10 OU.

The ‘obvious’ odour was used as the level which may lead to nuisance and complaint. The updated risk assessment indicated that the risk of offensive odour is low at all identified sensitive receptors.

The complaint analysis was based on complaints received at Central Goldfields Shire Council in 2016 and 2017, Mount Alexander Shire Council in 2016 and the EPA in 2016 and 2017. There were no recorded complaints during 2018 – 2023.



The GHD report concludes that the impact of GV3 is not considered to adversely impact the surrounding areas and is acceptable with regards to odour impacts.

EPA Victoria was satisfied with the way the GHD report was conducted and its outcomes.

It is considered appropriate to endorse the GHD report under a planning permit so the recommendations can be implemented.

### ***Visual/landscape impacts and landscaping***

A landscape and visual review were prepared by Landform (February 2024).

Buffer planting referred to as 'farm forestry' will be planted around the perimeter of the broiler sheds consisting of one tree planted every two metres in linear rows. Additional planting separated by a maintenance track, comprising shrubs and trees will be planted closer to the sheds. In addition to screening the broiler sheds, the water tanks, machinery shed, pump shed, and car park will also be screened. The feed silos at the end of the sheds are the highest structures at 8.2m and the screening will filter the view to these.

The proposed development is to be provided with a landscaped berm. The level of the berm varies up to 262.34m AHD and reduces in height to follow the contours.

A viewshed analysis was undertaken at six viewpoints:

- VP1 Corner of Clarkes Road and Hurns Road – 725m south of subject site
- VP2 Glengower – Joyces Creek Road (Strathlea Road) – 1600m north/east of subject site
- VP3 Glengower - Joyces Creek Road (Strathlea Road) – 1.9km north/east of subject site (has the wrong aerial)
- VP4 Rodborough Road – 3km north/east of subject site
- VP5 Smeaton Road – 3km west of subject site
- VP6 Pyrenees Highway – 2.5km north of subject site

Photo montages compared the viewshed from the development approved under PPA 120/16 issued at the direction of VCAT, and the proposed development. The montages also compared views with and without landscaping to demonstrate the impact of the landscape strategy.

The viewshed analysis concluded:

- When compared with the approved development, no appreciable changes in the existing amenity and landscape character in the area surround the subject site or in the location of the proposed development.
- There have been no changes to the planning scheme and guidelines that would alter the land use provisions, protections or levels of sensitivity to be considered.
- Comparative photo montages for VP2 and VP3 along Glengower-Joyces Creek Road demonstrate that the proposed changes would not be discernible in terms of the project's scale, extent, or prominence.

The topography of the surrounding land does provide for long sight lines towards the subject site. However, the presence of large sheds in a rural setting is considered typical in a rural landscape. The sheds although quite large (3,291m<sup>2</sup> each), they are low scale with a wall height of 2.9m at the eave and an overall height of 4.28m.

The substantial landscape screening proposed will minimise the visual impact, even though some of the structures, including the feed silos will be visible. Again, this type of infrastructure is not unusual in a rural landscape and is considered an acceptable development outcome.

### ***Noise and other amenity impacts***

An acoustic report was prepared by Watson Moss Growcott (8 April 2024).

This report identified eleven relevant receptors described as R01- R11 and provided their property addresses.

Table 4 in the WMG report identifies the adopted noise protocol noise limes for intensive farming activities.

For sensitive receptors r01-R11 these are:

- Day 49 dB(A)
- Evening 44 dB(A)
- Night 39 dB(A)

The proposed development comprise eight new sheds in an east west orientation and each shed will be fitted with a total of twelve ventilation fans, clustered toward the eastern end of the sheds on the northern, eastern, and southern facades. Vehicular access to the site is proposed to be via a crossover at the northern end of the site from Clarkes Road. Vehicles, including trucks, will use the internal access road to travel adjacent to the sheds and site boundaries.

Bird collection will occur adjacent to the eastern and western ends of the sheds, where trucks will stop, and forklifts will be used to load birds into the trucks. Bird collection can occur at any time during a 24hour period and will often occur during the night, which will be subject to the most stringent night period noise limits.

Table 8 in the WMG report shows the predicted noise levels at the off-site sensitive receptors based on two scenarios. Scenario two, the most conservative, includes the existing farms GV1 and GV2, the proposed farm GV3 including all fans operating simultaneously, plus trucks operating and noise due to bird pick up and feed delivering. Using the noise protocol limits during the critical night period, the noise at all receptors is below the permitted noise level identified in Table 4 of the WMG report.

The WMG report discusses various noise control strategies which will help to mitigate the risk of adverse amenity impacts from noise. It is therefore considered appropriate to endorse the WMG report under a planning permit so the recommendations can be implemented.

### **Farming zone**

Under the Central Goldfields Planning Scheme, a 'broiler farm' is included in the definition of 'animal production' which in turn is included in the definition of 'agriculture.'

Clause 35.07-1 of the Farming Zone requires a planning permit for the use of 'animal production' and Clause 35.07-4 of the Farming Zone requires a planning permit for the associated buildings and works.

Use of the site for the purpose of a 'broiler farm' is a legitimate use within a Farming Zone and meets the purpose of the zone which primarily relate to providing for the agricultural use of the land. The proposed 'broiler farm' takes up a small proportion of the overall site and leaves the balance of the site available for cropping or grazing. It was evident from a site inspection that the site had recently been cropped for canola.

The 'broiler farm' also provides additional opportunities for local employment to support the local rural community. A 'caretakers house' is *"a dwelling on the same site as a building, operation, or plant, and occupied by a supervisor of that building, operation, or plant."*

The 'broiler farm' operates 24/7 and needs constant supervision to ensure the safety and welfare of the birds. It is therefore reasonable for there to be two caretakers houses to ensure that constant supervision.

Each caretaker's house needs to comply with the requirements of Clause 35.07-2 relating to:

- Access via an all-weather road with dimensions adequate to accommodate emergency vehicles.
- Connection to reticulated sewerage or if not available wastewater from each dwelling must be treated and retained within the lot.
- Connection to reticulated potable water or an alternative potable water supply with adequate storage for firefighting purposes.
- Connection to reticulated electricity supply or have an alternative source.

A Land Capability Assessment (ephic, November 2016) was submitted with the planning permit application for 141 Clarkes Road and evidently appears to relate to the previously approved broiler farm. This report was based upon a maximum of seven employees at peak times and an indicative daily wastewater flow rate of 350L/day. It did identify a land application area of 2,700sqm adjacent to Clarkes Road.

Given the size of the site, it is not expected that the two caretakers' houses will impose a problem, however a planning permit condition should require an updated Land Capability Assessment to assess the current proposal, including the additional shed and two caretakers' houses.

This should be submitted to Council for approval before plans are endorsed, to ensure the appropriate application area is identified on endorsed plans.

The following table provides an assessment against the relevant decision guidelines of the Farming Zone:

General Issues	Response	Action
<b>Municipal Planning Strategy and Planning Policy Framework</b>		
<p><b>Clause 02.02</b> Council's vision "is to be a vibrant, thriving, inclusive community which has a supported and healthy community, a vibrant local economy and celebrates its heritage and sustainable environment"</p>	<p>The proposed development will make a positive contribution to the local economy and has adopted sustainable management practices.</p>	
<p><b>Clause 02.03-2</b> Environmental and landscape values</p>	<p>A landscape and visual assessment have carefully analysed six key viewpoints and found there is no discernible difference to the impact on views from the previous approved development. It also finds that some long sightlines will be improved with the landscape buffer.</p> <p>No native vegetation is being removed and in excess of 18,000 trees and shrubs will be planted providing a significant net benefit.</p>	<p>Planning permit condition requiring a detailed landscape plan, generally in accordance with the submitted plan, to be approved by the responsible authority.</p>
<p><b>Clause 02.03-3</b> Environmental risks and amenity</p>	<p>This clause recognises that emerging industries such as intensive agriculture can create amenity conflicts between land uses.</p> <p>The supporting documents including the Odour ERA,</p>	<p>Endorse the Odour ERA, Acoustic Assessment and Landscape and Visual Assessment under a planning permit to implement recommendations.</p>

	Acoustic Assessment and Landscape Visual Assessment have been prepared to identify and mitigate the offsite amenity impacts.	
<b>Clause 02.03-4</b> Natural resource management	<p>This clause relates primarily to agricultural land and water. It recognises the emerging industry of intensive agriculture and the conflict this can cause with nearby residential uses and the impact this can have on the productive capacity of the farm.</p> <p>This clause also recognises the need for sustainable land management in water supply catchments.</p> <p>We note that GMW provided conditional consent, and the application of those conditions will assist in managing any environmental risks.</p>	<p>Endorse the Surface Water Management Plan under a planning permit to implement recommendations.</p> <p>Include the GMW conditions in a planning permit.</p>
<b>Clause 02.03-7</b> Economic development	Rural enterprises are recognised for their employment opportunities. Intensive agriculture is recognised as a growing area of interest.	
<b>Clause 02.03-8</b> Transport	<p>The road network is recognised for its important role in the Shire.</p> <p>A traffic impact assessment has assessed the impact of not only this application but a further two planning permit applications for broiler farms and determined the road network has adequate capacity.</p> <p>It does make some recommendations with respect to this proposal about reducing the speed along Rodborough Road, east of Clarkes Road, rumble strips or 'trucks entering' signage. It also recommends a road maintenance agreement to address future deterioration of road pavement.</p>	Some of the traffic recommendations can be included as planning permit conditions. Other matters such as a reduction in the speed zone require further consideration by Council, outside the auspices of a planning permit.

<p><b>Clause 02.03-9</b> Infrastructure</p>	<p>This clause includes integrated water management. The proposed development is collecting stormwater and diverting it via swales to a sedimentation basin and then to a dam. This water is reused for drinking water for the birds.</p> <p>There is no detail on how often the sedimentation basin needs to be desilted.</p>	<p>A planning permit condition can require an update to the Surface Water Management Assessment to provide further details on the desilting of the sedimentation basin.</p>
<p><b>Clause 02.04</b> Strategic Framework Plan</p>	<p>The Central Goldfields Shire Environment and Landscape Values Plan does identify the subject site as being included in a significant wetland area.</p> <p>The management of surface water is therefore of high importance. There are no swamps identified on the subject site.</p> <p>The use of vegetated swales, a sedimentation basin and clay lined dam is considered to be an appropriate response.</p>	<p>Refer above action.</p>
<p><b>Clause 12.01-L</b> Protection of biodiversity</p>	<p>This clause seeks to protect and enhance remnant vegetation and wildlife corridors for the biodiversity value in the Box Ironbark Forests.</p> <p>The subject site has been ploughed and cropped, and the proposed development is approximately 1.3km from Joyces Creek along its eastern boundary.</p>	
<p><b>Clause 12.01-2S</b> Native vegetation management</p>	<p>In consideration of no removal of native vegetation the planting of in excess of 18,000 trees and shrubs the proposed development will result in a net gain for biodiversity</p>	
<p><b>Clause 12.03</b> Water bodies and wetlands</p>	<p>The proposed development has no impact upon Joyces Creek, and the integrated water management proposed will contain surface water within the site, treat it appropriately and</p>	

	store it in a clay lined dam to protect groundwater.	
<b>Clause 14.01</b> Agriculture	The proposed use is a legitimate agricultural use and along with cropping of the balance of the site will deliver a productive agricultural outcome.	
<b>Clause 14.01-2L</b> Sustainable agricultural land use – Central Goldfields	The integrated water management strategy to manage surface water is considered robust.  The North Central Regional Catchment Strategy does not identify any wetlands on the subject site.	Endorse the Surface Water Management Plan prepared by Water Technology under the planning permit.
<b>Clause 14.02-2S</b> Water quality	The objective is to protect water quality, and this is demonstrated in the submitted Surface Water Management Strategy prepared by Water Technology	Endorse the Surface Water Management Plan prepared by Water Technology under the planning permit.
<b>Clause 14.02-2L</b> Water quality – Central Goldfields	In addition to the above, although a land capability assessment was submitted it is outdated and should be amended to reflect the proposed development as sought.	Include a planning permit condition to require an updated LCA and an amended site plan showing recommendation of an updated LCA.
<b>Clause 17.01-1L</b> Diversified economy – Central Goldfields	Does not apply to the Farming Zone	
<b>Clause 18.02-4S</b> Roads	Council engaged a Traffic Engineer to undertake an assessment based on the number of existing broiler farms and the those proposed.	Include the engineering conditions in a planning permit.
<b>Clause 19</b> Infrastructure		
Any Regional Catchment Strategy	North Central Regional Catchment Strategy 2021-2027 (RCS) is relevant.  The RCS does not identify any biodiversity, waterway, or	

	wetland assets for the subject site.	
Land capability	The LCA submitted with the application and this needs to be updated. Given the land available this is considered to be satisfactory.	Include a planning permit condition to require an updated LCA and an amended site plan showing recommendation of the LCA.
How the use or development relates to sustainable land management	Stormwater is harvested and reused for drinking water for the birds. Water is treated before entering the dam and then goes through a process of osmosis and chlorination prior to being made available to the birds for drinking.	
Whether the site is suitable for the use or development and whether the proposal is compatible with adjoining and nearby land uses.	It has been established previously at VCAT that broilers are a suitable use in a farming zone. A broiler farm is included in the planning scheme's definition of 'agriculture.'	
How the use or development makes use of existing infrastructure and services.	The existing road infrastructure is identified as having sufficient capacity, although some recommendations are made to improve intersection safety and sight lines.  Recommendations were made about reducing the speed limit on Rodborough Road, east of Clarkes Road.	Planning permit condition requiring 'trucks entering' signage or rumble strips as recommended by the traffic report (Impact).  Potential future Council resolution to investigate this further.
<b>Agricultural issues and the impacts from non-agricultural uses</b>	<b>Response</b>	<b>Action</b>
Whether the use or development will support and enhance agricultural production.	The proposed broiler farm will increase the agricultural production of the subject site and is not considered to have any negative impact upon the productivity of nearby land.	
Whether the use or development will adversely affect soil quality or permanently remove land from agricultural production.	The dam is proposed to be clay lined. The caretakers' houses do arguably remove land from agricultural production, however given the intensity of the	

	proposed use this is considered satisfactory.	
The potential for the use or development to limit the operation and expansion of adjoining and nearby agricultural uses.	This is not considered likely given the findings and recommendations of the background reports supporting the proposal.	
The capacity of the site to sustain the agricultural use.	This has been demonstrated by the Surface Water Management Plan and further supported by the EMP.	
The agricultural qualities of the land, such as soil quality, access to water and access to rural infrastructure.	The site is considered suitable for the use and the adjoining and nearby road infrastructure has been identified as having adequate capacity.	
<b>Accommodation issues</b>	<b>Response</b>	<b>Action</b>
Whether the dwelling will result in the loss or fragmentation of productive agricultural land.	As stated elsewhere it is considered the caretakers houses will support the success of the agricultural use of the land.	
Whether the dwelling will be adversely affected by agricultural activities on adjacent and nearby land due to dust, noise, odour, use of chemicals and farm machinery, traffic, and hours of operation.	The occupiers of the caretakers' houses will be the Farm Manager and Assistant Farm Manager, responsible for the day-to-day operations of the broiler farm.	
The potential for the proposal to lead to a concentration or proliferation of dwellings in the area and the impact of this on the use of the land for agriculture.	The lots need to be linked so the caretakers' houses are reliant upon the broiler farm.	Include a planning permit condition addressing this.
<b>Environmental issues</b>	<b>Response</b>	<b>Action</b>
The impact of the proposal on the natural physical features and resources of the area,	The Surface Water Management Plan prepared by Water Technology submitted with the application assessed	Endorse the Surface Water Management Plan under a planning permit. Require an amendment to advise



in particular on soil and water quality.	the proposal on surface water and groundwater. Its findings are considered generally acceptable.	how often the sedimentation basin will be desilted.
The impact of the use or development on the flora and fauna on the site and its surrounds.	No native vegetation is proposed to be removed.	
The need to protect and enhance the biodiversity of the area, including the retention of vegetation and faunal habitat and the need to revegetate land including riparian buffers along waterways, gullies, ridgelines, property boundaries and saline discharge and recharge area.	The surface water management plan measures proposed are considered satisfactory and will prevent any impact upon Joyces Creek located 1.3km to the east.	
The location of on-site effluent areas to minimise the impact of nutrient loads on waterways and native vegetation.	The LCA submitted with the application was outdated and did not address the additional shed and two caretakers' houses.	Include a planning permit condition requiring an updated land capability assessment.
<b>Design and siting issues</b>	<b>Response</b>	<b>Action</b>
The need to locate buildings in one area to avoid any adverse impacts on surrounding agricultural uses and to minimise the loss of agricultural land.	The building infrastructure for the broiler farm is generally located quite close, leaving the balance of the site available for cropping or similar.	
The impact of the siting, design, height, bulk, colours, and materials to be used, on the natural environment, major roads, vistas and water features and the measures to be undertaken to minimise any adverse impacts.	The sheds themselves are quite low scale, the feed silos are 8.2m high. None of these are unusual in a rural landscape.  A visual assessment submitted with the application is considered satisfactory.	
The impact on the character and	Refer above	

appearance of the area or features of architectural, historic, or scientific significance or of natural scenic beauty or importance.		
Whether the use or development will require traffic management measures.	Council’s engineer has provided conditions	Include engineering conditions on a planning permit.

The Farming Zone is considered a suitable zone for a ‘broiler farm’ as it provides opportunities for separation distances due to the generally larger landholdings.

The ‘broiler farm’ is a legitimate agricultural use and given its intensity and the ability to still crop or graze the balance of the land it optimises agricultural use of the subject site.

**Overlays**

The subject site includes several overlays that are located along Joyces Creek that runs north/south to the rear of the site. These include:

- Environmental Significance Overlay Schedule 2.
- Land Subject to Inundation Overlay.
- Salinity Management Overlay.

The proposed use and development are not located within any of the overlays and is separated by approximately 1.3km from Joyces Creek so they are not a relevant consideration.

**Traffic safety and efficiency**

Council engaged a Traffic Engineer (Impact) to prepare a Traffic and Transport Assessment (November 2024) (TTA) to examine the cumulative traffic impacts of the five existing broiler farms and the three proposed broiler farms, including the subject site.

The TTA assessed the impact on the existing road network including:

- Pyrenees Highway.
- Rodborough Road.
- Clarkes Road.
- Locks Lane.
- Moolort-Baringhup Road.
- Baringhup Road.

The haulage route to the subject site was identified as Bendigo-Maldon Road, Allans Road, Lowther Street, Bridgwater-Maldon Road, Baringhup Road, Moolort Road, Moolort-Baringhup Road, Pyrenees Highway, Locks Len, and Rodborough Road.

The peak cumulative traffic volumes were estimated to be 842 movements per batch, assuming a 7-week growing cycle and 2 weeks for preparation for the next batch. This was further broken down to be twenty vehicle movements per day.

The lower order roads of Clarkes Road and Locks Lane are designed to carry a maximum of 150 vehicles per day, but only currently carry in the order of one hundred vehicles per day. The increased level of traffic movements is not expected to impact the operation of the road network.

An assessment of the sight distance at the intersection of Rodborough Road and Clarkes Road identified an unsatisfactory sight line distance to the east, falling short by 40m. It was satisfactory to the west.

The TTA recommends a speed reduction from 100kph to 90kph for a distance of 262m to the east. Signage including 'trucks entering' or rumble strips near the intersection are also recommended. The TTA further recommended a road maintenance agreement between parties due to anticipated deterioration of road pavement from the increased load and frequency of heavy vehicle traffic.

Council's engineer has provided planning permit conditions based on his own and the advice of Impact.

These conditions relate to a Traffic Management Plan, access, drainage, signage, loading/unloading and waste disposal.

### **Car parking**

The use of land for a broiler farm is not a listed within Table 1: Car Parking Requirements at Clause 52.06-5 of the Planning Scheme.

As such, and in accordance with clause 52.06-6, car parking spaces must be provided to the satisfaction of the responsible authority before the use commences.

The application proposes ten car parking spaces: six being outside of the biosecurity area and four within the biosecurity area. Considering the proposed number of staff, the nature of the operations, and the proximity of the caretakers' houses that provide further car parking, the number of car parking spaces provided is assessed to be acceptable.

Further, there are areas around the site that may provide informal car parking opportunities, if required, and ample space for trucks to park for deliveries/collections.

### **Water and environmental impacts**

The planning permit application was accompanied by a Surface Water Management Plan (Water Technology, 5 April 2024) and an Environmental Management Plan (Focus CDS Consultants, April 2024).

The Surface Water Management Plan provides an assessment of groundwater, nutrient risk and stormwater management and documents the surface water management mitigation measures to ensure the broiler farm:

- Mitigates any environmental impacts related to potential polluted or contaminated water runoff into the downstream receiving environment.
- Complies with the *Victorian Code for Broiler Farms (2009)* requirements.

Joyces Creek that runs north/south through the subject site along the eastern boundary is an intermittent stream that tends to be dry during summer and autumn and typically experiences flows through winter and spring, or after periods of heavy rain. It flows into Cairn Curran Reservoir at the Joyces Creek settlement approximately 6km north/east of the subject site. Cairn Curran Reservoir is owned and operated by Goulburn Murray Water.

The stormwater runoff from the broiler farm will be captured and diverted to a dam that is sized to retain runoff from a one in ten-year storm event. This accords with the requirements of the *Victorian Code for Broiler Farms (2009)*. The stormwater will be reused for the broiler farm operations and supplemented by groundwater during dry periods.

### **Groundwater**

The subject site is located within the Mid-Loddon Groundwater Management Area (GMA), specifically the Moolort Zone. In 2022/23 this zone had twenty-three licenced abstractions of groundwater, however only 41% of the entitlements was abstracted.

Groundwater dependent ecosystems (GDE's) are located within 2km of the subject site, however based on the depth to groundwater and the local clay soils, it's advised that the risk to groundwater is small and therefore GDEs at a greater distance were not considered likely to be impacted by any potential nutrient export from the proposed broiler farm.

The two nearest waterways, Joyces Creek to the east and Middle Creek to the west, are considered sufficiently distant from the subject site to not be impacted.

The White Swamp wetland located approximately 1km to the south/west is identified as having a low potential for groundwater interaction.

There is also an unnamed wetland to the south of the subject site which is also reported to have a low potential for groundwater interaction.

### **Nutrient Risk Assessment**

The report recognises that poultry manure contains high levels of nitrogen, phosphorous and potassium. These nutrients can result in downstream contamination and/or the potential for blue-green algal blooms in receiving waters.

A nutrient risk assessment was undertaken for the proposed broiler farm based on the methodology of the *Egg Industry Environmental Guidelines* (McGahan *et al* 2018).

The nutrient risk assessment resulted in a score within the low-risk band suggesting the proposed broiler farm presents a low environmental risk in relation to the potential impacts of nutrient loading on groundwater.

### **Surface Water Risk Assessment**

The methodology for this risk assessment was also based on the *Egg Industry Environmental Guidelines* (McGahan *et al* 2018). The nutrient risk assessment for surface water also scored in the low-risk band suggesting the proposed broiler farm presents a low environmental risk in relation to the potential impacts of nutrient loading on surface waters.

### **Broiler Farm Stormwater Management**

Key elements of the on-site stormwater management strategy include:

- Cleaning of sheds is done by removing litter by bobcat, followed by disinfection by high pressure, low volume sprays. The sheds have dwarf concrete wall to ensure no inflow or outflow of stormwater.
- Shed roofs are not guttered and roof runoff occurs directly to grassed swales beside and between the sheds.
- Water quality treatment measures are to be located upstream of the retention dam.
- The dam will be sized to cater for the 1 in 10 years ARI storm flow volume.
- Groundwater will be used to supplement the dam water supply during dry periods.
- Runoff from the catchment areas upstream of the site is directed around the site and dam by cutoff drains and bunds (so the dam is non 'online' to the local runoff path).
- A sedimentation pond is located at the outfall of the swale before the dam.

It is proposed that roof water will mix with surface water from the free-range areas. Ultimately this water is re-used for drinking water for the birds.

Agriculture Victoria does not support the stormwater from the free-range areas being used for drinking water for the birds.

As discussed earlier in this report, the water is treated before it enters the dam, then goes through a process of osmosis and a chlorination plant, before being stored in the water tanks.

If surface water from the free-range is not collected, the impact would be a reduction in the order of 16ML/year.

This would increase the reliance upon groundwater to maintain operational supply. The re-use of water from the free-range area as proposed is considered acceptable.

The Surface Water Management Plan recognises the two caretakers' houses but notes these will have no significant hydrologic impact on the site or downstream environment.

### **Environmental Management Plan**

The planning permit application was accompanied by an Environmental Management Plan (EMP) (FocusCDS Consultants, April 2024).

The *Victorian Code for Broiler Farms 2009* requires the approval of an EMP for every new broiler farm or expansion of an existing broiler farm.

The EMP incorporates the requirements of the Operation and Management Section (Element 6) of the Code and is subject to a process of continuous improvement. The EMP comprises thirteen categories of environmental matters, each having an objective and a series of Management Measures to achieve the objective.

The thirteen environmental matters addressed are:

**1. Landscaping.***Officer comment*

It is noted the EMP refers to completing landscaping within 6 months of commencement of use and the submitted planning report refers to landscaping within 12 months of commencement to allow for planting at a more appropriate time of year such as winter. The latter is a more practical outcome and in the longer term will allow for a more viable planting outcome.

**2. Facilities Standards.***Officer comment*

This should also allow for inspection and desilting of the sedimentation basin.

**3. Roads and Traffic.***Officer comment*

This refers to compliance with planning permit conditions. Council's engineering conditions will be further reinforced by the EMP.

**4. Feed, Water and Electricity Supply.**

*No officer comments.*

**5. Odour.**

*No officer comments.*

**6. Noise.**

*No officer comments.*

**7. Litter and Dust.***Officer comment*

Section 2.7.4 refers to temporary storage of litter limited to a maximum of ten days. As recommended by Agriculture Victoria an amended plan should show the location of this storage.

**8. Chemicals.***Officer comment*

As recommended by Agriculture Victoria an amended plan should show the location of chemical storage.

**9. Bird Management and Biosecurity.***Officer comment*

The method of freezing dead birds is supported, and EPA Victoria have advised this is best practice.

**10. Range Area Management.**

*No officer comments.*

**11. Other Environmental Controls.**

*No officer comments.*

**12. Contingency Plans.**

*No officer comments.*

**13. Community Participation.**

*No officer comments.*

The EMP is considered to be robust, and it should be endorsed under a planning permit to ensure its implementation to the satisfaction of Council.

**Biodiversity impacts**

The subject site for the proposed development has been cropped. A recent site inspection showed evidence of a canola crop and there were no trees on the part of the site to be developed. Neither the Central Goldfields Shire Environmental and Landscape Values Plan or the North Central Regional Catchment Management Plan identify the subject site as having biodiversity values.

The proposed landscaping comprises in excess of 18,000 new trees and shrubs which will result in a net improvement to biodiversity.

**The Broiler Code**

The *Victorian Code for Broiler Farms 2009* (the Code) provides a basis for the planning, design, assessment, approval, construction, operation, and management of broiler farms in Victoria.

The purpose of the Code is to:

- *Deliver sound environmental performance in the planning, design, construction, operation, and management of broiler farms.*
- *Protect local amenity from adverse impacts, including offensive odours, dust, noise, and visual impacts.*
- *Protect the surrounding environment from adverse impacts.*
- *Permit an economically viable, competitive, and sustainable broiler farm industry.*

To achieve these outcomes the Code sets requirements for:

The size and siting of broiler farms.

- *Application of best practice in the design, construction, operation, and management of broiler farms to satisfy relevant environmental standards.*
- *Preparation, assessment, and determination of broiler farms development proposals through the planning permit system.*
- *Ongoing monitoring of broiler farm operations through routine audits.*

A detailed assessment against the following elements has been provided:

- Element 1      Location, Siting and Size
- Element 2      Farm Design, Layout and Construction
- Element 3      Traffic, Site Access, On-farm Roads, and Parking
- Element 4      Landscaping
- Element 5      Waste Management
- Element 6      Farm Operation and Management (EMP)

Each element refers to the objective, relevant standards and approved measures and provides advice in relation to each.

The Code was referred to Agriculture Victoria who provided a detailed response to the applicant's assessment of the proposed broiler farm against the Code.

Agriculture Victoria's response is discussed elsewhere in this report however they did suggest some modifications largely relating to providing some additional detail on plans.

Their recommendations can be included as conditions of a planning permit as appropriate.

**Other matters raised in objections and submissions.**

Public notice of the planning permit application received eleven objections from nearby residents and their concerns have been listed earlier in this report. The objections have been considered in detail against the technical reports and supporting material submitted with the planning permit application and the relevant considerations of the Central Goldfields Planning Scheme.

Some matters raised in objections are not relevant planning considerations.

These include:

- Compliance issues with existing broiler farms.
- Proposal should be subject to an Environmental Impact Assessment.
- Impacts on property values.

- Inhumane conditions of broiler farms.

Council has sought legal advice regarding the impact of known breaches, on its consideration of a current planning permit application.

Although not directly relevant to this proposal, the legal advice was clear in that any known breaches are a separate matter and cannot be taken into consideration when assessing a current planning permit application.

The equivalent in Victoria of an Environmental Impact Assessment is an Environmental Effects Statement (EES), legislated by the *Environmental Effects Act 1978*.

Section 3 of the *Environmental Effects Act 1978* identifies what projects require an EES. One is not required for a broiler farm application.

The relevant regulatory test is the *Victorian Code for Broiler Farms 2009* (plus 2028 amendments). Impacts on property values has long been held by VCAT not to be a relevant planning consideration.

The welfare of animals is also not a relevant planning consideration and is a matter for other legislation and authorities including the *Prevention of Cruelty to Animals Act 1986* and the *Prevention of Cruelty to Animals (Domestic Fowl) Regulations 2006*.

Relevant objections followed some key themes including:

- Offsite amenity impacts from odour, noise, lighting, and air quality.
- Visual impact to nearby dwellings and the landscape character.
- The impact of heavy vehicles on local roads.
- Environmental concerns relating to impact on biodiversity and nearby wetlands.
- Impact on water quality including drinking water, groundwater, and the wider catchment.
- Suitability of the land use in an agricultural area.
- Compatibility with existing agricultural uses.
- Cumulative impact of several broiler farms in the area.
- Biosecurity concerns.
- Need for two caretakers' houses.

The permit application was accompanied by a number of reports prepared by suitably qualified consultants to assess the offsite amenity impacts. These included an Odour Environmental Risk Assessment, an EMP, a Visual Landscape Assessment, an assessment against the Broiler Code and an Acoustic Report.

### **Odour**

Of the eleven objectors, four do not identify the address of their property of interest. Of the other seven objectors, only two are identified as sensitive receptors in the Odour ERA, being R7 and R11. The dwelling of R7 is located approximately 722m south/east from the site boundary and the dwelling of R11 is located approximately 1,621m south/east from the site boundary.

The Odour ERA states that winds from the south/east occur less than 5% of the time for each direction, with the predominant annual average wind direction from the south-south/west.

As a result of the proposed broiler farm receptors R7 and R11 are impacted by an increase of 2.1 and 2.4 odour units, respectively.

Table 11 in the Odour ERA summaries the risk of offensive odour from current and proposed farms for R7 and R11 as subtle, with negligible risk odour exposure potential.

The sensitive receptor at the most risk is R17, located 975m west of the site boundary, with obvious odour intensity and high-risk exposure potential with a moderate risk of offensive odour. Although the owner/occupier of R17 did not make a submission, that does not mean the potential impact on their property should not be considered.

The Odour ERA also states that modelled increases in odour are unlikely to be perceived as the odour level needs to almost treble before an increase in perceived intensity is registered, although R17 is likely to experience offensive odour.

On balance the impact of the proposed broiler farm is considered acceptable. The Odour ERA should be endorsed under a planning permit to ensure implementation of the recommendations.

**Noise**

The Acoustic Assessment submitted with the application identified nine sensitive receptors and modelled predicted noise level using two scenarios. Using the most conservative Scenario 2 (refer to Table 8 in the acoustic assessment) the predicted noise levels comply with the Noise Protocol noise limits during the critical night period.

The Acoustic Assessment does recommend a number of strategies to minimise risks of harm to human health and environment. The Acoustic Assessment should be endorsed under a planning permit to ensure implementation of the recommendations.

**Lighting**

Batten lights at the end of each shed are proposed and the applicant advises these are only used during bird pick up. No other activities occur at night and there is no flood lighting proposed. Light spill is further ameliorated by the landscape buffer and distances to the nearest dwellings, with the closest being approximately 1.3km away.

A planning permit condition can be included to address this matter.

**Air Quality**

Information submitted with the application advises that the tunnel ventilation emits only very low levels of dust due to the moisture content in the litter.

The sheds are also at least 1.3km from the nearest dwelling and any dust issues in the local area are more likely to be from other agricultural practices such as ploughing and cropping.

**Landscape Impact**

Given the extensive landscape buffer proposed and low profile of the sheds it has been demonstrated in the submitted viewshed analysis that the proposed development will not have a negative impact, rather it will have a positive impact upon the landscape.

Further to this the appearance of large rural structures in a rural landscape is typical and an expected outcome to support the agricultural use of the land.

**Traffic Impacts**

As discussed elsewhere in the report Council engaged an external traffic expert to undertake an assessment of the cumulative impact on the local road network of the existing and proposed broiler farms.

That advice has been reviewed, and engineering conditions can be placed on a planning permit to address any required road upgrades including the requirement for a Traffic Management Plan.

**Biodiversity and Impact on Moolort Wetlands**

The subject site has been extensively cropped, and no removal of native vegetation is proposed. The development site is approximately 1.3km from Joyces Creek located along the eastern boundary.

It is noted that the Moolort Wetlands are in a different sub-catchment and not hydrologically connected to the subject site. GMW provided no objection to the proposal and require conditions to be placed on a planning permit.

**Proposed Use Within the Farming Zone**

A broiler farm is a legitimate agricultural use and is most appropriately located within a Farming Zone. It is nested within the definition of agriculture in the planning scheme, not within industrial.

A farming zone typically is comprised of larger parcels of land and provides the opportunity for greater separation distances than in other zones.

Offsite impacts from normal agricultural activities such as odour and dust are not unexpected in a farming zone, whether they be from ploughing and cropping or the application of fertilizers.

The application has demonstrated that there will no impact on nearby farming uses by runoff or impacts on groundwater.



The proposed broiler farm meets the purpose of the Farming Zone by providing for agricultural use of the land, providing for some local employment, and implementing sustainable land management techniques to manage surface water.

The proposed use along with the ability to crop the balance of the land will result in increased agricultural productivity from the subject site.

### **Impact on Drinking Water, Groundwater, and the Wider Catchment**

The Surface Water Management Plan submitted with the application has undertaken a rigorous assessment in accordance with relevant guidelines and concludes that the proposal represents a low environmental risk regarding both nutrient loading on groundwater and on surface waters.

It is recommended that a planning permit condition require an updated Land Capability Assessment and that the Surface Water Management Plan be endorsed under a planning permit.

GMW conditions are also required to be included on a planning permit.

### **Two Caretakers Houses**

The two caretakers' houses allow for a Farm Manager and Assistant Manager to live on site and be available 24/7 to deal with all usual operations and any unexpected operational requirements.

This will help to ensure the satisfactory operations of the proposed use.

Given the intensive nature of the agricultural use the footprint of the caretakers' houses is not considered to inhibit the agricultural use of the land, rather they will help to ensure the agricultural productivity.

Given the caretakers' houses are on a separate title to the remainder of the broiler farm operation i.e. the caretakers' houses are located on 39 Clarkes Road and the broiler farm is located on 141 Clarkes Road, it is considered appropriate to link the two lots by a planning permit condition This prevents the risk of 39 Clarkes Road being separately disposed of with two dwellings on it in a farming zone.

### **Not in accordance with the Broiler Code**

An assessment against the requirements of the *Victorian Code for Broiler Farms 2009* (plus 2028 amendments) was submitted with the application and this was referred to Agriculture Victoria who undertook a detailed assessment.

Apart from several recommendations for some modifications they offered no objection.

The Agriculture Victoria response included advice to consider the "*protection of the operation and growth of the cluster of Broiler farms from any further encroachment of dwellings.*"

Recommendations as considered appropriate should be included as planning permit conditions.

### **Cumulative Impact**

Each broiler farm needs to be assessed on its merits and the odour assessment has had particular regard to the impact from the existing GV1 and GV2 operations to the north as well as the impact of the proposed GV3.

### **Pest Impacts and Risk of Disease**

The risk of avian flu is not a relevant planning consideration and Council must confine its consideration of the planning permit application to those matters covered by the Victoria Planning Provisions.

### **Conclusion**

The application is supported by a number of expert reports and evidence to support the proposal.

Overall and on balance, the proposal is assessed as being an orderly planning outcome that represents net community benefit and sustainable development for the benefit of present and future generations.

### **CONSULTATION/COMMUNICATION**

As set out earlier within this report, notice of the application was given in the prescribed form in accordance with section 52 of the Act. Notice was given by placing a sign at the site, by publishing a notice in the Carisbrook Mercury, and sending it by post. Notice was given to the owners and occupiers of adjoining and surrounding land as well as to the EPA Victoria, while informal notice was also provided to Agriculture Victoria.

As a result, eleven (11) objections were received alongside two (2) neutral submissions from the EPA Victoria and Agriculture Victoria. The matters raised in both the objections and submissions have been addressed in the preceding assessment.

Council's decision on the matter will be communicated to all relevant parties following the Council meeting. Regardless of whether Council decides to grant or refuse a permit, the permit applicant as well as all objectors and submitters will receive a letter advising them of Council's decision and setting out their appeal (or review) rights to VCAT under the Act Text

### ••FINANCIAL& RESOURCE IMPLICATIONS

The assessment of planning permit applications is within the normal operational budget of Council. To assist in the assessment and consideration of both the subject planning permit application and two other applications for proposed broiler farms in the municipality, Council's Planning department commissioned a Traffic and Transport Assessment by Impact Traffic Engineering Pty Ltd. This was prepared and provided for a total cost of \$9,460.00 incl. GST.

Should any party appeal Council's decision to VCAT and a review process occurs, additional costs will be incurred. These situations may arise if:

- Pursuant to section 77 of the Act, the permit applicant applies to VCAT for review of Council's decision to refuse to grant the permit.
- Pursuant to section 79 of the Act, the permit applicant applies to VCAT for review of Council's failure to grant the permit within the prescribed time.
- Pursuant to section 80 of the Act, the permit applicant applies to VCAT for review of any condition in a permit which Council has issued or decided to grant.
- Pursuant to section 82 of the Act, an objector applies to VCAT for review of Council's decision to grant a permit.

### RISK MANAGEMENT

This report addresses Council's strategic risk Governance - Failure to transparently govern and embrace good governance practices by ensuring our assessment of the application meets all relevant legislation and regulations.

There is a current and ongoing risk to Council that, pursuant to section 79 of the Act, the permit applicant can apply to VCAT for review of Council's failure to determine the permit application within the prescribed time. Expediently determining the permit application will help to mitigate this risk.

Should a permit be granted by Council and/or VCAT and the proposed broiler farm becomes operational, there is a risk of non-compliance with permit conditions. Council has various enforcement options and powers under the Act to mitigate this risk and ensure that the use and development of the land suitably avoids detriment to the community. Council, as the responsible authority, is required by law to efficiently administer and enforce the planning scheme. This report addresses Council's strategic risk:

### CONCLUSION

Planning permit application 031-24 seeks approval for the use and development of the land for a Farm Cluster broiler farm for up to 445,000 birds and two caretakers' houses with associated buildings and works at 39 Clarkes Road, Moolort, and 141 Clarkes Road, Strathlea.

A Council resolution/determination is sought on the application as eleven (11) objections and two (2) neutral submissions have been received.

Pursuant to section 61 of the Act, Council, as the responsible authority, may decide either:

- c) To grant a permit.
- c) To grant a permit subject to conditions.

c) To refuse to grant a permit on any ground it thinks fit.

The recommendation of this report is that Council, as responsible authority, decides to grant a permit subject to conditions.

A report will be presented to the March 2025 Council meeting with the following recommendation: That Council, as the responsible authority and pursuant to section 61 of the Planning and Environment Act 1987, decides to grant a permit subject to conditions and issue a Notice of Decision to Grant a Permit in respect of planning permit application no. 031-24 for the use and development of the land for a Farm Cluster broiler farm for up to 445,000 birds and two caretakers' houses with associated buildings and works at 39 Clarkes Road, Moolort, and 141 Clarkes Road, Strathlea.

The following conditions will apply to this permit:

- 48) Before the development commences, amended plans to the satisfaction of the responsible authority must be submitted to and approved by the responsible authority. When approved, the plans will be endorsed and then form a part of this permit. The plans must be generally in accordance with the plans substituted with the application (being plans prepared by FocusCDS Consultants, dated April 2024, Reference 2632R01, but modified to include:
  - a) Recommendations of the Environmental Management Plan (EMP) required by condition six.
  - b) The revised Landscaping Plan required by condition eight.
  - c) Recommendations of the Surface Water Management Plan (Water Technology, 5 April 2024) required by condition eleven.
  - d) Recommendations of the Stormwater Management Plan required by condition twenty-nine.
  - e) The Acoustic Assessment (WMG, 8 April 2024) required by condition twelve.
  - f) The Odour Environmental Risk Assessment ((GHD, 10 April 2024)
  - g) The Landscape and Visual Assessment (Landform, February 2024) required by condition fourteen.
  - h) Detailed design details and cross sections of the storage dam, sedimentation, and vegetated swales.
  - i) Dust suppression mitigation measures for the loading and unloading of litter and spent litter trucks at the shed locations.
  - j) Areas identified for temporary storage of litter and associated details.
  - k) Location of chemical storage.
  - l) Floor plan of the caretakers' houses.
  - m) Recommendations of an updated Land Capability Assessment required by condition fifteen.
- 49) The layout of the site and size of the buildings and works, as shown on the approved endorsed plans shall not be altered or modified without the consent in writing of the responsible authority. Any substantive changes, in the opinion of the responsible authority, will require a new application and permit.
- 50) The use and development hereby permitted must at all times be carried out in accordance with the endorsed documentation to the satisfaction of the responsible authority.

**Use to cease if certain land not used in-conjunction with the broiler farm.**
- 51) Prior to the commencement of the development, Crown Allotments 2, 2A and 3 (No. 39 & 141 Clarkes Road Strathlea) must be consolidated to the satisfaction of the responsible authority.

**Environment Management Plan**

- 52) Prior to the commencement of the use hereby permitted, an Environmental Management Plan (EMP) for the operation of the broiler farm must be submitted to and be to the satisfaction of the responsible authority and Goulburn Murray Water. When approved by the responsible authority and Goulburn Murray Water, the EMP will be endorsed and then form part of this permit. The EMP must be in generally in accordance with the EMP submitted with the application (prepared by FocusCDS Consultants dated April 2024) and the Victorian Code for Broiler Farms 2009 (as may be amended from time to time), but amended to include the following additional requirements:
- a) bird-pickup trucks which are attending the site between 10pm and 7am must have broadband (non-audible) reverse beepers;
  - b) no deliveries of feed are to occur between 10pm and 7am;
  - c) any faulty fans are to be immediately decommissioned and are to be repaired within three business days (unless otherwise agreed by the responsible authority);
  - d) measures to ensure compliance with the traffic management plan, including information to be provided to drivers to ensure they follow the route required by the traffic management plan;
  - e) a requirement for the maintenance of the existing site-specific weather monitoring station, to the satisfaction of the responsible authority, with data from this monitoring station be provided to the responsible authority on request;
  - f) placement of birds is to be co-ordinated with the existing broiler farms at No. 1480 Rodborough Road, Moolort so that it is staggered in a manner which is generally in accordance with the assumptions of the odour modelling carried out by GHD as part of the permit application process;
  - g) shed clean out to be carried out during the day-time period and not at a time when prevailing weather conditions are likely to be conducive to offsite odour impacts;
  - h) litter and dead bird stockpiling, spreading or disposal is not to occur on the site, nor on other adjoining land associated with the broiler farm (including No. 39 Clarkes Rd, Moolort and No. 1480 Rodborough Road, Moolort);
  - i) litter, dead birds and other waste from other broiler farms is not to be accepted, disposed of, stockpiled on, or spread on or over the land; and
  - j) there is to be a nominated community liaison person/s which is independent of the operation of the broiler farm. This liaison person/s is to be appointed by the applicant, after consultation with the local community, and is to be to satisfaction of Council. The nominated community liaison person/s is to be a point of contact between the broiler farm operators and the community, including in relation to complaint resolution. The nominated community liaison person/s is to be provided with access to the farm logbook required to be kept by 2.6.1 of the EMP, as appropriate to assist in resolving complaint.
- 53) Site performance inspections, site audits and reviews of the Environmental Management Plan must be undertaken in accordance with the endorsed Environmental Management Plan. Any revision to the Environmental Management Plan must be submitted to and approved by the responsible authority and Goulburn Murray Water. When approved such revised Environmental Management Plan will be endorsed as evidence of its approval and will thereby become part of the endorsed plan of this permit.

**Landscape Plan**

- 54) Prior to the commencement of the use hereby permitted, a revised Landscape Plan must be submitted to and be to the satisfaction of the responsible authority.

- 55) The revised Landscape Plan must be prepared by a person suitably qualified or experienced in landscape design to ensure substantial visual screening to the satisfaction of the responsible authority. When approved by the responsible authority, the revised Landscape Plan will be endorsed and then form part of this permit.
- 56) The revised Landscape Plan must be generally in accordance with the landscape plan prepared by ,Landform, Draing No. Ls1, dated 15/02/2024and must include:
- a) Vegetation details of the drainage swales;
  - b) species and number of the trees, shrubs, and ground covers to be planted;
  - c) The use of semi-mature species for tree planting;
  - d) details of the methods to be used when planting, including deep ripping before planting as appropriate;
  - e) the timeline for planting, with the planting to be commenced at the commencement of construction and completed within 12 months of the construction of the broiler sheds; and
  - f) a short-term (1-3 years) and long-term (3 years +) maintenance plan, including a requirement for replacement planting of dead or diseased plants, appropriate irrigation methods and regular weed control.
- 57) The landscaping and maintenance, as detailed in the endorsed plans, must be carried out to the satisfaction of the responsible authority. Once landscaped the landscaped areas as shown on the endorsed plan(s) must not be used for any other purpose except with the prior written consent of the responsible authority.
- 58) A landscape performance bond to the satisfaction of the responsible authority must be established in accordance with Approved measure E4 M1.8 of the Victorian Code for Broiler Farms 2009.

### **Surface Water Management Plan**

- 59) Prior to the commencement of the use or any earthworks on the site hereby permitted, the submitted Surface Water Management Plan (Water Technology 5 April 2024) must be amended to the satisfaction of the responsible authority and Goulburn Murray Water. When approved by the responsible authority and Goulburn Murray Water, the Surface Water Management Plan will be endorsed and then form part of this permit. The Surface Water Management Plan must detail all proposed storm water quality works within the site during construction and operation of the broiler farm development. Such plan must be prepared by a person suitably qualified and may detail staging of works in line with the development proposed to the satisfaction of the Responsible Authority. The Surface Water Management Plan must be generally in accordance with the plan submitted with the application (prepared by Water Technology, dated 8 April 2024), but amended to include the following additional requirements:
- a) Details of loading on the sedimentation basin and details and timing of desilting of the sedimentation basin.
  - b) Any impacts from the temporary storage of litter.

### **Acoustic Assessment**

- 60) Prior to the commencement of development, the Acoustic Assessment (Watson Moss Growcott, dated 8 April 2024) must be endorsed under this planning permit.

### **Odour Environmental Risk Assessment**

- 61) Prior to the commencement of development, the Odour Environmental Risk Assessment (GHD, dated 10 April 2024) must be endorsed under this planning permit.

**Landscape and Visual Assessment**

- 62) Prior to the commencement of development, the Landscape and Visual Review (Landform, February 2024) must be endorsed under this planning permit

**Land Capability Assessment**

- 63) Prior to the commencement of development, a Land Capability Assessment must be submitted responding to the proposed development including requirements for the two caretakers' houses and staff amenities.

**Amenity**

- 64) The amenity of the area must not be detrimentally affected by the use or development through the: -
- a) Transport of materials, goods, or commodities to or from the site.
  - b) Appearance of any building works or materials. The site shall be kept orderly and tidy to the satisfaction of the responsible authority.
  - c) Emission of noise, artificial light, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, wastewater, waste products.
  - d) The presence of vermin.
  - e) Dust and particulate matter resulting from deliveries and pick-ups at and from the sheds.
- 65) The permit holder/operator shall use all appropriate broiler farm management techniques to the satisfaction of the responsible authority to minimise emissions beyond the site to the detriment of any person or the amenity of the neighbourhood of any broiler and/or chemical, disinfectant, or associated odour.
- 66) In the event of the responsible authority receiving any complaint regarding the operation of the broiler farm, the operator will be informed of such complaint by the responsible authority and the operator shall immediately investigate the reason for the complaint and take appropriate remedial action, as required, to comply with this permit to the satisfaction of the responsible authority.
- 67) If the responsible authority determines, in its opinion, that the amenity of nearby residents is adversely affected by the emission of an unreasonable level of odour, noise, dust or traffic noise from the broiler farm, the operators must immediately take actions and/or undertake works, which are directed by the responsible authority and may include adjusting stocking density in the sheds, removing unsatisfactory spent litter promptly, or any other actions including provision of mechanical odour or dust mitigation devices to rectify the emission of offensive, odour, dust or noise, all to the satisfaction and specification of the responsible authority.
- 68) In the event of the EMP Nuisance Complaint Handling provisions not rectifying any complaint, in the opinion of the responsible authority, particularly in the areas of Odour Emissions or Dust complaints, the responsible authority may, in its sole discretion, direct the operator under the Permit and EMP, to undertake a Supplementary Audit, at the cost of the farm operator, to identify the complaint causes and recommend appropriate ongoing, in-shed remedies, to mitigate the sources of the complaint and implement such remedies deemed appropriate by the responsible authority, at its sole discretion and to the satisfaction of the responsible authority.
- 69) Should the in-shed remedies recommended in the above condition not be successful in mitigating or eliminating any amenity or nuisance complaint/s to the satisfaction of the responsible authority, the responsible authority may direct appropriate in-shed or ex-shed

environmental amenity control plant & equipment, to be installed to a specification and to a time scheduled, all to the satisfaction of the responsible authority.

- 70) The broiler farm sheds, and all feed stores must be vermin and bird proof to the satisfaction of the responsible authority.
- 71) The permit holder must use its best endeavours to ensure that all trucks and heavy vehicles used in transporting livestock and litter do not cause any detriment to the amenity by noise or excessive vehicle movements. The permit holder must ensure that contractors engaged comply with all necessary Victorian vehicle design (ADR) and maintenance (roadworthy) requirements.
- 72) No external floodlighting shall be installed without the written permission of the responsible authority.
- 73) The use of chemicals in association with the use and development of the site must be in accordance with the endorsed EMP to the satisfaction of the responsible authority.

#### **Environmental Health conditions**

- 74) Prior to the commencement of use of the broiler farm the following must be undertaken by the permit holder/operator to the requirements and satisfaction of the responsible authority:
  - a) An updated Land Capability Assessment which takes into account full water balance and nutrient loads from the two proposed dwellings and is prepared following the Municipal Association of Victoria Model LCA Report must be submitted to Council demonstrating that the site is capable of treating and retaining all wastewater from the two proposed dwellings in accordance with relevant legislation and standards.
  - b) Prior to the commencement of construction of the proposed dwellings and any associated structures, an Application for a Permit to Install an Onsite Wastewater Management System must be submitted to Council and approved by Council prior to any installation.

#### **Engineering conditions**

##### **Road**

- 75) Prior to the commencement of use of the broiler farm the following must be undertaken by the permit holder/operator to the requirements and satisfaction of the responsible authority:
- 76) Road
  - a) A Traffic Management Plan must be submitted and endorsed detailing access to and from the broiler farm site. Access must be via Clarkes Road from Rodborough Road. No alternative routes are permitted without approval from the Responsible Authority.
  - b) Clarkes Road must be upgraded from Rodborough Road to twenty-five metres south of the developments entrance to the Council rural industrial Road hierarchy standard as per the Central Goldfields Shire Council Road Management Plan 2024.
  - c) An annual maintenance fee of \$11,800, indexed annually from the 2024/2025 Financial Year, is required to be paid to Council for unsealed road maintenance of the upgraded section of Clarkes Road for the additional road maintenance costs due to the extent of heavy vehicle traffic imposed by the Broiler Farm Development.
  - d) The intersection of Rodborough Road and Clarkes Road is to be asphalt overlaid with a 40mm thick 10mm aggregate Type H Asphalt for fifty metres in length (25 metres into Clarkes Road).
  - e) Prior to the commencement of any road works the permit holder/operator must submit detailed construction plans and make further application for, and have

approved, a Consent for Works permit. All works constructed or carried out must be in accordance with the approved plans/permit(s) and to the satisfaction of the responsible authority.

- f) All signs and line marking are to be included as per AS.1742.2.2022
- g) All line marking is to be thermoplastic permanent paint.

### **Access**

- h) Crossover to the development must be to at least the standard of the Infrastructure Design Manual drawing 255.
- i) Once constructed/upgraded crossovers must be thereafter maintained by the landowners to the satisfaction of the Responsible Authority.
- j) An internal driveway from the fence line to the enclosures must be provided as an all-weather driveway with dimensions adequate to accommodate emergency vehicles to the satisfaction of the Responsible Authority.

### **Drainage**

- k) No effluent or contaminated stormwater may enter the Council drainage system.
- l) All stormwater and surface water drainage from the proposed buildings, hard standing areas, driveways, and yards must be designed to be contained within the site and designed for storm water quality and quantity to comply with the Best Practice Environmental Management Guidelines for Urban Stormwater (CSIRO) 1999 to the satisfaction of the Responsible Authority.
- m) All stormwater and surface water drainage from the proposed buildings, hard standing areas, driveways, and yards is to be collected and discharged to the proposed retention dam on the development.
- n) A Stormwater Management Strategy detailing all proposed stormwater quality works within the subject land during construction and operation of the broiler farm development must be submitted to and approved by the Responsible Authority prior to the commencement of any drainage works on site.
- o) The developer/applicant/owner must restrict sediment discharges from the construction site in accordance with Construction Techniques for Sediment Pollution Control (EPA 1991) and Environmental Guidelines for the Major Construction Sites (EPA 1995).

### **Signage**

- p) Trucks entering signage must be placed on Clarkes Road and Rodborough Road to the satisfaction of the Responsible Authority.

### **Loading/Unloading**

- q) The loading and unloading of vehicles and the delivery of goods to and from the site must always be undertaken entirely within the boundaries of the site and be so conducted as to cause minimum interference with other traffic to the satisfaction of the Responsible Authority.

### **Waste Disposal**

- r) The treatment of waste and litter from the operation of the site is to be undertaken in accordance with the endorsed Environmental Management Plan.
- s) No stockpiling of waste or litter is to occur on the site, all waste is to be disposed off-site to the satisfaction of the responsible authority.



- t) All waste pick-up vehicles/trucks to be covered with secure covers, which are used to prevent dust or spillage of waste on departure from the site.

#### **Developers' Defect Liability**

- u) The developers' defect liability period for road related assets is 12 months from completion of construction.

#### **Rural Road Numbers**

- 77) Rural Road Numbers as assigned by Council's Rates Officer must be clearly displayed at the main access points for the site.

#### **Goulburn Murray Water (GMW) conditions**

- 78) All construction and ongoing activities must be in accordance with EPA Publication 1834.1 Civil Construction, Building and Demolition Guide (September 2023).
- 79) All wastewater from the two dwellings must be treated and disposed of using an approved system. The system must have a certificate of conformity issued by the Conformity Assessment Body (or equivalent approval) and be installed, operated, and maintained in accordance with the relevant Australian Standard and EPA Code of Practice.
- 80) The wastewater disposal area for this system must be located at least: 100 metres from any waterways, 40m from any drainage line, 60m from any dams and 20m from any bores.
- 81) The wastewater disposal area must be kept free of stock, buildings, driveways, and service trenching and must be planted with appropriate vegetation to maximise its performance. Stormwater must be diverted away. A reserve wastewater disposal field of equivalent size to the primary disposal field must be provided for use in the event that the primary field requires resting or has failed.
- 82) The development must be undertaken in accordance with the requirements of the Victorian Code for Broiler Farms, 2009 (including 2018 amendments).
- 83) The floor of the sheds must be constructed with impervious surface such as concrete or of clay compacted to achieve a design permeability of  $1 \times 10^{-9}$  m/sec. The shed must be designed to ensure that all litter can be retained within the shed until removal is required.
- 84) Contaminated litter removed from the sheds must be transported off site by an approved contractor to an approved site.
- 85) There must be no spent litter from the sheds stockpiled on the site. Any temporary storage areas for wet litter must have an impermeable base and bunding to ensure contaminated run-off does not discharge from the temporary storage area.
- 86) No land application of contaminated litter is to occur.
- 87) Stormwater and drainage from hard stand areas and the areas around the shed must be directed to a retention dam which must be designed with a capacity and freeboard to enable the run-off from a 1 in 10-year storm to be retained. Any overflow from the dam must not cause erosion.
- 88) The retention dam must be lined with an impervious liner and if clay is used it must be compacted to a seepage rate of not greater than  $1 \times 10^{-9}$  m/sec. The dam must be operated to a minimum level to ensure the liner does not dry out and crack. There must be no overflow of water from the dam directed to any waterways.
- 89) All soil removed during construction of the dam must be reused, stabilized, or vegetated on-site to ensure that no sediment can be transported off-site.
- 90) All dead birds must be disposed of off-site or managed on-site to the satisfaction of the Environment Protection Authority.
- 91) Any chemicals stored on-site must be kept in accordance with the EPA Publication 1698 Liquid Storage and Handling Guidelines (June 2018).

**EPA conditions**

- 92) Noise emitted from the premises must not exceed the recommended levels as set out in Noise from Industry in Regional Victoria (NIRV; EPA Publication 1411, 2011) or as amended.
- 93) Discharge of wastewater to land must not adversely affect the land.
- 94) Management of farm waste at the premises should be in accordance with EPA Publication IWRG641 Farm Waste Management June 2009 or as amended.
- 95) Stormwater contaminated with effluent must not be discharged beyond the boundary of the premises.
- 96) Nuisance dust must not be discharged beyond the boundaries of the premises.

**Expiry**

- 97) This permit will expire if: -
  - a) the development of the first shed is not commenced within four (4) years of the date of this permit; or
  - b) the development of the final shed is not completed or the use is not commenced within six (6) years of the date of this permit.In accordance with section 69 of the *Planning and Environment Act 1987*, an application may be submitted to the responsible authority for an extension of the periods referred to in this condition.

**Notes**

The Environment Protection Act 2017 came into effect on 1 July 2021 and imposes new duties on individuals and/or businesses undertaking the activity permitted by the permit. If your business engages in activities that may give rise to a risk of human health or the environment from pollution or waste, you must understand those risks and take action to minimise them as far as reasonably practicable.

For further information on what the laws mean for Victorian businesses go to: <https://www.epa.vic.gov.au/for-business/new-laws-and-your-business>.

For further information on what the new laws will mean for individuals and the community go to: <https://www.epa.vic.gov.au/about-epa/laws/new-laws/the-new-act-for-the-community>.

The storage dam may require a permit/licence from the catchment management authority, a Hazard Potential Classification and an ANCOLD.

**ATTACHMENTS**

1. Attachment 3 - 031-24 - 39-141 Clarkes Road, Strathlea - Engineering referral response [8.2.3.1]
2. Attachment 1\_ - [8.2.3.2]
3. Attachment 2\_ [8.2.3.3]
4. Attachment 4\_ [8.2.3.4]
5. Attachment 5\_ [8.2.3.5]
6. Attachment 6\_ [8.2.3.6]
7. Attachment 7\_ [8.2.3.7]
8. Attachment 8\_ [8.2.3.8]
9. Attachment 9\_ [8.2.3.9]
10. Attachment 10\_ [8.2.3.10]

**Engineering conditions**

**Road**

- 1 Prior to the commencement of use of the broiler farm the following must be undertaken by the permit holder/operator to the requirements and satisfaction of the responsible authority:

**Road**

- (a) A Traffic Management Plan must be submitted and endorsed detailing access to and from the broiler farm site. Access must be via Clarkes Road from Rodborough Road. No alternative routes are permitted without approval from the Responsible Authority.
- (b) Clarkes Road must be upgraded from Rodborough Road to 25 metres south of the developments entrance to the Council Rural industrial Road hierarchy standard as per the Central Goldfields Shire Council Road Management Plan 2024.
- (c) The intersection of Rodborough Road and Clarkes Road is to be asphalt overlaid with a 40mm thick 10mm aggregate Type H Asphalt for 50 metres in length (25 metres into Clarkes Road).
- (d) Prior to the commencement of any road works the permit holder/operator must submit detailed construction plans and make further application for, and have approved, a Consent for Works permit. All works constructed or carried out must be in accordance with the approved plans/permit(s) and to the satisfaction of the responsible authority.
- (e) All signs and line marking is to be included as per AS 1742.2:2022.
- (f) All line marking to be thermoplastic permanent paint.

**Access**

- (g) Crossover(s) to the development must be to at least the standard of the Infrastructure Design Manual drawing 265.
- (h) Any existing crossovers along the Clarkes Road upgrade not part of the development must be upgraded to at least the standard of the Infrastructure Design Manual drawing 255.
- (i) Once constructed/upgraded crossovers must be thereafter maintained by the landowners to the satisfaction of the Responsible Authority.
- (j) An internal driveway from the fence line to the enclosures must be provided as an all-weather driveway with dimensions adequate to accommodate emergency vehicles to the satisfaction of the Responsible Authority.

**Drainage**

- (k) No effluent or contaminated stormwater may enter the Council drainage system.

- (l) All stormwater and surface water drainage from the proposed buildings, hard standing areas, driveways and yards must be designed to be contained within the site and designed for storm water quality and quantity to comply with the Best Practice Environmental Management Guidelines for Urban Stormwater (CSIRO) 1999 to the satisfaction of the Responsible Authority.
- (m) All stormwater and surface water drainage from the proposed buildings, hard standing areas, driveways and yards is to be collected and discharged to the proposed retention dam on the development.
- (n) A Stormwater Management Strategy detailing all proposed stormwater quality works within the subject land during construction and operation of the broiler farm development must be submitted to and approved by the Responsible Authority prior to the commencement of any drainage works on site.
- (o) The developer/applicant/owner must restrict sediment discharges from the construction site in accordance with Construction Techniques for Sediment Pollution Control (EPA 1991) and Environmental Guidelines for the Major Construction Sites (EPA 1995).

**Signage**

- (p) Trucks entering signage must be placed on Clarkes Road and Rodborough Road to the satisfaction of the Responsible Authority.

**Loading/Unloading**

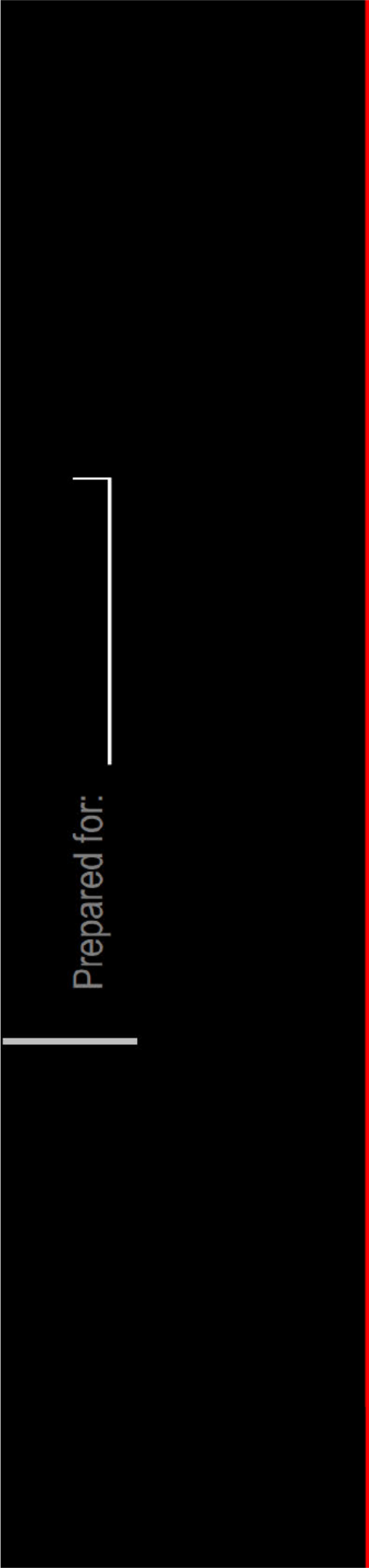
- (q) The loading and unloading of vehicles and the delivery of goods to and from the site must always be undertaken entirely within the boundaries of the site and be so conducted as to cause minimum interference with other traffic to the satisfaction of the Responsible Authority.

**Waste Disposal**

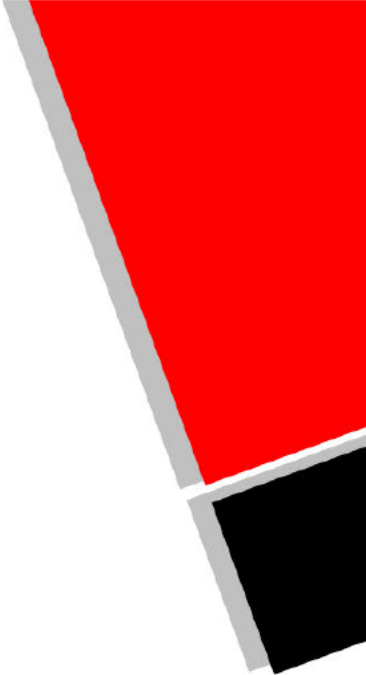
- (r) The treatment of waste and litter from the operation of the site is to be undertaken in accordance with the endorsed Environmental Management Plan.
- (s) No stockpiling of waste or litter is to occur on the site, all waste is to be disposed off-site to the satisfaction of the responsible authority.
- (t) All waste pick-up vehicles/trucks to be covered with secure covers, which are used to prevent dust or spillage of waste on departure from the site.

**Developers' Defect Liability**

- (u) The developers' defect liability period for road related assets is 12 months from completion of construction.



Prepared for:



# Submission in Support of Application for a Planning Permit

## VOLUME 4: FIGURES

Proposed Broiler Farm & Dwellings  
39 & 141 Clarkes Road, Strathlea

April 2024  
(2632R01)





**VOLUME 4: FIGURES**

**FIGURE 1 – LOCATION AND TOPOGRAPHIC PLAN**

**FIGURE 2 – FARM CONTEXT PLAN**

**FIGURE 3 – BROILER FARM SITE PLAN**

**FIGURE 4 – BROILER FARM LAYOUT**

**FIGURE 4A – FARM DWELLING LOCATIONS**

**FIGURE 5 – FLOOR PLAN & ELEVATIONS BROILER SHED**

**FIGURE 6 – FLOOR PLAN & ELEVATIONS MACHINERY SHED**

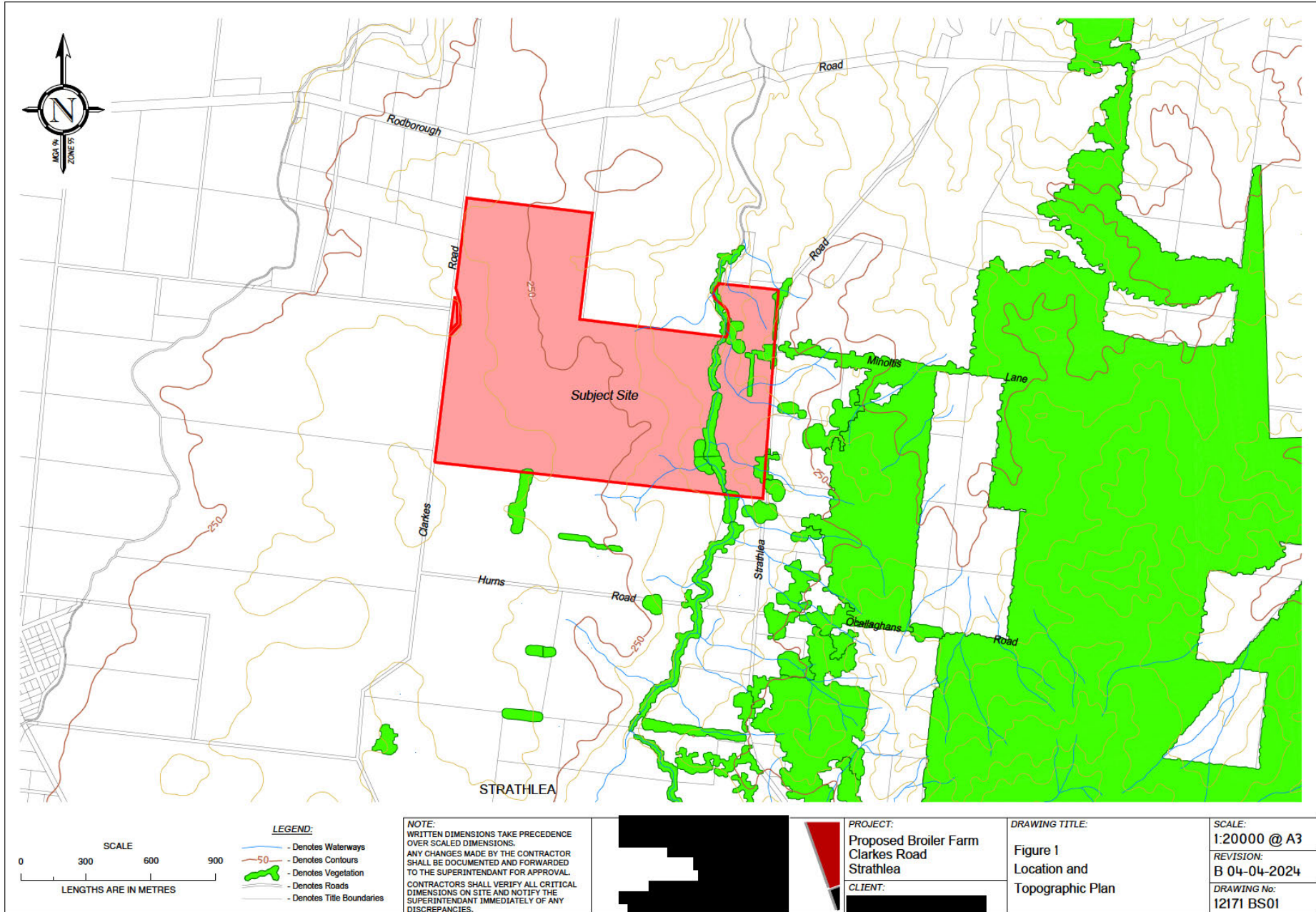
**FIGURE 7 – SECTION A – A'**

**FIGURE 8 – SECTION B – B'**

**FIGURE 9 – SECTION C – C'**

**DWELLING PLAN AND ELEVATIONS**

**LANDSCAPE PLAN**

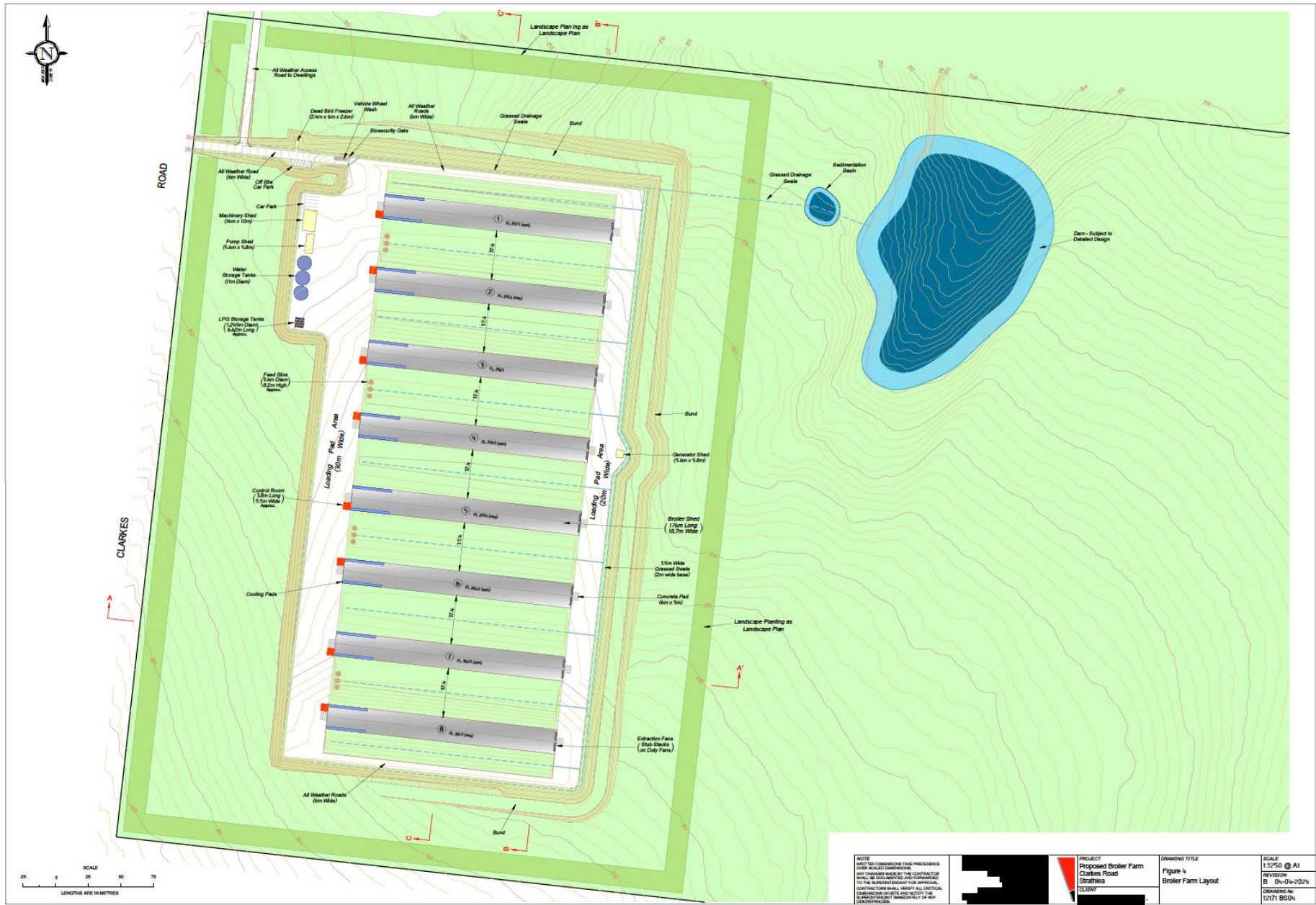


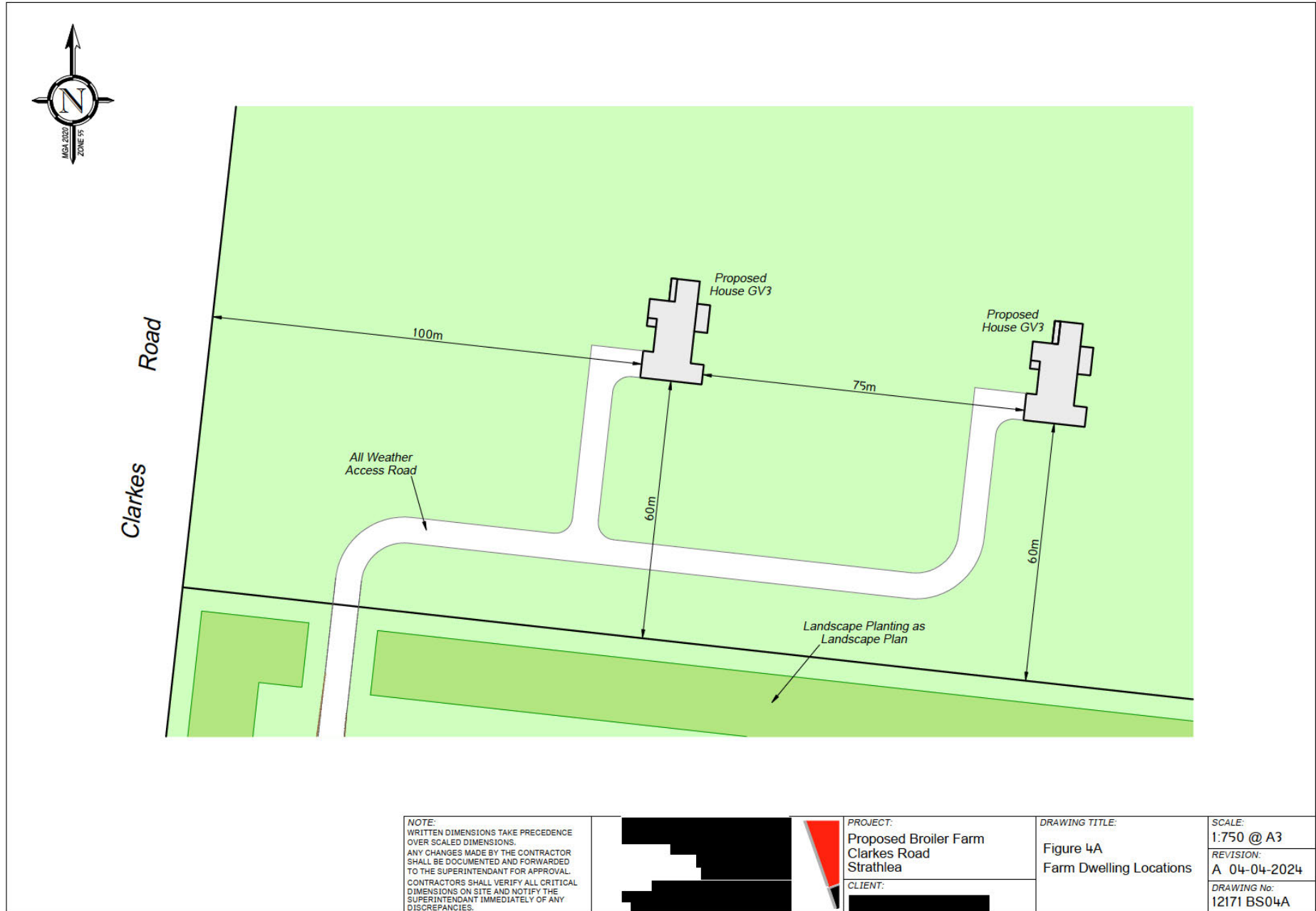


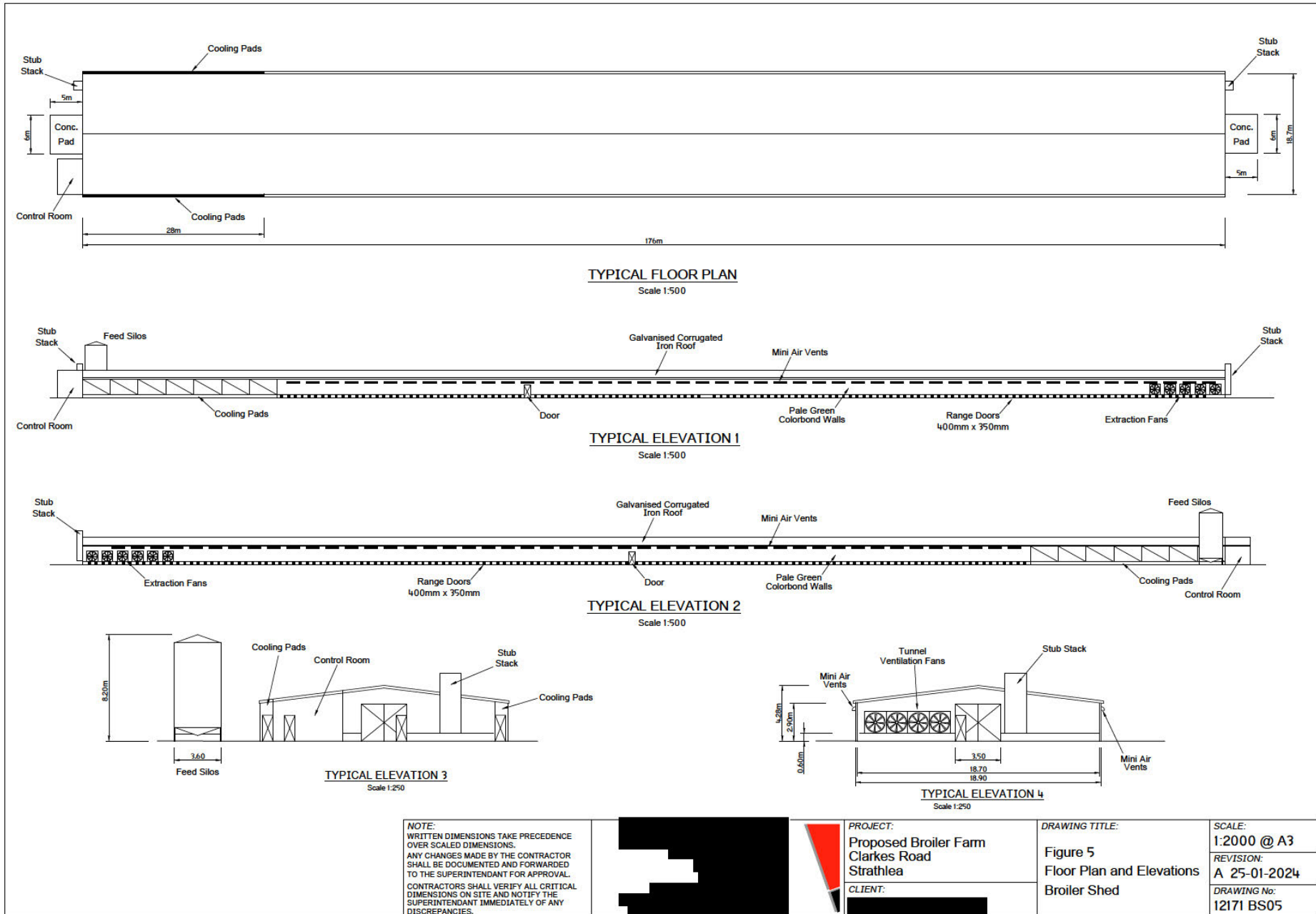


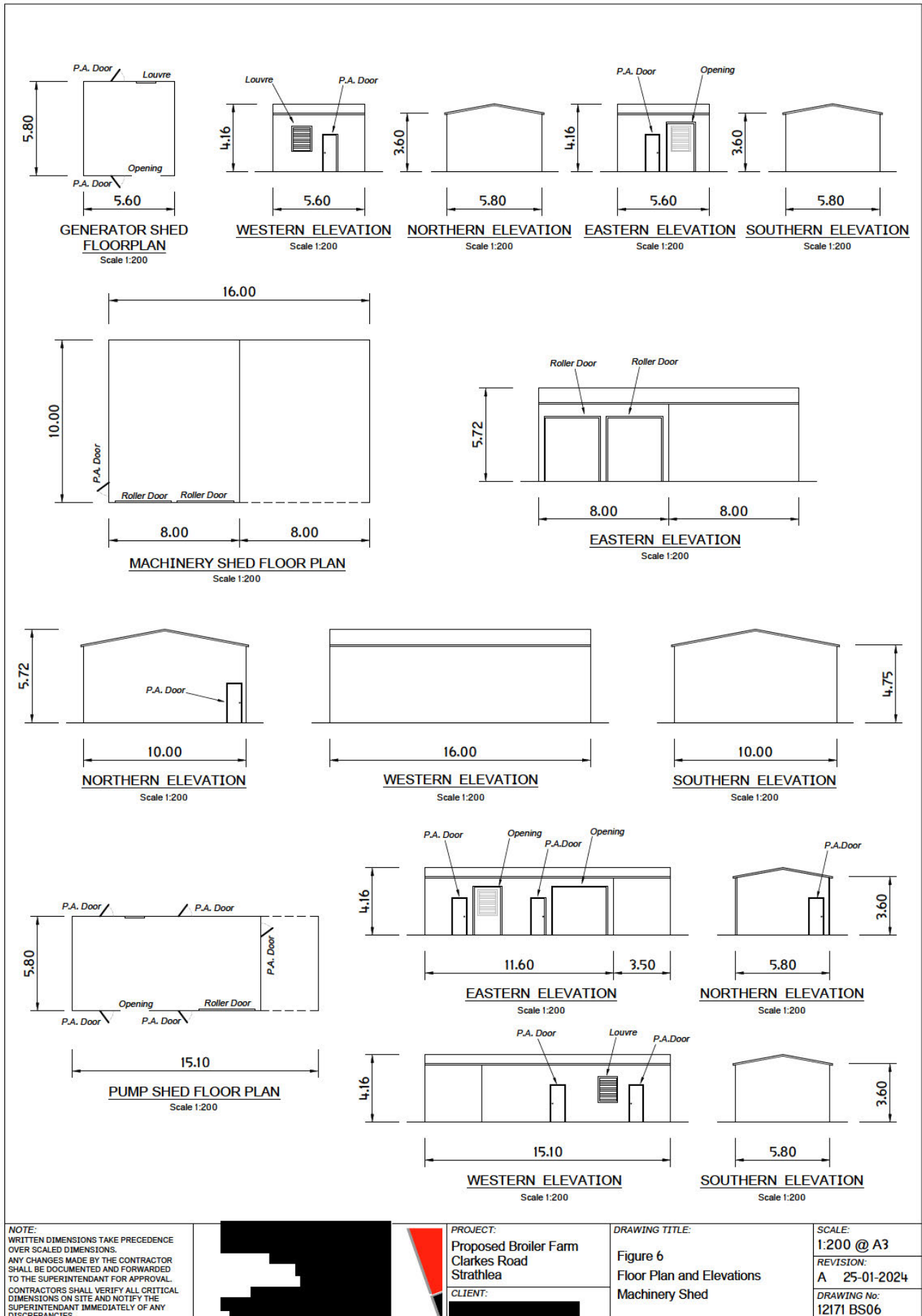












**NOTE:**  
 WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.  
 ANY CHANGES MADE BY THE CONTRACTOR SHALL BE DOCUMENTED AND FORWARDED TO THE SUPERINTENDANT FOR APPROVAL.  
 CONTRACTORS SHALL VERIFY ALL CRITICAL DIMENSIONS ON SITE AND NOTIFY THE SUPERINTENDANT IMMEDIATELY OF ANY DISCREPANCIES.

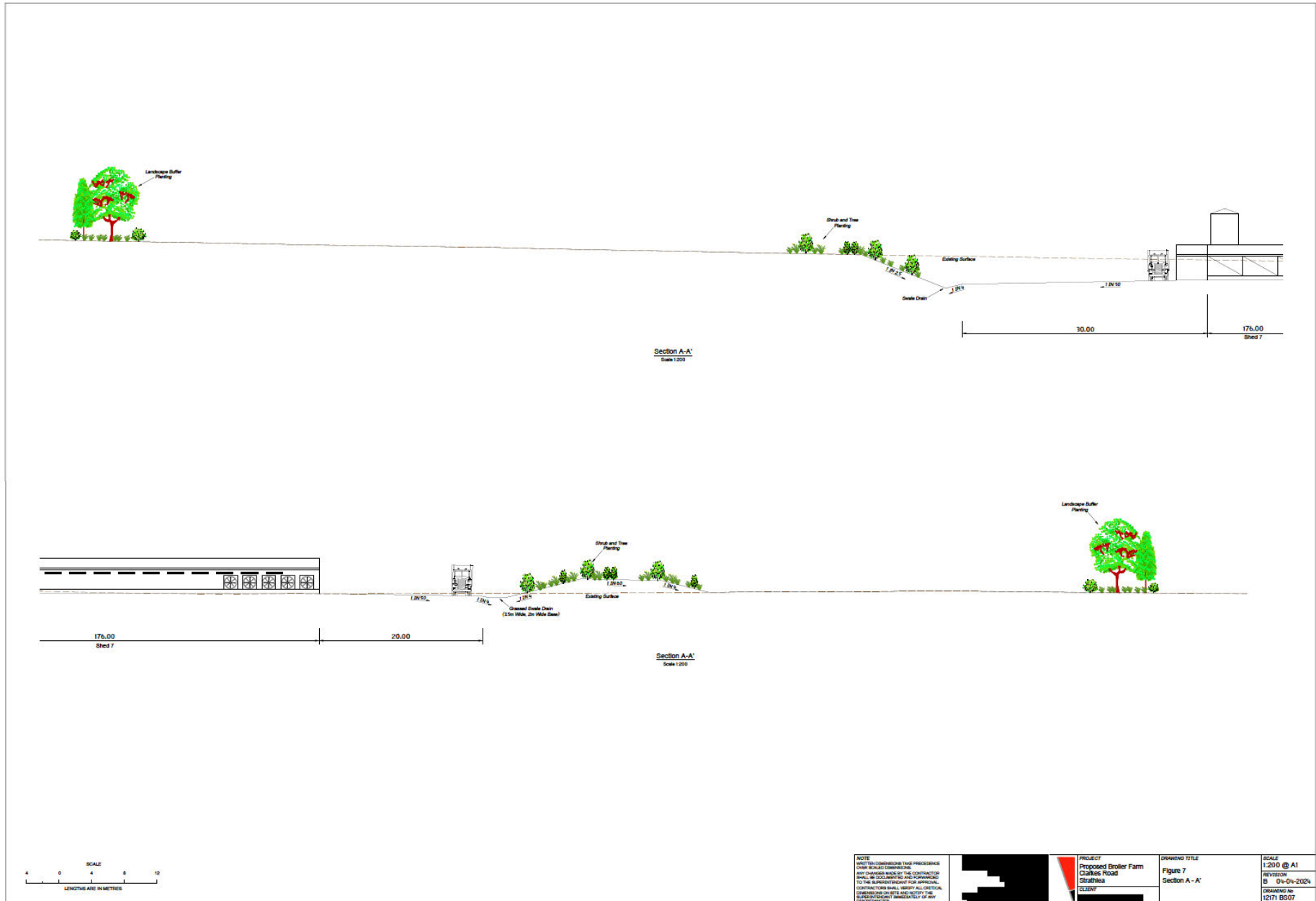


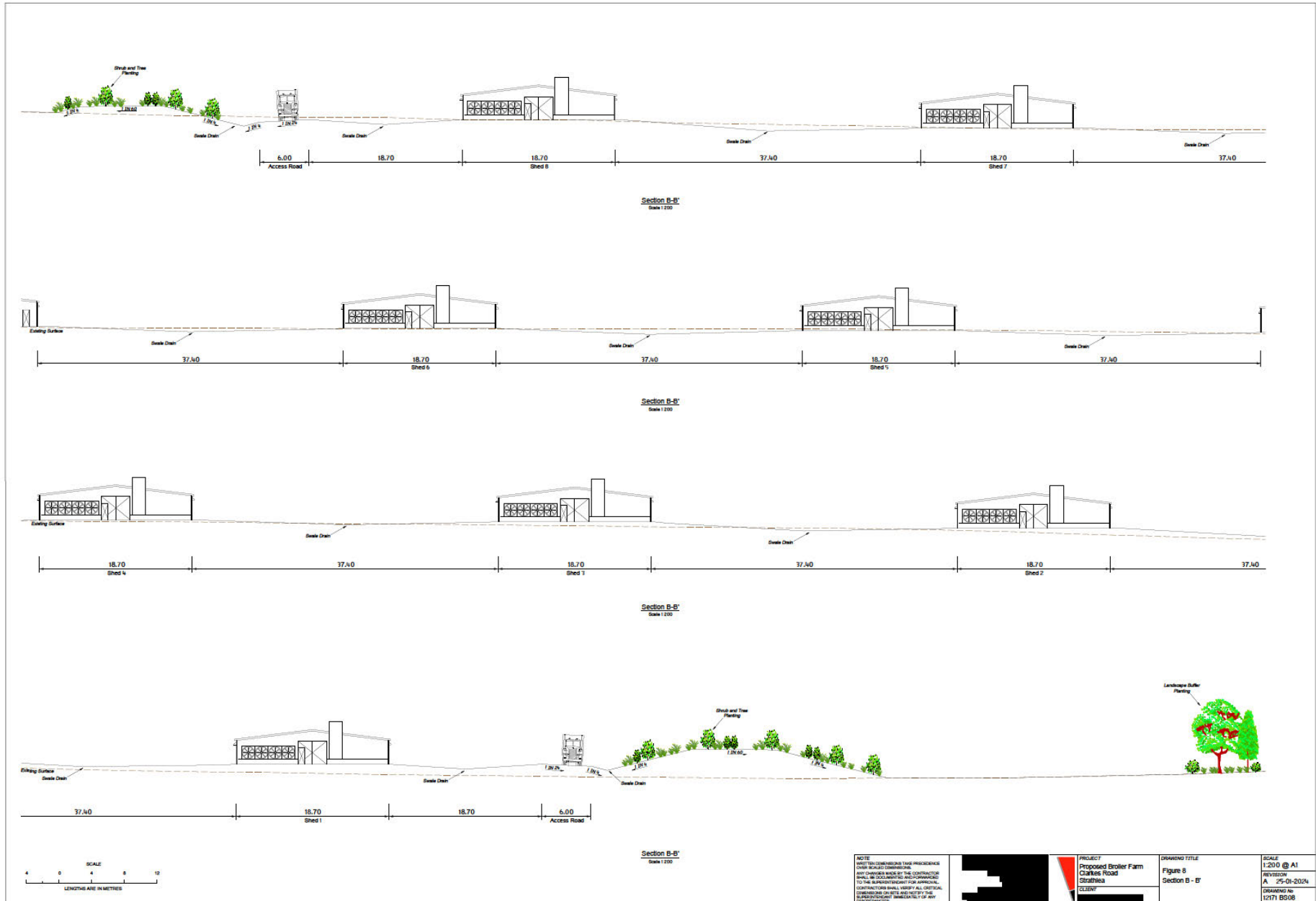
**PROJECT:**  
 Proposed Broiler Farm  
 Clarks Road  
 Strathlea  
**CLIENT:**  
 [Redacted]

**DRAWING TITLE:**  
 Figure 6  
 Floor Plan and Elevations  
 Machinery Shed

**SCALE:**  
 1:200 @ A3  
**REVISION:**  
 A 25-01-2024  
**DRAWING No:**  
 12171 BS06



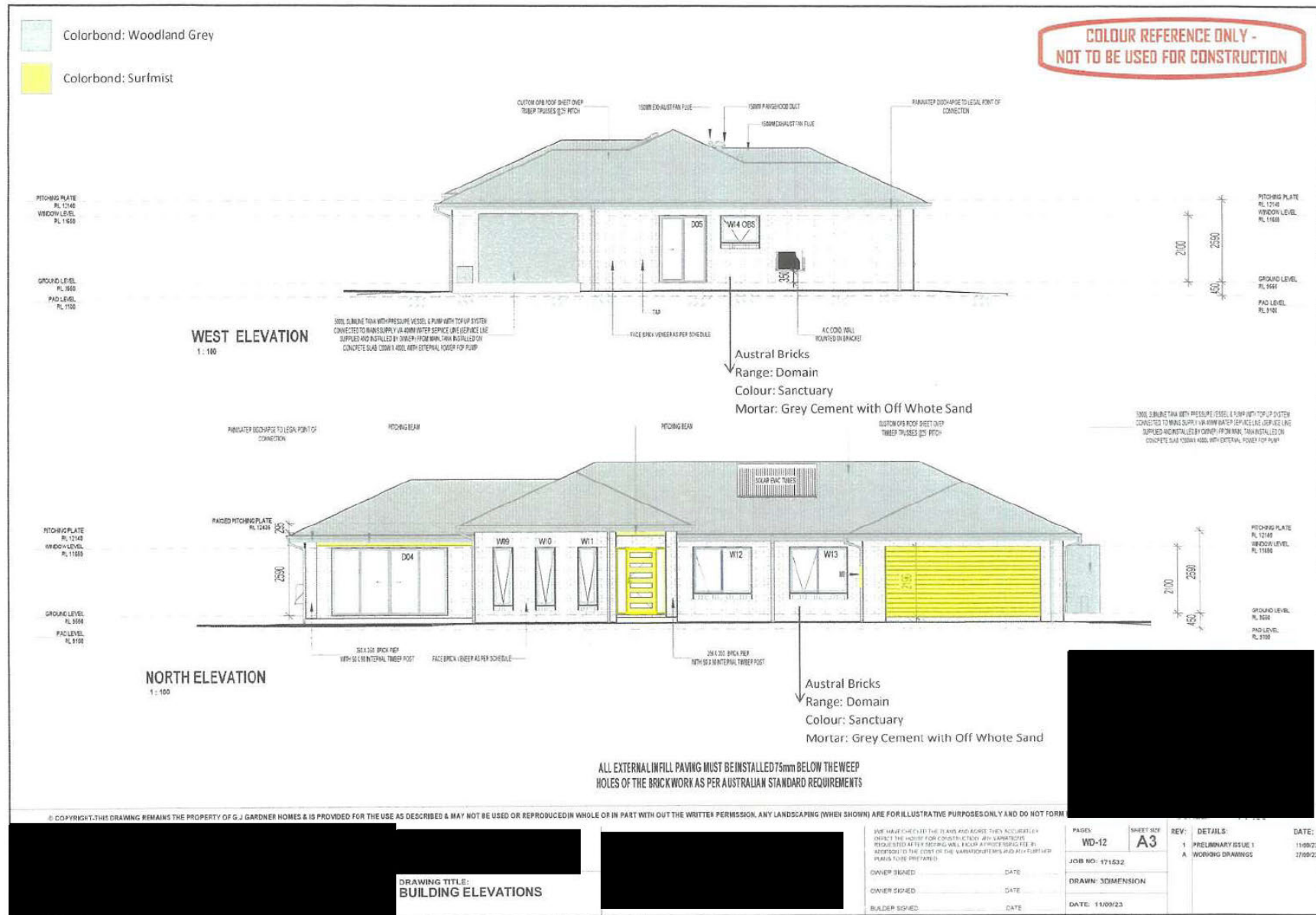






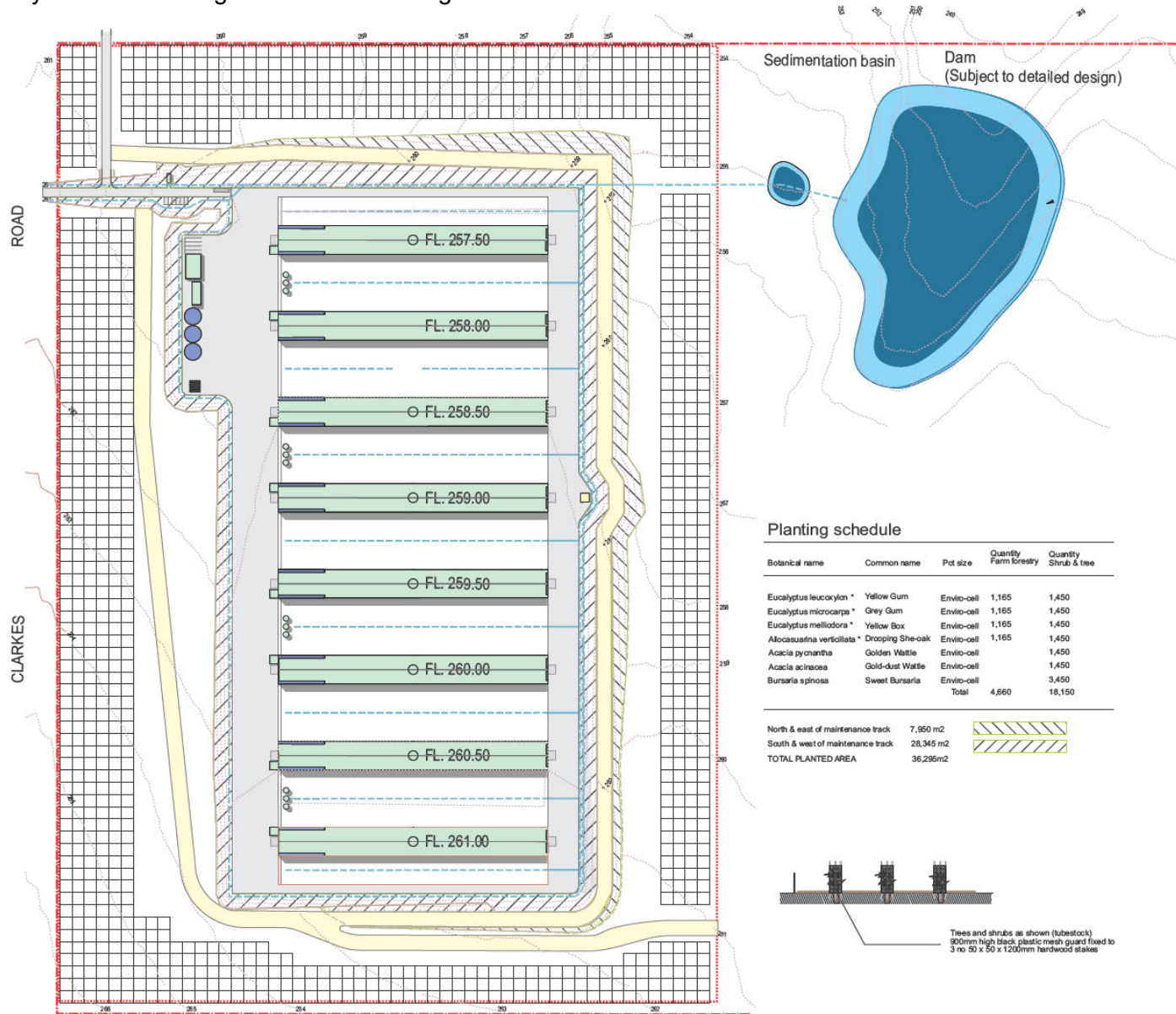








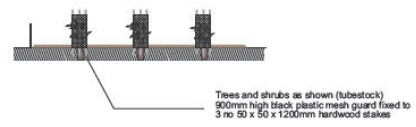




Planting schedule

Botanical name	Common name	Pot size	Quantity Farm forestry	Quantity Shrub & tree
<i>Eucalyptus leucocylon</i> *	Yellow Gum	Enviro-cell	1,165	1,450
<i>Eucalyptus microcarpa</i> *	Grey Gum	Enviro-cell	1,165	1,450
<i>Eucalyptus melliodora</i> *	Yellow Box	Enviro-cell	1,165	1,450
<i>Allocasuarina verticillata</i> *	Drooping She-oak	Enviro-cell	1,165	1,450
<i>Acacia pycnantha</i>	Golden Wattle	Enviro-cell		1,450
<i>Acacia acinosa</i>	Gold-dust Wattle	Enviro-cell		1,450
<i>Bursaria spinosa</i>	Sweet Bursaria	Enviro-cell		3,450
			<b>Total</b>	<b>18,150</b>

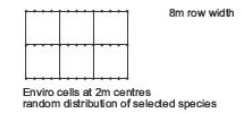
North & east of maintenance track	7,960 m <sup>2</sup>	
South & west of maintenance track	28,345 m <sup>2</sup>	
<b>TOTAL PLANTED AREA</b>	<b>36,295m<sup>2</sup></b>	



LEGEND

- Title Boundary
- Farm fence
- Existing contour
- Proposed contour
- Open earth drain
- Maintenance track
- Shrub & tree planting
- Farm forestry 8m x 8m grid

TYPICAL FORESTRY PLANTING MODULE



NOTES

- Weedicide with Glyphosate ('Roundup') existing grass in areas to be planted
- Rip area to be planted to a depth of 500mm min.
- Rotary hoe areas after grasses have died and before planting, narrow to prepare planting areas.
- In 'Farm forestry' areas plant at one tree every 2m in linear rows, rows at 8m centres.
- Plant trees (tubes or enviro-cells) with individual rabbit guards or alternatively ensure perimeter fence is rabbit proof.
- In 'Shrub & tree planting' areas, plant species randomly at a rate of one plant / m<sup>2</sup>.
- Only species marked with an asterisk (\*) are to be used in the 'Farm forestry' areas.
- All species can be used in the areas designated for 'Shrub & tree planting'.
- Planting to be completed within 12 months of the construction of the broiler sheds
- Planting is preferred in Autumn, once Autumn rains have softened the ground, however planting can also be undertaken in early Spring.
- Flood irrigate after planting. If the subsequent summer is particularly hot, additional watering may be required. Monitor and assess.
- Spot weed with Glyphosate ('Roundup') or equivalent as necessary to reduce weeds in the initial two years of establishment
- Replace dead plants in autumn for the first three years after planting. Subsequently replace plants where plant losses exceed 25%

LANDSCAPE PLAN

Project No:	PJ070	Drawing No:	Lst
Date:	10/04/24	Drawing site:	A1
Drawn by:	HB	Reviewed by:	HB
Issue:	FINAL	Scale:	1:120 @ A1

LS1

OFFICIAL



Central Goldfields Shire Council  
Planning Department  
mail@cgoldshire.vic.gov.au

22 May 2024

Dear Sir and/or Madam,

**Planning Permit Application - Agriculture - Animal Husbandry - Broiler Farm, Caretakers Houses & Associated Buildings & Works**

Application No. 031-23  
Applicant: [Redacted]  
Location: 39-141 Clarkes Road MOOLORT  
V 7629 F 147 CA 3 Rodborough  
V 7371 F 071 CA 2 Rodborough  
V 7371 F 071 CA 2A Rodborough

Thank you for your letter and information received 01 May 2024 in accordance with Section 55 of the *Planning and Environment Act 1987*.

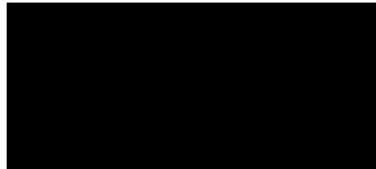
[Redacted] areas of interest are surface water and groundwater quality, use and disposal. GMW requires that development proposals do not impact detrimentally on GMW's infrastructure and the flow and quality of surface water and groundwater. Applicants must ensure that any required water supplies are available from an approved source.

[Redacted] understands that the applicant is seeking planning permission for a 8 shed broiler farm, caretakers dwellings x 2 and a dam. The property is zoned FZ and is located in the Cairn Curran Special Water Supply Catchment area and is subject to ESO1, ESO5 and LSIO. A Land Capability Assessment has been provided outlining that the site can accommodate a conventional wastewater treatment system.

Based on the information provided and in accordance with Section 56 (b) of the *Planning and Environment Act 1987*, [Redacted] has no objection to this planning permit being granted subject to the following conditions:

1. All construction and ongoing activities must be in accordance with EPA Publication 1834.1 Civil Construction, Building and Demolition Guide (September 2023).
2. All wastewater from the two dwellings must be treated and disposed of using an approved system. The system must have a certificate of conformity issued by the Conformity Assessment Body (or equivalent approval) and be installed, operated and

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maintained in accordance with the relevant Australian Standard and EPA Code of Practice.

3. The wastewater disposal area must be located at least: 100m from any waterways, 40m from any drainage lines, 60m from any dams, and 20m from any bores.
4. The wastewater disposal area must be kept free of stock, buildings, driveways and service trenching and must be planted with appropriate vegetation to maximise its performance. Stormwater must be diverted away. A reserve wastewater disposal field of equivalent size to the primary disposal field must be provided for use in the event that the primary field requires resting or has failed.
5. The development must be undertaken in accordance with the requirements of the Victorian Code for Broiler Farms, 2009 (including 2018 amendments).
6. The floor of the sheds must be constructed with an impervious surface such as concrete or of clay compacted to achieve a design permeability of  $1 \times 10^{-9}$  m/sec. The shed must be designed to ensure that all litter can be retained within the shed until removal is required.
7. Contaminated litter removed from the sheds must be transported off site by an approved contractor to an approved site.
8. There must be no spent litter from the sheds stockpiled on the site. Any temporary storage areas for wet litter must have an impermeable base and bunding to ensure contaminated run-off does not discharge from the temporary storage area.
9. No land application of contaminated litter is to occur.
10. Stormwater and drainage from hard stand areas and the areas around the shed must be directed to a retention dam which must be designed with a capacity and freeboard to enable the run-off from a 1 in 10 year storm to be retained. Any overflow from the dam must not cause erosion.
11. The retention dam must be lined with an impervious liner and if clay is used it must be compacted to a seepage rate of not greater than  $1 \times 10^{-9}$  m/sec. The dam must be operated to a minimum level to ensure the liner does not dry out and crack. There must be no overflow of water from the dam directed to any waterways.
12. All soil removed during construction of the dam must be reused, stabilized or vegetated on-site to ensure that no sediment can be transported off-site.
13. All dead birds must be disposed of off-site or managed on-site to the satisfaction of the Environment Protection Authority.
14. Any chemicals stored on-site must be kept in accordance with the EPA Publication 1698 Liquid Storage and Handling Guidelines (June 2018).

If you require further information please e-mail [REDACTED] or contact [REDACTED]

Yours sincerely

[REDACTED]  
[REDACTED]  
[REDACTED])



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3 June 2024

Tim Wild  
Coordinator Statutory Planner  
Central Goldfields Shire Council  
22 Nolan Street  
Maryborough VIC 3465

Our Ref:

Dear Tim,

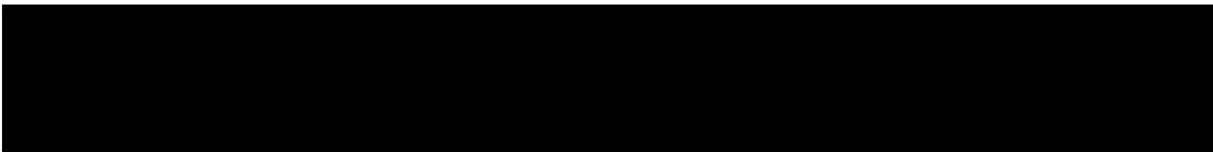
**RE: PLANNING PERMIT APPLICATION: 031-24**  
**PROPOSAL: Use and development of the land for a Farm Cluster broiler farm for up to 445,000 birds and two caretakers' houses with associated buildings and works.**  
**ADDRESS: 39 Clarkes Road Moolort 3465**

Thank you for your correspondence in relation to the above planning permit application, referred to the on 1<sup>ST</sup> of May 2024. The application was referred under Section 52 of the Planning and Environment Act 1987 (P&E Act). is not a statutory referral Authority under Section 55 of the P&E Act, since this proposal:

- a) does not require an operating licence or development licence or amendment to a licence;
- b) is not proposed to be used for an industry, utility installation or warehouse for a purpose listed in the table to Clause 53.10 shown with a threshold distance not specified or for which the threshold distance cannot be met; and
- c) is not a proposed extractive industry intended to be used at a later date for a landfill.

Pursuant to the *Victorian Code for Broiler Farms 2009 (The Code)* the is required to undertake an assessment of an Odour Environmental Risk Assessment (Odour ERA) where the proposed broiler farm is classified as either a Farm Cluster or Special Class Broiler Farm. Beyond assessing the Odour ERA, the has no further involvement in the assessment of broiler farms, as this is the jurisdiction of . As the proposal meets the classification for a Farm Cluster an assessment of the Odour ERA has been undertaken.

Specifically, the assessment has considered whether:



DX216073

















13 November 2024

Tim Wild  
Planning Department  
Central Goldfields Shire Council  
PO Box 194  
MARYBOROUGH VIC 3465

Email: [mail@cgoldshire.vic.gov.au](mailto:mail@cgoldshire.vic.gov.au)  
cc: [Tim.Wild@cgoldshire.vic.gov.au](mailto:Tim.Wild@cgoldshire.vic.gov.au)

Dear Tim,

**RE: Planning Permit Application 031-24 for the Use and development of the land for a Farm Cluster broiler farm for up to 445,000 birds and two caretakers houses with associated buildings and works**

**Land at: 39 Clarkes Road MOOLORT 3465 and 141 Clarkes Road STRATHLEA 3364  
3\PP3456, 2\PP3456, 2A\PP3456**

**Reference: 031-24**

Thank you for the opportunity to provide comment pursuant to a notice of application under Section 52 of the *Planning and Environment Act, 1987*.

**The advice provided in this letter relates to:**

1. Planning context
2. Assessment against the *Victorian Code for Broiler Farms 2009 Plus 2018 Amendments*
3. Review of the application against Golden Plains Planning Scheme strategic objectives.

#### **1. Planning Context**

The subject land is approximately 213.6 hectares in area and is zoned Farming Zone (FZ), Clause 35.07 of the Central Goldfields Planning Scheme, and is affected by;

- Environmental Significance Overlay - Schedule 1 (ESO1) - Streamside, Watercourses & Storages
- Land Subject to Inundation Overlay - Schedule 1 (LSIO1)
- Salinity Management Overlay Schedule (SMO)
- Areas of Aboriginal Cultural Heritage Sensitivity



- The area of proposed development does not encroach upon the area impacted by overlays.
- The whole of the site is located within the Curran Curran Special Water Supply catchment area.

The proposed use is as a Broiler farm, defined in Clause 73.03 Land use terms as: Land used to keep broiler chickens for the production of meat.

Broiler farm is included in Poultry farm and is part of the Agriculture group (sub-group of Animal Production) as illustrated in Clause 73.04-3.

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Within the Farming Zone, a Broiler farm is a Section 2 use – Permit required.

Particular Provision Clause 53.09 Poultry farm outlines the planning requirements for Poultry farms including Clause 53.09-3 Requirement – Broiler farm, that states *an application to use land or construct a building or construct or carry out works for a broiler farm must comply with the Victorian Code for Broiler Farms 2009 (plus 2018 amendments)*.

This Planning Application 031-24 is for an eight (8) shed Broiler farm (identified as Grandview 3 (GV3)) with a total of 445,000 birds, and it has been identified that the application is classed as a Farm Cluster due to the proximity of two nearby Broiler Farms (Grandview 1 (GV1) and Grandview 2 (GV2)), with a combined permitted capacity of 884,000 birds.

Under Clause 53.09 the proposal must address the requirements of the *Victorian Code for Broiler Farms 2009 (plus 2018 amendments)*, with particular reference to *Element 6 Odour Environment Assessment (Odour ERA)*. Element 6 makes the following statements:

- *An Odour ERA must be conducted in accordance with the requirements of the State Environment Protection Policy - Air Quality Management (SEPP AQM)*
- *Under Clause 66.05 of the Victorian Planning provisions and all planning schemes, notice of an application for a Special Class Farm, or Farm Cluster must be given under Section 52 (1) (c) of the Planning and Environment Act 1987 to EPA Victoria.*
- *In its response, [REDACTED] should state whether: the Odour ERA is consistent with the principles of the SEPP (AQM).*
- *The responsible authority must not accept any Odour ERA not conducted in accordance with the SEPP (AQM)*

[REDACTED] understands that State Environment Protection Policy, including SEPP (AQM) became redundant when the amended *Environment Protection Act 2017* came into effect on 1 July 2021.

[REDACTED] further understands, with the recent introduction of national guidelines for meat chicken farms, that [REDACTED] considers that the publication *Planning and Environment [REDACTED]* produced by [REDACTED] is key to the current state of knowledge (best available techniques and technologies) relating to broiler farms.

## **2. Assessment against the Victorian Code for Broiler Farms 2009 Plus 2018 Amendments**

[REDACTED] has reviewed the following provided supporting documentation:

- Application for Planning Permit Form.pdf
- Cover letter, dated 12 April 2024
- Proposed Summary and Application Checklist.pdf
- Submission in Support of Application for a Planning Permit, Volume 1: Planning Submission, April 2024
- Submission in Support of Application for a Planning Permit, Volume 4: Figures, April 2024
- Odour Assessment, ProTen Victoria Pty Ltd, 10 April 2024
- Environmental Management Plan, April 2024
- Acoustic Report – Environmental Noise Emission Assessment, Monday, April 8, 2024
- 141 Clarkes Road, Strathlea – Surface Water Management Plan, 5 April 2024
- Land Capability Assessment, November 2016
- Landscape and Visual Review, February 2024
- Appendix 1 – Planning Permit No. T120/16
- Appendix 2 – Certificates of Title
- Appendix 3 – Photographs
- Appendix 4 – Stub Stack Photograph





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██████████ provides the following summary based on the Broiler Code Appendix 5: Proposal Summary and Application Checklist and Appendix 1: Summary of Setback Measures to Meet the Code's Objectives and Standards

Colour key	
Condition/requirement met, adequate detail provided	
More detail/revision required	
Not addressed	
Condition/requirement not met	

**Appendix 5: Broiler farm proposal summary**

	Documentation excerpts	Comment
Proposal summary		Excerpts taken from <i>031-24 Proposal Summary and Application Checklist.pdf</i>
Permit applicant's name:	██████████	
Name of broiler farm:	██████████	From <i>031-24 Planning Report.pdf</i>
Farm address:	<i>39 &amp; 141 Clarkes Road, Strathlea</i>	
Type of proposal New farm Expansion of existing farm	<i>New farm</i>	
Class of proposed farm:	<i>Farm Cluster</i>	
Proposed number of employees:	<i>4 full time, 1 part time</i>	
Proposed number of new / additional broiler sheds:	<i>n/a</i>	
Existing number of sheds on farm (where applicable):	<i>n/a</i>	
Farm capacity (number of birds) once development is complete:	<i>445,000 birds</i>	
Bird stocking density: birds / m <sup>2</sup>	<i>Maximum of 34 kg/m<sup>2</sup> Equates to approx. 16.9 birds/m<sup>2</sup></i>	
Type of shed operation (for example, tunnel, natural or combination): Please describe.	<i>Tunnel with minimum ventilation</i>	

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**Appendix 1: Summary of Setback Measures to Meet the Code’s Objectives and Standards**

Feature	Broiler Code - sheds (metres)	Proposed GV3	Comment
Sensitive use	Odour ERA required	<p>Odour ERA completed according to [REDACTED]</p> <p>The odour ERA identifies R17 as the premises at most risk of impacts, with an risk odour exposure potential of Moderate, followed by R18 at low. All other identified receptors are classified as negligible.</p> <p>R17: 1366 Rodborough Road R18: 1290 Rodborough Road</p> <p>Both these receptors are located to the West of the existing GV1 &amp; GV2 and to the Northwest of proposed GV3.</p>	<p>The Victorian Broiler Code refers applicants and assessors to EPA publication 1643: Odour environmental risk assessment for Victorian broiler farms. This publication is no longer current. The current [REDACTED] publication is 1883: Guidance for assessing odour.</p> <p>The provided odour ERA has been completed referencing EPA Publication 1883 – Guidance for assessing odour, AgriFutures – Planning and environment guideline for establishing meat chicken farms: Guide 1 – Assessment guide. These are considered the current state of knowledge and are the appropriate references and methodologies.</p> <p>[REDACTED] considers that the odour ERA has been conducted in line with current state of knowledge and has used an appropriate methodology. As such, Agriculture Victoria considers that the conclusions reached in the odour ERA should be accepted.</p> <p><b>Condition met</b></p>
Residential Zone	1000 m (E1 M1.1)	7,692 m from property boundary to residential zone	<b>Condition met</b>
Rural Living Zone or Green Wedge A Zone	750 m (E1 M1.2)	> 12 km to closest identified RLZ	<b>Condition met</b>
Broiler farm boundary setback	100 m (from new sheds only) (E1 M1.4)	150 metres	<b>Condition met</b>
Nearby poultry farm	As per the Biosecurity	GV1 & GV2 will form part of a farm cluster owned and operated by the	Agnote AG1155 is no longer available and the replacement web content no longer addresses separation distances. In its absence,

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	Guidelines for Poultry Producers (Agnote AG1155) (E1 M4.1)	same entity, however both these locations are greater than 1,000 metres from the proposed new GV3  Aerial imagery shows no other poultry farms within the minimum 1,000 metres	we refer to Section 4.8 of the <i>Planning and environment guideline for establishing meat chicken farms, Guide 1 Assessment guide, November 2021</i> , which states:  <i>Based on existing national and state biosecurity recommended distances between poultry farms, the risk of biosecurity impacts can be reduced by siting new meat chicken farms a minimum of 1,000 m from other poultry farms. For 'low risk' farms (e.g., where both farms share the same owner), shorter buffer distances of 500 m may be appropriate given the greater degree of control over potential risks and the lower externalities in the event of a biosecurity issue.</i>  <b>Condition met.</b>
Potable water supply	50 m (E1 M2.1 M2.2)	The closest waterway is located on the Eastern boundary of 141 Clarkes Road, located approximately 1,300 metres from the proposed new poultry sheds and over 900 metres to the proposed storm water catchment dam	<b>Condition met.</b>
Waterway supplying potable water	50 m (E1 M2.1 & E1 M2.2)		<b>Condition met.</b>
Other waterways or surface waters	50 m (E1 M2.1 & E1 M2.2)		<b>Condition met.</b>

**Appendix 5: Broiler farm planning permit application checklist**

Checklist for permit applicants and planners		
	Provided Yes / No	Comments
Planning permit application form	Yes	<b>Condition met.</b>
Copy of certificate of title, including any restrictive covenants	Yes	<b>Condition met.</b>
Proposal summary (template found in Appendix 5 of this Code)	Yes	<b>Condition met.</b>
Response to the zone objectives and planning overlays	Yes	<b>Condition met.</b>
Show how the proposed development supports the state and local planning policy, relevant Catchment Management Authority strategies or local policies.	Yes	<b>Condition met.</b>



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Show that the development proposed addresses the requirements and any relevant decision guidelines of the zone objectives and planning overlays applying to the land.	Yes	Condition met.	
Site analysis and design overview, including: Rationale for the siting and design of the proposed development	Yes	Condition met.	
Overview of measures taken to avoid or minimise the risk of adverse impacts on surrounding: <ul style="list-style-type: none"> <li>• sensitive uses</li> <li>• native vegetation and fauna or other biodiversity</li> <li>• waterways, ground or surface waters</li> <li>• rural landscape</li> <li>• future use and development of surrounding land</li> </ul>	Yes	Condition met.	
Documentation that cross-references the Code and specifically addresses compliance with the elements of the Code (found in the 'Farm design and operation elements' section of this Code)	Yes	Condition met.	

Checklist for permit applicants and planners continued			
Associated plans	Code ref	Provided Yes / No	Comments
<b>Aerial photograph</b> (if required by the responsible authority)			
<b>Locality plan showing:</b> <ul style="list-style-type: none"> <li>• the location and all land within at least 1000 m of site boundaries (5000 m for a Special Class farm or Farm Cluster)</li> <li>• setback dimensions from residential zones, a Rural Living Zone and / or Green Wedge A Zone</li> <li>• setback dimensions from waterways</li> <li>• the location of, and distance to, surrounding sensitive uses</li> <li>• the location of all external and internal roadways</li> <li>• the location of all drainage and areas subject to flooding</li> <li>• vegetation (natural and introduced), local waterways, local topography</li> </ul>	Element 1	Partial	Detail scattered throughout different part of the documentation. There is no Locality plan that shows all the listed features in one place  <b>Revision recommended</b>
<b>Site plan showing:</b> <ul style="list-style-type: none"> <li>• the location and dimensions of existing and proposed buildings, gates, silos, loading bays, parking areas, noise mitigation mounds, internal access roadways and external lighting</li> </ul>	Elements 2 and 5		Detail scattered throughout different part of the documentation. There is no Locality plan that shows all the listed features in one place  <b>Revision recommended</b>

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<ul style="list-style-type: none"> <li>• drainage points, farm bores, dams and other water supply sources, on-farm waterways, springs and groundwater recharge areas</li> <li>• easements, vegetation (natural and introduced) and topography details</li> <li>• for the site of proposed buildings and works, the contours of the land at two-metre intervals</li> <li>• all existing and proposed waste storage areas (including litter stockpiles, long-term litter composting sites, dead bird composting sites and waste chemical storage areas), and the location of removal points for spent litter and dead bird collection</li> <li>• areas on which spent litter is to be re-applied (if applicable)</li> <li>• all relevant setback distances (see Appendix 1)</li> <li>• any relevant future development.</li> </ul>				
<p><b>Development plan showing:</b></p> <ul style="list-style-type: none"> <li>• all buildings and ancillary works, including: the materials of construction (including external colours), the elevation of each side of the structure, and maximum building heights</li> <li>• building construction details, including any management issues to be considered during the construction phase</li> <li>• road construction details and intersection treatment at external roads</li> <li>• details of the power supply system</li> <li>• details of water supply</li> <li>• fan locations and the design of the ventilation system</li> <li>• the feed system, including feed distribution and rodent control</li> <li>• assessments of the soil's ability to support the building(s), road access and effluent storage and disposal</li> <li>• the location and depth of all excavation and filling</li> <li>• drainage plans showing retaining dam(s) for all sheds, the methods of stormwater retention, and existing and proposed stormwater discharge points.</li> </ul>	Element 2	Partial	<p>Although most of the information has provided, it has not been collated into a single source of truth, making it difficult to assess, endorse and enforce</p> <p><b>Revision recommended</b></p>	
<p><b>Traffic plan showing:</b></p> <ul style="list-style-type: none"> <li>• road layout, farm access points, parking areas</li> <li>• proposed transport routes to and from the property</li> <li>• expected vehicle movements (including vehicle type and time of day).</li> </ul>	Element 3	Yes	<p>Description of transport routes: planning report, 5.3 access, page 13</p> <p>Expected vehicle movements: planning report, 5.4 Vehicle visits, page 13</p> <p>Layout, access points, parking: Figure 4</p>	





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Land capability assessment		Yes	<b>Land capability assessment</b> (staff amenities domestic waste water) – this report does not appear to include the two (2) dwellings proposed for the site. Given the application includes these two dwellings, consideration of the domestic waste water from these should be included in this assessment <b>Revision recommended</b>	
Landscape and visual review		Yes	Appears to have been completed in accordance with current standards	

**Appendix 5: Checklist for planners: Compliance with Code elements**

	Yes / No	Comment	
<b>Element 1: Location, siting and size</b> Through the provision of appropriate setback and separation distances, do the location and size of the broiler farm and the siting of the broiler sheds, temporary litter stockpiles, compost piles and litter spreading areas: <ul style="list-style-type: none"> <li>• minimise the risk of adverse amenity impacts on nearby existing, planned and potential future sensitive uses as a result of odour, dust and noise?</li> <li>• not adversely affect the use and development of nearby land?</li> <li>• avoid pollution of ground and surface waters?</li> <li>• avoid adverse impacts on the visual quality of the landscape?</li> <li>• minimise biosecurity risks?</li> </ul>			
<b>Standard E1 S1 Amenity protection</b>			
AM E1 M1.1 Residential Zone >1000m	Yes	<b>Condition met</b>	
AM E1 M1.2 RLZ >750 m	Yes	<b>Condition met</b>	
AM E1 M1.3 Meteorological conditions considered	Yes	Odour ERA outlines over 2 years of on-site meteorological data recording and ERA completed utilising this data <b>Condition met</b>	
AM E1 M1.4 Farm Boundary >100m	Yes	Sheds 150m from property boundary <b>Condition met</b>	
AM E1 M1.5 Litter stockpile >300m sensitive use	Not addressed	The EMP allows for up to 10 days of temporary litter stockpiling as a contingency if the off-site removal of litter is delayed. No litter stockpile area has been identified therefore no distance can be established. <b>Revision recommended</b>	
AM E1 M1.6 litter spreading >20m farm boundary	N/A	No litter to be spread on site	

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AM E1 M1.7 litter spreading >100m sensitive use	N/A	No litter to be spread on site	
<b>Standard E1 S2 Waterway protection</b>			
AM E1 M2.1 Vegetative buffer 30m along waterway	Yes	The closest waterway is located on the Eastern boundary of 141 Clarkes Road, located approximately 1,300 metres from the proposed new poultry sheds and over 900 metres to the proposed storm water catchment dam.  The area between the broiler farm and waterway is vegetated <b>Condition met</b>	
AM E1 M2.2 20m buffer from shed to vegetative buffer	Yes		
AM E1 M2.3 litter stockpile/spreading distance to waterways	Yes	The EMP allows for up to 10 days of temporary litter stockpiling as a contingency if the off-site removal of litter is delayed. No litter stockpile area has been identified therefore no distance can be established. <b>Revision recommended</b>	
<b>Standard E1 S3 Protecting the visual quality of the landscape</b>			
AM E1 M3.1 B&W not on steep slopes	Yes	141 Clarkes Road Strathlea, ProTen, Landscape and Visual Review, February 2024 provides extensive detail <b>Condition met</b>	
AM E1 M3.2 B&W orientated to follow contours	Yes		
AM E1 M3.3 existing ridgeline vegetation maintained	Yes		
<b>Standard E1 S4 Biosecurity</b>			
AM E1 M4.1 Separation from other poultry farms	Yes	<b>Condition met</b>	
AM E1 M4.2 Stockpile >100m from shed	No	The EMP allows for up to 10 days of temporary litter stockpiling as a contingency if the off-site removal of litter is delayed. No litter stockpile area has been identified. <b>Revision recommended</b>	
AM E1 M4.3 Litter spreading >20 m from shed	Yes	No litter spreading proposed <b>Condition met</b>	
<b>Standard E1 S5 Future use and development of neighbouring land</b>			
AM E1 M5.1 Class B separation <50% of neighbouring property	N/A	Proposed farm is not Class B, this standard does not apply	
AM E1 M5.2 Class B neighbouring property retains building parcel	N/A		
<b>Element 2: Farm design, layout and construction</b>			
Is the broiler farm development designed and constructed to minimise the risk of adverse off-site impacts and support the cost-effective operational efficiency of the farm?			
<b>Standard E2 S1 Protecting the visual quality of the landscape</b>			
AM E2 M1.1 Buildings are constructed in response to the topography of the land			
AM E2 M1.2 Sheds clad in non-reflective and natural-coloured materials	Partial	Planning report, Materials, page 9	



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		<p>The cladding material proposed for the chicken sheds is to be selected from the 'colorbond' range in a pale green colour. The roof of the chicken sheds will be corrugated galvanised iron.</p> <p>141 Clarkes Road Strathlea, [REDACTED] Landscape and Visual Review, February 2024: 2.2.3 Roof Glare, responds to previous VCAT decisions relating to PPA 120/16: It is apparent that roof glare was also of concern for objectors. The Tribunal appears to have concluded that this issue can be appropriately addressed by way of permit condition requiring the use of muted Colourbond roofing as suggested by the applicant.</p> <p>Currently the sheds are proposed to have galvanised iron roofing. The Landscape and visual review suggests roof glare may be an issue and suggests colourbond roofing in preference to galvanised iron.</p> <p><b>Revision recommended</b></p>	
<b>Standard E2 S2 Efficient farm operation</b>			
AM E2 M2.1 Shed orientation and tunnel fan location	Yes	Detail provided in Acoustic report <b>Condition met</b>	
AM E2 M2.2 Site designed for efficient operation	Yes	<b>Condition met</b>	
AM E2 M2.3 Site designed to prevent access by wild bird and vermin	Yes	<b>Condition met</b>	
AM E2 M2.4 Water availability	Yes	<b>Condition met</b>	
AM E2 M2.5 Water supply backup	Yes	<b>Condition met</b>	
AM E2 M2.6 Detail of water treatment system	Partial	Stated that water will be treated, no detail provided <b>Revision recommended</b>	
AM E2 M2.7 Feed and water system adjusted as birds grow	Yes	<b>Condition met</b>	
AM E2 M2.8 Nipple drinkers used	Yes	<b>Condition met</b>	
AM E2 M2.9 Systems designed to minimise feed spills	Yes	<b>Condition met</b>	
<b>Standard E2 S3 Avoiding environmental impacts from broiler sheds</b>			
AM E2 M3.1 Concrete hard stand at entrance to sheds	Yes	<b>Condition met</b>	
AM E2 M3.2 Low permeability shed base	Yes	Planning report, 5.1 shed design, page 7	

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		<i>The shed floors will be concrete, and of suitable strength to withstand the loading of machinery that operate inside the sheds.</i> <b>Condition met</b>	
AM E2 M3.3 Floor level above natural surface level	Yes	Planning report, 5.1 shed design, page 7 <i>The surface of the floors will be a minimum 0.35 metres above the inverts that collect stormwater within the free-range areas.</i> <b>Condition met</b>	
<b>Standard E2 S4 Noise management</b>			
AM E2 M4.1 design and siting to minimise noise	Yes	Acoustic report provided <b>Condition met</b>	
<b>Standard E2 S5 Stormwater drainage</b>			
AM E2 M5.1 Clean stormwater areas separated from areas that broiler farm waste may affect	Partial	Planning report, 5.2.3 Water, page 10 <i>Runoff from the shed roofs, free-range areas and the surrounding hard stand areas will be directed to the dam</i>  Stormwater from free-range areas will be captured in the same dam as shed roof runoff and utilised for drinking water (after treatment). Free-range areas will contain chicken manure and should be collected separately and not be included in chicken drinking water supplies <b>Revision recommended</b>	
AM E2 M5.2 Stormwater from sheds and hard standing apron areas is collected and managed on site in a dam(s) or tanks within the broiler farm boundary	Yes	Planning report, 5.2.3 Water, page 10 <i>Runoff from the shed roofs, free-range areas and the surrounding hard stand areas will be directed to the dam to the north east of the shed complex as shown on Figure 4 – Broiler Farm Layout.</i> <b>Condition met</b>	
AM E2 M5.3 Stormwater table drains with an appropriate gradient are established	Yes	As per Landscape and visual review <b>Condition met</b>	
AM E2 M5.4 Soil erosion mitigation	Yes	As per Landscape and visual review <b>Condition met</b>	
AM E2 M5.5 Stormwater management consistent with stormwater management plan of the responsible authority	UK	Agriculture Victoria is not best placed to determine this criteria	
AM E2 M5.6 Retaining dams are constructed with the capacity to retain run-off from a one-in-ten-year storm.	Yes	As per Surface water management plan <b>Condition met</b>	

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<b>Element 3: Traffic, site access, on-farm roads and parking</b>			
Do the location, design and construction of farm access points, internal roads and parking areas support the safe and efficient entry and exit to the site, movement of vehicles and operation of the farm?			
Do the location, design and construction of farm access points, internal roads and parking areas minimise noise and lighting impacts?			
<b>Standard E3 S1 Site access (Standard 1)</b>			
AM E3 M1.1 Access points constructed to appropriate standard	Partial	Planning report, 5.3 Access, page 13 <i>The intersection of the farm access road with Clarkes Road will be constructed to handle the largest approved heavy vehicle combination that can access the farm.</i>  Detail not provided, no engineering plans or standards for road construction provided <b>Revision recommended</b>	Yellow
AM E3 M1.2 Access point at least 30 metres inside boundary	Yes	Planning report, 5.3 Access, page 13 <i>The gate at the entrance will be setback 120 metres.</i> <b>Condition met</b>	Green
<b>Standard E3 S2 Site access (Standard 2)</b>			
AM E3 M2.1 Vehicle access points are located away from sensitive use	Yes	<b>Condition met</b>	Green
AM E3 M2.2 Lighting designed to limit spill	yes	<b>Condition met</b>	Green
<b>Standard E3 S3 Internal roads and car parking (Standard 1)</b>			
AM E3 M3.1 Internal roads appropriately constructed	Not addressed	No detail provided of construction standards <b>Revision recommended</b>	Red
AM E3 M3.2 Appropriate parking provided			
<b>Standard E3 S4 Internal roads and car parking (Standard 2)</b>			
AM E3 M4.1 Internal roads and parking areas are designed to ensure efficient traffic flow and to reduce the need for vehicles to reverse.	Partial	While a plan layout has been provided, detail has not been provided on traffic flow within the complex <b>Revision recommended</b>	Yellow
AM E3 M4.2 Internal roads and parking areas located away from sensitive use	Yes	<b>Condition met</b>	Green
AM E3 M4.3 Lighting baffled			
<b>Element 4: Landscaping</b>			
Is landscaping used to minimise the visual impact of broiler sheds and litter storage areas, reduce the risk of light and dust impacts on nearby sensitive uses, and protect, manage and enhance on-farm native vegetation and biodiversity?			
<b>Standard E4 S1 Landscaping</b>			
AM E4 M1.1 Dense vegetation and planting along frontages to public roads and other highly exposed site boundaries to provide screening	Yes	As per Landscape and visual review and landscape plan (Figure 7) <b>Condition met</b>	Green
AM E4 M1.2 The landscape plan incorporates a mix of trees and large shrubs	Yes	As per Landscape and visual review and landscape plan (Figure 7) <b>Condition met</b>	Green



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AM E4 M1.3 Retains existing trees and native vegetation	Yes	As per Landscape and visual review and landscape plan (Figure 7) <b>Condition met</b>	
AM E4 M1.4 Mounds of approximately 2 m high are used if the natural topography and tree planting cannot effectively screen a broiler farm	Yes	As per Landscape and visual review and landscape plan (Figure 7) <b>Condition met</b>	
AM E4 M1.5 Plantings and vegetation are located no closer than 20 m from the perimeter of the broiler sheds	Yes	As per Landscape and visual review and landscape plan (Figure 7) <b>Condition met</b>	
AM E4 M1.6 Unpaved areas around sheds are grassed to prevent soil erosion and minimise the heat load	Yes	As per Landscape and visual review and landscape plan (Figure 7) <b>Condition met</b>	
AM E4 M1.7 Ground surfaces that are exposed to erosion are stabilised with ground cover planting	Yes	As per Landscape and visual review and landscape plan (Figure 7) <b>Condition met</b>	
AM E4 M1.8 The permit approval requires the establishment of a landscape performance bond, to ensure effective implementation of a landscape plan approved by the responsible authority.		Responsibility of the responsible authority	
<b>Element 5: Waste management</b>			
Are measures in place to manage spent litter from the farm operations to minimise odour and dust generation, prevent the pollution of surface water, groundwater and land, and minimise biosecurity risks?			
Are measures in place to manage the disposal of dead birds from the farm operations to minimise odour and dust generation, prevent pollution of surface water, groundwater and land, and minimise biosecurity risks?			
Are measures in place to manage chemical waste from the farm operations to prevent the pollution of surface water, groundwater and land?			
<b>Standard E5 S1 Spent litter</b>			
AM E5 M1.1 Temporary litter stockpiles/compost piles are not visible/screened	Partial	EMP measure 2.7.4 states that: <i>Litter is generally removed from each shed after each batch as part of the cleaning process and loaded directly onto trucks for transport offsite. Sheds are closed before and after clean-out to reduce the potential for off-site odour impacts. Litter will not be stockpiled or spread on the property. Temporary storage will be limited to a maximum of ten (10) days.</i>  While normal management will not include stockpiling of litter, the EMP allows for stockpiling for a maximum of 10 days. Plans and documents do not include a location for this stockpiling to occur, specifications for construction or management measures (such as covering).  <b>Revision recommended</b>	
AM E5 M1.2 Stockpiles are located to prevent run-off into sensitive areas	As above		
AM E5 M1.3 Nutrient-rich run-off stockpiles is collected in a sump or dam	As above		
AM E5 M1.4 Stockpiles are on an impermeable base	As above		
AM E5 M1.5 Litter application is not on land subject to conditions where there is any risk of nutrient run-off to waterways, surrounding land or groundwater.	Yes	No litter to be spread on the property	

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<b>Standard E5 S2 Dead birds</b>			
AM E5 M2.1 Adequate freezers and space for the freezers are provided	Partial	No details of expected mortalities or freezer size is mentioned to allow for assessment. Reference to industry standard would suffice <b>Revision recommended</b>	
AM E5 M2.2 Dead bird bins are not left in public view, and the collection vehicle does not come in close proximity to the broiler sheds	Yes	Planning report, 5.2.6 Removal of dead and diseased birds, page 11	
AM E5 M2.3 The collection point so the bins are protected from extreme weather conditions; and the site can be easily cleaned in the event of a spill	Yes	Figure 4, Broiler farm layout EMP 2.9.8, 2.9.9	
AM E5 M2.4 Dead bird collection vehicles and all containment systems are leak proof and vermin proof	Yes	<b>Condition met</b>	
AM E5 M2.5 Incineration of dead birds is only in incinerators built for purpose.	N/A	Incineration not proposed <b>Condition met</b>	
AM E5 M2.6 On-site burial of dead birds is undertaken only in an emergency situation and with the approval of the relevant authorities	Yes	EMP 2.12.3 <b>Condition met</b>	
<b>Standard E5 S3 Chemical waste</b>			
AM E5 M3.1 Secure sheds, with an impermeable concrete base and appropriate bunding	Partial	Planning report states that: <i>The storage of chemicals and chemical waste will be undertaken within an enclosed section of the machinery shed in accordance with the requirements outlined in the relevant safety data sheets for the chemical.</i>  Details of storage area not included <b>Revision recommended</b>	
<b>Element 6: Farm operation and management (environmental management plan (EMP))</b>			
Are measures in place to ensure best practice management of the farm to avoid or minimise the risk of adverse impacts on the surrounding environment and neighbouring sensitive uses?			
Does the EMP adequately describe the day-to-day operation and management of the farm, including contingency plans?			
Does the EMP adequately describe the routine auditing program proposed for the farm?			
<b>Standard E6 S1</b>			
AM E6 M1.1 An environmental management plan (EMP) is developed that is site specific and based on the approved generic EMP	Yes	Provided and in line with requirements <b>Condition met</b>	
AM E6 M1.2 The farm grower / operator maintains and updates (as required) a manual containing the EMP	Yes	EMP contains commitment to do so <b>Condition met</b>	

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**3. Review of the application against Central Goldfields Planning Schemes strategic objectives**

██████████ considers that the following clauses of the Central Goldfields Planning Scheme are relevant to this application:

- Clause 02.03-4 Natural resource management
  - *Agricultural land - Council aims to protect agricultural and environmental values by:*
    - *Promoting sustainable agricultural activities and land management practices that minimise adverse impacts on the primary production and environmental values of surrounding land and the catchment.*
  - *Water - Council aims to protect the viability of natural resources by:*
    - *Discouraging the subdivision of land or conversion to land uses that take the land out of productive use.*
    - *Promoting alternative cropping, intensive agriculture and value adding enterprises.*
    - *Minimising conflicts between agriculture and residential uses to ensure productive agricultural capacity is not reduced.*
    - *Supporting emerging agricultural industries that are compatible with existing agricultural practices, including horticulture, intensive animal production, niche agriculture, value adding industries and renewables.*
    - *Protecting the environs and water catchments of Tullaroop and Laanecoorie Reservoirs and Lake Cairn Curran.*
- Clause 13.07-1S Land use compatibility, Strategies
  - *Ensure that use or development of land is compatible with adjoining and nearby land uses*
- Clause 14.01-2S Sustainable agricultural land use, Strategies
  - *Support agricultural investment through the protection and enhancement of appropriate infrastructure.*
  - *Facilitate ongoing productivity and investment in high value agriculture.*
  - *Facilitate the establishment and expansion of cattle feedlots, pig farms, poultry farms and other intensive animal industries in a manner consistent with orderly and proper planning and protection of the environment.*
  - *Policy documents, Consider as relevant:*
    - *Victorian Code for Broiler Farms (Department of Primary Industries, 2009, plus 2018 amendments)*
- Clause 14.01-2L Sustainable agricultural land use - Central Goldfields, Strategies
  - *Ensure intensive agriculture is located to minimise risks associated with effluent disposal and protect the amenity of adjacent land uses.*

**Conclusion.**

Central Goldfields Shire Council as the responsible authority will have to make a determination as to whether the application for the proposed Broiler farm meets the purpose of the zone and the strategic objectives of the Central Goldfields Planning Scheme.

██████████ notes that:

- The *Victorian Code for Broiler Farms 2009 Plus 2018 Amendments* makes reference to some resources that are no longer available. Where this occurs, Agriculture Victoria has utilised the industry current state of knowledge as outlined in the *Planning and*

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*environment guideline for establishing meat chicken farms, Guide 1 Assessment guide, November 2021* as an alternative for assessment.

██████████ considers that:

- The provided Odour ERA has been completed using appropriate current guidance.
- The documentation provided addresses most of the required elements outlined in the Broiler Code, however in many instances the information is scattered throughout multiple documents and would benefit from collation in a Development Plan that would be suitable for endorsement by council.
- By referencing the tables above, the following is a list of components that Agriculture Victoria considers would benefit from review/revision/redrafting
  - Locality Plan (collate required information into a single locality plan)
  - Site Plan (collate required information into a single site plan)
  - Development plan (Draft a development plan which provides as collated version of the required information)
  - Land capability assessment (update to include proposed dwellings)
  - Litter management (clarify litter stockpile information, conflict between EMP and rest of documentation)
  - Roof cladding
  - Storm water system and water supply (storm water from free-range areas currently proposed to be used to supply water for chickens)
  - Water treatment system (no detail provided)
  - Engineering standard for roads and access points not provided
  - Details of internal traffic flow not provided
  - Details of adequacy of freezer size for mortalities not provided
  - Details of chemical storage not provided
- While there are revisions required within the documentation, the proposal appears to be appropriately designed and suited to the Agricultural nature of the surrounding area.

### Recommendations

██████████ conditionally supports application 031-24 for the use and development of land for a Broiler Farm.

If Council considers that the proposal meets the strategic objectives of the Central Goldfields Planning Scheme, and Council determines a permit for a Broiler farm was to be approved,

██████████ makes the following recommendations:

- That the documentation be revised in accordance with ██████████ advice above, to the satisfaction of Council.
- That any permit issued includes that prior to commencement of the use and development, revised documents are provided to council, including a site plan, locality plan and development plan including elements as outlined in Appendix 5 of the Broiler code, all to the satisfaction of council.
- Council consider the protection of the operation and growth of the cluster of Broiler farms from any further encroachment of dwellings with reference to the recommended minimum separation distances as per the *Victorian Code for Broiler Farms 2009 Plus 2018 Amendments*.
- That any permit issued for the proposal includes the requirement to comply with the *Victorian Code for Broiler Farms 2009 Plus 2018 Amendments*.

This letter of advice is provided to Council to assist their assessment of the above planning permit application. The information provided should be considered as advisory in nature to inform Council's determination as the Responsible Authority.

Please provide a copy of Council's decision for our records.

Please contact me if you require any further clarification.

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Regards

[Redacted signature block]

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[37°02'28.2"S](#)  
[143°44'49.6"E](#)

# Broiler Farms in Central Goldfields Shire Council



## Traffic and Transport Assessment

1 November 2024  
Prepared for Central Goldfields Shire Council



### Company Information

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

### Document Information

Client Central Goldfields Shire Council

Report Title Broiler Farms in Central Goldfields Shire Council

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## Contents

1	INTRODUCTION .....	5
1.1	Engagement .....	5
1.2	Scope of Engagement .....	5
2	EXISTING CONDITIONS .....	5
2.1	Location .....	5
2.2	Road Network .....	7
2.2.1	Pyrenees Highway .....	7
2.2.2	Rodborough Road .....	8
2.2.3	Clarkes Road .....	9
2.2.4	Locks Lane .....	10
2.2.5	Moolort-Baringhup Road .....	11
2.2.6	Baringhup Road .....	12
2.3	Site Inspection .....	13
2.4	Traffic Volumes .....	14
2.5	Crash Statistics .....	15
2.6	Pre-approved Routes .....	17
3	TRAFFIC ASSESSMENT .....	18
3.1	General .....	18
3.2	Vehicle Access .....	19
3.2.1	Preamble .....	19
3.2.2	Chick Delivery .....	19
3.2.3	Gas Delivery .....	19
3.2.4	Litter Delivery & Removal .....	19
3.2.5	Feed Delivery .....	19
3.2.6	Bird Pick up .....	19
3.2.7	Access Routes .....	19
3.3	Traffic Generation .....	21
3.3.1	Assumptions and Traffic Volumes .....	21
3.4	Sight Line Assessment .....	22
3.5	Road Maintenance .....	23
3.5.1	General .....	23
3.5.2	Arterial Roads .....	23
3.5.3	Repair and Maintenance of Local Roads .....	23
4	RECOMMENDATIONS .....	24
5	CONCLUSION .....	25



## Tables

Table 1	Pyrenees Highway Parameters .....	7
Table 2	Rodborough Road Parameters .....	8
Table 3	Clarkes Road Parameters .....	9
Table 4	Locks Lane Parameters .....	10
Table 5	Moolort-Baringhup Road Parameters .....	11
Table 6	Baringhup Road Parameters .....	12
Table 7	Site Investigation Results .....	13
Table 8	Selected Crash Statistics on the Surrounding Road Network .....	16
Table 9	Broiler Farm Locations .....	18
Table 10	Peak Cumulative Traffic Generation .....	21
Table 11	Sight Distance Assessment .....	22

## Figures

Figure 1	Aerial View of Central Goldfields Shire LGA .....	5
Figure 2	Aerial View of Existing Subject Sites .....	6
Figure 3	Typical View of Pyrenees Highway .....	7
Figure 4	Typical View of Rodborough Road .....	8
Figure 5	Typical View of Clarkes Road .....	9
Figure 6	Typical View of Locks Lane .....	10
Figure 7	Typical View of Woolort-Baringhup Road .....	11
Figure 8	Typical View of Baringhup Road .....	12
Figure 9	Traffic Volumes of the Surrounding Road Network .....	14
Figure 10	VicRoads Crash Statistics Map (2017-2022) .....	15
Figure 11	Pre-approved Routes for B-doubles and Higher Mass Limit Vehicles .....	17
Figure 12	Site Locations and Available Routes to the Sites .....	18
Figure 13	Traffic Distribution on the Road Network .....	20





# 1 Introduction

## 1.1 Engagement

██████████ have been engaged by Central Goldfields Shire Council to undertake a Traffic Assessment for the eight (8) Broiler Farm developments within the Central Goldfields Shire Council.

## 1.2 Scope of Engagement

This Traffic Assessment has been prepared to provide information on the cumulative operational impacts of the proposed and existing Broiler Farms on the local and state road network.

In preparing this assessment, the following documentation was referenced:

- Approved 018-21 Traffic Management Plan - 683 Baringhup Road and 705 Baringhup Road, Carisbrook
- Current 022-23 Traffic Engineering Assessment - 3280 Pyrenees Highway, Carisbrook
- Current 022-23 Traffic Management Plan - 3280 Pyrenees Highway, Carisbrook
- Current 031-24 Planning Report - 39-141 Clarkes Road, Strathlea
- Current 061-24 Traffic Management Plan - 705 Baringhup Road Carisbrook
- Operational 014-08 Vehicle movements - 1480 Rodborough Road, Moolort
- Operational 050-20 Planning Report - 396 Bald Hill Road, Carisbrook
- Operational 051-20 Planning Report - 3080 Pyrenees Highway, Carisbrook
- Austroads Manual - AGRD Part 4A: Unsignalised and Signalised Intersections

# 2 Existing Conditions

## 2.1 Location

Broiler Farms located within the municipality are illustrated in Figure 1 and Figure 2.

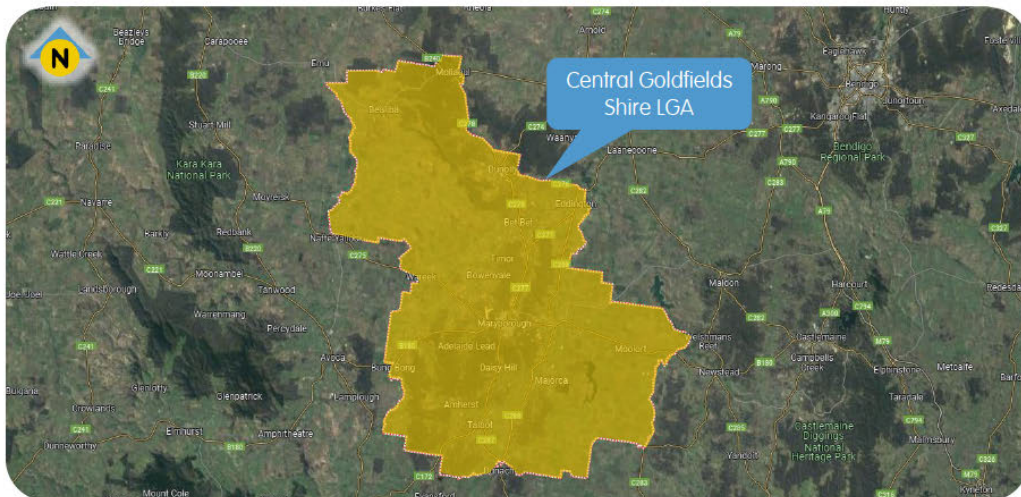


Figure 1 Aerial View of Central Goldfields Shire LGA





Figure 2 Aerial View of Existing Subject Sites



## 2.2 Road Network

The surrounding road network relevant to the existing Broiler Farms are tabulated and presented as follows:

### 2.2.1 Pyrenees Highway

**Table 1 Pyrenees Highway Parameters**

Road Characteristics	
<b>Traffic Lanes</b>	One trafficable lane in each direction (line marked)
<b>Pavement Material</b>	Sealed Pavement
<b>Road Type</b>	Primary Arterial Road (DoT)
<b>Indicative Traffic Volume</b>	> 7,000 vehicles per day
<b>Road Direction</b>	Eastbound/Westbound
<b>Speed Limit</b>	100km/h
<b>Traffic Volumes</b>	1,600 vpd - 12% heavy vehicles (approx.)



**Figure 3 Typical View of Pyrenees Highway**

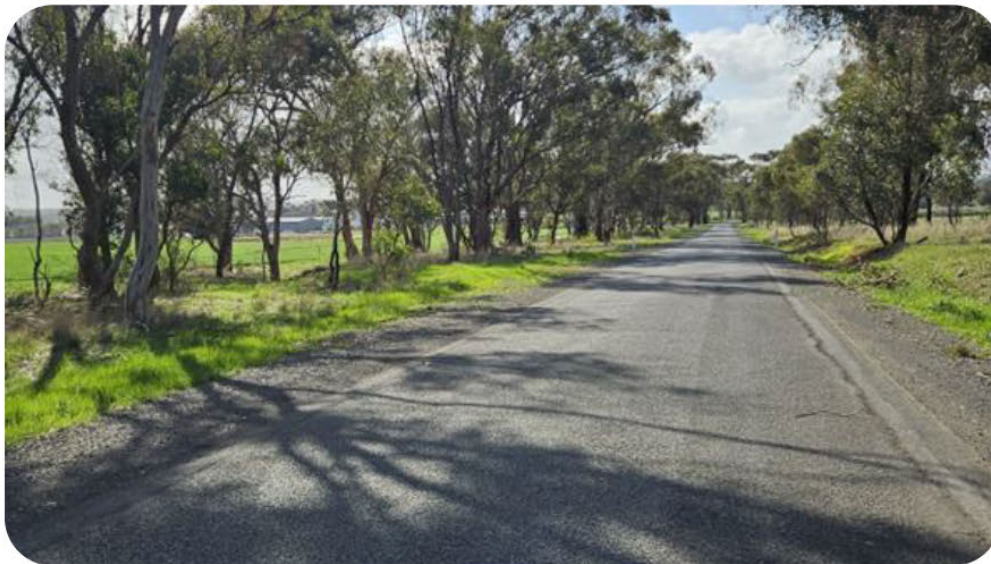




### 2.2.2 Rodborough Road

**Table 2 Rodborough Road Parameters**

Road Characteristics	
<b>Traffic Lanes</b>	Two trafficable lanes in each direction (no line marking)
<b>Pavement Material</b>	Varied (Sealed/Unsealed)
<b>Road Type</b>	Rural Access Road
<b>Indicative Traffic Volume</b>	> 150 vehicles per day
<b>Road Direction</b>	Eastbound/Westbound
<b>Speed Limit</b>	70km/h - 100km/h
<b>Traffic Volumes</b>	100 vpd - 12% heavy vehicles (approx.)



**Figure 4 Typical View of Rodborough Road**



2.2.3 Clarkes Road

**Table 3 Clarkes Road Parameters**

Road Characteristics	
<b>Traffic Lanes</b>	Two trafficable lanes
<b>Pavement Material</b>	Sealed Gravel
<b>Road Type</b>	Rural Access Road
<b>Indicative Traffic Volume</b>	> 150 vehicles per day
<b>Road Direction</b>	Northbound/Southbound
<b>Speed Limit</b>	100km/h
<b>Traffic Volumes</b>	100 vpd - 12% heavy vehicles (approx.)



**Figure 5 Typical View of Clarkes Road**



2.2.4 Locks Lane

**Table 4 Locks Lane Parameters**

Road Characteristics	
Traffic Lanes	Two trafficable lanes
Pavement Material	Sealed Pavement
Road Type	Rural Access Road
Indicative Traffic Volume	> 150 vehicles per day
Road Direction	Northbound/Southbound
Speed Limit	100km/h
Traffic Volumes	100 vpd - 12% heavy vehicles (approx.)



**Figure 6 Typical View of Locks Lane**



### 2.2.5 Moolort-Baringhup Road

**Table 5 Moolort-Baringhup Road Parameters**

Road Characteristics	
Traffic Lanes	Two trafficable lanes
Pavement Material	Sealed Pavement
Road Type	Rural Access Living Road
Indicative Traffic Volume	> 1,000 vehicles per day
Road Direction	Northbound/Southbound
Speed Limit	100km/h
Traffic Volumes	100 vpd - 12% heavy vehicles (approx.)



**Figure 7 Typical View of Moolort-Baringhup Road**





### 2.2.6 Baringhup Road

**Table 6 Baringhup Road Parameters**

Road Characteristics	
Traffic Lanes	Two trafficable lanes
Road Type	Rural Living Access Road
Indicative Traffic Volume	> 1,000 vehicles per day
Road Direction	Northeast bound/Southwest bound
Speed Limit	100km/h
Traffic Volumes	100 vpd - 12% heavy vehicles (approx.)



**Figure 8 Typical View of Baringhup Road**



### 2.3 Site Inspection

A site inspection was carried out on the surrounding road network near the existing Broiler Farm sites to assess the current conditions of the road environment. The inspection aimed to identify issues such as road pavement quality, safety and sight line issues, traffic flows and infrastructure constraints.

Key findings from the site inspection are summarised in Table 7 with site photos shown in Appendix A.

**Table 7 Site Investigation Results**

Road	Observed Conditions
<b>Pyrenees Highway</b>	<ul style="list-style-type: none"> <li>Pyrenees Highway was observed to be relatively flat and showed good sightlines at key intersections within the vicinity of the Broiler Farms.</li> <li>The pavement was observed to be in good condition with minimal potholes.</li> </ul>
<b>Rodborough Road</b>	<ul style="list-style-type: none"> <li>Rodborough Road along the sealed sections of the road was observed to be flat with minimal cracks and potholes. The gravel section was observed to be filled with potholes along the floodway adjacent Joyces Creek.</li> <li>At the intersection between the sealed road and gravel road, there are insufficient sight lines due to the approach angles and crests.</li> </ul>
<b>Clarks Road</b>	<ul style="list-style-type: none"> <li>Clarks Road was observed to be generally flat with some areas of hilly terrain and minimal potholes.</li> <li>At the Y intersection with Rodborough Road, crests and troughs restrict sightlines.</li> <li>Adjacent the dam, there is a low point in the road that can severely restrict sightlines.</li> </ul>
<b>Locks Lane</b>	<ul style="list-style-type: none"> <li>Locks Lane was observed to be flat with numerous patched up and new potholes.</li> <li>No notable sightline issues were detected at intersections.</li> </ul>
<b>Moolort-Baringhup Road</b>	<ul style="list-style-type: none"> <li>Moolort-Baringhup Road was observed to be generally flat with exception to the bridge.</li> <li>New and patched-up potholes were observed throughout the road.</li> <li>The Y intersection with Baringhup Road has restricted sightlines due to the road geometry.</li> </ul>
<b>Baringhup Road</b>	<ul style="list-style-type: none"> <li>Baringhup Road was observed to be flat with minimal potholes.</li> <li>Sight lines were observed to be limited around bends within the road.</li> <li>It is noted that yellow chevroned signs are placed around bends to warn motorists of the bend, a speed reduction could be beneficial due to the reduced sight lines.</li> </ul>

Further details related to the sight lines and geometric constraints is provided in Section 3.4.

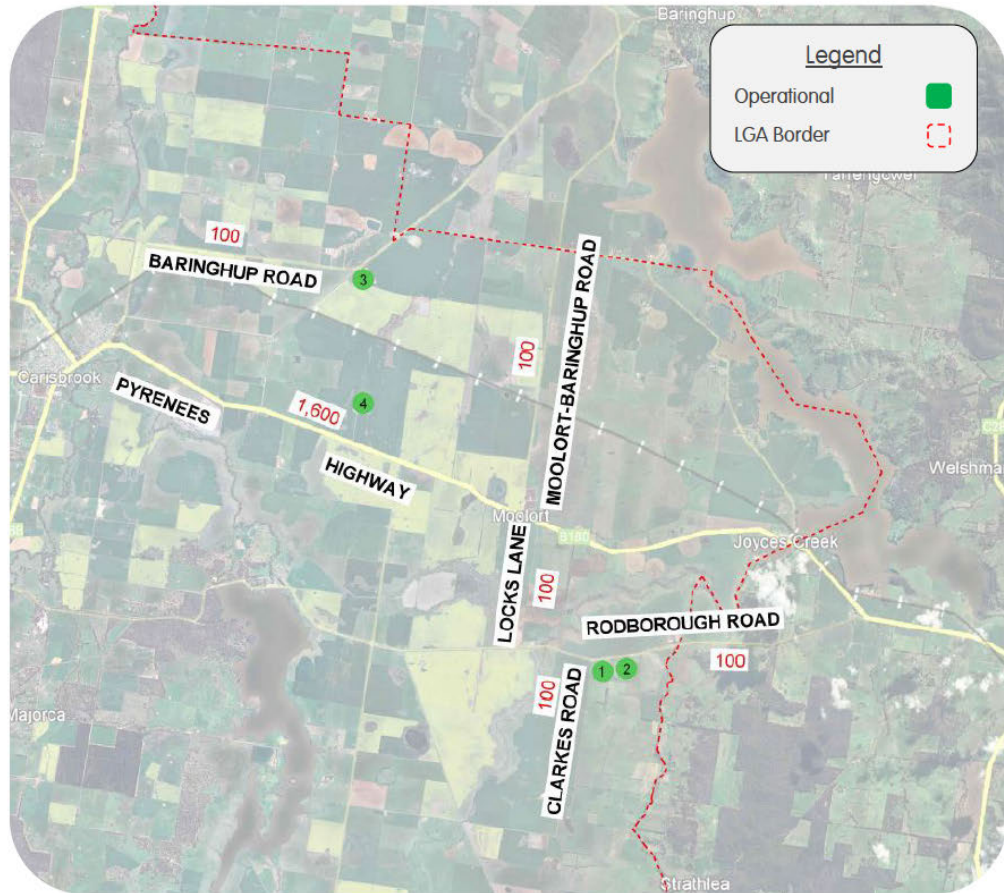


## 2.4 Traffic Volumes

A weeklong pneumatic tube count survey was undertaken by Traffix Group on Pyrenees Highway within the vicinity of a Broiler Farm site revealed approximately 1,600 vehicle movements per day along Pyrenees Highway.

As no data was available for the surrounding roads, each local road was conservatively assumed to carry 100 vehicle movements per day. It is understood that heavy vehicles contribute to approximately 12% of the total traffic volume for each road.

Figure 9 depicts the assumed traffic volumes along the road network.



**Figure 9** Traffic Volumes of the Surrounding Road Network





## 2.5 Crash Statistics

A detailed summary of [REDACTED] crash statistics is presented in Figure 10. This summary provides an overview of accident data within the past five (5) years in the vicinity of the Broiler Farm sites, highlighting trends, types of crashes and location of crashes.



**Figure 10 VicRoads Crash Statistics Map (2017-2022)**

As observed above, accidents near the vicinity of the sites were observed to be on:

- Pyrenees Highway,
- Baringhup Road,
- Joyces Creek-Baringhup Road,
- Moolort Road,
- Moolort-Baringhup Road,
- Rodborough Road.

The details of these accident are as follows.



**Table 8 Selected Crash Statistics on the Surrounding Road Network**

Location	Date	Time	DCA Code	Description	Severity <sup>1</sup>
Pyrenees Highway	06 Jan 17	4:00 AM	172	Vehicle overturned (no collision)	3
	25 Oct 18	6:00 AM	173	Collision with a fixed object	3
	01 Apr 19	11:00 PM	171	Collision with a fixed object	3
Baringhup Road	02 Jun 17	5:30 PM	180	Vehicle overturned (no collision)	3
	04 May 18	5:30 AM	167	Struck Animal	3
Joyces Creek-Baringhup Road	11 Mar 17	11:30 PM	184	No Collision and no object struck	1
Moolort Road	02 Mar 21	6:20 PM	173	Collision with a fixed object	1
Moolort-Baringhup Road	06 Jul 20	10:15 PM	174	Vehicle Overturned (no collision)	3
Rodborough Road	16 Feb 19	4:00 PM	181	Collision with a fixed object	3
	15 May 19	8:15 PM	171	Collision with a fixed object	3
	06 Jan 22	2:55 PM	198	Collision with some other object	1

The summary above shows a total of 11 accidents, with 8 (73%) of these accidents categorised as serious accidents.

The data also highlights that most incidents are occurring during the evening period / late at night with crashes involving collision with a fixed object.

No fatalities have been reported along these roads.

<sup>1</sup> Scores injuries on a scale from 1 (minor) to 6 (maximum/fatal). A severe injury will score a 3 or above.



## 2.6 Pre-approved Routes

It is understood that vehicles used in the delivery and operation of the Broiler Farms may vary between each site. Notwithstanding, this chapter highlights the pre-approved routes for access along the roads adjacent to each Broiler Farm.

The VicRoads pre-approved B-Double and Higher Mass Limit Vehicles (HML) network in the locality of the Broiler Farm sites are reproduced in Figure 11.

These network diagrams are typically read as follows:

- Green Roads - preapproved for haulage and typically a permit is not required
- Unhighlighted Roads - require an assessment and approval from the responsible authority



**Figure 11 Pre-approved Routes for B-doubles and Higher Mass Limit Vehicles**

As per above, the green lines represent roads which are pre-approved for haulage and typically a permit is not required for haulage on these roads, e.g Baringhup Road, Pyrenees Highway, Locks Lane and a portion of Rodborough Road.

Conversely, Moolort-Baringhup Road and the rest of Rodborough Road require an assessment and approval from the responsible authority for haulage access if 26m B-doubles were to utilise this route for delivery.



## 3 Traffic Assessment

### 3.1 General

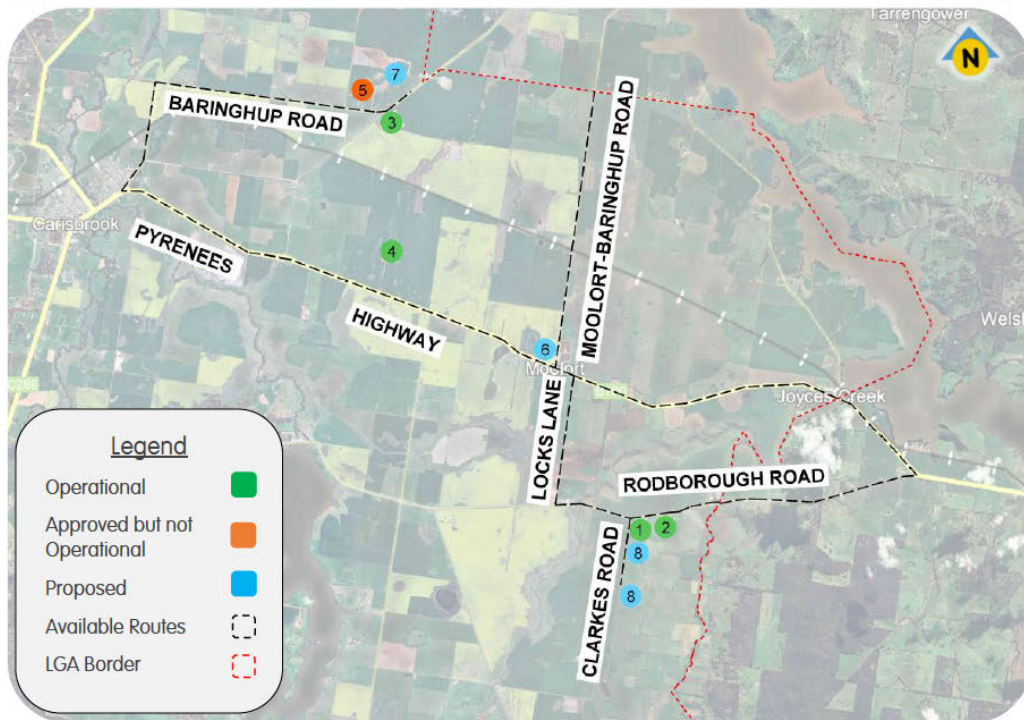
It is understood that the Central Goldfields Shire Council are seeking to understand the cumulative operation traffic impacts of the proposed Broiler Farms on the local and state road network.

Based on the information provided by Council, there is a total of eight (8) Broiler Farms, with four (4) that are operational, three (3) proposed and one (1) approved but not operational as summarised in Table 9.

The location of the Broiler Farms and possible routes to/from the sites are shown in Figure 12.

**Table 9 Broiler Farm Locations**

No.	ID	Location	Status	Operator	Capacity
1	014-08	1480 Rodborough Road, Moolort	Operational	Proten	486,377
2	038-10	1480 Rodborough Road, Moolort	Operational	Proten	397,623
3	050-20	396 Bald Hill Road, Carisbrook	Operational	Pavilion	400,000
4	051-20	3080 Pyrenees Highway, Carisbrook	Operational	Pavilion	400,000
5	018-21	683 Baringhup Road	Approved but not operational	Pavilion	400,000
6	022-23	3280 Pyrenees Highway, Carisbrook	Proposed	Pavilion	400,000
7	061-23	705 Baringhup Road, Carisbrook	Proposed	Pavilion	400,000
8	031-24	39 Clarkes Rd, Moolort, and 141 Clarkes Rd, Strathlea	Proposed	Proten	445,000



**Figure 12 Site Locations and Available Routes to the Sites**



### 3.2 Vehicle Access

#### 3.2.1 Preamble

The following chapter describes the current operational movements associated with each of the Broiler Farm sites.

It is to be noted that each Broiler Farms will have a similar level of operational movements e.g. deliveries associated with the general operation of each of the Farms.

#### 3.2.2 Chick Delivery

██████ has been advised that chicks for the Broiler Farms will most likely be sourced from Bendigo and that access to the sites will likely occur via Moolort-Baringhup Road or Baringhup Road.

#### 3.2.3 Gas Delivery

No information has been provided on the location the gas deliveries will originate from. However, it is likely that Moolort-Baringhup Road or Baringhup Road will be utilised when travelling to the Broiler Farms.

#### 3.2.4 Litter Delivery & Removal

We are advised that the litter deliveries and removal will be coming from Deniliquin and Nathalia respectively. Both of which will be coming from the North and will leverage Moolort-Baringhup Road or Baringhup Road.

#### 3.2.5 Feed Delivery

We are advised that the feed for the Broiler Farms will likely be delivered from Bendigo and access to each site will occur via Moolort-Baringhup Road or Baringhup Road.

#### 3.2.6 Bird Pick up

We are advised that the chickens will be picked up from Lockwood and that access to the sites will likely occur via Moolort-Baringhup Road or Baringhup Road.

#### 3.2.7 Access Routes

It is anticipated that deliveries and pickups relating to the Broiler Farms will primarily arrive from the northeast and utilise either Moolort-Baringhup Road or Baringhup Road to access each of the Broiler Farm sites. If the Broiler Farms were to utilise 26m B-doubles, specifically along Moolort-Baringhup Road, which is currently not approved for travel of 26m B-doubles then approval from authorities will be required.

Haulage routes for existing/proposed Broiler Farms

**Access Routes to Sites 1, 2 & 8**

Bendigo-Maldon Road - Allans Road - Lowther Street - Bridgewater-Maldon Road - Baringhup Road - Moolort Road - Moolort-Baringhup road - Pyrenees Hwy - Locks Lane - Rodborough Road

**Access Routes to Site 3**

Bendigo-Maldon Road - Allans Road - Lowther Street - Bridgewater-Maldon Road - Baringhup Road - Bald Hill Road



**Access Routes to Site 4**

Bendigo-Maldon Road - Allans Road - Lowther Street - Bridgewater-Maldon Road - Baringhup Road - Moolort Road - Moolort-Baringhup road - Pyrenees Hwy

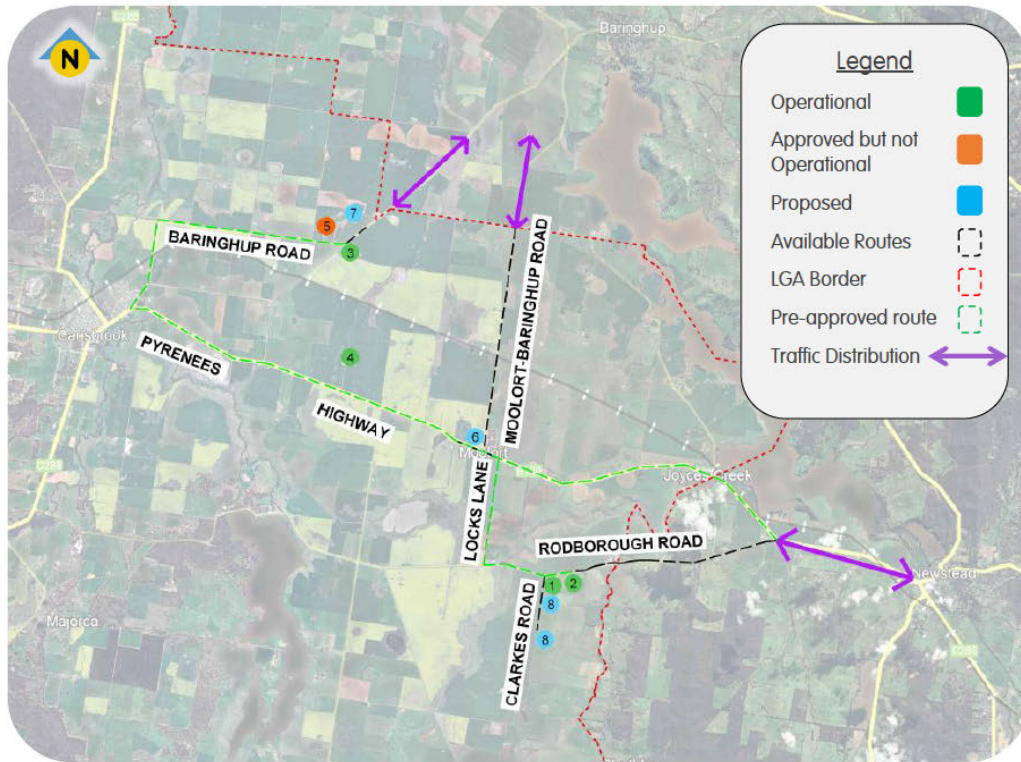
**Access Routes to Site 5 & 7**

Bendigo-Maldon Road - Allans Road - Lowther Street - Bridgewater-Maldon Road - Baringhup Road

**Access Routes to Site 6**

Bendigo-Maldon Road - Allans Road - Lowther Street - Bridgewater-Maldon Road - Baringhup Road - Moolort Road - Moolort-Baringhup Road

The access routes to each site are shown diagrammatically in Figure 13 and shows that movements / deliveries will primarily leverage Moolort-Baringhup Road and Baringhup Road to access the Broiler Farms. Alternatively, there is also opportunity to access the Broiler Farms from the east via Newstead prior to entering the Goldfields Shire Council LGA.



**Figure 13 Traffic Distribution on the Road Network**

Notwithstanding the above, Moolort-Baringhup Road and Clarkes Road is not pre-approved for access for 26m B-doubles and if vehicles of this size are accessing this road then approval will need to be sort from relevant authorities.

Baringhup Road, Pyrenees Highway, Locks Lane and Rodborough Road (east of Locks Lane) are approved for access for 26m B-doubles.

For vehicles greater than 26m B-doubles, a separate application will need to be made with the National Heavy Vehicle Regulator (NHVR) to obtain the relevant permits prior to travelling on the road network.



### 3.3 Traffic Generation

#### 3.3.1 Assumptions and Traffic Volumes

██████████ have been provided past Traffic Assessments and Reports conducted on each individual Broiler Farm by the Central Goldfields Shire Council.

Upon review of the documents provided, the following assumptions have been adopted to determine the cumulative operational traffic volumes:

- It is assumed that all eight (8) sites will be operating simultaneously;
- A 6-day working week is assumed as Broiler Farms are typically on staffed 6 days of the week;
- A batch time of 7 weeks excluding cleaning (42 days) was adopted for the assessment;
- Staff movements were assumed to be the same throughout every site;
- All activities such as gas, litter, feed etc. were assumed to be consistent across all 8 sites;
- All movements were assumed to be operating within the AM/PM commuter peak hours. However, it is noted that deliveries to/from the sites typically occur during the off-peak hours.

Our findings are detailed below in Table 10.

**Table 10 Peak Cumulative Traffic Generation**

Activity	Traffic Movements per Batch* (inbound movements)
Chicken Delivery	19
Feed Delivery	167
Litter Delivery	62
Gas Delivery	15
Bird Pickup	259
Hygiene	24
Staff Vehicle Movements	298
<b>Total</b>	<b>842</b>
Total per Day	20
Total per Hour**	10

\*A batch typically operates in nine (9) week periods, with the last two (2) dedicated to cleaning and preparing for the next batch of chicks.

\*\*Assumes that 50% of the total daily movements occur during the peak hour.

The total cumulative volumes split across all eight (8) sites equates to approximately 20 vehicle inbound movements per day during the peak operational periods of the Broiler Farms.

Pyrenees Highway currently caters for approximately 1,600 vehicles per day and with the assumption that all Broiler Farms operate simultaneously, is expected to carry in the order of 1,620 vehicles per day. This equates to an increase of 1 - 2% of traffic which is not expected to impact on the operation of the road network.

Further, lower order roads such as Clarkes Road and Locks Lane is designed to carry a maximum of 150 vehicles per day of which is currently carrying 100 daily vehicle movements (assumed). If all Broiler Farms were to operate simultaneously, then then it these roads could carry in the order of 120 daily vehicle movements or 80% of the total carrying capacity of the road. This level of traffic increase in the context of the road network is not expected to impact on the operation of the road network.

The increase in cumulative traffic from the Broiler Farms are expected to occur during a seven (7) week period assuming that all Farms are operating simultaneously. Notwithstanding, it is expected that there will be periods in between the exchange of different batches where traffic generated from the Broiler Farms are significantly reduced as the only vehicle movements that will be operating are maintenance vehicles (e.g. cleaning and in-preparation for the next batch cycle).





### 3.4 Sight Line Assessment

A desktop and on-site assessment of the sight distance available from the site access points and relevant intersections has been undertaken using aerial imagery, Google Street View, and images taken during the site inspection.

Based on Table 3.2 from Part 4A of Austroads Guide to Road Design, the minimum SISD requirements can be determined for the following speeds:

- 100km/hr design speed
  - o Minimum SISD of 300 metres
- 70km/hr design speed
  - o Minimum SISD of 226 metres

The assessed intersections and site access points have been summarised in Table 11.

**Table 11 Sight Distance Assessment**

Intersection	Speed Limit (km/h)	Sight Distance (m)	Required Sight Distance	Requirement Met
Rodborough Road / Clarkes Road	100 km/h	East: ~260m West: ~300m+	300m both directions	✗
Rodborough Road / Locks Lane	70 - 100 km/h 70km/hr	East: ~240m West: ~350m+	East: 226m West: 300m	✓
Pyrenees Highway / Locks Lane	100 km/h	~300m+ both directions	300m both directions	✓
Moolort-Baringhup Road / Pyrenees Highway	100 km/h	~300m+ both directions	300m both directions	✓
Baringhup Road / Bald Hill Road	100 km/h	Northeast bound: ~250m Westbound: ~190m	300m both directions	✗
Baringhup Road / Moolort Road	100 km/h	~300m both directions	300m both directions	✓
Bald Hill Road / 396 Bald Hill Road Site Access	100 km/h	Westbound: ~300m+	300m both directions	✓
Pyrenees Highway / 3080 Pyrenees Highway Site access	100 km/h	~300m+ both directions	300m both directions	✓
Rodborough Road / 1480 Rodborough Road Site Access	100 km/h	~300m+ both directions	300m both directions	✓

Based on the sight distance assessment, the intersection of Rodborough Road / Clarkes Road and Baringhup Road / Bald Hill Road is below the required sight distances.

To address these SISD shortfalls, it is recommended to review the current speed limit of these roads, noting that by default, rural roads are 100km/hr (unposted). A reduction / lowering of speed on approaches to the intersection can compensate for the inadequate sight distance and provide more time for users to react to on-coming vehicles.

According to Austroads Guide to Road Design Part 4A, to achieve the required SISD for the east approach of Rodborough Road / Clarkes Road intersection, a speed reduction from 100km/hr to 90km/hr (SISD of 262m with a reaction time of 2.5 seconds) would be sufficient.

For the intersection of Baringhup Road / Bald Hill Road, to achieve the SISD requirement on the northeast bound approach, the speed will need to be reduced from 100km/hr to 90km/hr and to 70km/hr from the westbound approach.

Additionally, installing warning signs such as "trucks entering" or reduced speeds along with rumble strips or solid centrelines near the intersection is recommended to enhance driver awareness and safety.



### 3.5 Road Maintenance

#### 3.5.1 General

It is evident that roads will deteriorate over time with the increase and frequent use of heavy vehicles. The maintenance of these affected roads is vital in minimising long-term damage and ensuring that the roads are safe to use.

Ultimately, the responsibility of the upkeep of these roads is generally in the form of a contractual agreement between Council, DTP and the Operator.

#### 3.5.2 Arterial Roads

The Department for Transport & Planning (Or Regional Roads Victoria) are responsible for maintenance of all arterial roads.

Depending on the contractual agreement, the Department and the Operator will share maintenance responsibilities for arterial roads used as part of the haulage route.

While the Broiler Farms are in operation and during construction, both parties will collaborate on inspections, repairs and any necessary maintenance to ensure the roads remain safe and accessible.

Notwithstanding, given the relatively low increase in volumes generated from the Broiler Farms, we anticipate that the Department will retain its primary maintenance role, with support from the Operator for ongoing maintenance works.

#### 3.5.3 Repair and Maintenance of Local Roads

To ensure the local road network remains in good condition, it is recommended that Council conduct regular inspections of the roads and haulage routes used by the Broiler Farms and its contractors.

It is recommended that the inspection assessment be undertaken by a suitably qualified pavement engineer / consultant.

Additionally, as recommended in Section 4, regular traffic surveys and inspections should be undertaken along the main haulage route when the Broiler Farms are operational to regularly monitor traffic volumes and road conditions. Following the surveys, Council should review the data and:

- Verify that survey results align with the current road conditions;
- Provide any feedback to the operators of the Broiler Farms within a timely manner and if no impact from the additional traffic movements is apparent;
- In the event that the additional traffic movements to/from the Broiler Farms have caused damage to the roads, the parties will in good faith discuss and agree to the nature and timing of any works required to investigate and/or rehabilitate any damage to the road infrastructure and the agreed works will be carried out in accordance with Council's procedures and standards.



## 4 Recommendations

The following recommendations have been developed to address potential traffic and road infrastructure concerns associated with the proposed Broiler Farm sites.

The intent of these recommendations is to ensure that the surrounding road network can safely and efficiently accommodate the additional operational traffic movements generated by the farms.

Based on the assessments conducted, we recommend and note the following:

- Organise / undertake a review of pavement conditions (e.g. pot-holes and general conditions) on all roads associated with the primary delivery/haulage route for the Broiler Farms. In addition, review and monitor pavement conditions as dilapidation is expected to occur;
- Review potential dust and noise impacts from the increase in vehicle movements, especially on unpaved road and consider possible mitigation measures to either upgrade the pavement to sealed/paved or reduced speed limits;
- Implement or undertake traffic counts along the primary routes to regularly monitor traffic volumes and road conditions after the Broiler Farms have become operational;
- The assessment identified that Moolort Road and Moolort-Baringhup Road was a primary route for access to the Broiler Farm sites. A review of the appropriateness of this road will need to be undertaken and this route is currently not approved for B-Double or HML access. Further, it is recommended that if operational vehicles are of 26m in length then alternative routes should be considered (e.g. along pre-approved routes);
- Encourage collaboration between the Broiler Farms and Council to provide schedules and delivery routes; and
- Review the appropriateness of sight distances at the intersections which are below the Austroads threshold. In addition, provide appropriate traffic management measures to address the sight line issues such as reduced speeds and signage.



## 5 Conclusion

A traffic assessment was conducted to evaluate the impact of the existing and proposed Broiler Farm sites within the Central Goldfields Shire.

A review of intersections used to access the Broiler Farms identified that some intersections do not meet the minimum SISD recommended by Austroads Guidelines. For these locations, it is advised to implement suitable traffic management measures, such as reducing speed limits &/or adding additional signage approaching the intersections to enhance safety.

Following a review of the crash statistic data within the locality of the Broiler Farms, it was revealed that majority of incidents that occurred involved a collision with a fixed object during the evening / late at night.

As outlined in Section 2.6, the primary haulage route for heavy vehicles on Moolort Road and Moolort-Baringhup Road is not an approved route for B-doubles or HML vehicles. It is noted that at the time of writing this report, no details were provided for the type / size of vehicles used for the Broiler Farms, however if 26m B-doubles were used then it is recommended that alternative pre-approved routes be utilised to ensure compliance.

Due to the anticipated deterioration of road pavement from the increased load and frequency of heavy vehicle traffic, routine road maintenance will be essential to minimise long-term damage. The site inspection undertaken indicated that the haulage roads from the Broiler Farms are currently in acceptable condition. However, it is necessary for Council, DTP and the Operator to collaborate and establish an agreement outlining maintenance responsibility for these roads throughout the Broiler Farms' operational lifespan.

The local and state road network is generally capable of supporting the operational traffic from the Broiler Farms. However, it is recommended that Council implement safety enhancements at intersections with restricted sightlines, establish road maintenance agreements between parties and ensure Operators adhere to designated haulage routes. These measures will support the upkeep of road conditions and reduce potential traffic risks from the increase in heavy vehicle use.



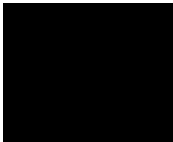
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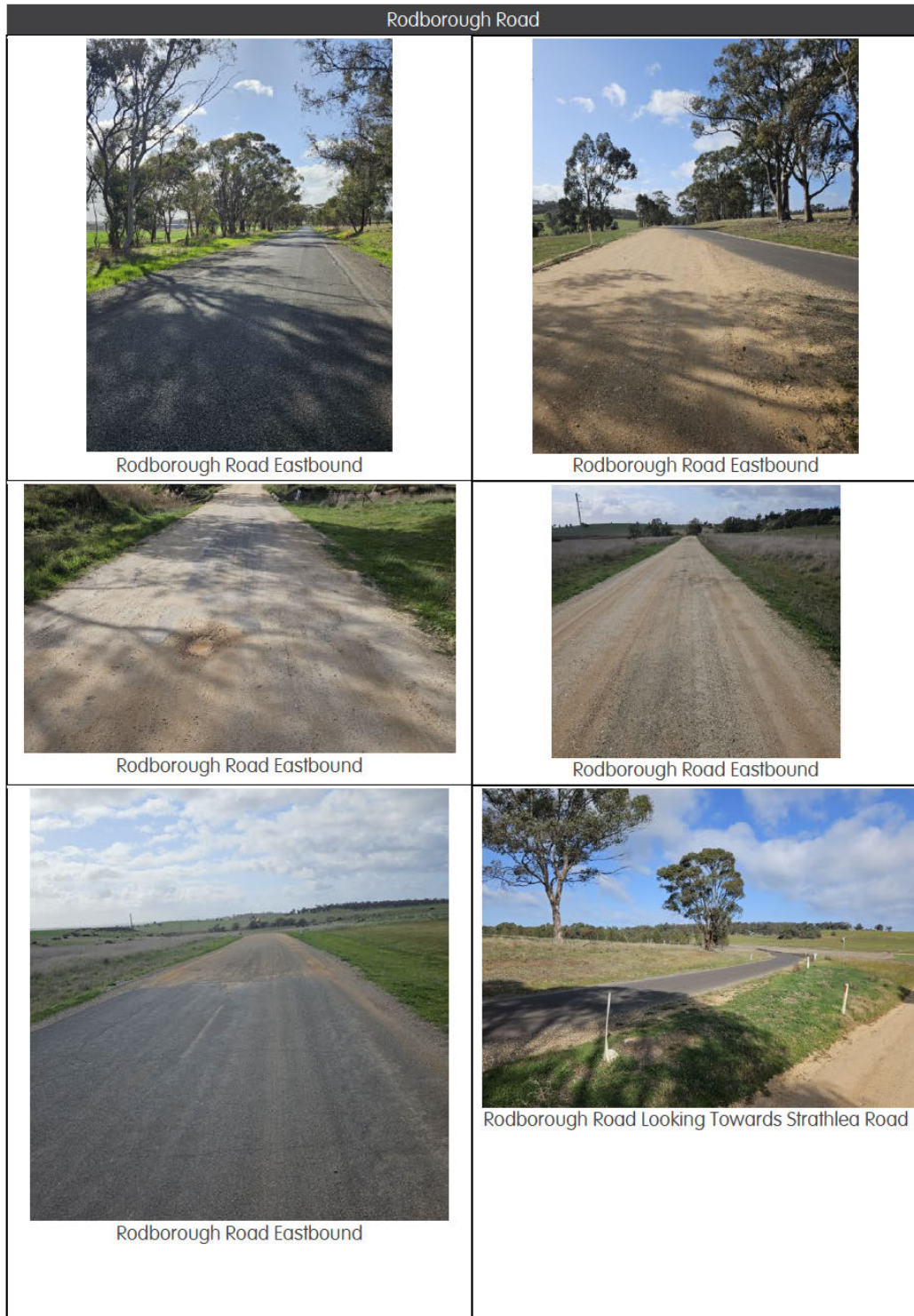
# APPENDIX A

## Site Visit

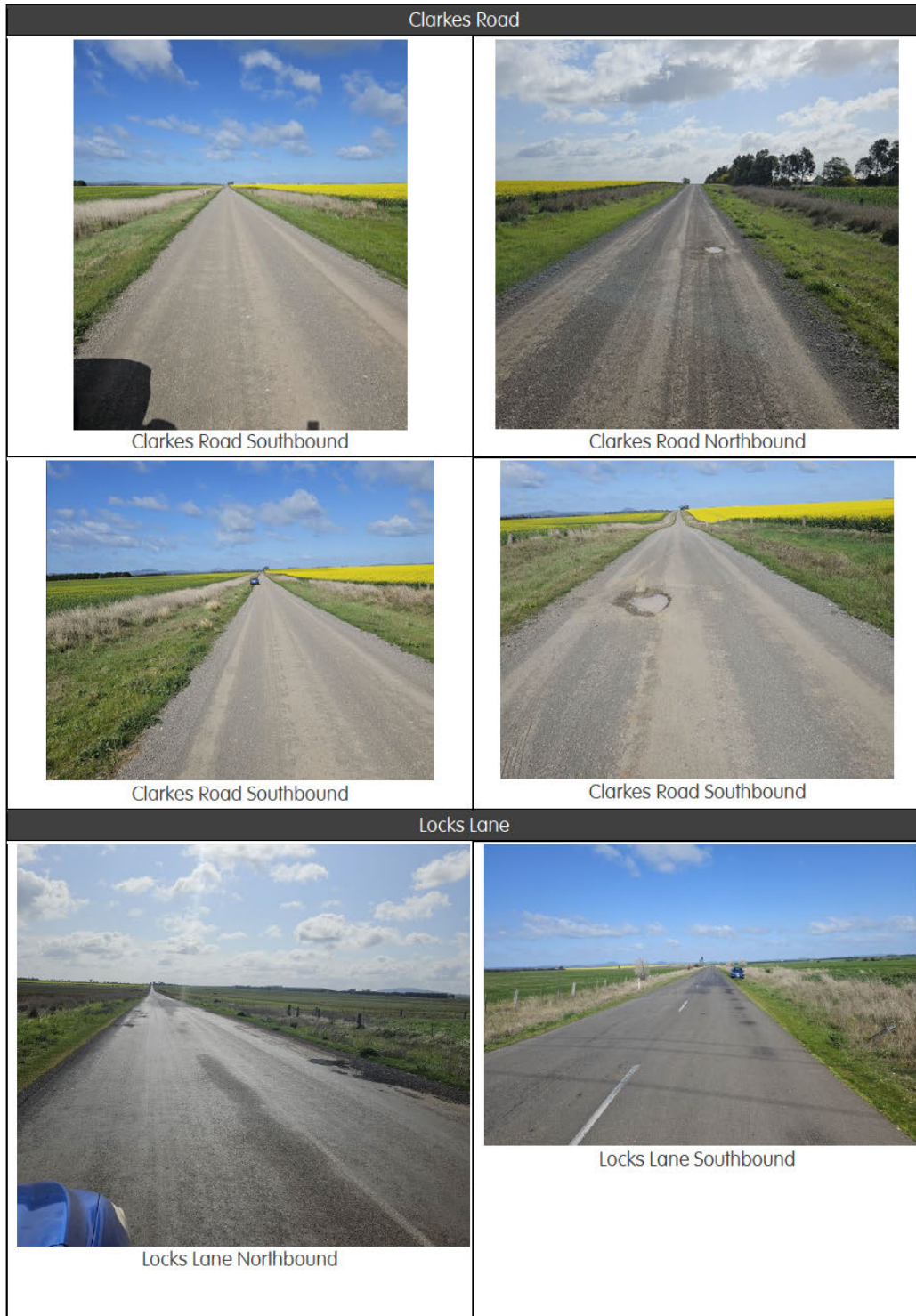
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### Site Photos

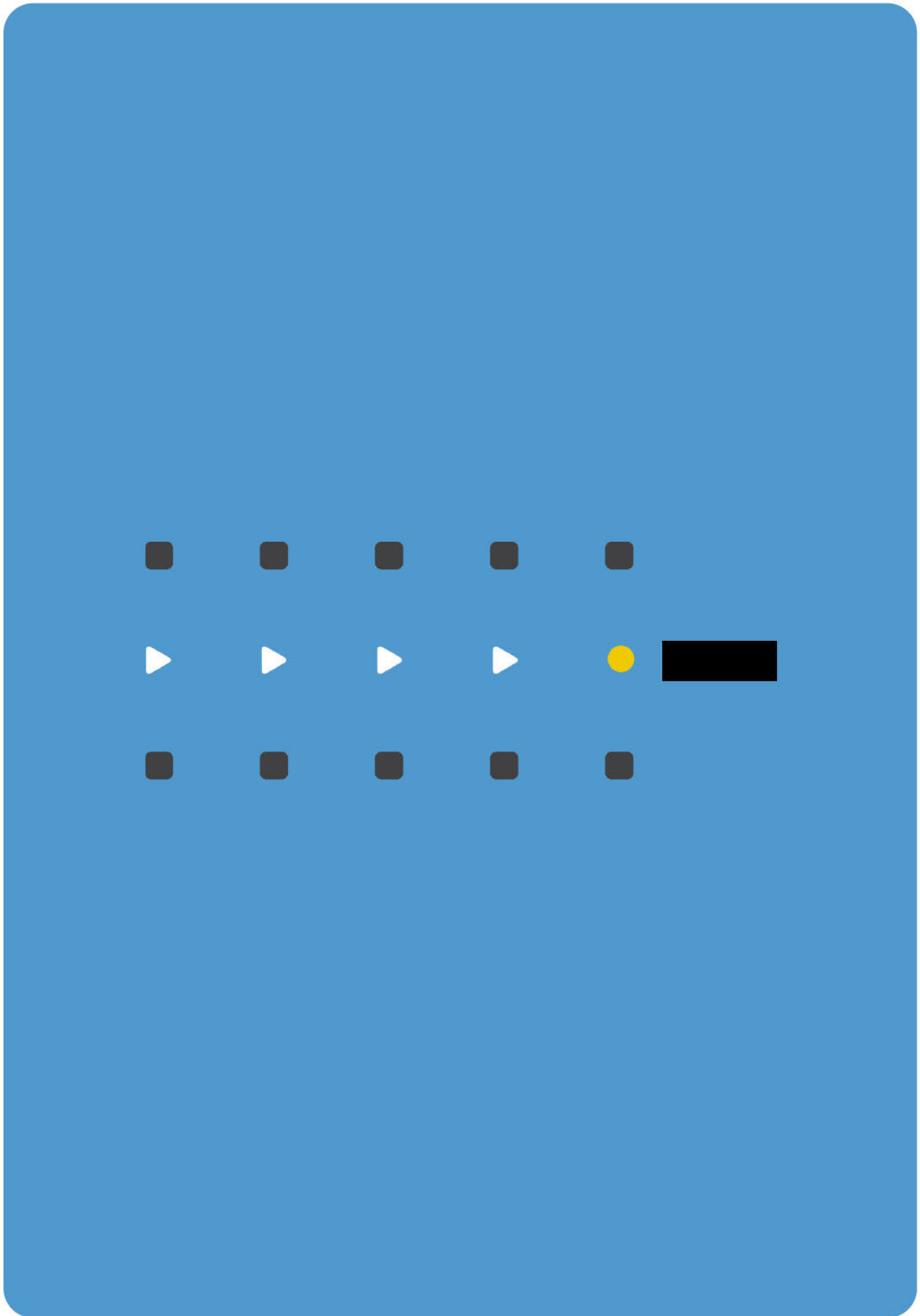














# Proposed Broiler Farm

141 Clarkes Road, Strathlea

**Acoustic Report – Environmental Noise Emission Assessment**





Project	Proposed broiler farm – 141 Clarkes Road, Strathlea
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**Disclaimer**

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# Table of Contents

- 1. Introduction..... 3
- 2. Noise Assessment Terminology..... 4
- 4. Site and Surrounding Environment ..... 5
- 5. Noise Assessment Criteria..... 6
  - 5.1. EPA Publication 1826.4 – Noise Protocol..... 7
    - 5.1.1. General Methodologies..... 7
    - 5.1.2. Derivation of Noise Protocol Noise Limits..... 8
    - 5.1.3. Noise Protocol Assessment Adjustments ..... 9
  - 5.2. Environment Reference Standard ..... 10
  - 5.3. EPA Noise Guideline – Assessing Low Frequency Noise..... 11
- 6. Previous Assessment Findings and Recommendations ..... 12
- 7. Assessment of Noise Emissions from Proposed Operations..... 14
  - 7.1. Site Configuration and Source Sound Power Levels ..... 14
  - 7.2. Noise Prediction Methodology ..... 16
  - 7.3. Predicted Noise Levels and Noise Protocol Assessment ..... 17
  - 7.4. Consideration of Low Frequency Noise ..... 18
- 8. Proposed Noise Control Strategies..... 19
  - 8.1. Safety Reverse Beepers..... 19
  - 8.2. Direct communication between operator and surrounding residents ..... 19
  - 8.3. Maintenance and inspection procedures ..... 19
  - 8.4. Trucks attending the subject site ..... 19
  - 8.5. Education of site personnel..... 20
  - 8.6. Existing and new site equipment ..... 20
- 9. General Environmental Duty – General Requirements ..... 21
- 10. Conclusion..... 22
- Appendix 1 – Aerial Site Plan Layout ..... 23
- Appendix 2 – Site Locality Plan ..... 24







## 1. Introduction

The proposal includes the operation of a new broiler farm at the site described as 141 Clarkes Road, Strathlea.

[REDACTED] is familiar with the proposal having provided an acoustic report during 2014 and expert evidence at the Victorian Civil Administrative Tribunal (VCAT) during 2017 supporting the application.

As part of the proceedings during 2017, the project was issued with a Planning Permit at the direction of VCAT which supported the construction and operation of a 325,000 bird farm at the subject site.

It is understood that the project has not been built and has been on-sold to the current client, who intends to increase the number of birds at the site to 445,000 within a conventional broiler farm arrangement.

The proposed site operations will include heavy vehicle movements within the site boundaries for delivery/collection events as well as the construction of eight new sheds which will house the birds and will incorporate ventilation fans.

The heavy vehicle movements and ventilation fans will generate noise emissions and have the potential to impact on the acoustic amenity of the surrounding area including at residential receptors.

In consideration of the above, WMG has been engaged to undertake an assessment of potential noise emissions from the proposed use and their potential impact on nearby sensitive receptors.

This report presents the findings of the assessment and includes indicative noise mitigation strategies where relevant.



## 2. Noise Assessment Terminology

Noise assessment terminology used within this report is defined within Table 1 below.

*Table 1: Noise Assessment Terminology*

Terminology	Definition
dB(A)	Decibels recorded on a sound level meter, which has had its frequency response modified electronically to an international standard, to quantify the average human loudness response to sounds of different character
$L_{eq}$	The equivalent continuous level that would have the same total acoustic energy over the measurement period as the actual varying noise level under consideration. It is the noise measure defined by the EPA as the measure of the noise to use in assessing compliance with noise limits.
$L_{90}$	The level exceeded for 90% of the measurement period, which is representative of the typical lower levels in a varying noise environment. It is the noise measure defined by the EPA as the measure of the background noise level to use in determining noise limits.
Sound Power Level (Lw)	The sound power level of a source is a measure of the amount of energy in the form of sound emitted from the source. The sound power level of a source is an inherent characteristic of that source and does not vary with distance from the source or with a different acoustic environment. The sound power level equals the sound pressure level at a distance from the source plus 10 times the logarithm (to base 10) of the measurement surface area (m <sup>2</sup> ), and is relative to a reference sound power of 1pW, (10 <sup>-12</sup> Watts).
Sound Pressure Level (Lp)	Sound that we can hear with our ears or measure with a sound level meter is actually small variations in the pressure of the air around us. The magnitude of the pressure fluctuations vary over a very wide range from the very lowest levels we can just hear to the very high levels we need to be protected from, and for that reason sound is measured on a logarithmic scale. The sound pressure level equals 10 times the logarithm (to base 10) of the sound pressure divided by a reference pressure, which is 20 µPa. The sound pressure level reduces with increasing distance from a source and is influenced by the surroundings.





#### 4. Site and Surrounding Environment

The subject site is located at 141 Clarkes Road and abuts farm zone (FZ) land to the north, east and south, and Clarkes Road to the west. The site is generally surrounded by vacant farmland which will not be considered noise sensitive in accordance with legislative and guideline criteria. However, it is noted that there are scattered residential properties which are primarily located to the north, east and south of the subject site.

Based on their proximity to the site, the closest, and in this instance most relevant receptors will include the following:

- **R01** – 324 Rodborough Rd.
- **R02** – 381 Rodborough Rd.
- **R03** – 321 Strathlea Rd.
- **R04** – 359 Strathlea Rd.
- **R05** – 9 Hurns Rd.
- **R06** – 457 Strathlea Rd.
- **R07** – 557 Strathlea Rd.
- **R08** – unknown address, Strathlea Rd.
- **R09** – 444 Strathlea Rd.
- **R10** – 375 Clarkes Rd.
- **R11** – 1366 Rodborough Rd.

The described receptors as well as the subject site are identified in Figure 1. It is noted that there is also an Emu farm and associated dwelling located to the east, however this forms part of the application and has not been considered.

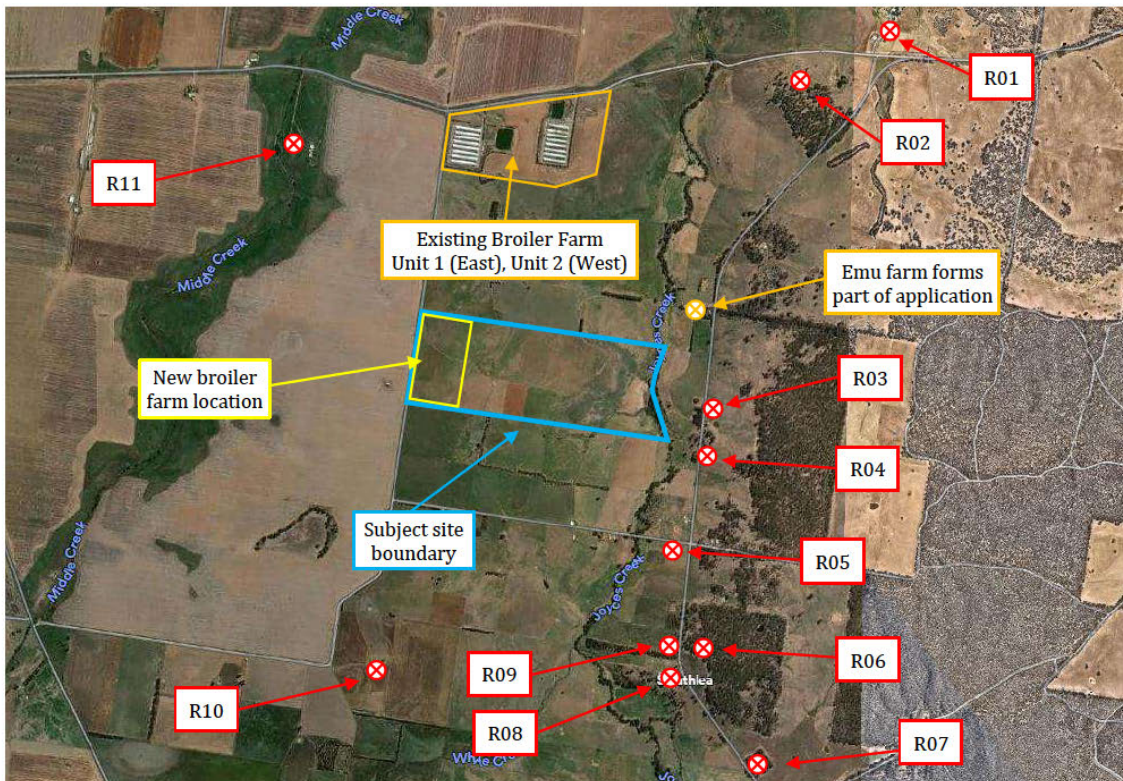


Figure 1: Aerial image identifying subject site boundaries and critical receptors







## 5. Noise Assessment Criteria

The previous noise assessment for the proposed site operations was undertaken in accordance with EPA Publication 1411 – Noise from Industry in Regional Victoria (NIRV) which was applicable at the time of the assessment.

However, NIRV has since been superseded as part of the introduction and enforcement of the Environment Protection Act 2017 (The Act) which came into effect July 1, 2021. The Act now provides the legislative framework for assessing commercial noise within Victoria, including within rural areas.

In consideration of the above, it is expected that any noise assessment for the proposed use will need to address noise emissions in accordance with the current legislative framework.

The approach within The Act focuses on prevention of pollution impacts rather than managing the impacts after they have occurred and is based on a person or entities General Environmental Duty (GED) for the protection of human health and the environment from pollution and waste.

The GED is explained within Part 3.2 of The Act and stipulates that ‘a person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable’.

Determining what is deemed ‘reasonably practicable’ is explained within EPA Publication 1856 and relates to the implementation of controls that are proportionate to the potential risk.

It relates to the potential for harm to occur, the potential impacts on the environment, and considers what controls are available to reduce the risk, and their associated costs.

It is deemed the responsibility of the operator to understand and assess the risks which their operations may pose on human health or the environment, and once understood, implement proportionate controls to mitigate or minimise the risk of harm.

The definition of harm within The Act introduces the concept of what is deemed ‘unreasonable’ generally, and in particular ‘unreasonable noise’. The Environment Protection Regulations 2021 (The Regulations) under the Act essentially define unreasonable noise as noise that exceeds the noise limit that applies under the Noise Protocol (EPA Publication 1826.4) at the time the noise is emitted.

Methodologies, specific criteria, and guidance regarding unreasonable noise emissions are included in the following Regulations and guideline documentation referred to within The Act and provided by the Environment Protection Authority (EPA):

- The Regulations.
- Noise Protocol.
- Environmental Reference Standard (ERS).
- EPA Publication 1996 Noise Guideline – assessing low frequency noise.
- EPA Publication 1856 Reasonably practicable.

With the above considered, whilst evaluating risks and implementing reasonably practicable measures are necessary to comply with the GED, the basis for any noise emission assessment will be ensuring that noise emissions are not deemed ‘unreasonable’.



5.1.  Publication 1826.4 – Noise Protocol

5.1.1. General Methodologies

The subject site land and the sensitive receptors located within proximity of the subject site are **not** located within a ‘major urban area’ and will therefore be defined as a ‘rural area’ in accordance with the Noise Protocol.

In consideration of the above, relevant noise limits for addressing noise emissions from the site will be determined in accordance with Part I, A2 of the Noise Protocol referenced as the ‘rural area method’.

The calculated ‘noise limits’ vary depending on the time of the day, evening, or night with the highest permitted values occurring during day periods and the lowest during night periods.

The relevant day, evening, and night assessment periods are shown in Table 2.

*Table 2: Details of EPA Assessment Periods*

EPA Assessment Period	Relevant Days	Relevant Time Periods
Day	Monday to Saturday	7:00am to 6:00pm
Evening	All Days	6:00pm to 10:00pm
	Sunday, Public Holidays	7:00am to 6:00pm
Night	All Days	10:00pm to 7:00am

In accordance with the Noise Protocol, ‘zoning levels’ for commercial noise emissions are determined based on the land zoning for the ‘noise generator’ and the ‘noise receiver’.

Where relevant, ‘zoning levels’ can then be adjusted based on the distance separation between the noise generating zone and the noise receivers, and by the presence of elevated ‘ambient background’ noise levels.

Special provisions are also made for specific use types including utilities and agricultural production activities.





5.1.2. Derivation of Noise Protocol Noise Limits

As part of previous works undertaken at the subject site, [REDACTED] has determined that the existing acoustic environment at the sensitive residential receptors considered relevant for the assessment is not sufficiently elevated in noise level to be considered 'background relevant'.

Furthermore, due to the continuous nature of the Farm Zone (FZ) land which extends from the proposed site to each of the nearby sensitive receptors, a distance adjustment will not be applicable.

In consideration of the above, the Noise Protocol 'zone levels' can be determined by cross-referencing the 'generating zone' where the subject site is located, and the 'receiving zone' where the sensitive receptor is located in **Table B.1 – Zone levels (dB(A)) for rural area method for commercial, industrial and trade premises** of the Noise Protocol.

Based on the subject site and the sensitive receptors both being located within a FZ, the relevant zone levels for the day, evening and night periods will be as shown below.

Table 3: Adopted Noise Protocol Zone Levels

Sensitive Receptor	Rural Method Noise Protocol Noise Limits – dB(A) Leq		
	Day	Evening	Night
R01-R10	46	41	36

The above values align with the NIRV guideline values which were adopted within the 2017 WMG assessment.

As part of the introduction of The Act and the Noise Protocol, there appears to have been a subtle change in the way in which noise emissions from 'intensive farming activities' are considered. The Noise Protocol indicates that 'where the Farming Zone is the generating zone and the noise-emitting agricultural activity is 'intensive', an adjustment of +3dB is applied to the determined Zone Levels to reflect amenity expectations of locally intense farming activities'.

Within the Noise Protocol 'intensive farming activities' are defined as follows:

- agricultural production activities under the planning scheme (Clause 73.01) with the following land use terms included in agriculture (in clause 73.03):*
  - a. *Horticulture and timber production (in crop raising); and*
  - b. *Intensive animal production, pig farm, poultry farm and poultry hatchery (in animal production: animal husbandry)*

In consideration of the above, and for the purposes of this assessment, it is understood that the zone levels nominated above will be subject to a plus 3dB adjustment, and hence the Noise Protocol noise limits for the proposed operations will be as follows.

Table 4: Adopted Noise Protocol Noise Limits – Intensive farming activities

Sensitive Receptor	Rural Method Noise Protocol Noise Limits – dB(A) Leq		
	Day	Evening	Night
R01-R11	49	44	39

The noise limit must be met within a 'noise sensitive area', which for this site will be within the boundary of any of the nearby sensitive receptors, and within 10 metres of the outside of the external walls of the dwelling or building.

The relevant assessment period will be 30 minutes.







5.1.3. Noise Protocol Assessment Adjustments

When considering noise impacts at residential receptors, Noise Protocol methodology includes relevant adjustment factors which account for the potential for the noise source to impact on the acoustic amenity of the noise sensitive receptor. The relevant adjustments include:

- Tonal Adjustment
- Impulsive Adjustment.
- Intermittency Adjustment.
- Reflection Adjustment.
- Duration Adjustment.

Clarification regarding each of the adjustments is shown below in Table 5.

Table 5: Noise Protocol Assessment Adjustments

Relevant Adjustment	Description
Tonal Adjustment	When the noise is tonal in character then an adjustment shall be made as follows: <ul style="list-style-type: none"> <li>▪ When the tonal character of the noise is just detectable then + 2 dB(A).</li> <li>▪ When the tonal character of the noise is prominent then + 5 dB(A).</li> </ul>
Impulsive Adjustment	When the noise is impulsive in character then an adjustment shall be made as follows: <ul style="list-style-type: none"> <li>▪ When the impulsive character of the noise is just detectable then + 2 dB(A).</li> <li>▪ When the impulsive character of the noise is prominent then + 5 dB(A).</li> </ul>
Intermittency Adjustment	An intermittency adjustment applies when the noise increases in level rapidly by at least 5 dB, on at least two occasions during a 30-minute period and maintains the higher level for at least one minute duration. The relevant intermittency adjustments applicable include: <ul style="list-style-type: none"> <li>▪ When the level increase is &gt;10 dB during the day period, then apply an adjustment of +3 dB(A).</li> <li>▪ When the level increase is 5-10 dB during the night period, then apply an adjustment of +3 dB(A).</li> <li>▪ When the level increase is &gt;10 dB during the night period, then apply an adjustment of +5 dB(A).</li> </ul>
Reflection Adjustment	When the measurement point is located outdoors and the microphone is located from 1 to 2 metres from an acoustically reflecting surface, an adjustment of -2.5 dB shall be made.
Duration Adjustment	When the noise emissions do not occur over the whole of a continuous 30-minute period, then a duration adjustment based upon the total amount of time for which the noise occurs over that continuous 30-minute period shall be determined.

Where applicable, adjustments are applied to the measured/predicted values at noise sensitive receptor locations to determine the 'effective' noise level impacting on the receptor.





## 5.2. Environment Reference Standard

The ERS provides environmental values which have been developed to reflect the ambient soundscape associated with different land use settings, from highly urbanised areas to natural environments.

Through consideration of land zoning types, and varying assessment periods for the day and night, it is understood that the ERS intends to provide consideration of noise levels which may impact on:

- Sleep during the night.
- Domestic and recreational activities.
- Normal conversation.
- Child learning and development.
- Human tranquility and enjoyment outdoors in natural areas.
- Musical entertainment.

Whilst being included within the Act, the ERS is not a compliance standard and clearly states that ‘the objectives for each land use category are typical ambient sound level values and are neither noise limits nor noise design criteria’.

It’s understood that the primary function of the ERS is to provide environmental assessment benchmarks to assist ‘decision makers’ with evaluating noise emissions within areas not already captured within the Regulations and Noise Protocol.

The ERS will not require consideration when addressing noise emissions from the proposal at the nearby residential premises as these are captured by the Noise Protocol. Furthermore, given the proximity of the residential receptors to the proposed use, it is expected that compliance with Noise Protocol will adequately address potential impacts at any further setback natural areas.

In consideration of the above, the ERS has not been considered further within the assessment.





5.3. [Redacted] Noise Guideline – Assessing Low Frequency Noise

As defined in the Act, a person must not, from a place or premises that are not residential premises emit an unreasonable noise or permit an unreasonable noise to be emitted.

In the Regulations, unreasonable noise is based on exceedances determined in accordance with the Noise Protocol, however, the Regulations also include consideration of the frequency spectrum associated with a noise emission.

To provide some basis for addressing low frequency noise emissions and determining whether the noise emission is deemed 'unreasonable' the [Redacted] released Publication 1996 Noise Guideline – assessing low frequency noise.

The guideline document provides 'threshold levels for assessing low frequency noise' which are not set limits, but levels that indicate a potential risk of problematic low frequency noise.

The threshold levels for indoor and outdoor measurements are included within Table 6 below.

Table 6: Indoor and outdoor measurement one-third octave band noise level thresholds

Measurement Location	One-third octave band noise levels Hz												
	10	12.5	16	20	25	31.5	40	50	63	80	100	125	160
Indoor noise dB Leq	92	87	83	74	64	56	49	43	42	40	38	36	34
Outdoor noise dB Leq	92	89	86	77	69	61	54	50	50	48	48	46	44

Whilst Publication 1996 is presented as a guideline, it is understood that the [Redacted] will require reasonably practicable measures to be considered where values are measured or predicted to be higher than the thresholds.







## 6. Previous Assessment Findings and Recommendations

As part of a previous broiler farm development proposal at the subject site, WMG assessed noise emissions from the two existing Broiler Farm (units 1 and 2) located to the north of the subject site at 1480 Rodborough Road.

When considering noise impacts at sensitive residential receptors in proximity to the proposed broiler farm, it is the cumulative commercial noise impacts at the sensitive receptor which is compared with relevant noise criteria, and hence contributions from the existing broiler farms will be relevant for any new assessment.

As part of the previous investigations, [redacted] undertook unattended monitoring of noise emissions from the existing facility operations at setback locations to the northeast and south of the existing broiler farm units. These locations are identified below.

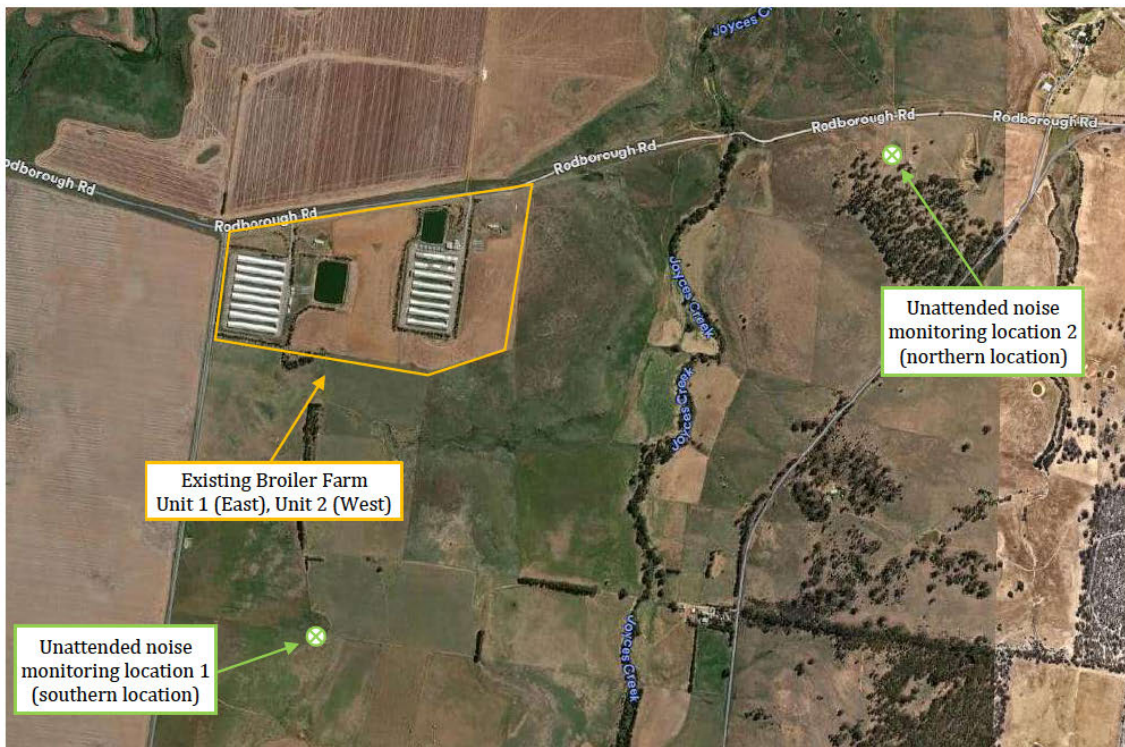


Figure 2: Previous assessment (2017) unattended noise monitoring locations

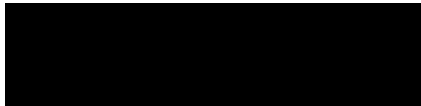
The monitoring works were undertaken during times when weather conditions, including breeze conditions assisted propagation of noise from the existing broiler farm in the direction of the noise monitoring equipment.

This is a requirement of the [redacted] in Victoria, and hence the results were used as a basis for assessing noise emissions from the existing site operations.

It was noted that during the previous investigations, the existing broiler farm was operating a ventilation fan which has a faulty bearing. The faulty bearing was resulting in a significant tonal noise being audible at sensitive receptors and was the cause for complaint at these receptors.

As part of preparation of the previous report, the client undertook relevant works to 'fix' the ventilation fan, and the fan is understood to no longer be emitting the distinctive tonal noise.





With the removal of the faulty bearing as a noise source at the existing broiler farm, the findings of the previous noise assessment were as follows:

- When compared with the unattended noise monitoring locations, predicted noise levels at each of the nearby off-site receptors were in the order of 5 dB(A) lower.
  - The exception of the above was the Emu Farm dwelling where predicted noise levels were 1 dB(A) higher than at each of the unattended noise monitoring locations. This dwelling now forms part of the application property and hence has been excluded from the assessment.
  - **Northeastern unattended noise monitoring location**
    - Noise emissions from the existing site were typically inaudible at the northeastern location. with extraneous noise events due to sheep, local traffic, wind/rain at times and a water pressure system at the nearby dwelling more prominent. Measured values at this location generally remained well below the previously determined NIRV night period noise criteria of 36 dB(A)  $L_{eq}$ .
  - **Southern unattended noise monitoring location**
    - When considered at the southern monitoring location, extraneous noise due to birds and sheep contributed to the measured noise levels. Measured values generally remained below the previously determined NIRV night period noise criteria of 36 dB(A)  $L_{eq}$  except when elevated by extraneous noise.
    - During one of the 'louder' nights considered in the previous noise assessment, the following noise sources were identified as contributing to the overall noise level at the monitoring location:
      - A truck, significantly louder than other trucks identified on the recorded audio files at other times, was heard using an exhaust/engine brake to slow down from what sounded like a roadway speed then travel at a lower speed, presumably within the site boundaries. The timing of this noise event corresponded with an identified bird pick-up.
      - Noise due to what sounded like metal on metal impacts was intermittently audible and was understood to be associated with the loading of collected birds.
      - Conventional reversing beepers were audible at times during this period, understood to be associated with forklifts that operate as part of the bird collection process.
- In the absence of noise due to the faulty bearing, noise present during bird pick-ups was typically up to 36 dB(A)  $L_{eq}$  30-minute at the southern unattended noise monitoring location and a +5 dB(A) tonal adjustment would have been applicable due to the reversing beepers, giving an effective level of up to 41 dB(A)  $L_{eq}$ . With the corresponding level 5 dB(A) lower at nearest receptors (excl. emu farm), this implies an effective noise level of up to 36 dB(A)  $L_{eq}$  at each nearby receptor, which was equal to the previously determined NIRV night period noise criteria. With the tonal character adjustment removed, and based on the results of the previous noise modelling, the effective level at the emu farm during bird pickups would be 37 dB(A)  $L_{eq}$  at times.

The above outcomes in conjunction with ongoing complaints from nearby receptors led to WMG recommending the following:

- Replacement of tonal reversing beepers with broadband reverse beepers.
- Direct communication between residents and the existing broiler farm.
- Introduction of maintenance and inspection procedures to understand site noise sources and potential issues.
- Limitations regarding the types of trucks entering the site.
- Education for personnel frequenting the site.







## 7. Assessment of Noise Emissions from Proposed Operations

### 7.1. Site Configuration and Source Sound Power Levels

The proposed site configuration will include eight new sheds arranged in an east west orientation. Each shed will be fitted with a total of 12 ventilation fans which will be clustered toward the eastern end of the sheds on the northern, eastern, and southern facades.

Access to the site will be provided by a crossover at the northern end of the site which will abut Clarkes Road. Vehicles including trucks, will then utilise the internal access road to travel adjacent to the sheds and site boundaries.

The general site plan for the proposal is included below.



Figure 3: Proposed development site plan

It is understood that bird collection events will occur adjacent to the eastern and western ends of the sheds whereby trucks will stop. Forklifts may then be used as part of the process to load birds into the trucks.

When considering noise sources associated with the proposal, it is understood that the relevant sources will include:

- Trucks driving within site boundaries. It should be noted that trucks driving on public roads will not be assessable under the Noise Protocol.
- Bird collection events occurring at the eastern and western end of the sheds (inc. forklift use).
- Ventilation fans (12no. per shed) located at the eastern end of the sheds.

It is understood that truck activity, including bird collection events may occur at any time 24 hours per day, and hence will be subject to the most stringent night period noise limits.







The placement of batches of birds will be staggered between the three individual farms, likely 2-3 weeks apart.

There is the possibility that bird pickups may occur on two of the three farms on the same night, but this is not very often due to the differing bird ages on each farm, and the processing capacity limitations of the processing plant. It would not be expected that bird pickups would occur on all three farms on the one night and at the same time.

If pickups were to occur on two farms during the one night, they would attend one farm first, and then move onto the second farm afterwards. It takes approximately one hour to load a truck, hence, generally there would only be one truck coming and one truck going from a farm in any one hour.

Ventilation fans will also operate continuously 24 hours a day, however, the client has advised that during the critical night period, up to one third of the fans will typically operate. This will have a noise reduction effect due to the operation of the ventilation fans in the order of 5dB(A) at the nearby receptors, and hence the assessment which includes all fans operating during the night period is somewhat conservative for typical operations.

Based on involvement during the previous investigations at the 1480 Rodborough Road site, and with input from the client in relation to the new ventilation fan selections, the sound power levels which have been adopted as the basis for the assessment as summarised below.

Table 7: Adopted source sound power levels

Noise Source	Source Sound Power Level
Truck moving slowly within site boundaries (based on previous assessment)	103 dB(A)
New ventilation fans - SKOV BF 55 LPC HF - 12 fans per shed	93 dB(A) per fan
Bird pick-up event	104 dB(A)

A markup of the site plan including the adopted location of the relevant noise sources is included below.

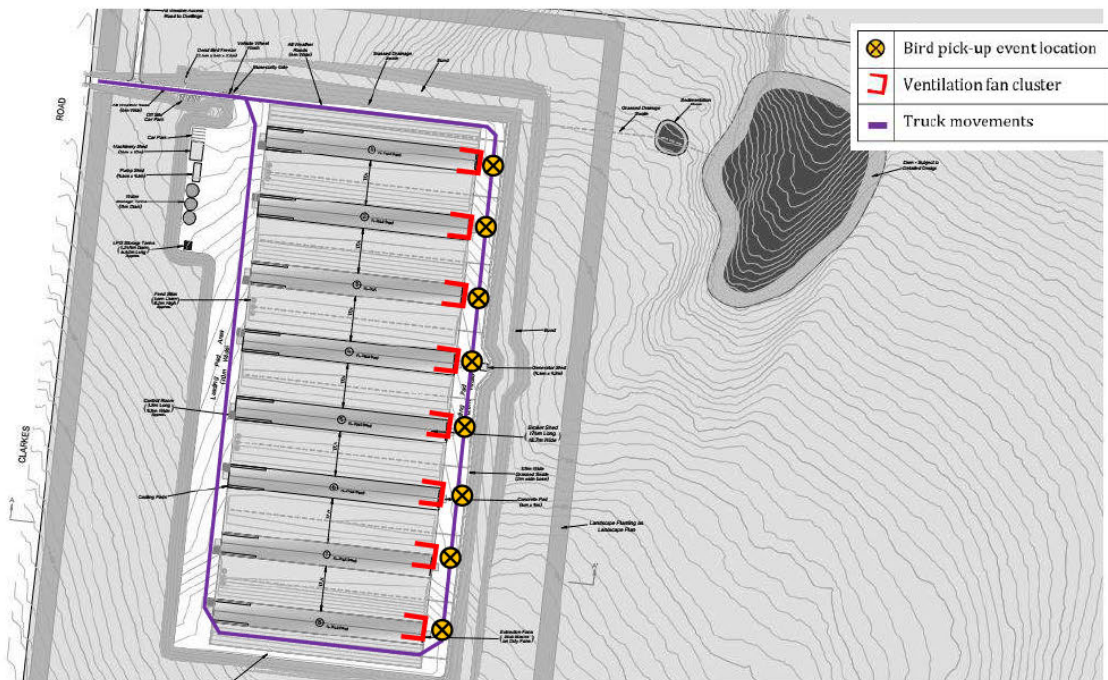


Figure 4: Site plan including adopted noise source locations





## 7.2. Noise Prediction Methodology

Modelling of operational noise emissions from the site has been conducted using DataKustik CadnaA environmental noise modelling software.

Relevant information regarding site elevations, site buildings and the surrounding environment has been provided by the client and sourced from online databases including Nearmaps, VicMaps and topography from the ANZLIC Committee on Surveying and Mapping.

The model has been developed with sufficient detail for appropriate noise emission calculations to be undertaken.

For this assessment, the modelling software has implemented the calculation procedures defined within International Standard ISO 9613-2: 1996 Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation (ISO 9613).

The described standard has been considered and approved as part of many previous projects requiring noise emission assessment works.

Through implementation of the Standard using CadnaA, the model considers the following attenuation measures:

- Geometrical spreading.
- Atmospheric absorption.
- Ground attenuation.
- Meteorological effects.
- Source/Receiver height effects.
- Attenuation due to the surrounding environment including existing buildings/structures.

The modelling input parameters also incorporate assessment methodology requirements of EPA Victoria including:

- Residual noise levels at noise sensitive receptor locations have been considered when weather conditions assist with propagation of emissions in the direction of the relevant receptor.
- Predicted values have been considered within 10 metres of the noise sensitive external facades.

The critical receptors located in proximity to the proposed use are understood to be single level dwellings and hence, for the purposes of this assessment, an assessment height of 1.5m for ground level has been adopted.

Predicted values at receptor locations have been calculated in the 'free-field', which do not include reflections from localised surfaces other than the ground.





### 7.3. Predicted Noise Levels and Noise Protocol Assessment

For the purposes of this assessment, WMG has adopted the noise level values which were predicted for the existing site operations at each of the sensitive receptors during the previous 2017 noise assessment.

Noise modelling has then been used to introduce the contributions from the proposed site operations and compare the cumulative noise impacts with the determined Noise Protocol noise limits.

As was documented within the previous acoustic assessment report, the results have been presented for the following two scenarios:

- **Scenario 1** – Existing two units (1&2) plus the proposed site operations (all fans operating continuously).
- **Scenario 2** – Existing two units (1&2) plus the proposed site operations (all fans operating continuously) plus trucks operating and noise due to bird pick-up/feed delivery occurring at proposed development.

The predicted noise levels for each scenario are summarised below.

*Table 8: Predicted noise levels at off-site sensitive receptors*

Reference	Receptor Address	Predicted Cumulative noise levels – dB(A) $L_{eq}$	
		Scenario 1	Scenario 2
R01	324 Rodborough Rd	30	30
R02	381 Rodborough Rd.	35	35
R03	321 Strathlea Rd	32	33
R04	359 Strathlea Rd	31	32
R05	9 Hurns Rd	30	31
R06	457 Strathlea Rd	28	30
R07	557 Strathlea Rd	24	25
R08	unknown address	26	27
R09	444 Strathlea Rd	27	28
R10	375 Clarkes Rd	24	27
R11	1366 Rodborough Rd	32	32
<b>Critical night period Noise Protocol noise limit</b>		<b>39</b>	<b>39</b>

Based on the results of the noise model, the noise levels at the nearby sensitive receptors during both scenario 1 and scenario 2 comply with the Noise Protocol noise limits during the critical night period.

This is a conservative assessment given that all fans will not be operating during the night period.

In response to the outcomes of the previous assessment, it is understood that several recommendations have been implemented at the existing site, and will also form part of the proposed new site operations which will reduce the potential for any tonal character adjustment being necessary for the assessment.

Despite the above, it is noted that the modelled noise levels generally allow for a tonal character adjustment to be applied to the predicted values whilst remaining below the 39 dB(A)  $L_{eq}$  value applicable during the night period.







#### 7.4. Consideration of Low Frequency Noise

As is discussed within [REDACTED] Publication 1996, predicting low frequency noise at sensitive receptors can be problematic and of limited accuracy. [REDACTED] has therefore used the results of the noise model as a screening tool to assess the risk of low frequency noise from the proposal.

During the previous investigations undertaken during 2017, specific issues including a faulty fan bearing and a noisy truck were identified to include low frequency noise emissions. However, these noise sources have been identified and risks are being mitigated through the implementation of the recommended noise control strategies including:

- Maintenance and inspection procedures.
- Evaluation of trucks using the site with a focus on their noise level.
- Education for site personnel in relation to noise emissions.

It is understood that the new broiler farm site will also implement the same strategies to minimise their risks.

When considering noise emissions associated with the broiler farm fans, the client was unable to provide one-third octave band noise data for the specific fan selections. For the purposes of the assessment, [REDACTED] has adopted generic octave band values based on the duty requirements of the fan.

In consideration of the above, the finalised fan selections must be reviewed by, and ideally measured by an acoustic consultant prior to purchase to confirm the presence of any problematic acoustic energy low frequency which may result in levels higher than the outdoor threshold values nominated in Publication 1996.

Based on the results of the current noise model, predicted values are below the threshold and hence do not present a 'potential risk of problematic low frequency noise'.





## 8. Proposed Noise Control Strategies

In accordance with the clients general environmental duty, the existing broiler farm to the north, and the new broiler farm will both implement strategies to minimise their risks of harm to human health and the environment.

These strategies will include:

- Ensuring that site-based equipment utilises broadband safety reversing alarms in lieu of tonal beepers.
- Encouraging bird pick up contractors to utilise broadband safety reversing alarms in lieu of tonal beepers.
- Providing an instrument for direct communication between the operator and surrounding residents to ensure that any concerns in relation to site operations are resolved promptly.
- Enforcing a maintenance and inspection procedure to ensure that equipment is operating as usual.
- Encouraging transport contractors to ensure that trucks attending the sites comply with noise requirements.
- Educating site personnel in relation to noise emissions and minimising the activity noise where practical.
- Ensuring that new equipment is selected with 'low noise' as an important criterion.

### 8.1. Safety Reverse Beepers

Conventional reversing beepers have the potential to cause annoyance to residents and contribute to exceedances of noise limits at sensitive receptors, due to the highly distinctive character and on-off nature of the noise.

In consideration of the above, all site-based equipment must be fitted with broadband safety alarms which vary their noise output according to the ambient noise level. These reversing alarms should be selected for the lowest noise level consistent with safe operation. Suitability of the system will need to be certified by others.

Further to the above, contractors operating on site from time to time should also be encouraged to fit their equipment with broadband safety alarms as above.

Publication 1890 'Managing noise from reversing alarms' provides further information regarding these units.

### 8.2. Direct communication between operator and surrounding residents

Further to the findings from the 2017 noise assessment, recommend that the operator implements a mechanism to facilitate communication with surrounding sensitive receptors.

This will enable communication to occur during times when specific noise sources may be 'faulty' and unknowingly impacting on the surrounding acoustic environment.

### 8.3. Maintenance and inspection procedures

As part of the 2017 investigations, there was a significant delay in the time period during which a faulty ventilation fan bearing was identified and subsequently repaired.

In consideration of the above, continues to recommend that the operator implements specific site practices and procedures in order to ensure that any departure from normal operating conditions is recorded and passed on to maintenance personnel for prompt rectification.

### 8.4. Trucks attending the subject site

Trucks attending the site to comply with the Heavy Vehicle (Vehicle Standards) National Regulation and be driven in a reasonable manner.

During the 2017 assessment, this recommendation was provided under the heading 'trucks attending the site during the night period', however, in accordance with the GED, this will become a requirement for all trucks attending site.





8.5. Education of site personnel

As part of the previous assessment, there was a focus on the night period as being the critical times during which the operator would need to take specific care in their ongoing operations.

However, in accordance with the GED, such activities will become a site requirement.

In consideration of the above, and in the interests of minimising noise emission during all periods, it is recommended that the operator implement educational programs for those who will be attending the site regarding work practices to avoid the generation of unnecessary noise.

Such work practices include avoiding unnecessary engine revving and metal-on-metal impacts during bird loading.

8.6. Existing and new site equipment

When selecting equipment to be utilised at the subject site, the source sound power level of the equipment must be a primary consideration. The client must evaluate what is available in the marketplace and select equipment with the lowest sound power level so far as reasonably practicable.

The above approach must also be implemented when equipment is proposed to be replaced/upgraded.







## 9. General Environmental Duty – General Requirements

In accordance with the requirements of the general environmental duty, the client must consider the potential risks associated with the proposed use and reduce these risks as far as reasonably practicable.

The results of the assessment have concluded that with the implementation of operational noise control strategies, noise emissions from the proposed broiler farm in combination with the existing broiler farm to the north can comply with Noise Protocol noise limits at nearby sensitive receptors.

The results also indicate that noise emissions do not present a potential risk of problematic low frequency noise at the receptors in accordance with [REDACTED] Publication 1996.

Despite the above and in accordance with the requirements of The Act, the client would be deemed to be in breach of the GED if they fail to do any of the following in the course of conducting the business or the undertaking so far as reasonably practicable:

- use and maintain plant, equipment, processes and systems in a manner that minimises risks of harm to human health and the environment from pollution and waste;
- use and maintain systems for identification, assessment and control of risks of harm to human health and the environment from pollution and waste that may arise in connection with the activity, and for the evaluation of the effectiveness of controls;
- use and maintain adequate systems to ensure that if a risk of harm to human health or the environment from pollution or waste were to eventuate, its harmful effects would be minimised;
- ensure that all substances are handled, stored, used or transported in a manner that minimises risks of harm to human health and the environment from pollution and waste;
- provide information, instruction, supervision and training to any person engaging in the activity to enable those persons to comply with the general environmental duty.

The described items will likely be internal processes involving training and documentation to address any potential emissions from the site in the event that they occur.





## 10. Conclusion

█ has carried out an assessment to address potential noise emissions from the operation of a new broiler farm at the site described as 141 Clarkes Road, Strathlea.

In accordance with the clients general environmental duty, the existing broiler farm to the north, and the new broiler farm will both implement strategies to minimise their risks of harm to human health and the environment.

These strategies will include:

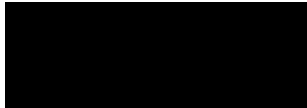
- Ensuring that site-based equipment utilises broadband safety reversing alarms in lieu of tonal beepers.
- Encouraging bird pick up contractors to utilise broadband safety reversing alarms in lieu of tonal beepers.
- Providing an instrument for direct communication between the operator and surrounding residents to ensure that any concerns in relation to site operations are resolved promptly.
- Enforcing a maintenance and inspection procedure to ensure that equipment is operating as usual.
- Encouraging transport contractors to ensure that trucks attending the sites comply with noise requirements.
- Educating site personnel in relation to noise emissions and minimising the activity noise where practical.
- Ensuring that new equipment is selected with 'low noise' as an important criterion.

With the above implemented and as part of the assessment, █ has undertaken the following:

- Reviewed and considered the outcomes of previous site investigations conducted during 2014 and 2017.
- Modelled noise emissions from the proposed use at nearby sensitive receptors.

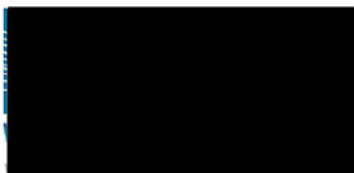
Based on the results of the assessment including the noise model, █ has concluded that noise emissions from the proposed broiler farm will:

- Comply with Noise Protocol noise limits at nearby noise sensitive receptors.
- Result in noise levels below the outdoor threshold values nominated in █ Publication 1996 at the nearby noise sensitive receptors.







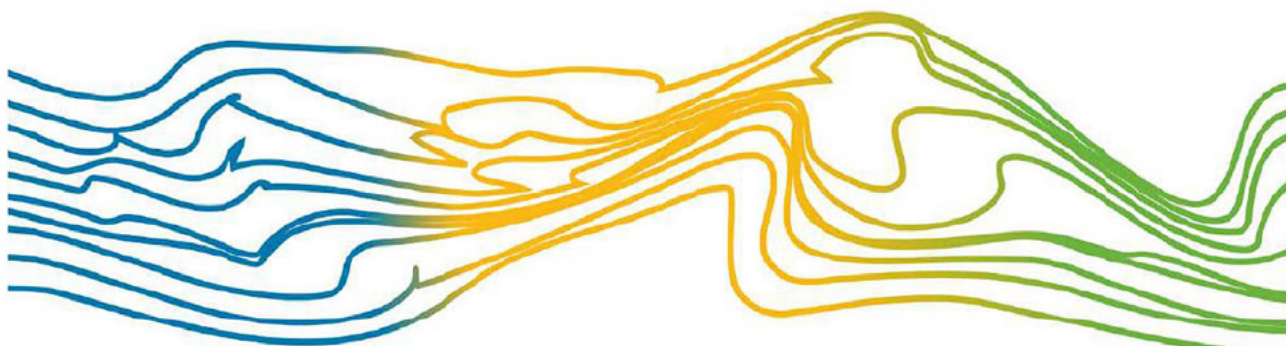


# Report

## 141 Clarkes Road, Strathlea – Surface Water Management Plan



5 April 2024



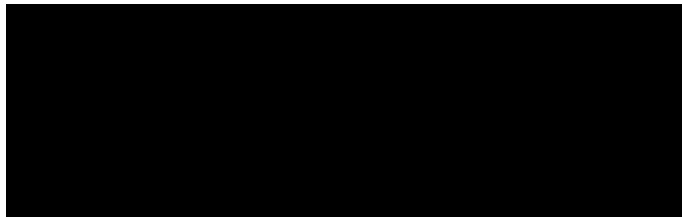


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## ACKNOWLEDGEMENT OF COUNTRY

The Board and employees of Water Technology acknowledge and respect the Aboriginal and Torres Strait Islander Peoples as the Traditional Custodians of Country throughout Australia. We specifically acknowledge the Traditional Custodians of the land on which our offices reside and where we undertake our work.

We respect the knowledge, skills and lived experiences of Aboriginal and Torres Strait Islander Peoples, who we continue to learn from and collaborate with. We also extend our respect to all First Nations Peoples, their cultures and to their Elders, past and present.





## CONTENTS

1	INTRODUCTION	5
2	SITE DESCRIPTION	6
2.1	Waterways	7
3	PROPOSED DEVELOPMENT	10
4	GROUNDWATER ASSESSMENT	12
4.1	Management Area	12
4.2	Geology and Hydrogeology	14
4.2.1	Groundwater Levels	14
4.2.2	Groundwater Dependent Ecosystems	17
4.2.3	Soils	18
4.2.4	Rainfall	19
5	BROILER FARM - NUTRIENT RISK ASSESSMENT	20
5.1	Groundwater Risk Assessment	20
5.2	Surface Water Risk Assessment	23
5.3	Waterway Setback	26
5.4	Summary	26
6	BROILER FARM STORMWATER MANGEMENT	27
6.1	Free-range Areas	29
6.2	Water Separation	29
6.3	Water Quality Assets	29
6.3.1	Vegetated Filter Strip	29
6.3.2	Sedimentation Basin	29
6.4	Retention Dam	30
6.4.1	With Water Re-use	30
6.4.2	Without Water Re-use	31
6.4.3	Water Balance Summary	31
6.5	Impacts on the local and regional drainage system and catchments	32
7	SUMMARY	34

## APPENDICES

- Appendix A Water Balance Model
- Appendix B Stormwater Concept Design

## LIST OF FIGURES

Figure A-1	MUSIC Model Schematic	37
Figure C-2	Mean Monthly Evaporation Rates for Moolort (BoM)	39
Figure C-4	Modelled Water Levels in the Proposed Dam (1987-2014) – with Irrigation & Water Re-use	40
Figure B-1	MUSIC Water Quality Model Schematic	47



**LIST OF TABLES**

Table A-1	Dam Stage Storage Relationship	38
Table A-2	Average Inflows, Rainfall and Losses	39

## 1 INTRODUCTION

In December 2017, the Victorian Civil and Administrative Tribunal (VCAT) directed Central Goldfields Shire Council to grant and issue a permit for the land at 141 Clarkes Road, Strathlea, to allow the use and development of the land for a 325,000 bird (six shed) broiler farm<sup>1</sup>.

ProTen Pty Ltd have acquired the land and wish to amend the existing planning permit to enable them to use and develop the site for a broiler farm that can be used as either a 445,000 bird conventional broiler farm or a 400,000 free-range farm. Two dwellings are also proposed on the adjacent property to the north at 39 Clarkes Road.

Water Technology has prepared this surface water management plan, to support the planning permit application to Central Goldfields Shire Council. The report considers both the conventional and free-range farm scenarios and documents the surface water management mitigation measures required for the broiler farm operation to:

- Mitigate any environmental impacts related to potential polluted or contaminated water runoff into the downstream receiving environment; and
- Comply with the *Victorian Code for Broiler Farms* (2009) requirements.

---

<sup>1</sup> VCAT Reference no. P672/2017 & Permit Application no. PA120/16



## 2 SITE DESCRIPTION

The Subject Site consists of two parcels of land at 141 Clarkes Road and 39 Clarkes Road, Moolort, as shown in Figure 2-1. The parcels are bounded by Clarkes Road to the west, Joyces Creek to the east, and adjoining farmland to the north and south. It has a frontage of just over 1,600 m along Clarkes Road:

- The parcel at 141 Clarkes Road has an area of approximately 106 hectares.
- The parcel at 39 Clarkes Road has an area of approximately 107 hectares.

Joyces Creek flows from south to north along the eastern boundary of the Subject Site. The sites have been cleared and are currently used for stock grazing.

The Subject Site, west of Joyces Creek, is in the Central Goldfields Shire. Joyces Creek and land to the east of Joyces Creek are in the Mount Alexander Shire. The two parcels are currently zoned Farming Zone (FZ). There is a Salinity Management Overlay (SMO), a Land Subject to Inundation Overlay (LSIO), and an Environmental Significance Overlay (ESO1) over the low-lying land along the west (Central Goldfields Shire) side of Joyce’s Creek. There is an Environmental Significance Overlay (ESO5) over Joyces Creek within the Mount Alexander Shire.

The broiler farm is to be located on the western part of the Subject Site adjacent to Clarkes Road, approximately 1.1 km south of the existing broiler farms at 1480 Rodborough Road and more than a kilometre west of Joyces Creek. The proposed operation area is outside of the overlays described above.

As shown in Figure 2-2, the western boundary of the Subject Site is located on a north-south ridge-line, with the land sloping down eastwards, towards Joyces Creek.

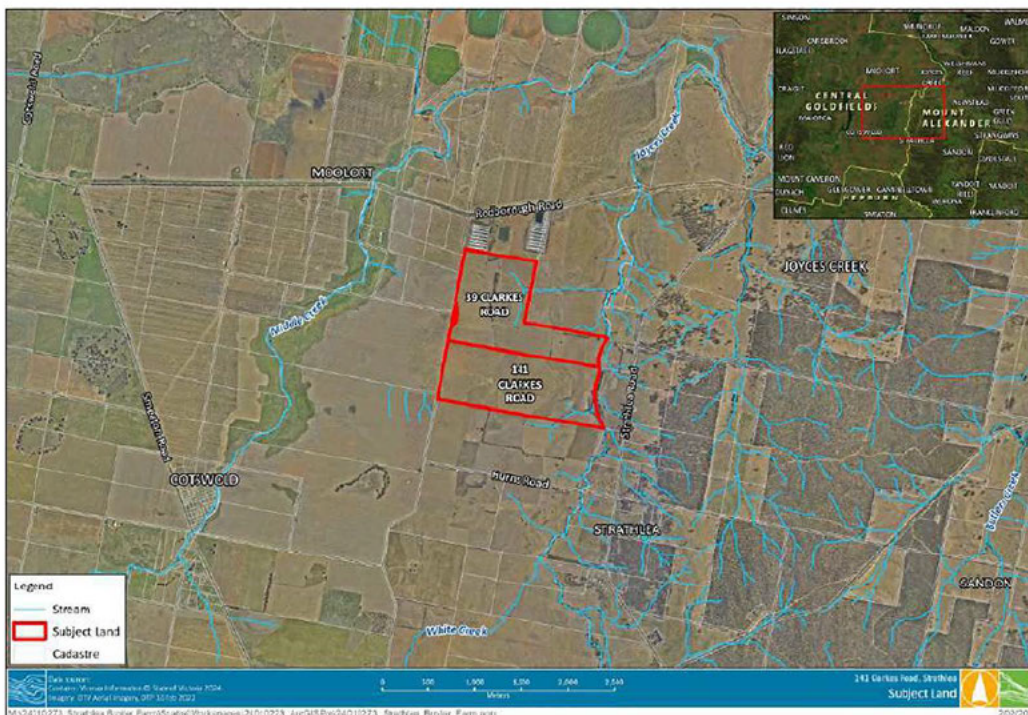






Figure 2-1 Subject Site Locality

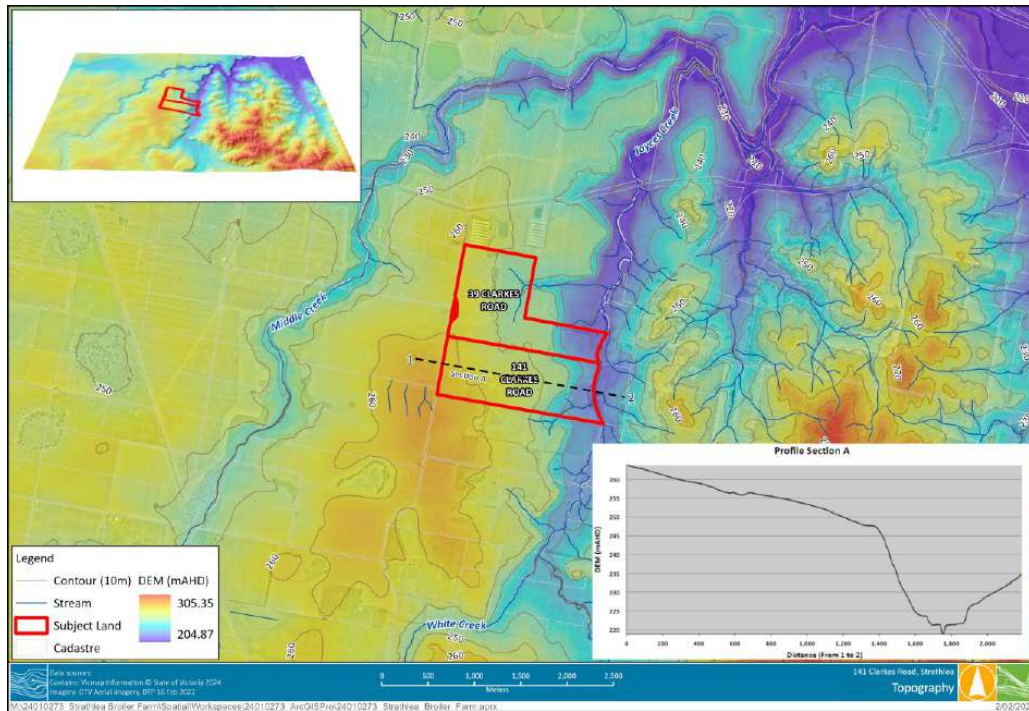


Figure 2-2 Subject Site and Surrounding Topography

## 2.1 Waterways

The local watercourses in the vicinity of the Subject Site (as identified on the VicMap watercourse GIS layer) are shown as pale blue lines in Figure 2-3. Joyce's Creek flows south to north across the eastern part of the Subject Site. The gully leading from the area to be developed continues northward beyond the Subject Site boundary until it connects with a minor watercourse. This watercourse continues to drain northward then eastward until it joins with Joyce's Creek approximately 1.6 km downstream of the Subject Site boundary.



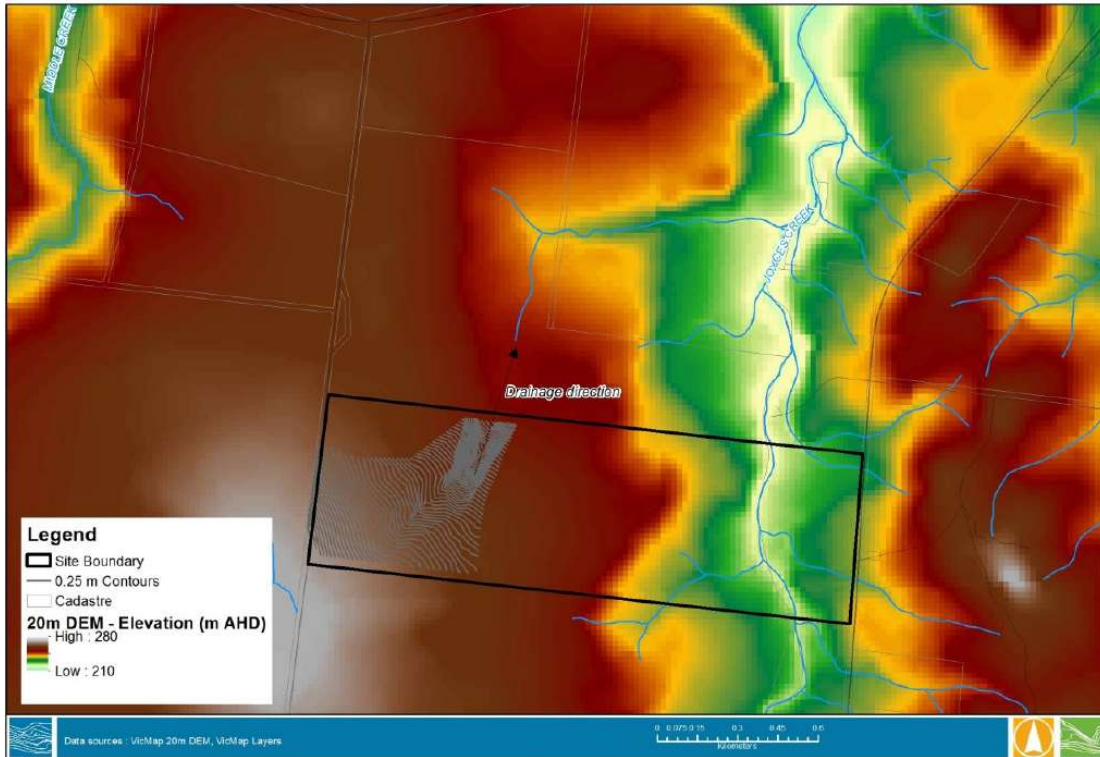


Figure 2-3 Waterways (141 Clarkes Road, Mooloort)

The catchment of Joyces Creek drains an area of approximately 187 km<sup>2</sup> upstream of the Subject Site. The catchment is shown in Figure 2-4. Joyces Creek is gauged upstream at Strathlea (DEPI site 407230). Joyces Creek is an intermittent stream which tends to remain dry through the summer and autumn months and typically experiences flows through winter and spring, and/or after periods of heavy rain. Joyces Creek flows into Cairn Curran Reservoir at Joyces Creek settlement located approximately 6 km northeast of the Subject Site. Cairn Curran Reservoir is owned and operated by [REDACTED] for irrigation and domestic and stock water supply.

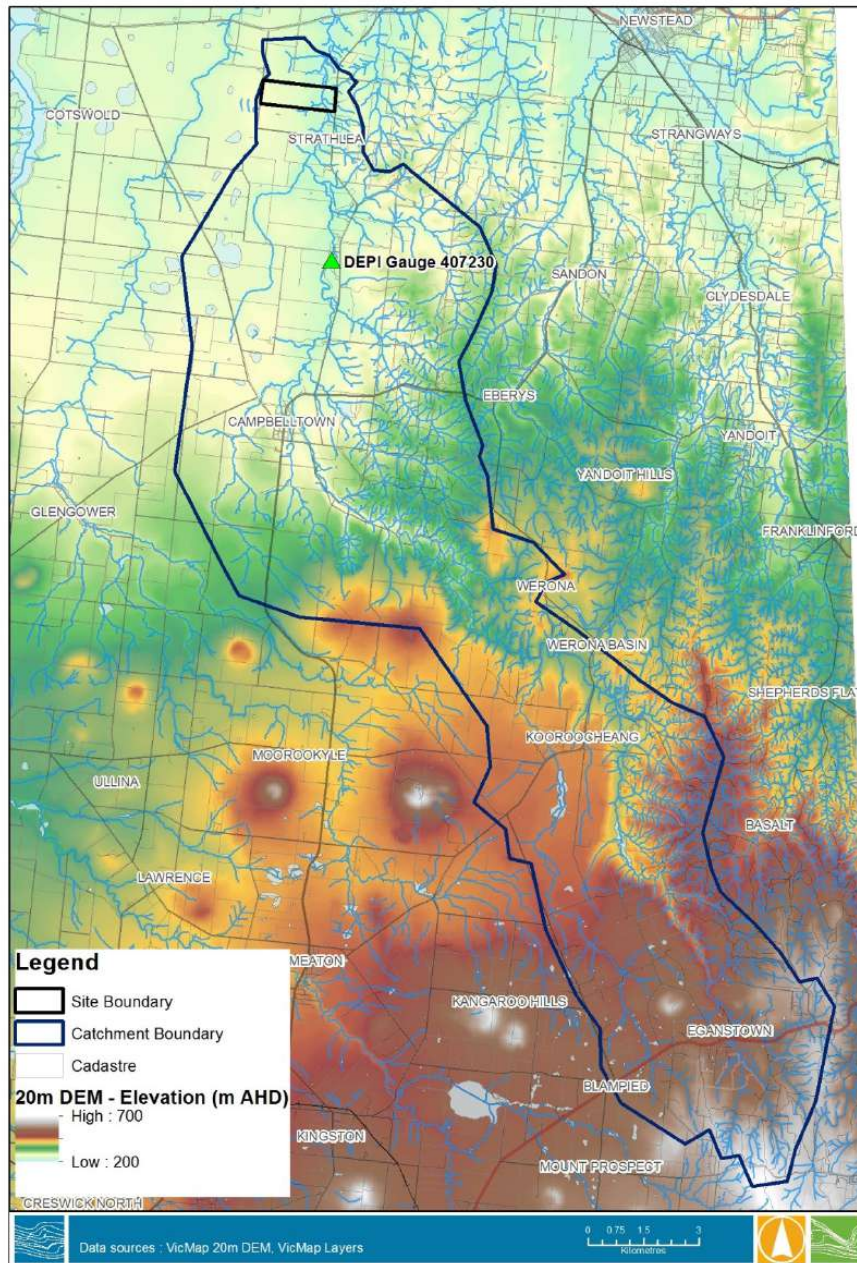
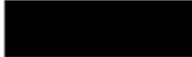


Figure 2-4 Catchment Area for Joyces Creek (141 Clarks Road, Mooloort)



### 3 PROPOSED DEVELOPMENT

The proposed development is for a bird broiler farm on 141 Clarkes Road, Mooloort, located on the highest ground in the southwest corner of the Subject Site, as shown in Figure 3-1. The proposed layout of the farm is shown in Figure 3-2. It will consist of 8 sheds arranged in rows perpendicular to Clarkes Road.

Stormwater runoff from the farm will be captured and managed via a dam, sized to retain run-off from a one-in-ten-year storm in accordance with the *Victorian Code for Broiler Farms* (2009). Stormwater will also be re-used for farm water supply, supplemented by groundwater during dry periods.



Figure 3-1 Location of Proposed Broiler Farm [Redacted]





Figure 3-2 Layout of the Proposed Broiler Farm at 141 Clarkes Road Strathlea

will operate the broiler farm either as a 445,000 bird conventional broiler farm or a 400,000 bird free-range farm.



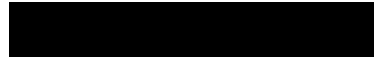
## 4 GROUNDWATER ASSESSMENT

### 4.1 Management Area

The Subject Site is located within the Mid-Loddon Groundwater Management Area (GMA), specifically the Moolort Zone, the southernmost area of the [REDACTED]. The Moolort zone management area in 2022/23 had 23 licenced abstractions of groundwater with a licence entitlement of 3,875.4 ML/yr, however, only 1,583.3 ML was abstracted in 2022/23, approximately 41% of the licence entitlement.







#### 4.2 Geology and Hydrogeology

There are two recognised aquifers in the Mid-Loddon GMA being the shallow Shepparton Formation and the deeper Calivil Formation, also referred to as the Deep Lead aquifer (Macumber, 2007). The Shepparton Formation generally occurs to depths of 60 m to 65 m and consists of clays and discontinuous ‘shoe-string’ sands, with thicker fan-delta sands best developed approximately 50 km north of the site. Groundwater flow direction is not reported for the Shepparton Formation in the vicinity of the site, largely due to the lack of abstraction from the formation and the coincidence with overly fractured rock geology.

The Calivil Formation underlies the clayey Shepparton Formation and is considered the regional aquifer in the vicinity of the site being comprised of very coarse sand, gravel and small boulders at the base of the formation in incised paleovalleys and grading upwards (getting shallower) to finer sand deposits. The Calivil Formation is about 45 m to 65 m thick and thins to the north, with groundwater flow generally from south to north (Macumber, 2007). The distinction between the deep Calivil and shallow Shepparton Formations is non-distinctive and generally determined by sediment type and colour.

It is reported by Macumber (2007) that the Moolort Zone of the GMA has extensive interbedded basalt valley flow which overlie both the deep Calivil and the shallower Shepparton Formations. The basalt flows are a fractured rock aquifer in their own right, with several monitoring bores screened in the shallow basalts. Macumber (2007) reports that groundwater within the basalt, Shepparton and Calivil Formations are interconnected as groundwater hydrographs show coincidental groundwater elevations and the same patterns of increasing and decreasing water levels. The basalt flows near Moolort, approximately 5 km north of the site, are up to 50 m in thickness.

The closest regularly monitored groundwater bore on the Visualising Victoria’s Groundwater website<sup>2</sup> (accessed February 2024) is bore 138653, located on Locks Lane (Figure 4-1), approximately 3 km northwest of the Subject Site, which reported a geological profile of 7.9 m of red grey clay from surface overlaying 23.1 m of weathered basalt over a further 9 m of clay. The co-located bore (138654) report 1.5 m of red clay from surface over 2 m of ‘weathered ash’ (considered to be weathered basalt) over 10 m of weathered basalt and then interbedded firm and weathered basalt to 40 m depth.

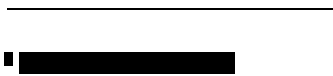
Bore (89796) (Figure 4-1) located less than 1 km from the Subject Site reported 1.98 m of top red volcanic soil from surface and then hard boulders and seams of clay to 7.62 m depth underlain by basalt and bluestone to 15.85 m depth.

The three closest bores to the site, indicate that the site is likely to be underlain by clay and basaltic geologies within the uppermost 10-20 m.

##### 4.2.1 Groundwater Levels

Groundwater levels at the Subject Site have not been recorded, however, groundwater monitoring bores at Locks Lane (Figure 4-1), approximately 3 km from the Subject Site identified as bores 138653 (screened between 78 m and 81 m depth in the Calivil Formation) and 138654 (screened from 37 m to 40 m depth screened in the basalt) are regularly monitored for groundwater levels and report groundwater levels on average deeper than 15 m below ground level (mbgl) from 2017 to 2023 in bore 138653 and on average deeper than 10 mbgl from 2017 to 2023 in bore 138654. Hydrographs for the two bores are provided below in Figure 4-2.

The general groundwater level trends from the two monitored bores suggest a slow decrease in groundwater levels from 2012 until 2022/23 where a slight increase in groundwater levels was observed, however it is





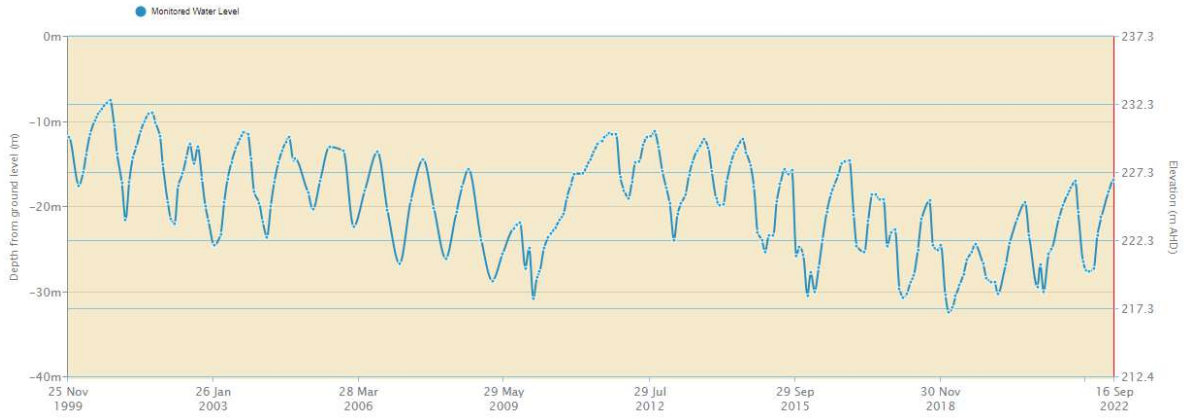
considered that this may be a response to the high rainfall year of 2022/23 and not a long-term increasing trend (Figure 4-2).

The Annual Mid-Loddon report ( ) for 2022/23 reported annual groundwater fluctuations at the nearby Locks Lane bore (138653) due to abstraction and seasonal changes in rainfall (Figure 4-2). The report identifies that groundwater is seasonally drawn down by about 6 m by early Autumn (March) after the lower summer rainfall period, and then recovers by approximately 6 m to a post-winter high following the higher rainfall period into Spring (November).

The , returned depth to groundwater at the subject site of 20-50 m, deeper than reported at the 138653 and 138654 monitoring bores, however for a conservative approach the shallower approximate 10 m to groundwater figure has been adopted. It is therefore interpreted that groundwater is likely to be at least 10 m below ground level at the subject site.



Monitoring for bore: 138653



Monitoring for bore: 138654

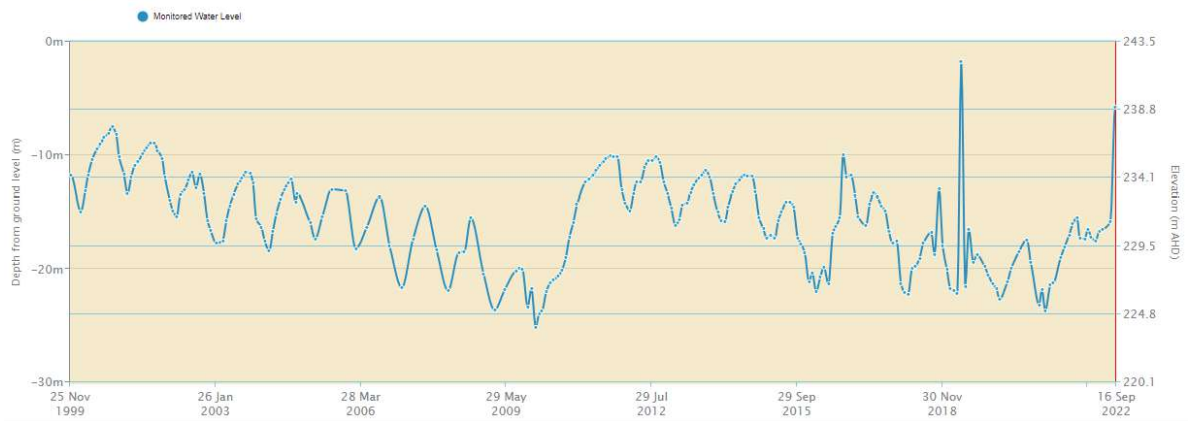


Figure 4-2: Groundwater Hydrographs from [Redacted]

3 [Redacted]

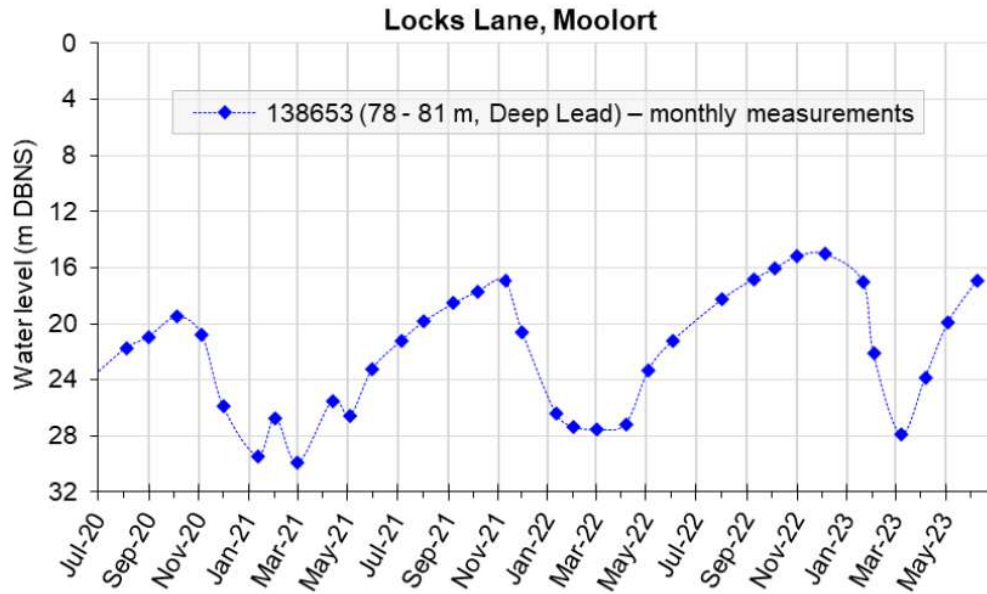


Figure 4-3: Locks Lane Groundwater Bore (138653) Monthly Groundwater Levels (2023)

**4.2.2 Groundwater Dependent Ecosystems**

Groundwater dependent ecosystems (GDEs) were identified within 2 km of the Subject Site (Figure 4-4). Based on the depth to groundwater and local clayey soils, the risk to groundwater is considered small and therefore GDEs at greater distances were not considered likely to be impacted by any potential nutrient export from the proposed broiler farm. Two waterways located to the east (Joyces Creek) and west (Middle Creek) are reported as having a high and moderate, respectively, potential for groundwater interaction from the fractured rock basaltic aquifer. However, at over 1 km from the subject site it is not considered that the broiler farm will have any impacts on the two waterway systems from a groundwater perspective.

There is a named wetland located approximately 1 km to the southwest of the Subject Site, identified as White Swamp on the VVG website, and having a low potential for groundwater interaction. Therefore, it is not considered likely to be impacted by any operations at the Subject Site. An unnamed wetland located south of the Subject Site is also reported to have a low potential for groundwater interaction and therefore not considered at any risk from the proposed broiler farm.

There are no identified springs within 2 km of the Subject Site.

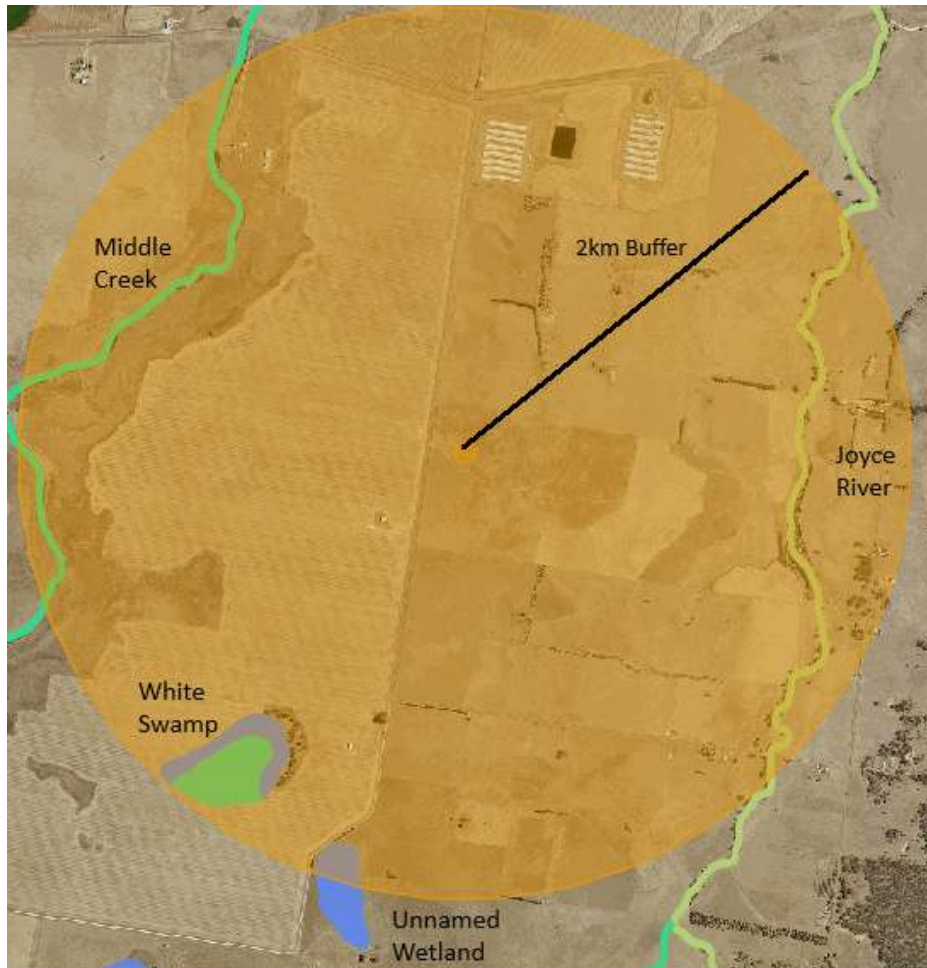


Figure 4-4: GDEs within a 2km buffer

#### 4.2.3 Soils

The [redacted] identifies that the soils in the vicinity of the Subject Site are vertosol class soils which are described as:

“Clay soils with shrink-swell properties that exhibit strong cracking when dry and at depth have slickensides and/or lenticular peds. Although many soils exhibit gilgai microrelief, this feature is not used in their definition.” And as having a “clay field texture or more than 35% or more clay thought the solum”

By the Australian Soil Classification (ASC) (Isbell, 2002). The vertosol (cracking clays) classification identifies the soils as high clay content indicating a low likelihood of infiltration of surface water to groundwater.

Based on the reported clayey soil type, the soil phosphorus level and the Phosphorus Buffering Index (PBI) was determined from the detailed description provided in Tables 22 and Table 23 respectively of Appendix C of the Egg Industry Environmental Guidelines (McGahan et al 2018). The clay based vertosol soil was

determined to have a soil phosphorus level of <24 (low) and a PBI of <280 (low) for surface water risk assessment purposes.

**4.2.4 Rainfall**

Rainfall data was sourced from the [redacted] Bridgewater weather station (station 81058), which is located 70 km north of the Subject Site and is considered to be representative of the entire GMA which is approximately 140 km in length, with Bridgewater being located roughly in the centre of the GMA.

The Bridgewater station recorded 652 mm of rain in the 2022/23 water year, reported as the 2<sup>nd</sup> highest rainfall total in the last 50 years ([redacted]). The Annual report provided a rainfall graph (Figure 4-2) from 1974 to 2023 indicating that rainfall has generally been below the long-term average with occasional years of high rainfall, but in general there is a deficit in rainfall compared to the long-term average. It is noted that 2010/11 and 2022/23 were above average rainfall years resulting in flooding and likely increased groundwater recharge.

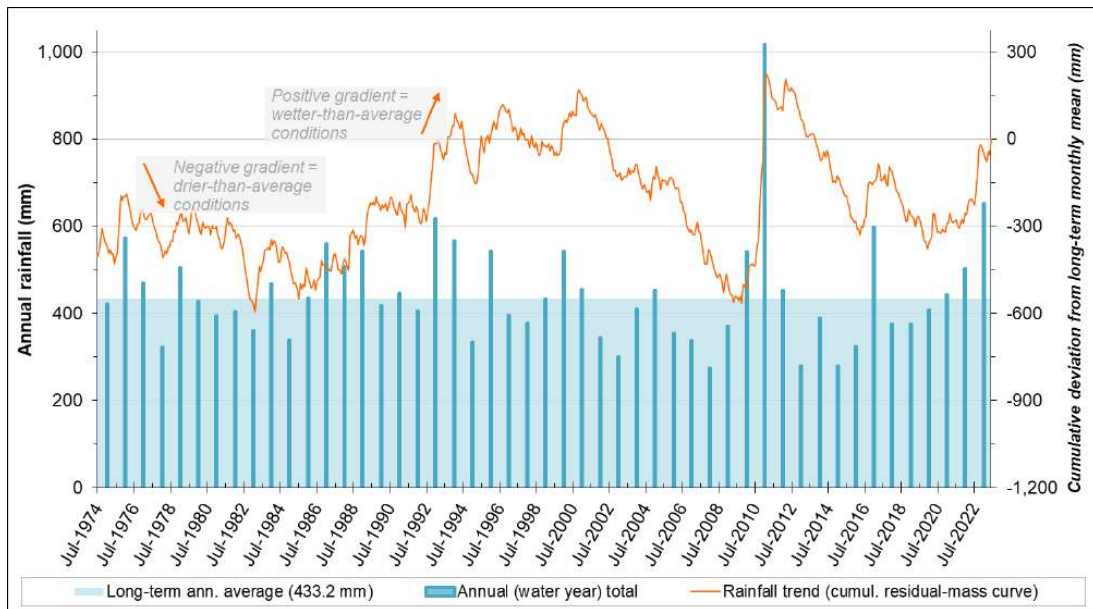


Figure 4-2 Rainfall recorded at Bridgewater [redacted]



## 5 BROILER FARM - NUTRIENT RISK ASSESSMENT

Poultry manure contains high levels of nitrogen, phosphorus and potassium. These nutrients may result in downstream contamination and/or the potential for blue-green algal blooms receiving waters.

A nutrient risk assessment for the proposed facility has been undertaken, based on the methodology detailed in Appendix C of the *Egg Industry Environmental Guidelines* (McGahan *et al* 2018). This methodology considers a range of factors, including rainfall characteristics, farm size, stocking rates, land shape, ground cover and a range of different soil parameters.

The following sections provide the background information utilised in the Risk Assessment for both surface water and groundwater.

### 5.1 Groundwater Risk Assessment

Based on the methodology and discussions provided in detail in Appendix C of the Egg Industry Environmental Guidelines [REDACTED] the following Nutrient Loading Risk Assessment for Groundwater has been developed. The results of the assessment are summarised in Table 5-1 for groundwater. The nutrient risk assessment results in an overall risk score for the facility of 285 for groundwater. This score fits the "Low Risk" band (scores of 100 to 400) as provided in the Guidelines. These results suggest the facility presents a low environmental risk in relation to the potential impacts of nutrient loading on groundwater.

Table 5-1 Nutrient Loading Risk Assessment for Groundwater

		Low	Moderate	High	Very High	Score	Risk for Factor	Comment
Runoff Factors	Factor Weight	1	2	4	8		Weight x Score	
Soil Profile	25	Heavy clay to surface: •Cracking clays •black earths	Constrained soils: •Duplex soils •Solodic soils	Poorly structured soils: •Massive earths	Well structured/draining soils: •Structured earths •Structured loam soils •sand	1	25 (25x1)	Based on the [redacted] designation of vertosol (cracking clay) soils and geological logs from near vicinity groundwater bores.
Groundwater	20	>10 m to GW where protected by clay or impermeable strata (otherwise >20m)	>2 m to GW where protected by clay or impermeable strata (otherwise >10m)	>2 m to unprotected GW	<2 m to unprotected GW	1	20 (20x1)	Based on a clay-based topsoil and monitored groundwater levels at nearby bores of > 10 m to groundwater over the previous 6 years.
Rainfall (mm/yr)	20	<5,000	5,000 - <10,000	10,000 - 20,000	>20,000	1	20 (20x1)	Based on the average rainfall at Bridgewater of 652 mm/yr
Pasture Type	15	>30% Lucerne	>30% deep rooted perennials	>30% shallow rooted perennials	<30% perennials	4	60 (15x4)	The pastures in range areas will be managed to maintain at least 80% vegetation coverage (EMP)

Farm Size (# of birds)	15	<10,000	10,000 - <60,000	60,000 - <250,000	>250,000	8	120 (15x8)	Based on a maximum stock of 400,000 birds (under free-range scenario)
Stocking Rate (birds/ha)*	5	<750	750 - <1,500	1,500 - <5,000	>5,000	8	40 (5x8)	Between 35,000 and 40,000 birds/ha
<b>Risk Assessment Score</b>							285	Low Risk 100 – 400 High risk 400 – 600 Very High >600



## 5.2 Surface Water Risk Assessment

Based on the methodology and discussions provided in detail in Appendix C of the Egg Industry Environmental Guidelines ( ), the following Nutrient Loading Risk Assessment for surface water has been developed. The results of the assessment are summarised in Table 5-2 for surface water. The nutrient risk assessment results in an overall risk score for the facility of 330 for surface water. This score fits the “Low Risk” band (scores of 100 to 400) as provided in the Guidelines. These results suggest the facility presents a low environmental risk in relation to the potential impacts of nutrient loading on surface waters.

Table 5-2 Nutrient Loading Risk Assessment for Surface Water

		Low	Moderate	High	Very High	Score	Risk for Factor	Comment
Runoff Factors	Factor Weight	1	2	4	8		Weight x Score	
Rainfall factor	20	<5,000	5,000 - <10,000	10,000 - 20,000	>20,000	1	20 (20x1)	Based on the average rainfall at Bridgewater of 652 mm/yr.
Distance to waterways	15	>200m	100-200m	30-100m	<30m	1	15 (15 x 1)	Greater than 300m (waterways to the east)
Farm Size (# of birds)	15	<10,000	10,000 - <60,000	60,000 - <250,000	>250,000	8	120 (8 x 15)	400,000 free-range farm
Soil Profile	10	Well structured/draining soils: • Structured earths • Structured loam soils • sand	Poorly structured soils: • Massive earths	Constrained soils: • Duplex soils • Solodic soils	Heavy clay to surface: • Cracking clays • black earths	8	80 (8x10)	Based on the [redacted] designation of vertosol (cracking clay) soils and geological logs from near vicinity groundwater bores.
Land Shape	10	Swales and contour banks	Uniform flat or sloping land	Slightly uneven, minor rills	Highly concentrated gully flow	2	20 (2 x 10)	Sloping land (west to east)
Groundcover	10	80-100%	60-<80%	45-<60%	<45%	1	10	The pastures in the range areas will likely

							(1 x 10)	be >85%
<b>Stocking Rate</b>	5	<750 birds/ha	750 - <1,500 birds/ha	1,500 - <5,000 birds/ha	>5,000 birds/ha	8	40 (8 x 5)	Between 35,000 and 40,000 birds/ha
<b>Slope</b>	5	<1	1-<3.75	3.75-15	>15	2	10 (2 x 5)	~1.6% slope - calculated from LiDAR
<b>Soil P</b>	5	Refer to explanatory notes (Egg Industry Environmental guidelines - Appendix C)				1	5 (1 x 5)	The clay based vertosol soil was determined to have a soil phosphorus level of <24 (low)
<b>Topsoil PBI</b>	5	>280 (clay)	140-280 (clay loam)	35 -<140 (sandy loam)	<35 (sand)	2	10 (2 x 5)	The clay based vertosol soil was determined to have a PBI of <280 (low)
<b>Risk Assessment Score</b>							330	Low Risk 100 – 400 High risk 400 – 600 Very High >600





### 5.3 Waterway Setback

Nutrient levels decrease significantly with distance from poultry sheds (see Figure 5-1). The shed closest to the designated waterway is more than 1000 m from the Joyces Creek and 500 m from the minor watercourse located to the north of the proposed development area. Additionally, manure deposition in areas more than 25 m away from a fixed shed only represent about 2% of total manure deposition (Wiedemann et. al., 2018, Larsen et al., 2017)<sup>4</sup>. The lower nutrient concentration and higher groundcover (minimum 80% vegetation coverage) in the pastures in the range areas pose a reduced environmental risk, even on high risk sites. Wiedemann et al. (2018) showed nutrient levels in areas more than 25 m away from sheds, “were typically within acceptable agronomic ranges for crop and pasture production and management”.

Additionally, the proposed stormwater management strategy incorporates a sediment basin and retention dam located between the proposed sheds and the receiving waterway, that will retain runoff from the proposed development site. The dam will have the capacity to retain the 1 in 10 year ARI flow volume, refer to Section 6.

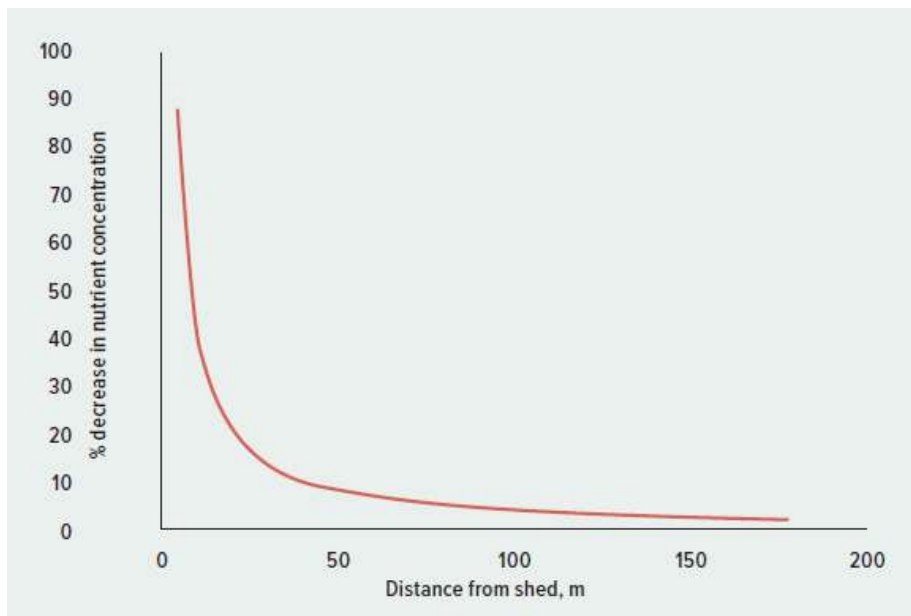


Figure 5-1 Combined soil nutrient (nitrate-N and available-P) levels and distance from shed [redacted]

### 5.4 Summary

The nutrient risk assessment results suggest the development is not likely to cause any contamination to groundwater and the downstream waterways, indicating no further investigations are required. Appropriate design and operational measures will further mitigate risk, as discussed in the following section.

<sup>4</sup> Both cited in the Enviro Fact Sheet [Free Range Production: Management of range areas](#)

## 6 BROILER FARM STORMWATER MANGEMENT

This section documents the proposed surface water management when the site operates as a broiler farm, with up to 445,000 birds on site.

The following are key elements of the proposed on site stormwater management strategy:

- Cleaning of sheds is done by removal of litter by bobcat followed by disinfection by high-pressure low-volume sprays. The sheds have dwarf concrete walls and floors to ensure no inflow or outflow of stormwater.
- Shed roofs are not guttered and roof runoff occurs directly to open grassed swales alongside and between the sheds.
- Stormwater runoff from the site (including grassed areas between sheds) is directed to a dam to the north-east of the proposed development via grassed swales.
- Water quality treatment measures are to be located upstream of the retention dam:
  - The proposed treatment train is discussed in Section 6.
- The dam will have the capacity to retain the 1 in 10 year ARI storm flow volume:
  - Sizing of the dam is supported by a detailed water balance analysis, discussed in Section 6.4.
- Groundwater will be used supplement the dam water supply during dry periods.
- Runoff from catchment areas upstream of the site is directed around the site and dam by cutoff drains and bunds (hence the dam is not “online” to the local runoff path).

Figure 6-1 show a schematic of the proposed stormwater concept design for the site.

The following sections detail:

- How external flows are managed relative to the development area:
- The proposed water quality treatment train for stormwater runoff generated within the site, which consists of:
  - Bunding and diversion of stormwater flows entering the site to avoid the mixing of runoff from within the free-range grazing areas and external catchment flows.
  - Vegetated buffer strips.
  - A sedimentation pond at the outfall of the swale (before dam).
  - A retention dam.



Figure 6-1 Stormwater Management Strategy Schematic



6.1 Free-range Areas

The free-range area between the sheds is to be drained to ensure all runoff travels north-east toward the treatment area and subsequently via the sedimentation basin to the dam for retention and re-use. All runoff from the free-range area for events up to a 10% AEP storm will be retained. The development area will be banded and provided with cut-off drainage to ensure all external runoff from the south-western external catchment is directed around the sheds and does not mix with the free-range areas.

6.2 Water Separation

Roof water will mix with surface water from the free-range areas. Separation of these water sources is not proposed within the stormwater management strategy. The stormwater treatment measures (swales and ponds) associated with the development areas have been sized accordingly.

6.3 Water Quality Assets

The runoff will be treated by a Vegetated Filter Strip and a sedimentation basin before flowing into the retaining dam.

6.3.1 Vegetated Filter Strip

A Vegetated Filter Strip will be constructed immediately upstream of the sedimentation basin. The Vegetated Filter Strip was sized in accordance with *Egg Industry Environmental Guidelines (Edition II – McGahan et al., 2018)*. The Vegetated Filter Strip width was determined to be a minimum of 2 m. Calculations supporting the concept design are provided in Appendix B.

6.3.2 Sedimentation Basin

A sedimentation basin will be constructed immediately upstream of the retaining dam. The sedimentation basin is sized to ensure >99% capture of 125 µm particles. The sediment basin provides two primary functions. Firstly, it assists in the control of nutrients by trapping fine sediments as nutrients (particularly phosphorus) are often bound in particulate form to the sediments. Secondly it minimises siltation of the dam and hence benefits the maintenance regime, as it is easier to desilt the sediment pond than the dam. Typical details of a sedimentation basin are shown in Figure 6-2 and Table 6-1. Calculations supporting the concept design are provided in Appendix B. Recommended management and maintenance regimes are also detailed in Appendix B.

Table 6-1 Sedimentation Basin Summary

Item	
Design Flow	0.127 m <sup>3</sup> /s
Sedimentation Basin Normal Water Level Surface Areas	600 m <sup>2</sup>
Capture Efficiency	99%
Permanent Water Depth	1.5 m

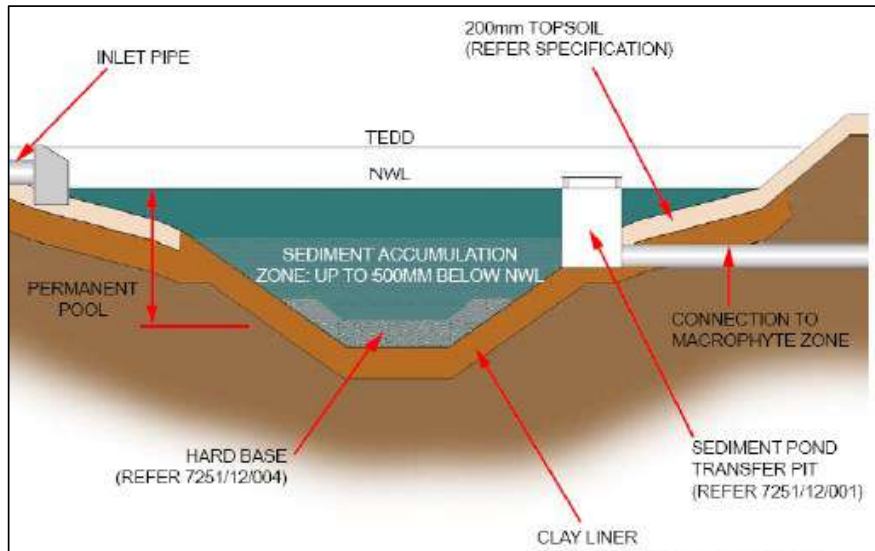


Figure 6-2 Typical Details of Sedimentation Basin (source: [redacted])

#### 6.4 Retention Dam

The proposed dam is sized to retain the 1 in 10 year ARI flow from the broiler farm site. A water balance analysis was undertaken which comprised the following steps:

1. Definition of the area and type of contributing sub-catchments;
2. Derivation of dam inflows, outflows and any losses:
  - a. Scenarios for the conventional operation (445,000 birds) and the free-range operation (400,000 birds) were considered.
3. Computation of the water balance and dam water level fluctuations for an extended period of available rainfall data.
4. Indicative sizing of the dam (stage-storage relationship) to comply with the *Victorian Code for Broiler Farms* (2009) requirements.

Two scenarios were considered in sizing the retention dam:

- With water re-use from the retention dam.
- Without water re-use from the retention dam.

##### 6.4.1 With Water Re-use

Dam water would be re-used to meet poultry seasonal water consumption rates, as follows:

- Chicken drinking water consumption of 8 L per bird per batch
- Cooling water consumption of 12 L per bird per batch in the warm season
- 3.4 batches in the cool season (April to October)





- 2.2 batches in the warm season (November to March)

Under the development proposal 400,000 birds was conservatively adopted to assess the size of a required retention dam (that is less re-use and more water in the dam).

This resulted in a cool season consumption estimate for the facility of 51,810 L/day, and a corresponding warm season consumption estimate of 117,333 L/day.

Proten have advised that approximately 8 ha of free-range and surrounding areas will be irrigated. They anticipate doing this 10 times per year with an application rate of about 0.2 ML/ha. This resulted in an additional of 16 ML/year of dam water re-used for irrigation. The water balance assumed that this would be applied on a daily basis, on a rate of ~44 m<sup>3</sup>/day.

Top-up pumping (from groundwater) would be required to maintain operational supply. The average annual water balance deficit is 13.68 ML/y. It is noted that, based on the VVG website, the site is located in an area of high salinity of 7,000 – 13,000 mg/L indicating groundwater may be unsuitable as livestock drinking water<sup>5</sup> without treatment. It is also noted that other water quality treatment measures (for bird health/bio-security reasons) may be required to enable water re-use. This is a separate consideration to the downstream receiving environment issues addressed in this report.

The retention dam size is 76,400 m<sup>3</sup>, with a footprint of about 1.9 ha.

**6.4.2 Without Water Re-use**

The retention dam was also sized considering no water re-use for landscape irrigation and bird drinking water and cooling. The design of the dam was therefore revised to understand the asset footprint, dependent on the level of water re-use allowed for.

Without water re-use, the retention dam size would be significantly larger, about 241,000 m<sup>3</sup>, with a footprint of about 5.4 ha. There is ample space within the Subject Site to accommodate either design,

**6.4.3 Water Balance Summary**

Table 6-2 summarises the retention basin sizing. Calculations supporting the concept design are provided in Appendix A.

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<sup>5</sup> <500 mg/L, as per (draft)   




Table 6-2 Water Balance Results – Retention Dam Sizes

	Option A - With Reuse and Landscape Irrigation*	Option B – Without Re-use
Dam Storage (m³)	76,374	240,751
Dam Area (m²)	18,762	54,176
Dam Max depth Adopted (m)	5	5
Number of days over topping in 27 years (Max 10 allowable events in 100 years)	5 (2 events, i.e. consecutive days)	4 (3 events, i.e. consecutive days)

\*Reuse determined conservatively based on 400,000 birds

### 6.5 Impacts on the local and regional drainage system and catchments

The water balance modelling has demonstrated that average outflow volumes from the dam are likely to be approximately 99% less than existing runoff volumes (for the sheds, free-range area and access tracks etc). Therefore, any impact on the local and regional drainage system would be due to a flow reduction resulting from retention of flows from the dam catchment and re-use.

As a worst-case scenario (in events which are completely captured by the dam), the proposed broiler farm will result in approximately 16.29 hectares of land being effectively removed from the catchment of Joyces Creek. This equates to a reduction in area of the catchment of Joyces Creek of less than 0.1%.

The method used to adjust the peak flows to the smaller catchment area, based on techniques described by Grayson et al. (1996)<sup>6</sup>, is represented by the following equation:

$$\frac{Q_d}{Q_e} = \left(\frac{A_d}{A_e}\right)^b$$

Where:

- Qd = discharge in developed conditions
- Qe discharge in existing conditions
- Ad = catchment area under developed conditions
- Ae = catchment area under existing conditions
- b = exponent

A value of 0.7 for exponent b is recommended for situations where limited or no catchment data is available (Grayson et al. 1996).

Based on this equation the reduction in catchment area would be expected to have the effect of reducing flows in Joyces Creek downstream of the site by about 0.06%. From this analysis it is concluded that the proposal will have no measurable impact on the surface water flow volumes or water quality in the Joyces Creek system.

The proposed development is unlikely to result in increases in flow in any storms up to the 1 in 100 year ARI, due to the retarding effect of the storage within the dam.

<sup>6</sup> [Redacted]

## 7 SUMMARY

This report sets out a recommended Stormwater Management Plan for the facility at 141 Clarkes Road, Strathlea. It has been prepared to support an amendment to a planning permit granted by VCAT to enable the use and development of the site for a broiler farm that can be used as either a 445,000 bird conventional broiler farm or a 400,000 free-range farm.

Two dwellings are also proposed on the adjacent property to the north at 39 Clarkes Road. These will have no significant hydrologic impact on the site or downstream environment and do not require any detailed investigation.

This Stormwater Management Strategy outlines how stormwater from the site will be captured, stored, treated and disposed of, In particular:

- Diversion of overland flow entering the site from the south-west from entering the poultry farm area and associated retention dam in events up to 10% AEP design storm.
- A proposed water quality treatment train conveying runoff from the free-range area to a proposed dam to avoid pollutants being washed offsite during storm events up to and including the 10% AEP storm event. The treatment train consists of:
  - Swales and Vegetated Buffer Strip;
  - A 600 m<sup>2</sup> sedimentation basin; and
  - A retaining dam.

The swale, buffer strip and sediment pond will allow for pre-treatment of surface runoff prior to the dam. These measures in conjunction with an appropriate maintenance regime will allow for appropriate water quality to be maintained within the dam.

There will be no discernible impact on the flow or water quality within Joyces Creek and the downstream environment.



## APPENDIX A WATER BALANCE MODEL





A water balance model for the poultry farm draining to the retention dam was developed to assess the likelihood of the dam overflowing. The dam is expected to retain the 10% AEP flow originating from the free-range area. It is estimated that an area of approximately 18.97 ha will drain to the dam (refer Figure 6-1), via a swale and sedimentation basin. A number of conservative assumptions have been adopted including ignoring dust suppression demands within the site.

A MUSIC model (Figure A-1) was built to determine the flows to the proposed dam generated by the development area, as a result of long-term rainfall and catchment conditions.

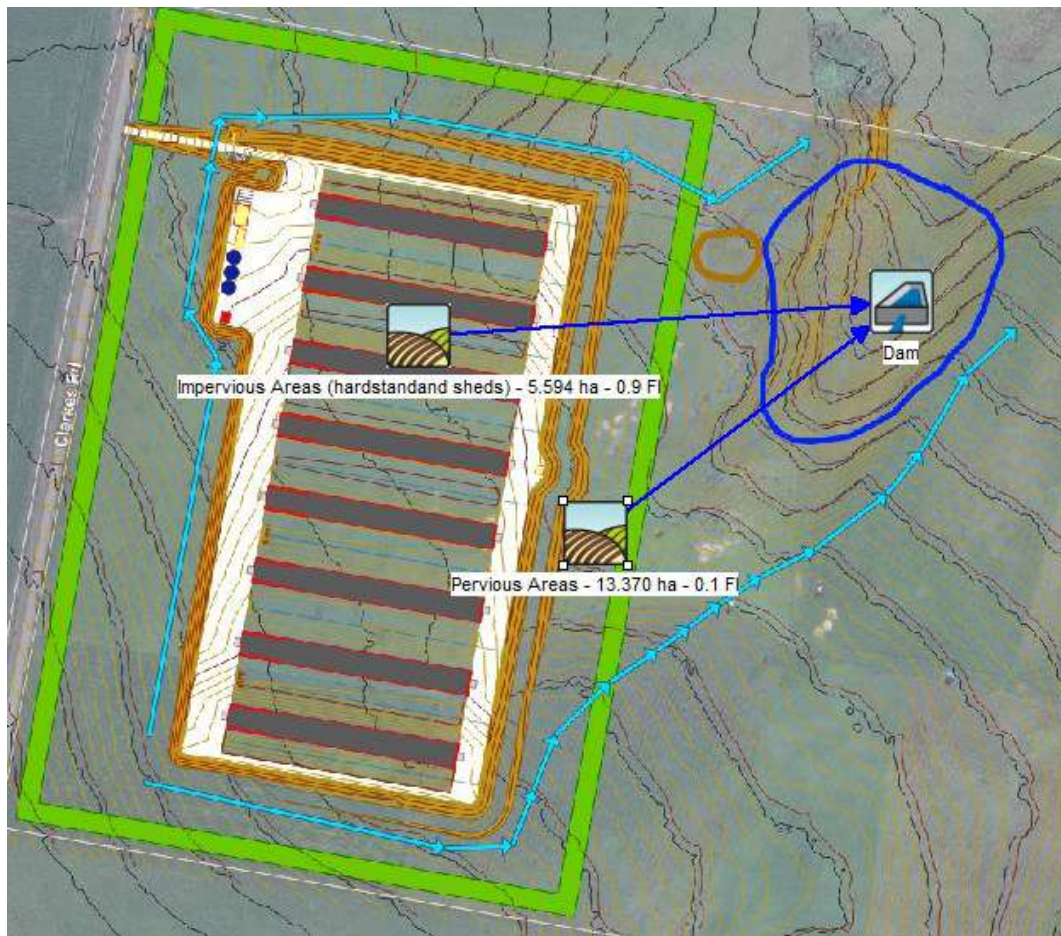


Figure A-1 MUSIC Model Schematic

## A-1 Stage-Storage Relationship

The adopted stage-storage relationship is shown in Table A-1.

Table A-1 Dam Stage Storage Relationship

Stage (m)	Storage (m <sup>3</sup> )	Area (m <sup>2</sup> )
0.00	-	-
0.25	3,003	12,180
0.50	6,090	12,519
0.75	9,262	12,859
1.00	12,520	13,200
1.25	15,862	13,542
1.50	19,290	13,884
1.75	22,804	14,227
2.00	26,404	14,571
2.25	30,090	14,916
2.50	33,862	15,262
2.75	37,721	15,608
3.00	41,667	15,955
3.25	45,699	16,303
3.50	49,818	16,652
3.75	54,025	17,002
4.00	58,319	17,352
4.25	62,701	17,703
4.50	67,171	18,055
4.75	71,728	18,407
5.00	76,374	18,761

## A-2 Dam Inflows and Outflows

Components of the water balance include dam inflows and outflows. In the case of this dam, the known inflows are catchment runoff. The known outflows are evapotranspiration, seepage, offtake for use in the poultry sheds and overflow.

### A-2-1 Rainfall and Catchment Runoff into Dam

Rainfall data from the [redacted] weather station as Joyce’s Creek was used in the MUSIC modelling for the period 1987-2014. The hard stand areas, driveways and sheds, have been included in the MUSIC model with a single node. Vegetated areas within the local dam catchment were incorporated into the MUSIC model as a separate node. The vegetated areas are represented as 10% Fraction Impervious (FI) and the hardstand area is 90% FI.

### A-2-2 Evaporation and Evapotranspiration and Dam Seepage

Mean monthly pan evaporation and potential evapotranspiration (PET) data were obtained from BoM gridded data for Moolort and adopted for modelling dam evaporation losses in the water balance model. The adopted mean monthly evaporation estimates are shown in Figure C-2. Seepage is the rate at which water seeps into





the ground (i.e. water loss through infiltration from the dam). A conservative seepage value of 0.00 mm/hr was applied based on the assumption that the proposed dam will be clay-lined.

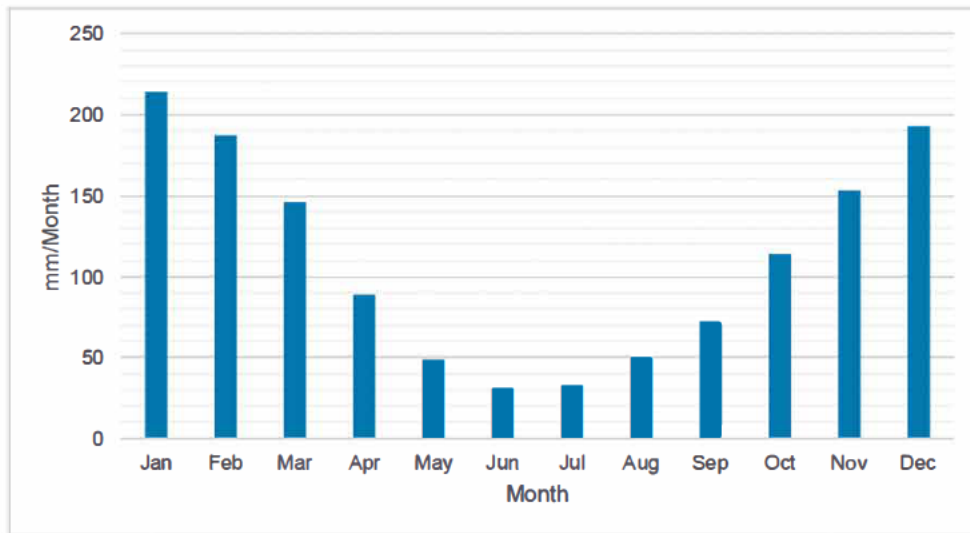


Figure C-2 Mean Monthly Evaporation Rates for Moolort (BoM)

### A-2-3 Outflow and Overflow

Spillway overflow will occur when the water level exceeds the crest of the dam embankment (approximate depth of 5 m) at the north-east of the dam. The rate of spillway overflow was assumed to be unlimited for the purpose of water balance modelling, though in reality it cannot exceed the rate of inflow.

Re-use demand was adopted as per Section 6.4.1.

### A-3 Water Balance Results

Average inflows, rainfall and losses (seepage and evaporation losses) are summarised in Table A-3 for the development scenario adopting re-use onsite. The modelled water level between 1987 and 2014 is shown as the green line in Figure C-4. During that period, the dam spillway is triggered 2 times over a 27-year period, including during periods of abnormally wet weather (almost consecutive period of spillway overflow).

Table A-2 Average Inflows, Rainfall and Losses

Water Component	Average (m <sup>3</sup> /year)
Direct Rainfall	9,659
Inflow	41,830
Outflow (reuse)	44,965
Evaporation	19,300
Seepage	0
<b>TOTAL</b>	<b>-19,395</b>



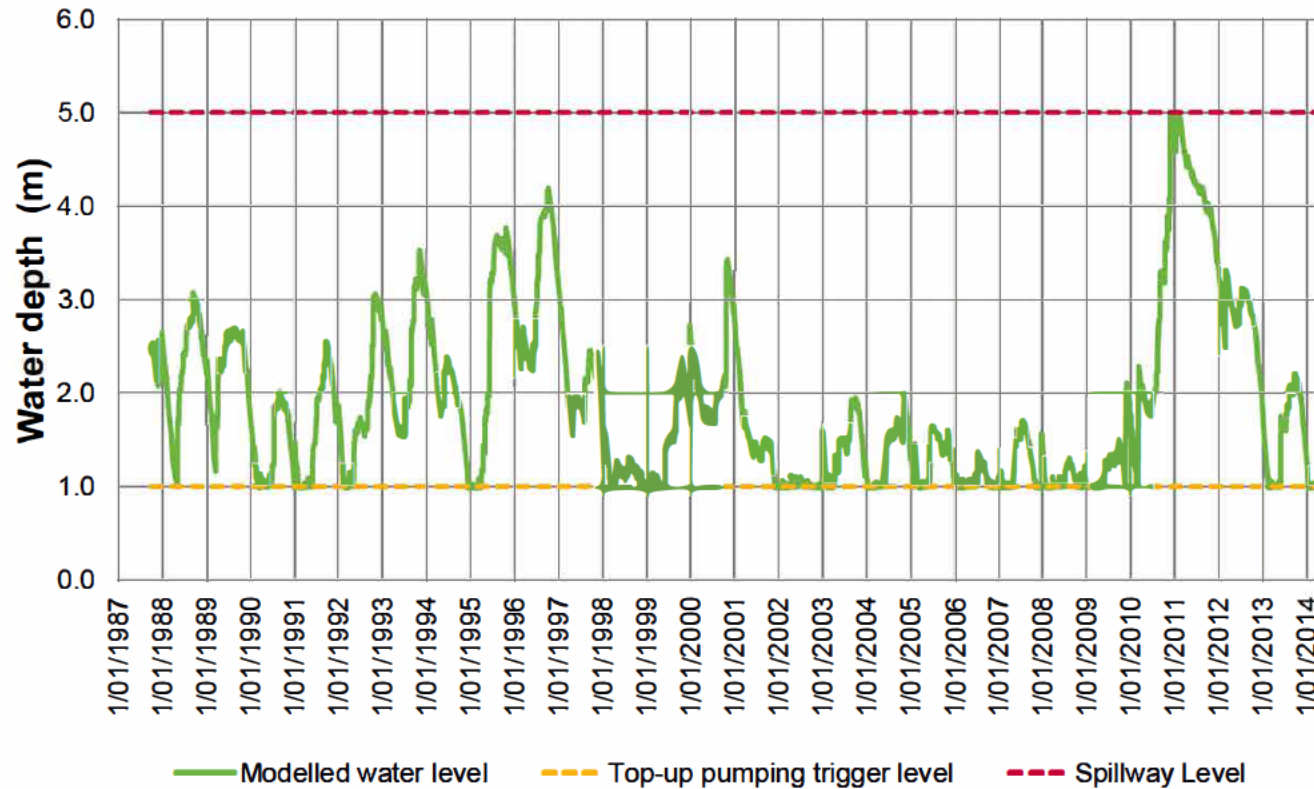


Figure C-4 Modelled Water Levels in the Proposed Dam (1987-2014) – with Irrigation & Water Re-use



APPENDIX B  
STORMWATER CONCEPT DESIGN



## B-1 Swale

The external catchment areas will be diverted around the development by swales and bunds, as discussed in Section 6. The design parameters and expected flow rates are shown in Table B-1. Indicative swale alignments are shown in Figure 6-1. The swales were sized to convey the 10% AEP flow (Q10), using a Mannings calculation with flows adopted from a Rational Method that uses BoM 2016 IFDs. The slopes of the swales have a 1 in 200 design gradient.

Table B-1 Swale Details (indicative)

Area	Catchment (ha)	Fraction Impervious (%)	Q <sub>10</sub> (m <sup>3</sup> /s)	Top Width (m)	Batter Slopes	Depth (m)	Vegetation height (mm)	Capacity (m <sup>3</sup> /s)
Full development area catchment at sedimentation basin inlet	16.29	37%	0.842	3.5	1 in 3	0.6	10 (Manning n = 0.035)	0.94
Western diversion around development area	4.8	10%	0.15	3	1 in 3	0.5	10 (Manning n = 0.035)	0.58
Southern diversion around development area	6.7	10%	0.205	3	1 in 3	0.3	10 (Manning n = 0.035)	0.58

Given existing levels within the site, the swale gradient may be steeper than the 1 in 200 assumed above. It is appropriate for the design to be optimised at the detailed design stage and variations to slope can be readily accommodated.

## B-2 Sedimentation Basin

The sedimentation basin has been sized to ensure >99% removal of 125 µm particles, for a Q<sub>3 month</sub> of 127 l/s (Rational method). The catchment for the sedimentation basin includes the sheds, hardstand areas, and vegetated areas upstream of the retention basin. The calculations used to assess this are outlined below. The catchment areas area was assumed to have a fraction imperviousness (FI) of 37% based on the delineation of the area into two categories:

Hardstand areas (including sheds) = 5.59 ha at 0.9 % FI

Vegetated areas upstream of the retention dam = 10.8 ha at 0.1 % FI

### Sedimentation Basin Calculations

**Fair and Geyer Equation – Equ 10.3 WSUD Stormwater Technical Manual (2005)**

$$R = 1 - \left[ 1 + \frac{1}{n} \cdot \frac{v_s}{Q/A} \cdot \frac{(d_e + d_p)}{(d_e + d^*)} \right]^{-n} \quad \lambda = 1 - 1/n; \quad n = \frac{1}{1-\lambda}$$

R = fraction of Initial Solids Removed = 80 - 90 % typ.

- R = fraction of Initial Solids Removed = 80 - 90 % typ.
- d<sub>p</sub> = Depth of permanent pool
- d<sub>e</sub> = Extended detention depth above permanent pool
- d\* = depth below permanent pool sufficient to retain particles (lower of 1.0m or d<sub>p</sub>)
- Q = design flow (Typically 3 month, 6 month or 1 year flow)
- A = Basin Surface Area
- n = turbulence parameter (see above) = 1 for significant short circuiting and turbulence  
= 5 for insignificant short circuiting and turbulence
- v<sub>s</sub> = setting velocity for particles

Table 7.2 Settling velocities under ideal conditions (Maryland Department of Environment, 1987)

Classification of Particle size range	Particle diameter (µm)	Settling velocities (mm/s)
Very coarse sand	2000	200
Coarse sand	1000	100
Medium sand	500	53
Fine sand	250	26
Very fine sand	125	11
Coarse silt	62	2.3
Medium silt	31	0.66
Fine silt	16	0.18
Very fine silt	8	0.04
Clay	4	0.011

**Calculations**

**Sediment Target =**  *Very fine sand for standard residential developments*

v<sub>s</sub> =  m/s This value changes for different particle size target

d<sub>e</sub> =  m Extended Detention Depth *max 0.35 for MW*

d<sub>p</sub> =  m Permanent Pool Volume Depth *1.5 m is a common depth for standard residential developments*

d\* =  m (lower of 1 m and d<sub>p</sub>)

(d<sub>e</sub>+d<sub>p</sub>) =  (d<sub>e</sub>+d\*)

Q =  m<sup>3</sup>/s Ration Method

A =  m<sup>2</sup> Area of the sediment basin at NWL

L/W =  Length/Width Ratio (assuming rectangular shape)

v<sub>s</sub> =  Q/A

λ =  Pond shape assumption (see figure 10.5 above)

n =

**Fraction of Initial Solids Removed**

R =



### B-3 Vegetated Filter Strip

Vegetated filter strips are vegetated areas that act as buffer strips, promoting deposition of organic matter from free-range areas. They should be designed in accordance with Appendix I in Egg Industry Environmental Guidelines (May 2018). Adopted factors for Vegetated filter strip determination:

- **Low to Rainfall factor**, based on a Rainfall Erosivity of below 1425 for Strathlea;
- **High Soil Erodibility factor**, based on a K factor of 0.05 (e.g. Cracking Clays);
- **Low Slope factor**, based on a 2% slope (500 m length of slope); and
- **Good Cover**, with pastures in the low intensity range areas managed to maintain at least 80% vegetation coverage.

As shown in Table B-3, the width of potential vegetated filter strips is a minimum of 2 m.

Table B-3 Vegetated Filter Strips Width Determination

Rainfall Factor	Soil Erodibility	Slope	Filter Width (Poor Cover)	Filter Width (Good Cover)
LOW	LOW	LOW	2	2
		MEDIUM	3	2
		HIGH	6	2
	MEDIUM	LOW	2	2
		MEDIUM	5	2
		HIGH	11	2
	HIGH	LOW	2	2
		MEDIUM	7	4
		HIGH	16	10

### B-4 Water Quality

A MUSIC model was developed (Figure B-1) to assess runoff quality generated by the development area upstream of the proposed dam. The vegetated filter strip was represented by a swale network along the eastern side of the development area.

Table B-4 and Table B-5 outline the swale and sedimentation basin parameters adopted, while default MUSIC 'agricultural' catchment nodes were adopted to represent the local sub-catchment areas.

Table B-4

	Conveyance and VFS swales	Swales within free range area
Depth (m)	0.5	0.4
Top Width (m)	4	8
Slope (%)	1-2	0.5
Batter Slope	1 in 4	1 in 10
Vegetation Height (m)	0.1*	0.1

\*0.2 for VFS

Table B-5 MUSIC Swale Properties

	Sediment Basin Parameter
Surface Area (m <sup>2</sup> )	600
Permanent Pool Volume (m <sup>3</sup> )	350
Extended Detention Depth (m)	0.35



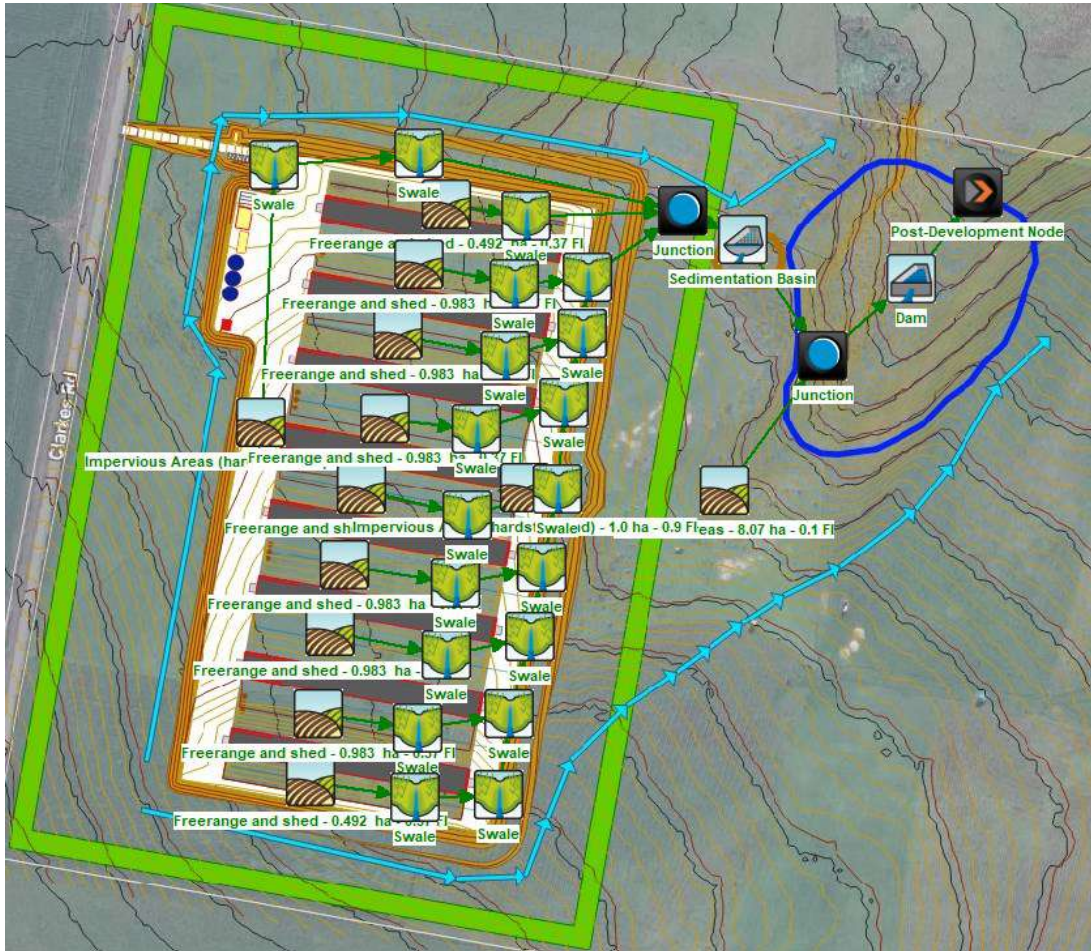


Figure B-1 MUSIC Water Quality Model Schematic

Table B-6 summarises the pollutant reduction achieved through the treatment train directly upstream of the proposed retention dam, additionally this table summarises the catchment area pollutants in the pre-development scenario.

Table B-6 Results

	Sources		Residual Load		% Reduction	
	Pre	Post	Pre	Post	Pre	Post
Flow (ML/yr)	14.2	41.8	14.2	41.3	0	1.2
Total Suspended Solids (kg/yr)	2,480	9,490	2,480	2,850	0	70
Total Phosphorus (kg/yr)	6.62	25.4	6.62	10	0	60.6
Total Nitrogen (kg/yr)	47.6	173	47.6	88.8	0	48.7
Gross Pollutants (kg/yr)	336	1.21E+03	336	145	0	88

Table B-7 summarises the pollutant reduction achieved through the treatment train inclusive of the proposed retention dam. Re-use demand had not been incorporated in this water quality pollutant analysis.

Table B-7 Results

	Sources		Residual Load		% Reduction	
	Pre	Post	Pre	Post	Pre	Post
Flow (ML/yr)	14.2	41.8	14.2	0.537	0	98.7
Total Suspended Solids (kg/yr)	2,480	9,490	2,480	11	0	99.9
Total Phosphorus (kg/yr)	6.62	25.4	6.62	7.12E-02	0	99.7
Total Nitrogen (kg/yr)	47.6	173	47.6	0.767	0	99.6
Gross Pollutants (kg/yr)	336	1,210	336	0	0	100



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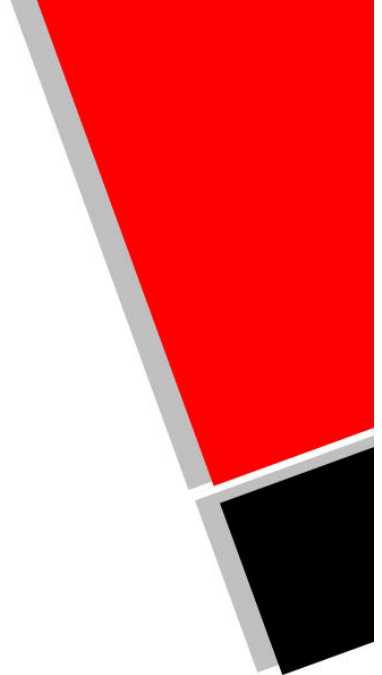
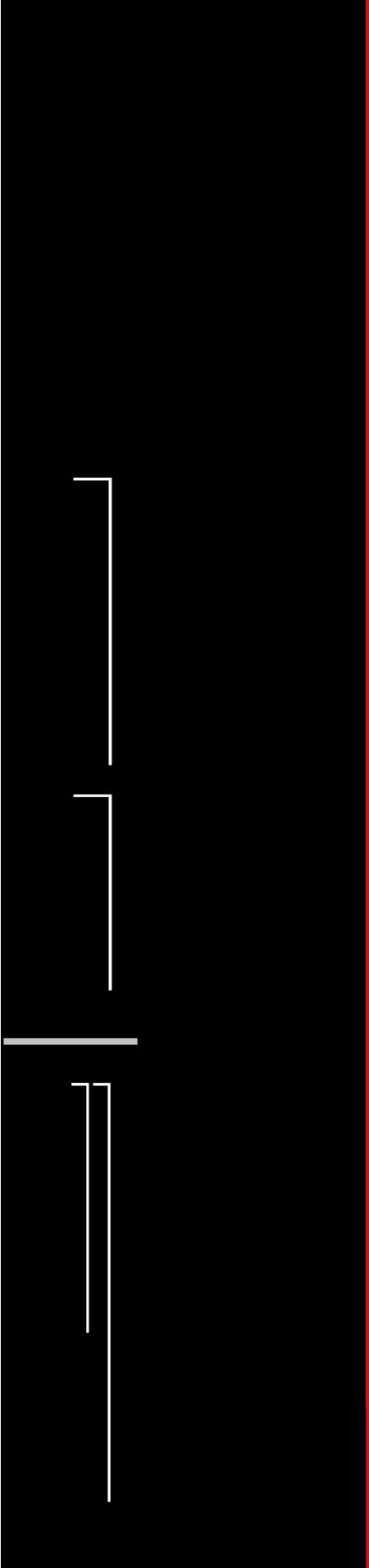
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## **ENVIRONMENTAL MANAGEMENT PLAN**

**Broiler Farm**  
39 & 141 Clarkes Road, Strathlea

April 2024  
(2632R02)



**ENVIRONMENTAL MANAGEMENT PLAN**

[REDACTED]

**BROILER FARM**

**39 & 141 CLARKES ROAD, STRATHLEA**

April 2024

[REDACTED]

[REDACTED]

[REDACTED]

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Document Revision Record			
Issue No.	Date	Document ID	Details of Revision
1	April 2024	2632R02	Original

*Environmental Management Plan*  
[REDACTED] - Broiler Farm  
39 & 141 Clarkes Road, Strathlea  
April 2024

(2632R02)



**CONTENTS**

1 INTRODUCTION ..... 1

2 ENVIRONMENTAL ISSUES ..... 2

2.1 LANDSCAPING ..... 3

2.2 FACILITY STANDARDS..... 4

2.3 ROADS AND TRAFFIC ..... 7

2.4 FEED, WATER AND ELECTRICITY SUPPLY ..... 10

2.5 NOISE ..... 12

2.6 LITTER AND ODOUR ..... 15

2.7 LITTER AND DUST ..... 18

2.8 CHEMICALS ..... 22

2.9 BIRD MANAGEMENT AND BIOSECURITY..... 27

2.10 OTHER ENVIRONMENTAL CONTROLS ..... 32

2.11 CONTINGENCY PLANS ..... 35

2.12 COMMUNITY PARTICIPATION ..... 38

3.0 IMPLEMENTING THE EMP ..... 36

3.1 OPERATIONS AND INCIDENT RECORDS ..... 36

3.2 INCIDENT INVESTIGATION..... 36

3.3 EMERGENCY CONTACTS ..... 36

4.0 AUDITING AND REPORTING..... 36

4.1 BIENNIAL FARM ASSESSMENT - EMP AND PLANNING PERMIT ..... 36

4.2 COMPLAINTS HANDLING ..... 37

4.3 PUBLIC AND LOCAL COUNCIL REPORTING ..... 37

**APPENDICES**

**APPENDIX 1- WASTE MINIMISATION PLAN**

*Environmental Management Plan*

39 & 141 Clarkes Road, Strathlea  
 April 2024

(2632R02)

## 1 INTRODUCTION

The Victorian Code for Broiler Farms 2009 (the Code) provides a basis for the planning, design, assessment, approval, construction, operation and management of broiler farms in Victoria. A key element of this Code is an emphasis on ongoing environmental management. It requires the preparation and approval by the responsible authority of an Environmental Management Plan (EMP) for every new farm or expansion of an existing farm.

This EMP has been specifically prepared to address the requirements of Condition XXXXX of Planning Permit No. XXXXX for the use and development of a broiler farm at 39 & 141 Clarks Road, Strathlea. It must be noted that if there is any discrepancy between the permit and this EMP, the conditions of the permit shall prevail.

The objective of this EMP is to ensure best practice management and a commitment to continuous improvement in environmental performance. It is intended to minimise the risk of any adverse event with potential to impact on the environment or the surrounding community during the ongoing operation of the broiler farm. The responsibility for compliance with the EMP rests with the permit holder.

This EMP reflects the requirements in the Code. It incorporates to the maximum current practical extent the requirements of the Operation and Management Section (Element 6) of the Code and is subject to a process of continuous improvement. It reflects the following principles:

- Pursuit of continuous improvement in environmental performance.
- Provision of flexibility but without vagueness that could permit selective interpretation of acceptable performance.
- Provision where possible of plans or actions, not merely statements of good intentions.
- Compatibility with the need for objective independent auditing, and
- Support to the Code objective, which encourages investment decisions consistent with a long term strategy for the industry.

This EMP comprises thirteen categories of environmental matters. Each has an objective and a series of Management Measures required to achieve the objective. Prime responsibility (Grower and/or Processor) for each measure is indicated. The method of monitoring each measure is stated as well as the indicator or trigger level which will initiate contingency action. The nature of contingency actions and their timing are also provided.

Additional information has not been given for Management Measures where the requirements are clear and where Growers and Auditors can readily assess compliance.

**Environmental Management Plan**  
**Broiler Farm**  
**39 & 141 Clarks Road, Strathlea**  
April 2024

(2632R02)

## **2 ENVIRONMENTAL MATTERS**

Within this EMP the environmental matters pertinent to the broiler farm have been grouped into 13 categories as follows:

1. Landscaping
2. Facilities Standards
3. Roads and Traffic
4. Feed, Water and Electricity Supply
5. Odour
6. Noise
7. Litter and Dust
8. Chemicals
9. Bird Management and Biosecurity
10. Range Area Management
11. Other Environmental Controls
12. Contingency Plans
13. Community Participation

Overall strategies and control measures to minimise impacts and continuously improve environmental performance on each matter are provided in the following sections.

Careful monitoring and application of the appropriate measures can manage potential impacts in relation to each matter.

***Environmental Management Plan***

**39 & 141 Clarkes Road, Strathlea**  
*April 2024*

(2632R02)

**2.1 LANDSCAPING**

EMP Objective: To complete the landscape plantings specified in the approved landscape plan within six months of commencement of the use with the intent to provide effective visual screening of the broiler farm sheds and to maintain these over the life of the farm.

Management Measures / Strategies	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.1.1 The implementation of the landscape plan approved by the responsible authority as part of the planning permit will effectively screen broiler farm sheds and assist with odour dispersion.	Grower	Inspection will confirm that planting has been undertaken within 6 months of the use of the sheds commencing.	Dead or diseased plants or inconsistencies with approved plan will initiate corrective action.	Dead, diseased, or incorrect plants to be replaced with new plants within 2 months where seasonal conditions allow.
2.1.2 Landscaping is well maintained with dead/diseased plants regularly replaced.  Watering, weed control and mulching activities are consistent with advice from a qualified horticulturist and/or local nurseries.	Grower	Inspections to be monthly for 12 months after planting and every 6 months thereafter to ensure plant health and weed control.	Dead and diseased plants trigger replacement of plants.  Supplementary watering triggered by dry soil conditions consistent with advice from a qualified horticulturist and/or local nurseries.	Replacement within 2 months if consistent with seasonal and weather conditions. Species to be consistent with original plantings unless deemed unsuitable by death or disease.  Manual watering will be undertaken as soil moisture conditions require.
2.1.3 Changes that will improve farm performance against EMP 2.1 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.	Both <sup>(1)</sup>			

Note (1): "Both" means responsibility shared by both Grower and Processor

**Environmental Management Plan**

**39 & 141 Clarkes Road, Strathlea**

April 2024

(2632R02)

**2.2 FACILITY STANDARDS**

EMP Objective: To maintain and enhance buildings, site drainage and equipment in order to minimise off-site impacts and maximise operational efficiency and safety.

<b>Management Measures</b>	<b>Prime Resp.</b>	<b>Monitoring</b>	<b>Indicator / Trigger Level</b>	<b>Contingency Actions/Timing</b>
2.2.1 Sheds and associated areas are maintained to the Processor and Grower agreed best practice specifications and to planning permit requirements.	Both	Quarterly inspection and comparison will demonstrate compliance with both Processor and Permit requirements.	Non-compliance with Processor or Permit requirements will trigger remedial action.	Minor remedial actions will be completed prior to placement of next batch. Major remedial action will be undertaken within one year.
2.2.2 Equipment and structures are in place and maintained to enable odour, dust and noise control as required by the planning permit.	Grower	Manufacturer documentation for major equipment is available to demonstrate design performance standards are being achieved.	Failures in performance will trigger remedial action.	Repairs will occur prior to next batch unless there is potential for immediate offsite noise or other impacts. In these cases, timings in Sections 2.5, 2.6 and 2.12 apply.
2.2.3 External finishes of sheds exhibit low visual intrusion. Walls are a pale green colorbond. Coolpad surfaces to be non-reflective. Roofs are to be constructed of custom orb. Energy consumption, fan usage and animal welfare have been considered in selecting the roof surface.	Grower	Quarterly inspection will confirm compliance with planning permit requirements and maintenance of external cladding in a sound condition.	Surfaces found not to be in sound condition are to be repaired.	Minor remedial actions will be completed prior to placement of subsequent batch. Major remedial action will be undertaken within one year.
2.2.4 Best practice equipment for monitoring and control of temperature, ventilation, cooling and water consumption is used and maintained to manufacturer's specifications.	Grower	Continuous monitoring of shed via programmable controllers (to adjust heaters, fans and cooling systems) and remote alarms (to alert on temperature, water and electricity excursions).	Deviation of conditions outside processor's performance tolerances initiates remedial action. Power or water failures initiate corrective action.	Remedial / corrective action to be undertaken immediately to protect environmental performance and bird welfare.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.2.5 Drainage to soil or waterways is not impaired or contaminated by shed or farm operations. Spilt feed or litter will be cleaned up to prevent contamination of surface waters. No free flowing water from shed cleaning / sanitisation will be allowed to leave the shed.</p>	<p>Grower</p>	<p>Inspections at the time of feed deliveries, litter clean out, shed cleaning and rainfall events will confirm compliance.</p>	<p>Any incidences of spilt feed or litter will initiate remedial action.</p> <p>Any failures of the drainage system to efficiently deliver surface water flows into the retention dam or wetland, as appropriate, will initiate remedial action.</p>	<p>Clean up of spilt feed or litter will occur within 8 hours of detection.</p> <p>Rectification of drainage problems will be undertaken within one month.</p>
<p>2.2.6 Stormwater runoff from roofs, hardstand aprons and free-range area is controlled and collected by grassed swales and pipes and directed via a sedimentation basin into the retention dam.</p>	<p>Grower</p>	<p>Confirmation via inspections at the time of rainfall events.</p>	<p>Drains, swales and pipes are to have sufficient capacity to adequately drain required areas and deliver flows via grassed swales to the sediment basin and retention dam. Failure to achieve this will initiate remedial action.</p>	<p>Remedial actions will be undertaken within one month.</p>
<p>2.2.7 Stormwater systems including drains, pipes, swales, sediment basin and dam are maintained in accordance with planning permit requirements to ensure no pollution of surface or groundwater.</p>	<p>Grower</p>	<p>Confirmation via inspections at the time of rainfall events.</p>	<p>Drains and swales are maintained in shape and slope (typically greater than 1:300) and are free of weeds and blockages. Failure to achieve this will initiate remedial action.</p>	<p>Remedial actions will be undertaken within one month.</p>
<p>2.2.8 Water from the retention dam is to be recycled for drinking, cooling and landscape purposes.</p>	<p>Grower</p>	<p>Confirmation by quarterly inspection of infrastructure.</p>	<p>Observation of non-compliance will initiate remedial action.</p>	<p>Remedial actions undertaken immediately if there is a threat to bird welfare or within one month.</p>
<p>2.2.9 An emergency backup generator(s) is provided of a sufficient capacity to provide all power requirements to maintain normal operating conditions in all sheds and will start automatically upon power failures.</p>	<p>Grower</p>	<p>Confirmation by weekly testing.</p>	<p>Failure to automatically start or insufficient supply generation will initiate remedial action.</p>	<p>Repair of any faults will be undertaken within 24 hours.</p>



Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.2.10 Changes that will improve farm performance against EMP 2.2 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.	Both			

**2.3 ROADS AND TRAFFIC**

EMP Objective: To maintain roads, gates and turning areas in good condition and in accordance with the planning permit in order to prevent interference with other traffic or the generation of unreasonable off-site noise or dust.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.3.1 Access to the farm is from Clarkes Road via an all-weather road. Access to Clarkes Road is to be from Pyrenees Highway via Locks Lane and Rodborough Road.	Grower	Compliance confirmed by inspection.	Non-compliance with Permit requirements will trigger remedial action.	Minor remedial actions will be completed prior to placement of next batch. Major remedial action will be undertaken within one year.
2.3.2 The access point is constructed to the standards specified by the responsible authority in the Planning Permit. The access road allows for truck parking off Clarkes Road.	Grower	Compliance confirmed by inspection.	Non-compliance with Permit requirements will trigger remedial action.	Minor remedial actions will be completed prior to placement of next batch. Major remedial action will be undertaken within one year.
2.3.3 The surface of access roads, loading areas and car parking spaces are surfaced with crushed rock and maintained to allow safe entry, all weather access and minimise generation of dust.	Grower	Inspection of road infrastructure will be undertaken at the completion of each batch.	If all weather access is compromised or fine surface particles are likely to lead to dust generation, remedial action will be triggered.	Repairs or upgrades where needed will be completed prior to the next major period of truck movements.
2.3.4 Road drains, stormwater runoff areas and culverts etc., are maintained to ensure efficient functioning.	Grower	Confirmation via inspections at the time of rainfall events.	Failure to achieve efficient functioning will initiate remedial action.	Remedial actions will be undertaken within one month

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.3.5 All vehicles and machinery, including that used by contractors servicing the farm, are maintained to ensure that noise or emissions do not exceed the manufacturer's specification.</p> <p>Registered vehicles will conform with all relevant regulations.</p>	Both	Monitoring will be via the recording of noise complaints from neighbours.	Regular substantiated noise complaints from neighbours will initiate remedial action.	Where offsite vehicle noise has been identified as a concern, testing of vehicles by an appropriate acoustics engineer will occur to ensure compliance with the noise standards listed in this Section.
<p>2.3.6 All transport contractors will be instructed to undertake all operations with the objective of minimising noise generation, both on-site and in the farm vicinity.</p>	Both	Monitoring will be via the recording of noise complaints from neighbours.	Regular substantiated noise complaints from neighbours will initiate remedial action.	Where regular verified off site noise complaints occur, appropriate measure to address the causes will be implemented. These may include modifications to operational practices and/or equipment, provision of physical barriers, reductions in vehicle speeds etc.
<p>2.3.7 Farm layout and standing instructions to transport contractors ensure that all vehicles leave the property in a forward direction.</p>	Both	Monitoring will be via regular observations by farm manager.	Observation of non-compliance will initiate remedial action.	Transport contractors will be instructed to ensure that all vehicles leave the property in a forward direction.
<p>2.3.8 Bird pick-up contractors are instructed and supervised to ensure bird pick-up and associated activities completed during the night are undertaken with care to reduce the generation of noise.</p>	Both	Monitoring will be via regular observations by farm manager.	Observation of non-compliance will initiate remedial action.	Bird pick up contractors will be instructed to ensure that all activities are undertaken with care to reduce the generation of noise.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.3.9 During pick up and loading activities (generally 8.30 pm to 7.00 am) the time that shed doors remain open will be minimised as far as practicable. If delays occur, shed doors will remain closed.	Both	Monitoring will be via regular observations by farm manager.	Observation of non-compliance will initiate remedial action.	Bird pick up contractors will be instructed to ensure shed doors are closed during delays in pick up activities.
2.3.10 Vehicle speed limit of 30 kph applies on the farm and is implemented by training, signs and instructions to drivers in order to limit noise and dust levels.	Grower	Monitoring will be via visual monitoring of vehicle movements, monthly inspection of signs and annual inspection of documented instructions.	Observation of non-compliance will initiate remedial action.	Vehicle operators will be instructed to maintain speeds below 30 kph.  Documentation of instructions to operators will be updated where required and advised to drivers.
2.3.11 Contract transport drivers are aware of their responsibilities and are familiar with their transport accident emergency plan.	Processor	Compliance confirmed by inspection of plan.	Observation of non-compliance will initiate remedial action.	Emergency plans updated to comply with industry emergency procedures and with VicRoads Transport Regulations
2.3.12 Changes that will improve farm performance against EMP 2.3 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.	Both			

**2.4 FEED, WATER AND ELECTRICITY SUPPLY**

EMP Objective: To ensure the quality and continuity of feed, water and shed ambient conditions in order to protect animal welfare and prevent environmental impacts.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.4.1 Well designed, constructed and totally enclosed silos and feed systems are installed in order to provide fresh and wholesome feed without any contamination or generation of dust.	Both	Inspections of the feed delivery system will be undertaken daily and problems will be recorded in the farm records.	Observation of any breach will initiate remedial action.	Where feed delivery to birds is compromised by the problem, repairs will be undertaken immediately. All other repairs will be undertaken with one week.
2.4.2 Wild-bird proofing on shed and silos is installed and maintained, and vermin and rodents are controlled by targeted and environmentally safe baiting, using substances and protocols that meet Government and Processor requirements.	Grower	Inspections of the bird proofing will be undertaken prior to each batch of chickens being placed.  Vermin and rodent control actions and baiting program will be recorded in the farm records and checked against protocols.	Observation of any breach will initiate remedial action.  Non-compliance with protocols will initiate corrective action.	Where biosecurity of birds is compromised, repairs will be undertaken immediately.  Farm staff will be instructed to comply with relevant protocols for next cycle of control and / or baiting.
2.4.3 Equipment and procedures for clean-up of feed spills are available and any such spills are removed daily.	Grower	Inspections will be undertaken daily for spillages or breaches of the feed system – these will be recorded in the farm records.	Observation of any breach will initiate remedial action.	Spillages will be cleaned up within 24 hours.  Where feed delivery to birds is compromised by the problem, repairs will be undertaken immediately. All other repairs will be undertaken with one week.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.4.4 Potable drinking water for birds is provided from the retention dam. This can be supplemented from the bore located in Rodborough Road. Water is suitably treated before being used in the sheds.</p> <p>On-site water storage tanks provide in excess of 2 days back up supply of water (at peak summer usage). These are connected to automatic backup water pumps.</p>	Grower	<p>Water supply failure sensors will be connected to the Farm Alarm System which will immediately alert the farm manager by mobile phone.</p> <p>The system has automatic leak failsafe and shut off facility. The sheds' computer controller system constantly monitors water flow.</p>	<p>The Farm Alarm System will alert farm manager if consumption is outside set parameters – normally + or – 50% of previous day's consumption.</p> <p>The system will automatically cut off water supply to the shed(s) if it detects abnormal flows.</p>	The farm manager or staff will immediately identify the problem and take corrective action.
<p>2.4.5 Electrical power and phase supply alarms are installed to alert the Grower of supply failure and a standby generator is provided to maintain normal operating conditions.</p>	Grower	Monitoring is via daily inspection and weekly testing.	<p>Generator starts automatically upon supply / phase failure.</p> <p>Mains electricity supply failure sensors will be connected to the Farm Alarm System which will immediately alert the farm manager by mobile phone.</p>	The farm manager or staff will immediately identify the problem and take corrective action.
<p>2.4.6 Changes that will improve farm performance against the EMP 2.4 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.</p>	Both			



**2.5 NOISE**

EMP Objective: To ensure that farm operations control transmission of unreasonable noise by using appropriate design, maintenance and operating procedures.

<b>Management Measures</b>	<b>Prime Resp.</b>	<b>Monitoring</b>	<b>Indicator / Trigger Level</b>	<b>Contingency Actions/Timing</b>
2.5.1 Correct operation of all mechanical equipment, including shed fans, feed systems and other equipment minimises the offsite transmission of mechanical noise or vibration.	Grower	Inspection prior to placement of each batch will confirm compliance.	Observation of an equipment failure will initiate remedial action.	Equipment failures causing increased off-site noise are repaired within one week. Other equipment problems are repaired in a timely manner to prevent deterioration and occurrence of excessive offsite noise.
2.5.2 Equipment and electrical generators have effective noise suppressers / screens.	Grower	Inspection prior to placement of each batch will confirm compliance.	Observation of ineffective noise suppressers / screens will initiate remedial action.	Problems causing increased off-site noise are repaired within one week. Other equipment problems are repaired in a timely manner to prevent deterioration / occurrence of excessive offsite noise.
2.5.3 Equipment is installed, operated and maintained according to manufacturer's requirements or to the instructions from an appropriately qualified technical source.	Grower	Annual comparison of equipment operations with register of manufacturer instructions available on the farm for all equipment with potential for off-site noise.	Observation of failure to comply with manufacturers or technician's instructions will initiate remedial action.	Farm staff will be instructed to comply with relevant instructions
2.5.4 Vehicle reversing is minimised, and visual alarms are used (subject to safety considerations also being met).	Grower	Monitoring will be via regular observations by farm manager.	Observation of non-compliance will initiate remedial action.	Drivers will be instructed to minimise vehicle reversing.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.5.5 Only low noise alarms, house alarms, visual alarms and pagers are used to minimise the occurrence and duration of noise affecting neighbours.	Grower	Inspection confirms installation of low noise alarms, house alarms, visual alarms and paging systems.  Alarms are to be checked on a daily basis.	Failure of any alarm will trigger corrective action.	Failed alarms will be repaired as soon as possible upon detection.
2.5.6 Ventilation fans, tractors, farm vehicles, transport vehicles and other equipment are maintained, repaired and operate to the manufacturer's requirements.	Both	All equipment is to be inspected annually via an equipment checklist.	Observation of failure to comply with manufacturer's requirements will initiate remedial action.	Equipment failures causing increased off-site noise are repaired within one week. Other equipment problems are repaired in a timely manner to prevent deterioration and occurrence of excessive offsite noise.
2.5.7 Bird pick-up contractors have the equipment and training specified by Processors and comply with procedures that minimise noise.  Noise control practices require the arrival, operation and departure of pick up trucks and crews to be conducted as quietly as possible.	Both	Procedures will be reviewed annually with the Processor.  Monitoring will be via regular observations by farm manager.	Observation of non-compliance will initiate remedial action.	Bird pick up contractors will be instructed to ensure that arrival, operation and departure of pick up trucks and crews will be conducted as quietly as possible.
2.5.8 Bird pick-up contractors are supervised and suggested practical improvements or details of noisy contractor performance are reported to the Processor for action.	Both	Monitoring will be via regular observations by farm manager.  Breaches of noise control practice will be recorded in the farm records and reported to the processor.	Breaches will initiate remedial action.	Breaches to be reported to the processor within 24 hours for follow up with the pick up contractor.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.5.9 Farm noise levels comply with the noise criteria specified in the EPA's Noise Protocols (Publication 1826.4).	Both	Monitoring will be via the recording of noise complaints from neighbours.	All complaints will be investigated to identify the cause. For two or more substantiated noise complaints where the cause cannot be identified, an acoustic assessment will be undertaken to determine compliance with EPA's Noise Protocol levels. Where compliance cannot be demonstrated, remedial action will be initiated.	Where remedial action is required, the principles and measures outlined in the National Environmental Management System for the Meat Chicken Industry – Rural Industries Research & Development Corporation Publication No. 03/038 will be adopted and implemented to meet the noise limits specified in the Noise Protocols.
2.5.10 All physical noise barriers specified in the planning permit and/or endorsed plans are maintained in effective condition.	Grower	Monitoring will be via regular observations by farm manager.	Observation of non-compliance will initiate remedial action.	Failures likely to cause increased off-site noise are repaired within one week. Other problems are repaired in a timely manner to prevent deterioration and occurrence of excessive offsite noise.
2.5.11 Changes that will improve farm performance against EMP 2.5 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.	Both			

**2.6 LITTER AND ODOUR**

EMP Objective: To ensure that farm operations do not produce odours that unreasonably impact on neighbours.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.6.1 Prior to the introduction of the birds to the sheds, a 4 to 10 centimetre layer of dry sawdust, wood shavings, rice hulls or similar material (deep litter) is distributed over the entire shed floor.	Grower	Confirmation will be via inspection of litter by farm manager prior to placement of birds at beginning of each batch.	Insufficient depth of litter will trigger remedial action.	Litter will be topped up to sufficient depth prior to placement of birds.
2.6.2 Farm records of key conditions and activities with potential to affect odour generation are in place, maintained and periodically reviewed as the basis for minimisation and control of odours. It addresses relevant factors including feed, drinker, litter and climate conditions and flock age.	Grower	Confirmation will be via inspection of records at the end of each batch.  Regular observations of odour generation by farm manager.	Observation of non-compliance, either due to incomplete recording or verified odour complaints will trigger corrective actions.  Observation of higher than normal odour generation from a shed will trigger remedial action.	In cases of incomplete recording, staff will be instructed to carry out proper recording.  In instances of high odour emissions or verified complaints, investigations of the cause will be undertaken, and appropriate contingency action plans will be enacted. These may include those detailed in Section 2.11 and in various industry information. These cover odours caused by: <ul style="list-style-type: none"> <li>- Drinker malfunction</li> <li>- Poor ventilation</li> <li>- Wet droppings</li> <li>- Dead birds</li> <li>- Chemicals</li> </ul>
2.6.3 Drinker technology equivalent in performance to industry best practice is installed and maintained to minimise formation of wet litter.	Both	Annual comparison with other Growers in the Processor group, benchmarking between Processors and reviews of research and commercial literature.  Daily inspection of drinkers and litter.	Where comparisons and inspections confirm that best practice operating performance is not being achieved, mitigation measures are to be investigated.  Instances of wet litter will initiate remedial action.	Consistent poor performance dictates that drinker technology be repaired / upgraded in a timely manner to prevent further deterioration and wet litter.  Wet litter is to be removed from sheds within 24 hours of detection.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.6.4 Feed is sourced only from mills capable of producing an output of assured quality. Feed formulation objectives for meat chicken diets demonstrably minimise the risk of feed-sourced odour on farms.</p> <p>Feed delivery flexibility will be typically provided by availability of at least 3 silos (approx. 45 tonne capacity) for every 2 sheds.</p>	Processor	Monitoring will be via regular observations of odour by farm manager.	Any individual feed batches strongly linked to excessive odour will be reported to the Processor.	<p>Suspect batches will be reviewed, changed or removed immediately when the sources of the problem are known.</p> <p>Feed formulations suspected to be causing excessive odour or wet litter will be adjusted no later than for the next bird growing cycle.</p>
<p>2.6.5 Litter will be kept in a friable condition. Target moisture content of litter is between 15% &amp; 30% (by weight). This equates to litter being friable and not dusty or sticky. This will be achieved by:</p> <ul style="list-style-type: none"> <li>• Shed floors constructed of concrete (eliminating moisture seepage into sheds),</li> <li>• shed floors built up above adjacent surface levels with compacted clay,</li> <li>• using best practice drinkers,</li> <li>• undertaking adequate ventilation</li> <li>• regular checking of litter condition and drinker performance.</li> </ul>	Grower	Litter and drinker monitoring will be undertaken via regular visual inspections (typically 3 to 4 times daily). Litter condition will be recorded in the farm records of key conditions.	<p>Litter moisture content outside the target range will trigger investigation of the cause and corrective action will be initiated. Wet litter is material that forms a sticky ball when squeezed by hand. Litter which is sticky will trigger remedial action.</p> <p>Areas of wet litter observed will trigger remedial action.</p>	<p>The following contingency actions may be implemented:</p> <ul style="list-style-type: none"> <li>• increasing heating</li> <li>• increasing ventilation</li> <li>• manual turning of litter</li> <li>• adding additional fresh litter</li> <li>• repairs to faulty equipment.</li> </ul> <p>Actions will be implemented to dry litter and counteract high moisture levels prior to onset of excessive odour generation.</p>

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.6.6 Wind direction and strength forecasts will be taken into account when scheduling shed clean out operations at the end of the production cycle. Operations will be suspended where wind conditions have the potential to cause odour impacts beyond the farm boundary.</p>	<p>Grower</p>	<p>Monitoring of wind forecasts prior to shed cleanout operations. These are to be recorded on the Farm record of key conditions. Complaints from neighbours regarding unacceptable odour will be recorded be recorded in the farm's complaint records.</p>	<p>Wind conditions are forecast that are likely to cause odour impacts beyond the farm boundary.</p> <p>Odour complaints will be investigated and if found to be substantiated, corrective action will be initiated.</p>	<p>Clean out operations will be suspended until the adverse wind conditions abate.</p>
<p>2.6.7 Any major wet litter areas are removed and replaced with dry litter where practicable.</p>	<p>Grower</p>	<p>Monitoring will be undertaken via regular visual inspections (typically 3 to 4 times daily).</p>	<p>Areas of wet litter exceeding 10 square metres will trigger remedial action</p>	<p>Where the wet litter is likely to generate high levels of odour, it will be replaced with dry litter within 24 hours.</p> <p>Otherwise, contingency actions including gas heating, ventilation adjustment and others detailed in industry information will be implemented to dry litter.</p>
<p>2.6.8 Changes that will improve farm performance against the EMP 2.6 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.</p>	<p>Both</p>			



**2.7 LITTER AND DUST**

EMP Objective: To minimise odour or dust generation with potential for off-site impact and to ensure that no land or water contamination occurs.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.7.1 Prior to the introduction of the birds to the sheds, a 4 to 10 centimetre layer of dry sawdust, wood shavings, rice hulls or similar material (deep litter) is distributed over the entire shed floor.	Grower	Confirmation will be via inspection of litter by farm manager prior to placement of birds at beginning of each batch.	Insufficient depth of litter will trigger remedial action.	Litter will be topped up to sufficient depth prior to placement of birds.
2.7.2 A concrete hardstand of area sufficient for clean-out operations is provided and maintained at the shed entrances.	Grower	Confirmation will be via inspection by farm manager during cleanout operations.	Concrete area to be large enough and maintained to allow for effective use of litter removal machinery. Insufficient size or surface conditions which do not allow for effective use of farm machinery will trigger remedial action.	Concrete hardstand area to be increased to sufficient size or repaired prior to clean out of next batch.
2.7.3 Litter will be kept in a friable condition. Target moisture content of litter is between 15% & 30% (by weight). This equates to litter being friable and not dusty or sticky. This will be achieved by: <ul style="list-style-type: none"> <li>• using best practice drinkers,</li> <li>• undertaking adequate ventilation</li> <li>• maintaining appropriate shed humidity</li> <li>• regular checking of litter condition and drinker performance.</li> </ul>	Grower	Litter and drinker monitoring will be undertaken via visual inspections (3 to 4 times per day). Litter condition will be recorded in the farm records of key conditions.	Litter moisture content below 15% will trigger investigation of the cause and corrective action will be initiated.  Dusty litter is material that does not form a single stable ball when squeezed by hand.  Litter which is dusty will trigger remedial action.	Shed humidity will be increased where litter moisture content is below 15%.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.7.3 Litter transported off-site is free of dead birds.</p>	<p>Grower</p>	<p>Inspection of empty sheds before litter removal is undertaken will ensure that dead birds are not contained within the litter.</p> <p>Where wet litter is removed from any shed during the growing cycle, it will be inspected for dead birds prior to disposal.</p>	<p>Occurrence of dead birds will trigger remedial action.</p>	<p>Dead birds are collected and removed in the manner described in Section 2.9.</p>
<p>2.7.4 Litter is generally removed from each shed after each batch as part of the cleaning process and loaded directly onto trucks for transport off-site. Sheds are closed before and after clean-out to reduce the potential for off-site odour impacts.</p> <p>Litter will not be stockpiled or spread on the property. Temporary storage will be limited to a maximum of ten (10) days.</p>	<p>Grower</p>	<p>Confirmation will be via inspection by farm manager during cleanout operations.</p>	<p>Observation of litter remaining on site after removal from sheds will trigger remedial action.</p> <p>Observations of doors being unnecessarily open before or after litter removal will trigger remedial action.</p> <p>A verified off-site complaint regarding odour or litter removal will trigger remedial action.</p>	<p>The principles and measures outlined in the National Environmental Management System for the Meat Chicken Industry – Rural Industries Research &amp; Development Corporation Publication No. 03/038 will be adopted and implemented.</p>
<p>2.7.5 Contractors responsible for delivery and pick-up of litter ensure that all trucks delivering and collecting litter at the beginning / end of each batch have secured covers, which prevent any dust or spillage of the litter on arrival at, and departure from, the site.</p>	<p>Grower</p>	<p>Litter delivery / collection vehicle movements will be monitored by the farm manager.</p>	<p>Where uncovered loads have been identified, remedial action will be triggered.</p>	<p>The contractor will be instructed to cover all loads.</p>

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.7.6 Any litter spillage will be cleaned up promptly in order to minimise generation of contaminated stormwater or dust.</p> <p>Such events and actions are documented in the farm records.</p>	Grower	Litter delivery / collection activities will be monitored by the farm manager.	Occurrences of spilt litter will trigger remedial action.	Spills will be cleaned up within 24 hours of occurrence.
<p>2.7.9 The broiler farm operator will not spread spent litter from the farm on the property.</p>	Grower	This will be monitored by the farm manager.	Remedial action will be triggered if litter spreading occurs	Non-conforming activities will be ceased immediately.
<p>2.7.10 If dust is visible with potential for off-site impact, shed operations and / or loading activities will be modified to control the level of dust emissions.</p>	Both	<p>Monitoring will be undertaken via regular visual inspections of shed operations (typically 3 to 4 times daily).</p> <p>Inspections by farm manager during cleanout operations will be conducted.</p>	Visible dust with the potential for off-site impacts will initiate remedial action.	<p>Contingency actions include adjustment of litter moisture levels or fan cowls. Actions to be commenced immediately.</p> <p>Loading of used litter onto trucks may have to be stopped or modified.</p>

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.7.11 Wind direction and strength forecasts will be taken into account when scheduling shed clean out operations at the end of the production cycle. Operations will be suspended where wind conditions have the potential to cause dust to be transmitted beyond the farm boundary.</p>	<p>Grower</p>	<p>Monitoring of wind forecasts prior to shed cleanout operations. These are to be recorded on the Farm record of key conditions.</p> <p>Complaints from neighbours regarding unacceptable dust will be recorded in the farm's complaint records.</p>	<p>Wind conditions are forecast that are likely to cause dust impacts beyond the farm boundary.</p> <p>Dust complaints will be investigated and if found to be substantiated, corrective action will be initiated.</p>	<p>Clean out operations will be suspended until the potentially adverse wind conditions abate.</p>
<p>2.7.12 Changes that will improve farm performance against EMP 2.7 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.</p>	<p>Both</p>			

**2.8 CHEMICALS**

EMP Objective: To identify all environmental and safety hazards associated with chemicals and fuels used on the farm, to ensure systems are in place to handle accidents and to prevent on-site and off-site impacts.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.8.1 The Safety Data Sheets (SDS) for all chemicals used are available on the farm. They are reviewed and the implications for use of the substances are assessed and understood. Risk controls are in place before a new substance is received on the farm.	Both	Annual inspection will provide confirmation.	Any missing SDS's will trigger remedial action.	Actions are to be undertaken prior to the subsequent batch to ensure compliance.
2.8.2 A list of the maximum quantities of chemicals and fuels typically stored on the farm is available, containers are labelled and HAZCHEM placards posted as required under Dangerous Goods and Workplace Hazardous Substances Regulations.	Both	Confirmation by annual inspection and reference to SDS's.	Any incidences of non-compliance will initiate remedial action.	Actions are to be undertaken prior to the subsequent batch to ensure compliance.
2.8.3 All agricultural chemicals used in poultry facilities are registered and approved for the intended use.	Both	Confirmation by reference to SDS's.	Any occurrence of unregistered or unapproved chemicals will trigger remedial action.	Non-complying chemicals will be removed from the property.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.8.4 All persons applying chemicals have successfully completed training in the safe use of chemicals or are supervised by a person who has. Evidence of training will be available on the farm.	Both	Confirmation by annual inspection that persons have successfully completed training such as the Farm Chemical Users Course or equivalent.	Occurrences of non-compliance will trigger remedial action.	Untrained or inappropriately supervised persons will be prohibited from applying chemicals on the farm.
2.8.5 Sanitising and cleaning products to be used on the farm, and their application, will be consistent with the Technical Appraisals and SDS's.	Both	Confirmation by annual inspection and reference to SDS's.	Occurrences of non-compliance will trigger remedial action.	Persons applying chemicals will be instructed on correct use and application of chemicals prior to the subsequent batch.
2.8.6 Records are maintained covering the purchase and procurement of chemicals and the details of each chemical application. These records are available to responsible authorities to substantiate that the chemical use meets the requirements of the Code of Practice for Farm Chemical Spray Application. A pesticide usage log is maintained onsite.	Both	Confirmation by annual inspection	Occurrences of non-compliance will trigger remedial action.	Actions are to be undertaken prior to the subsequent batch to ensure compliance.
2.8.7 Storage of farm chemicals prevents contamination of soil or stormwater and prevents uncontrolled reactions in routine operations or through spills. This includes provision of a low risk storage location, sealed flooring, segregation, and provision of spill absorbents.	Both	Confirmation by annual inspection	Occurrences of non-compliance will trigger remedial action.	Actions are to be undertaken prior to the subsequent batch to ensure compliance.



Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.8.8 LPG and other fuels storage and handling comply with legal (HAZCHEM) requirements and supplier guidelines.</p> <p>Spill cleanup techniques will meet HAZCHEM requirements.</p>	Grower	Confirmation by annual inspection	Occurrences of non-compliance will trigger remedial action.	Actions are to be undertaken prior to the subsequent batch to ensure compliance.
<p>2.8.9 All chemicals will be stored in 'child proof' containers or storage units and handling will comply with legal (HAZCHEM) requirements and supplier guidelines.</p> <p>Spill cleanup techniques will meet HAZCHEM requirements.</p>	Grower	Monitoring will be via regular observations by farm manager of chemical storage areas.	Occurrences of non-compliance will trigger remedial action.	In the instance of incorrect chemical storage, storage will be updated in accordance with the relevant SDS requirements.
<p>2.8.10 Install bunding or storage cabinets for above-ground storage tank and chemical stores to control any unplanned release of fuels, lubricants, coolants or other chemicals.</p>	Grower	Monitoring will be via regular observations by farm manager of chemical and fuel storage areas and bunds to ensure all chemicals and fuels are stored in accordance with SDS requirements and no leaks have occurred in bunds.	Occurrence of non compliance will trigger remedial action.	<p>In the instance of incorrect chemical or fuel storage, storage will be updated in accordance with the relevant SDS requirements.</p> <p>In the instance of a bund failure, the spill will be cleaned up in immediately in accordance with chemical or fuel spill contingency plans and the bund will be repaired.</p>

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.8.11 No chemical or related odours are to be detected off-site during or after shed cleaning / sanitisation.</p> <p>Sanitisation/cleaning of shed uses high pressure low volume sprays to avoid generation of free flowing water or excessive odour or mists.</p> <p>To minimise the risk of off-site chemical spray drift, shed is closed immediately after chemical applications and for 24 hours after spraying with hazardous or highly odorous substances such as cresylic acid, formaldehyde or organophosphate pesticides.</p>	Both	Confirmation will be via inspection by farm manager during and after shed cleaning / sanitisation operations.	The identification of free flowing water or odours / mists that have the potential to create off-site impacts will initiate remedial action.	Immediate modifications to the method of cleaning / sanitisation or application of chemicals will be undertaken, including the closure of sheds, if necessary.
<p>2.8.12 Controls are to be implemented to ensure there is no chemical spray drift into sensitive areas, such as watercourses and residences. Includes spraying only on days with suitable wind conditions and selection of appropriate spraying methods and spray nozzles. The 'Use of Weed Sprayer' work instruction will be followed when spraying which covers checking weather conditions, keeping records, filling, spraying and clean up for both knapsack and spray units.</p>	Grower	Confirmation will be via inspection by farm manager during spraying operations.	The identification of spray drifts that have the potential to create off-site impacts will initiate remedial action.	Immediate appropriate corrective action will be implemented. Guidance is available in 'A guide to using agricultural chemicals in Victoria Ground-based spray application'.

<b>Management Measures</b>	<b>Prime Resp.</b>	<b>Monitoring</b>	<b>Indicator / Trigger Level</b>	<b>Contingency Actions/Timing</b>
2.8.11 Changes that will improve farm performance against EMP 2.8 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.	Both			

**2.9 BIRD MANAGEMENT AND BIOSECURITY**

EMP Objective: To provide a safe and healthy environment for birds that is appropriate for their physical and behavioural needs and for control of odour.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.9.1 Sheds, equipment, management systems and farm practices comply with the <i>Code of Accepted Farming Practice for Welfare of Poultry (Rev 2)</i>.</p> <p>The automated shed environmental control system incorporating heating and cooling and the use of roof insulation will control sheds to the temperatures appropriate to bird age and as outlined in the welfare code above.</p>	Both	Regular inspections by the farm manager will be undertaken to ensure compliance.	Occurrences of non-compliance will trigger remedial action.	Where non-compliance may impact on bird welfare, immediate corrective action will be undertaken. In other instances, actions are to be undertaken prior to the subsequent batch to ensure compliance.
<p>2.9.2 Effective biosecurity and general shed management complies with the requirements of the Processor, the National Biosecurity Manual and industry guidelines to minimise the risk of disease introduction to the farm.</p> <p>Wild-bird proofing on shed and silos is installed and maintained.</p> <p>Exclusion zones exist around shed complex to control entry to authorised persons, vehicles &amp; equipment.</p>	Both	Inspections by the farm manager will be undertaken to ensure compliance prior to each batch of chickens being placed. Ongoing observation will be undertaken by farm manager to ensure compliance.	Occurrences of non-compliance or breaches will trigger remedial action.	Where non-compliance may impact on bird biosecurity, immediate corrective action will be undertaken. In other instances, actions are to be undertaken prior to the subsequent batch to ensure compliance.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.9.3 Adjustments as needed will be made to feeder availability and height, water availability and drinker height, ventilation rates, air speed, temperature and light levels.	Grower	Monitoring will be undertaken via regular inspections of shed operations (typically 3 to 4 times daily).	Where conditions deviate from guidelines issued by the processor or the Welfare Code, corrective actions will be undertaken.	Immediate actions will be undertaken to correct the specific problem.
2.9.4 Cooling system performance is observed, adjusted and maintained to provide the operating patterns specified by Processors or equipment suppliers and to minimise litter wetting.	Grower	Cooling system is continuously monitored as part of the automated control system.	Deviation of shed temperatures and humidity from the processor's tolerances will initiate corrective action.	The automated shed controllers will adjust operating parameters. These can be overridden manually if necessary.  Any irregularities will be logged, investigated and rectified as soon as practical.
2.9.5 Any maldigestion of feed or observable increase in shed odour or moisture content of droppings is reported to the Processor for review (by a qualified husbandry officer).	Both	Monitoring will be undertaken via regular inspections of shed operations (typically 3 to 4 times daily).	An observable and recorded increase in droppings moisture for a three day period would typically confirm the need for a review and action.	Depending on the source of the problem, corrective actions could include bird removal, adjustment of feed formulation or treatment for poor health.
2.9.6 Bird density does not exceed those specified in the Code of Accepted Farming Practice for Welfare of Poultry (Rev 2).	Processor	Total bird numbers will be checked at time of placement. Density / bird mass will be checked prior to first thin out.	The standard currently required by the Code is 40kg/m <sup>2</sup> maximum and is reviewed and updated from time to time.	Any likely exceedance will be controlled by removal of the necessary number of birds from the sheds to ensure compliance.
2.9.7 Growers record daily bird mortality and report any abnormal losses or trends to their Processor for review and action.	Both	Monitoring will be undertaken via daily recording of mortalities in the farm records.	Bird mortalities at double the norm for the specific week of the batch or unusual flock appearance would be reported to the processor and trigger a review and action.	Investigation of the cause of abnormal mortalities would be immediately undertaken. Corrective action would be dependent on the identified cause of the problem.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.9.8 The collection of dead birds from within the sheds occurs on a daily basis, or more frequently should conditions so require.	Grower	Monitoring will be undertaken via daily recording of mortalities in the farm records.	Occurrences of non-compliance will trigger remedial action.	Actions are to be undertaken prior to the subsequent batch to ensure compliance.
2.9.9 Disposal of dead birds is in accordance with the planning permit. Collection of dead birds occurs daily. Dead birds will be placed in buckets / bins prior to removal and storage in the freezer prior to off-site removal.	Both	Monitoring will be undertaken via daily recording of mortalities in the farm records.	Occurrences of non-compliance will trigger remedial action.	Actions are to be undertaken prior to the subsequent batch to ensure compliance.
2.9.10 Changes that will improve farm performance against EMP 2.9 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.	Both			



**2.10 RANGE AREA MANAGEMENT**

EMP Objective: To maintain and enhance free range areas in order to provide optimum conditions for birds and minimise potential off-site impacts.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.10.1 Each chicken shed is to be provided with external free range areas which total an area of at least 2 times the internal floor area of the shed.	Grower	Annual inspection will provide confirmation.	Inadequate provision of range areas will trigger remedial action.	Remedial actions will be undertaken prior to the next batch.
2.10.2 The range areas are to be provided with predator proof fencing and sufficient shade to meet bird welfare needs.		Inspection at the commencement of each batch will provide confirmation.	Inadequate provision of fencing or shade will trigger remedial action.	Remedial actions undertaken immediately if there is a threat to bird welfare or within one month.
2.10.3 Each chicken shed is to be provided with external free range areas on both sides of the shed to provide the opportunity to spell individual areas.	Grower	Inspection at the commencement of each batch will provide confirmation.	Occurrences of non-compliance will trigger remedial action.	Corrective action is to be undertaken prior to the commencement of the subsequent batch.
2.10.4 The pastures in the range areas are to be managed to ensure the continued supply of palatable vegetation for the birds.	Grower	Inspection to be undertaken at the end of each batch. Observations to be recorded on the flock record sheet.	Observations of insufficient vegetation will trigger remedial action.	Corrective action is to be undertaken within one month and will address the deficiencies identified in the monitoring process.
2.10.5 Pastures will be fertilised in accordance with the soil's nutrient requirements.	Grower	Soils will be tested for their nutrient requirements.	Occurrences of non-compliance will trigger remedial action.	Nutrient imbalances will be remedied via appropriate fertiliser application within 6 months.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.10.6 Sufficient vegetation cover will be maintained to ensure that dust will not be generated from the free range areas.	Grower	Inspection to be undertaken prior to the free range period of each batch. Observations to be recorded on the flock record sheet.	Observations of insufficient vegetation will trigger remedial action.	Corrective action is to be undertaken within one month and will address the deficiencies identified.
2.10.7 Runoff from the free range areas will be drained and filtered via the grass swales and directed into the sedimentation basin and the retention dam.	Grower	Confirmation via inspections at the time of rainfall events.	Insufficient capacity of swales to adequately drain free range areas and deliver flows to bio-retention basin will initiate remedial action.  Inadequate grass cover within the swales will initiate remedial action.	Remedial actions will be undertaken within one month
2.10.8 Nutrient build up within the free range areas will be prevented by appropriate rotation and spelling.	Grower	Confirmation by inspection at the commencement of each batch.	Occurrences of non-compliance will trigger remedial action.	Corrective action is to be undertaken within the following 3 months.
2.10.9 Changes that will improve farm performance against EMP 2.10 objectives above will be identified and included in future development plans for the farm at the time of the annual EMP review.	Grower			

**2.11 OTHER ENVIRONMENTAL CONTROLS**

EMP Objective: To ensure that those involved in broiler farming are environmentally aware, are trained and implement environmental and fire risk prevention and control practices.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.11.1 Broiler farm personnel participate in briefings and other activities arranged by the industry and other bodies to increase and share knowledge of best practice production and environmental management methods. Records of training completed are kept on-site.	Both	Annual inspection of on-site records will provide confirmation.	Occurrences of non-compliance will trigger remedial action.	Corrective action is to be undertaken within the following 12 months and may include attendance or talks at Processor, Grower Branch, Chicken Care, EPA/AgVic/TAFE meetings or workshops.
2.11.2 The skills needed to carry out all farm activities safely, efficiently, and environmentally soundly are defined. Suitable training is identified, planned, attended, recorded and reviewed. Records of training completed are kept on-site.  The Farm Service Manager will help identify training needs.	Both	Annual inspection of on-site records will provide confirmation.  The skills needed are identified in the <i>National Environmental Management System for the Meat Chicken Industry – Rural Industries Research &amp; Development Corporation Publication No, 03/038.</i>	Occurrences of non-compliance will trigger remedial action.	Corrective action is to be undertaken within the following 12 months and will address the deficiencies identified in the monitoring process.
2.11.3 Contingency Plans demonstrate that farm procedures and practices are proactive and cautious in their approach to foreseeable environmental risk events. Refer to Section 12.	Both	Annual inspection of contingency plans will provide confirmation.	Occurrences of non-compliance will trigger remedial action.	Corrective action is to be undertaken within the following 12 months and will address the deficiencies identified in the monitoring process.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.11.4 A Waste Minimisation Plan for all significant farm wastes is to be implemented. Refer to Waste Minimisation Plan in Appendix 1.</p> <p>Commercial waste operators are engaged to remove all farm wastes from the farm.</p>	Both	<p>Annual inspection of contingency plans will provide confirmation.</p> <p>The farm manager will regularly seek to identify opportunities and methods to reduce waste materials</p>	Occurrences of non-compliance will trigger remedial action.	Corrective action is to be undertaken within the following 12 months and will address the deficiencies identified in the monitoring process.
<p>2.11.5 Testing of nutrient levels in the water contained within the stormwater retardation dam will be undertaken to ensure there is no environmental risk to surrounding drainage systems in the event of discharge from the dam.</p>	Grower	Annual testing of the water in the retarding dam will be undertaken in late spring when the probability of discharge is greatest.	<p>Total phosphorus at the 75% percentile should not exceed 55 µg/L.</p> <p>Total nitrogen at the 75% percentile should not exceed 1100 µg/L.</p>	Corrective action which will investigate and address the cause of the nutrients entering the dam will be undertaken within 6 months.
<p>2.11.6 Clear requirements for fire prevention are documented and communicated to all people on the farm. Fire extinguishers are provided in the control room of each broiler shed. Fire fighting hoses are provided at the centre and the ends of each shed.</p> <p>Restrictions may be applied to smoking, welding, comfort heating, vegetation burn off or other activities involving potential sources of ignition.</p>	Grower	Confirmation by annual inspection of documents and facilities.	Occurrences of non-compliance will trigger remedial action.	Corrective action is to be undertaken within the following 12 months and will address the deficiencies identified in the monitoring process.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.11.7 Appropriate facilities to prevent, detect and control fires are provided and maintained. Sheds are constructed from non-flammable materials including steel, concrete and fibreglass wool insulation. Water for fire fighting purposes is provided from the tanks which are fitted with CFA fire truck filling connections. Water can also be drawn from the dam.</p>	<p>Both</p>	<p>Confirmation by annual inspection of documents and facilities.</p>	<p>Occurrences of non-compliance will trigger remedial action.</p>	<p>Corrective action is to be undertaken within the following 12 months and will address the deficiencies identified in the monitoring process.</p>
<p>2.11.8 A fire management plan is prepared and held in the amenities service shed. All broiler farm personnel participate in briefings and training in implementing the plan.</p>	<p>Grower</p>	<p>Confirmation by annual inspection of documents and facilities.</p>	<p>Occurrences of non-compliance will trigger remedial action.</p>	<p>Corrective action is to be undertaken within the following 12 months and will address the deficiencies identified in the monitoring process.</p>
<p>2.11.9 Changes that will improve farm performance against EMP 2.11 objectives above will be identified and included in future development plans for the farm at the time of the annual EMP review.</p>	<p>Both</p>			

**2.12 CONTINGENCY PLANS**

EMP Objective: To provide well thought out contingency plans and triggers for all foreseeable events to complement the planning and prevention of environmental impacts in earlier sections of the EMP.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.12.1 Documented contingency plans for all foreseeable odour and other environmental events and the trigger conditions for their implementation are defined and available on the farm.</p> <p>Contingency actions and triggers include those routine measures detailed in industry information (such as the <i>National Environmental Management System for the Meat Chicken Industry – Rural Industries Research &amp; Development Corporation Publication No. 03/038</i>), chemical supplier SDSs and CFA Guidelines.</p>	<p>Both</p>	<p>Confirmation by annual inspection of documents and facilities.</p>	<p>Occurrences of non-compliance will trigger remedial action.</p>	<p>Corrective action is to be undertaken within the following 3 months and will address the deficiencies identified in the monitoring process.</p> <p>In cases where persistent or serious odour or dust problems are occurring, possible actions for consideration include increased litter depth, reduction in bird density, increased ventilation to dry litter, changed feed, earlier or emergency bird removal, dietary or odour control additives, air/dust system redesign, dispersion stacks and others. The choice of action(s) to be undertaken will be determined by the grower and processor together and will be dependant on the identified cause of the problem.</p> <p>Operational changes for persistent problems should be made within one week.</p>



Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.12.2 In the event of an emergency where large numbers of dead birds must be removed, a bird disposal contractor having the capacity to remove large numbers of dead birds within 24 hours will be employed to remove the dead birds.</p>	Both	<p>Confirmation by annual inspection of documents recording details of potential contractors.</p>	<p>Occurrences of non-compliance will trigger remedial action.</p>	<p>Corrective action is to be undertaken within the following 3 months and will involve the identification of potential contractors and recording of their contact details.</p>
<p>2.12.3 Adequate means of disposal of dead birds in the event of an emergency disease outbreak or catastrophic mortalities are available, are used under direction of the State Chief Veterinary Officer and achieve the optimum overall health, environmental and economic outcome. This would normally involve off-site removal to a licensed landfill.</p>	Both	<p>Off-site dead bird removal will be undertaken by a licensed contractor under the direction of the State Chief Veterinary Officer.</p> <p>Compliance with such directives will be recorded in the farm records.</p>	<p>Occurrences of non-compliance will trigger remedial action.</p>	<p>Any instances of non-compliance will be reviewed in association with the State Chief Veterinary Officer.</p>
<p>2.12.4 Chemical or fuel spill contingency plans and clean-up equipment and materials are available and meet the Safety Data Sheet (SDS) and other supplier recommendations.</p> <p>Clean up equipment and materials are kept within the machinery shed. Relevant documentation is maintained on-site in the amenity service shed.</p>	Both	<p>Confirmation by annual inspection of documents and equipment.</p>	<p>Occurrences of non-compliance will trigger remedial action.</p>	<p>Deficiencies in the fuel spill contingency plans or clean up equipment will be rectified prior to the commencement of the subsequent batch.</p>

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.12.5 An emergency backup generator(s) is provided of a sufficient capacity to provide all power requirements to maintain normal operating conditions in all sheds and will start automatically upon any power failure.	Grower	Confirmation by weekly testing.	Failure to automatically start or insufficient supply generation will initiate remedial action.	Repair of any faults will be undertaken within 24 hours.
2.12.6 Documented fire emergency control and response plan (Fire Management Plan) is located in the amenity service shed. This is practiced and updated for lessons learned from drills or actual events.  Emergency drills will be undertaken every six months and plans updated where necessary.	Both	Confirmation by annual inspection of the plan and documents recording details of drills or actual events.	Occurrences of non-compliance will trigger remedial action.	Corrective action is to be undertaken within the following 3 months and will involve updating the plan / conducting drills as necessary.
2.12.7 Contract transport drivers are trained and familiar with their transport emergency response plan. A documented transport emergency plan is kept on-site.	Both	Confirmation by annual inspection of the plan.	Occurrences of non-compliance will trigger remedial action.	Corrective action is to be undertaken within the following 3 months and will involve the provision of the transport emergency plan.
2.12.8 Changes that will improve farm performance against EMP 2.12 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.	Both			

**2.13 COMMUNITY PARTICIPATION**

EMP Objective: To provide processes for consultation with farm neighbours and the local Council so that their concerns and expectations are understood.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
<p>2.13.1 All company and farm staff members demonstrate commitment to openness and two-way dialogue with all interested parties. Neighbour contacts and complaints will be logged in the farm records.</p>	Both	<p>Confirmation by annual inspection of the farm records.</p> <p>This will be compared with published industry average performance.</p>	<p>Significant variation from published industry average performance will trigger a review.</p>	<p>A review will be conducted to determine reasons for significant variance from published industry average performance.</p>
<p>2.13.2 Ways are sought to brief the community on the risks, controls and benefits of the meat chicken industry. Activities will be recorded in the farm records.</p>	Both	<p>Confirmation by annual inspection of the farm records.</p>	<p>Persistent complaints by neighbours will trigger a review of actions undertaken.</p>	<p>The review will be conducted to determine reasons for persistent complaints and the types of briefings given to neighbours / community.</p>
<p>2.13.3 All complaints received are viewed as opportunities for improvement and addressed in a positive and co-operative manner. Neighbour complaints will be recorded in the farm records.</p> <p>A written copy of complaint details using forms in the Victorian Code for Broiler Farms or similar will be provided by Council or other responsible authority to Growers promptly (typically within one day) to allow remedial action to be undertaken within one week where possible.</p> <p>An initial response to the complaint will be provided within 24 hours of receipt of complaint details.</p>	Both	<p>Confirmation by quarterly inspection of the farm records.</p>	<p>Occurrences of non-compliance will trigger remedial action.</p>	<p>The review will be conducted to determine reasons for non compliance.</p>

<b>Management Measures</b>	<b>Prime Resp.</b>	<b>Monitoring</b>	<b>Indicator / Trigger Level</b>	<b>Contingency Actions/Timing</b>
2.13.4 All complaints received including their type, complainant details and actions taken are recorded in the farm records.	Grower	Confirmation by annual inspection of the farm records.	Occurrences of non-compliance will trigger remedial action.	The review will be conducted to determine reasons for non compliance.
2.13.5 Liaison with the local Council will take place over complaints received and on upset conditions that occur with potential to impact nearby residents. This liaison is to be recorded in the farm records.	Grower	Confirmation by annual inspection of the farm records.	Occurrences of non-compliance will trigger remedial action.	The review will be conducted to determine reasons for non compliance.
2.13.6 Complaints resolution using the local Council and industry processes and the Special Audits as outlined in the Code will be followed where required. The resolution activities will be recorded in the farm records.	Both	Confirmation by annual inspection of the farm records.	Occurrences of non-compliance will trigger remedial action.	The review will be conducted to determine reasons for non compliance.  Potential resolution mechanisms may be found in various industry guidance documents.
2.13.7 The results of complaints, corrective actions, complaint resolution activities and audits are available to local Council and to neighbours. The availability of this information will be advised at the annual Council briefing outlined in Section 2.12.3.	Grower	Confirmation by annual inspection of the farm records.	Occurrences of non-compliance will trigger remedial action.	The review will be conducted to determine reasons for non compliance.
2.13.8 Records of the properties, procurement and use of chemicals are maintained and available to the local Council.	Grower	Confirmation by annual inspection of the farm records.	Occurrences of non-compliance will trigger remedial action.	The review will be conducted to determine reasons for non compliance.

Management Measures	Prime Resp.	Monitoring	Indicator / Trigger Level	Contingency Actions/Timing
2.13.9 Changes that will improve farm performance against EMP 2.13 objectives above will be identified and included in the future development plan for the farm at the time of the annual EMP review.	Both			

**3.0 IMPLEMENTING THE EMP**

**3.1 OPERATIONS AND INCIDENT RECORDS**

The operator will maintain farm records of their regular monitoring of the parameters or indicators identified in Section 2. These farm records will be maintained on the farm to record the monitoring and corrective / contingency actions undertaken in situations and incidents considered to be outside normal operating parameters.

These records will be used in formulating operating targets for the next year and may be of assistance in the resolution of complaints.

**3.2 INCIDENT INVESTIGATION**

The operator and their processor will carry out a post-incident review of the causes of any significant incident and of the effectiveness of actions taken under the contingency plan for that incident. Both the grower and processor will undertake corrections to the root causes of the problem when identified. Results of individual incidents will be provided to the local Council and discussed with neighbours when requested.

**3.3 EMERGENCY CONTACTS**

Organisation	Contact Phone No.
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

**4.0 AUDITING AND REPORTING**

**4.1 BIENNIAL FARM ASSESSMENT - EMP AND PLANNING PERMIT**

A biennial assessment of the compliance with the site EMP and the Planning Permit and of the adequacy of the actions taken to meet farm improvement objectives

*Environmental Management Plan*  
 [REDACTED] Broiler Farm  
 39 & 141 Clarkes Road, Strathlea  
 April 2024

(2632R02)

and targets will be made and signed by the Grower, the Processor and an experienced auditor. The latter may be a Processor employee.

This assessment will use an audit document containing all the elements of the EMP and be conducted in detail sufficient to evaluate or confirm to the responsible authority that planning permit requirements are met.

The Grower and the Processor will retain audit documents for five years.

The audit will form the basis of the biennial review of the EMP by the grower and processor. The EMP will be updated where necessary, based on the review findings.

The frequency of assessments and reviews may be adjusted based on the performance of the farm and with the agreement of the local Council.

Proof of the completion of the audit must be provided to Council at the conclusion of the audit. The grower will provide a copy of the full audit report to Council upon request.

#### **4.2 COMPLAINTS HANDLING**

As outlined under measures for Community Participation, complaints will be addressed as legitimate community concerns and opportunities for improvement. Where a verified off-site complaint occurs, the principles and measures outlined in the *National Environmental Management System for the Meat Chicken Industry – Rural Industries Research & Development Corporation Publication No, 03/038* will be adopted and implemented.

All complaints wherever received must be passed on to the grower within one working day and the grower must be advised in writing of a validated complaint within one day of its confirmation, so that causes, and corrective actions can be identified and implemented. All complaints will be recorded in the farm's complaints records.

When received, the grower, a suitably qualified processor employee and where possible a local Council or EPA officer and the complainant will investigate the problem. Complaints lodged with the responsible authority may trigger a Special Audit as outlined in the Code. Results will be provided to the local Council or EPA.

The complainant will be advised of the outcome of the investigation within one week of its completion.

#### **4.3 PUBLIC AND LOCAL COUNCIL REPORTING**

A summary of the results of the audit will be provided on request to the local Council. Other interested parties may request summaries from the council or the grower.



**APPENDIX 1 - WASTE MINIMISATION PLAN**

*Environmental Management Plan*  
[REDACTED] - Broiler Farm  
39 & 141 Clarks Road, Strathlea  
April 2024

(2632R02)

**WASTE MINIMISATION PLAN  
BROILER FARM – 39 & 141 CLARKES ROAD, STRATHLEA**


The following table outlines the potential waste generated on the farm and their minimisation and disposal methods.

<b>Waste Type</b>	<b>Method of Minimisation / Disposal</b>
Used Litter	Spent litter will be taken off-site by contractors.
Dead Birds	Dead birds will be collected on a daily basis and placed in the freezer prior to off-site removal.
Chemical Containers	Empty chemical containers are returned to the supplier for reuse.
Packaging & General Waste	Where possible, the need to minimise packaging will be taken into account when purchasing items for use on the farm.



# Moolort and Strathlea Broiler Farms

## Odour Assessment

 Victoria Pty Ltd

10 April 2024

→ The Power of Commitment





# Contents

<b>1.</b>	<b>Introduction</b>	<b>1</b>
1.1	Purpose of this report	1
1.2	Scope of works	2
1.3	Limitations	2
1.4	Assumptions	2
<b>2.</b>	<b>Legislation and guidelines</b>	<b>3</b>
2.1	Environment Protection Act 2018 (amendment to Environment Protection Act 2017)	3
2.2	Environment Reference Standard	3
2.3	Victorian Code for Broiler Farms – 2009	3
2.3.1	Project application	4
2.4	New national guideline – Meat chicken farms	4
2.4.1	Project application	5
2.5	██████████ Publication 1883 Guidance for assessing odour	5
2.5.1	Project application	6
<b>3.</b>	<b>Site overview</b>	<b>7</b>
3.1	Site location	7
3.2	Site operation	9
3.2.1	Bird numbers	9
3.2.2	Shed size	9
3.2.3	Grow-out cycle	9
3.2.4	Bird thinning	10
3.2.5	Shed temperature	10
3.2.6	Ventilation	10
3.3	Sensitive receptors	11
<b>4.</b>	<b>Meteorology</b>	<b>13</b>
4.1	Onsite weather data	13
4.2	Wind pattern	15
4.2.1	Long term pattern in wind	15
4.2.2	Seasonal pattern in wind	16
4.3	Pattern of atmospheric stability	17
4.3.1	Atmospheric stability	18
4.3.2	Mixing height	18
<b>5.</b>	<b>Odour Dispersion Modelling</b>	<b>20</b>
5.1	CALPUFF configuration	20
5.2	Odour emission rates	20
5.3	Modelled results	21
5.4	Risk assessment	23
5.4.1	Method	23
5.4.2	Risk assessment outcome	26
5.5	Model result summary	29



<b>6.</b>	<b>Model calibration using odour observations</b>	<b>30</b>
6.1	Summary and findings	30
6.2	Calibration methodology	31
6.3	Calibrated results	31
6.4	Updated risk assessment	32
6.5	Updated risk assessment summary	36
<b>7.</b>	<b>Complaint Data Analysis</b>	<b>37</b>
7.1	Observations	39
<b>8.</b>	<b>Summary and conclusion</b>	<b>40</b>

## Table index

Table 1	Bird numbers in existing and proposed farms	9
Table 2	Existing and proposed shed sizes	9
Table 3	Typical bird live weight over the growth cycle	10
Table 4	Bird thinning and maximum bird mass density at each shed	10
Table 5	Sensitive receptors identified within approximately 2 km radius from the site boundary	11
Table 6	Parameters used in estimating odour emissions rates for each shed	21
Table 7	Predicted odour impact at nearby receptors	22
Table 8	Perceived Intensity vs Odour Level – Poultry Odour	22
Table 9	Summary of recommended methods used when undertaking risk of offensive odour assessment	24
Table 10	Risk of offensive odour from current farms	27
Table 11	Risk of offensive odour from current and proposed farms	28
Table 12	Summary of data used to update odour dispersion model	31
Table 13	Determining odour concentrations which could be described as ‘Obvious’	31
Table 14	Risk of offensive odour from current farms – Updated assessment	33
Table 15	Risk of offensive odour from current and proposed farms – Updated assessment	34
Table 16	Address and frequency of received complaints	37

## Figure index

Figure 1	Site Location and Layout	8
Figure 2	Sensitive receptor locations	12
Figure 3	Moolort Broiler Farm on-site weather station as installed	14
Figure 4	CALMET extracted wind at the site for the period between 1 January 2017 and 31 December 2018	15
Figure 5	Annual windroses extracted at the site	16
Figure 6	Seasonal windroses	17
Figure 7	Stability class distribution predicted by CALMET for the site	18
Figure 8	Mixing heights predicted by CALMET at the site	19
Figure 9	Predicted 99.9 <sup>th</sup> percentile 3-minute average odour concentrations from the current and proposed farms (existing and proposed)	23

Figure 10	Risk of odour exposure potential – colour key. This is Table 11 from EPA Publication 1883.	24
Figure 11	Risk of odour based on character, obvious odour intensity and frequency of predicted odour. This is Table 12 from EPA Publication 1883	25
Figure 12	Risk of odour based on character, subtle odour intensity and frequency of predicted odour. This is Table 13 from EPA Publication 1883	25
Figure 13	Risk of offensive odour key. This is Table 14 from EPA Publication 1883	25
Figure 14	Risk of offensive odour. This is Table 15 from EPA Publication 1883	25
Figure 15	Level of risk of offensive odour plot	35
Figure 16	Histogram of complaints received by ProTen in 2016 and 2017	37
Figure 17	Number and location of complaints made against the site (2016 – 2017)	38

## Appendices

Appendix A	TAPM and CALMET setup
Appendix B	Hourly varying bird density (D) and ventilation rate (V) for a year of typical bird growth cycles
Appendix C	Modelled odour emission rates throughout a year
Appendix D	Calibrated odour impact compared with odour surveys
Appendix E	Baseline Odour Assessment to Determine the Extent of Odour Plume”, prepared by AOC Specialist





# 1. Introduction

██████████ currently operates two farms at 1480 Rodborough Road, Moolort. It is understood that in addition to purchasing Grandview 3 (GV3) site at 141 Clarkes Road, Strathlea, ProTen intends to build additional sheds and change the number of permitted bird numbers at the new site and to the existing Grandview 1 farm at 1480 Rodborough Road, Moolort, which are located north of the proposed GV3.

A summary of the proposed planning amendments is described below:

## **Grandview 1 (GV1), existing eastern farm at 1,480 Rodborough Road**

GV1 has a permitted capacity of 384,000 birds in eight conventional poultry sheds. With the introduction of RSPCA farming standards, the capacity of farms has reduced to 319,288.

The amendment of existing permit for GV1 includes:

- Increase permitted shed numbers to eleven (additional three sheds)
- Increase permitted bird numbers from 384,000 to 486,377

## **Grandview 2 (GV2), existing western farm at 1,480 Rodborough Road**

GV2 has a permitted capacity of 500,000 birds in eight conventional poultry sheds. With the introduction of RSPCA farming standards, the capacity of farms has reduced to 397,623.

The amendment of existing permit for GV2 includes:

- Reduce permitted bird numbers to 397,623

## **Grandview 3 (GV3), proposed farm at 141 Clarkes Road**

GV3 has a permitted capacity of 325,000 birds in six conventional poultry sheds.

The amendment of existing permit for GV3 includes:

- Increase permitted shed numbers from six to eight conventional poultry sheds, which would also be free-range compatible
- Increase permitted bird numbers from 325,000 to 445,000

ProTen has engaged FocusCDS to support a planning permit application to amend the existing planning permit for the proposed changes. To support the amendment of existing planning permit, ProTen has requested an Odour Environmental Risk Assessment (OERA) to be undertaken to assess the resultant odour impacts on the surrounding areas.

## 1.1 Purpose of this report

The purpose of this report is to undertake an OERA in accordance with EPA Publication 1883 – *Guidance for assessing odour*, AgriFutures – *Planning and environment guideline for establishing meat chicken farms: Guide 1 – Assessment guide*, to support the proposed planning amendments described in Section 1 to understand odour risks associated with the proposed operations.

The findings, conclusions and recommendations of this assessment should be read in conjunction with the limitations presented in Section 1.3.



## 2. Legislation and guidelines

### 2.1 Environment Protection Act 2018 (amendment to Environment Protection Act 2017)

EPA Victoria released a new legal framework on 1 July 2021, with the intention for this framework to drive environmental improvements in industrial operations. The cornerstone of the Environment Protection Act 2017 (the EP Act) is the general environmental duty (GED), which requires Victorians to understand and minimise their risks of harm to human health and the environment, from pollution and waste.

Complying with the GED is about taking reasonable proactive steps and employing good environmental work practices. Compliance with the GED can be through following responsibilities under Occupational Health and Safety (OHS) laws, meeting industry standards, adopting industry better management practices, and following other relevant legislation related to the environment. In effect, the GED makes it clear that it is the individual businesses' responsibility to reduce risk to the environment and to protect it.

### 2.2 Environment Reference Standard

The EP Act's environment protection framework includes the Environment Reference Standard (ERS). This identifies environmental values, air indicators and objectives that set the benchmark for the quality of the air environment needed to protect environmental values. The environmental values identified include:

- Life, health and wellbeing of humans
- Life, health and well-being of other forms of life, including the protection of ecosystems and biodiversity
- Local amenity and aesthetic enjoyment
- Visibility
- The useful life and aesthetic appearance of buildings, structures, property and materials
- Climate systems that are consistent with human development, the life, health and well-being of humans, and the protection of ecosystems and biodiversity

The ERS is a reference standard, not a 'compliance standard' for businesses i.e. it relates to ambient air and not any individual facility. The ERS replaces SEPP (AQM) and generally adopts the objectives in the National Environment Protection Measure (Ambient Air Quality) (NEPM AAQ) with some modifications.

The following air quality indicators, and respective objectives, relevant to this assessment are outlined below:

- **Odour**  
*An air environment that is free from offensive odours from commercial, industrial, trade and domestic activities*

As such, the 5 Odour Unit (OU) level is generally taken as the level that if the odour is offensive, it may lead to nuisance and resultant complaint. Hence, GHD has utilised the 5 OU level to assess the 99.9<sup>th</sup> percentile 3-minute average odour impact from the site.

### 2.3 Victorian Code for Broiler Farms – 2009

The Victorian Code for Broiler Farms 2009 (The Code) is the code of practice for the planning, design, assessment, approval, construction, operation and management of broiler farms in Victoria. It was developed to provide clear environmental standards for those wishing to establish new, or expand existing, broiler farms, and assurance for the surrounding landholders who may be impacted by broiler farming activities.

The 2018 amendments include:

- New definition for broiler farm to include free-range chicken meat farms
- A minimum farm size for which the Code applies (only applies to farms with more than 10,000 birds)

The Code details the method of calculating separation distances to assess whether a proposed broiler farm has sufficient separation to the nearest residences. However, where the farm capacity exceeds 400,000 birds, the farm is termed a Special Class and instead of using a separation distance criterion, an Odour Environmental Risk Assessment (OERA) must be conducted in accordance with the requirements outlined in Section 6 of the Code. The requirements are listed below:

Stage 1 – Odour dispersion modelling is required to assess the cumulative odour emissions from all the broiler farms within the site. The dispersion model will be used to calculate whether the predicted peak (99.9<sup>th</sup> percentile) odour levels exceed the 5 OU criterion at the site boundary<sup>1</sup>. If the criterion is met at and beyond the broiler farm boundary, then the responsible authority should accept that the risk of odour amenity impact is low and no further assessment is required.

Stage 2 – When the odour modelling results do not meet the criterion, an analysis of the odour modelling results will be undertaken to determine the frequency (how often) of the odour impact, duration (the length of time) and extent (the number of odour units) on surrounding sensitive uses (that is for dwellings). This information can then be used to determine whether the risk of adverse odour impacts beyond the broiler farm boundary is acceptable.

Stage 3 – If, following Stage 2 analysis, the risk of adverse odour impacts beyond the broiler farm boundary is considered to be unacceptable, then the design of the broiler farm will need to be modified. This may include, for example, reducing the number of chickens and/or relocating the broiler sheds.

### 2.3.1 Project application

The OERA for this assessment will be conducted as follows:

Stage 1 – Odour dispersion modelling will be undertaken using CALPUFF, with odour emissions estimated using Ormerod and Holmes emissions method<sup>2</sup>. The predicted cumulative odour emissions from all broiler farms for all scenarios will be assessed against the 99.9<sup>th</sup> percentile 3-minute average 5 OU odour criterion.

Stage 2 – At the time this assessment was undertaken, there are no established risk assessment for assessing odour impact using predicted results from odour dispersion model. GHD has therefore adopted the assessment for risk of odour exposure presented in Section 6.3 of EPA Publication 1883 – *Risk of Offensive Odour using Area Surveillance Method* to assess the likelihood of the identified receptors in experiencing offensive odour from the broiler farm.

## 2.4 New national guideline – Meat chicken farms

In November 2021, the first national planning and environmental guideline developed for Australia’s chicken meat industry was released<sup>3</sup>. Two guides have been prepared by AgriFutures Australia and include (i) Planning and environment guideline for establishing meat chicken (broiler) farms (Guide 1 – Assessment guide) and (ii) its companion document (Guide 2 – Applicant guide).

The principal aim of these guidelines is to safeguard that the chicken meat industry’s ongoing economic growth upholds the principles of environmentally sustainable and socially responsible development. This is to be achieved by confirming that future meat chicken farms are located, designed and managed sustainably and provide confidence for ongoing industry investment.

They have been developed through an extensive review of state environmental requirements and application guidance for meat chicken farms and other intensive animal industries. These guidelines were developed in collaboration and consultation with researchers and industry experts, as well as local government and state departments of planning, environment, primary industries, and agriculture.

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### 2.4.1 Project application

For odour dispersion modelling, CALPUFF is selected as it is the model recommended in AgriFutures Guide 1 to be used to undertake poultry assessment. This assessment also utilised the K-factor method, also known as the Ormerod and Holmes emissions method (Ormerod and Holmes 2005)<sup>4</sup>. The K-factor emissions method is based on the relationship between the number of birds present, the stocking density of the birds, the ventilation rate and overall farm management.

The K-factor method estimates hourly varying odour emission rates (OER) from a poultry farm shed using the following equation:

$$OER = 0.025 \times K \times A \times D \times V^{0.5}$$

Where:

<b>OER</b>	Hourly odour emission rate (OU.m <sup>3</sup> /s)
<b>K</b>	Scaling factor between 1 and 5, where a value of 1 represents a very well designed and managed shed operating with minimal odour emissions, and a value of 4 – 5 would represent a shed with serious odour management issues. For this assessment, a K factor of 1.9 has been selected. AgriFutures Guide 1 recommends that when modelling a 'greenfield' site that will be operated to best management practice, a K-factor of no less than 1.9 should be used as it represented the most recent test data from new farms.
<b>A</b>	Total shed floor area (m <sup>2</sup> )
<b>D</b>	Average bird density (kg/m <sup>2</sup> )
<b>V</b>	Ventilation rate (m <sup>3</sup> /s)

## 2.5 [REDACTED] 1883 Guidance for assessing odour

[REDACTED] 1883 provides guidance on how to assess the risk posed by odour emission sources and to understand the receiving environment where effects might occur. The guideline is to be utilised once an assessment of the separation distance has been undertaken to assess for any potential constraints. This is to evaluate the risk of harm in accordance with ERS objective for odour.

[REDACTED] 1883 focuses on the assessment of odour under the provisions of the EP Act, including the GED, which requires all Victorians to take precautionary and reasonable actions to avoid hazards causing harm. The guideline is primarily intended for government, the planning sector, practitioners and specialists, who need to understand offensive odours that are associated with a development proposal, investigation or study where an odour assessment is required. The publication provides a framework for three levels of risk assessment, according to the odour impact potential of an industry or site. The three levels of assessment include:

- Level 1 – Gateway assessment of emissions duration, wind direction and cumulative odour sources
- Level 2 – Source-Pathway-Receptor assessment
- Level 3 – Detailed risk assessment that could include:
  - Comparisons with similar operations or case studies
  - Risk assessment using field odour surveillance data
  - Complaint assessment
  - Community odour surveys/questionnaires and odour diaries
  - The use of dispersion modelling

[REDACTED]

[REDACTED]

### 2.5.1 Project application

This assessment includes selected Level 3 tools to assess the overall odour risk from the broiler farm. The tasks associated with Level 3 assessments undertaken for this site are presented below:

- Complaint assessment
- Odour surveys
- Odour dispersion modelling

### 3. Site overview

#### 3.1 Site location

The proposed site is located at 141 Clarkes Road, Strathlea and 1480 Rodborough Road, Moolort. The site and its immediate surrounding are currently zoned as Farming Zone under the Central Goldfields Shire.

The township closest to the site is Newstead which is approximately 10 km to the east of the existing farms. The existing air quality in the area is considered to be typical of a rural area with mainly agricultural activities. An aerial image of the site relative to the township and land zoning are shown in Figure 1.

The two existing poultry farms (GV1, GV2) and the proposed poultry farm (GV3) are located at the site as follows:

- **GV1 and GV2**  
1480 Rodborough Road, Moolort, Victoria, 3465. Located within parcels 6\LP5755 and 6A\LP5755
- **GV3**  
141 Clarkes Road, Strathlea, Victoria, 3364. Located within parcel 3\PP3456, approximately 1 km south-southwest of the Rodborough Road farms.



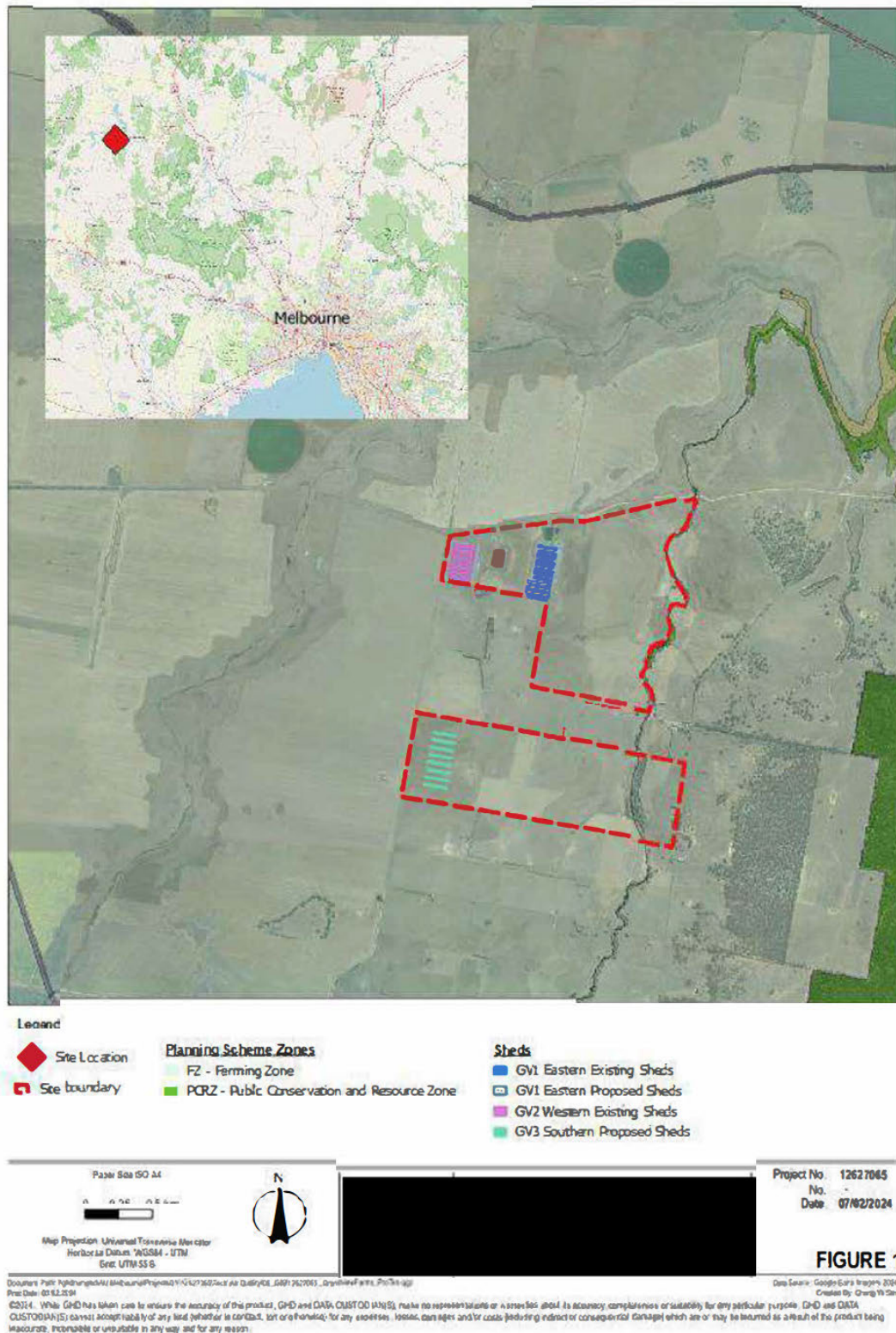


Figure 1 Site Location and Layout

### 3.2 Site operation

#### 3.2.1 Bird numbers

Table 1 summarises the number of sheds within each farm, number of birds and the farm identifications for existing and proposed farms which GHD uses to determine odour emission rates from each shed.

Table 1 Bird numbers in existing and proposed farms

Farm ID	Description	Number of sheds	Number of birds per shed	Total birds
<b>Existing operations</b>				
GV1	Existing eastern farm	8	39,911	319,288
GV2	Existing Farm	8	49,703	397,623
<b>Proposed operations</b>				
GV1	Existing Farm with three additional new sheds	11	Existing sheds – 39,911 per shed Proposed sheds – 55,696 per shed	486,377
GV2	Existing Farm	8	49,703	397,623
GV3	Proposed Farm	8	55,625	445,000

#### 3.2.2 Shed size

Table 2 summarises the existing and proposed shed sizes at GV1, GV2 and GV3.

Table 2 Existing and proposed shed sizes

Farm ID	Description	Shed area and dimension	Shed spacing
GV1	Existing shed	2,768 m <sup>2</sup> (148 m X 18.7 m)	16 m
	Proposed additional shed	3,291 m <sup>2</sup> (176 m X 18.7 m)	18 m
GV2	Existing shed	3,261 m <sup>2</sup> (172 m X 18.7 m)	16 m
GV3	Proposed shed	3,291 m <sup>2</sup> (176 m X 18.7 m)	37.4 m

#### 3.2.3 Grow-out cycle

The typical grow-out cycle, or the production cycle, for the current farms are 9.5 weeks (67 days) in total, comprising:

- 53 days of bird occupation
- Seven days of litter removal and shed cleanout
- Seven days of new bedding and preparation work for the next batch of birds
- A delay of three weeks from stocking GV1 to stocking GV2. It is assumed that there will be a delay of three weeks from stocking GV2 to stocking GV3. Consequently, peak odour emissions from GV1 – GV3 do not occur at the same time due to a delay of three weeks between farm stockings.

The typical bird live weight over the growth cycle used in this assessment to estimate odour emission rates is summarised in Table 3.



Table 3 Typical bird live weight over the growth cycle

Day in growth cycle	Typical bird live weight (grams)
0	42
7	190
14	480
21	910
28	1,350
35	1,900
42	2,400
49	3,100
53	3,437

### 3.2.4 Bird thinning

The [redacted] Approved Farming Scheme Standard for Meat Chicken<sup>5</sup> (RSPCA 2020), the recommended stocking density for tunnel ventilated or extractive systems to be less than 34 kg/m<sup>2</sup>. The current farms have a placement density of 16.9 birds/m<sup>2</sup>.

Bird thinning is carried out to maintain the stocking density below the RSPCA 2020 standard of 34 kg/m<sup>2</sup>. It is understood that the current site generally removes approximately 40-50% of the total birds on Day 28 (end of week 4). This would give a maximum bird mass density of 26 kg/ m<sup>2</sup> at the end of the growing cycle before birds are removed from the shed. It is assumed that the new sheds in GV1 and GV3 will have the same placement density and thinning regime as the existing sheds.

Table 4 Bird thinning and maximum bird mass density at each shed

Bird age days	% Removal	Number of birds per shed			
		GV1		GV2	GV3
		Shed 1 – 8	Shed 9 – 11	Shed 1 – 8	Shed 1 – 8
0 – 27	-	39,911	55,696	49,703	55,625
28 – 35	40-50	19,956	27,848	24,852	27,813
53	All birds harvested from shed	0	0	0	0

### 3.2.5 Shed temperature

The shed temperature in a shed is controlled. Generally, the shed temperature is held at approximately 31°C at the start of the growing cycle as this is the optimum temperature for baby chick comfort, health and survival. As bird mass increases, the internal shed temperatures required for optimum bird performance decreases. The shed temperature is gradually lowered by about 0.5°C each day after the first two days, down to 20°C by week 6.

### 3.2.6 Ventilation

Ventilation is used to managed internal shed temperatures. Changes in ventilation that are required to achieve the target effective temperature are a function of ambient temperature. Each shed will have eight tunnel ventilation fans. The tunnel ventilation capacity used for this assessment is a typical value of 10 m<sup>3</sup>/hr/bird.

[redacted]

[redacted]



### 3.3 Sensitive receptors

The definition of a sensitive receptor or sensitive land use is defined by [redacted]<sup>6</sup> as:

*'Any land use that requires a focus on protecting human health and wellbeing, local amenity and aesthetic enjoyment.'* Examples of such sensitive land uses include but not limited to, *'dwellings, hospitals, aged care facilities, education centres, childcare centres, places of worship, corrective institutions'*.

Based on the above, sensitive receptors were identified within 2 km of radius from the site as this is generally considered the distance at which sensitive receptors are likely to experience odour nuisance from an odour source. A total of 11 receptors have been identified within 2 km of the site boundary to be included in this assessment. All receptors were identified to be residential receptors.

All sensitive receptors identified are located on lands zoned as Farming Zone and are presented in Table 5 and graphed in Figure 2. The nearest existing sensitive receptors are R5 and R6 which are located 38 m and 95 m from the site boundary.

It should be noted that the sensitive receptors are identified based on publicly available aerial imagery provided in Google Earth and Google Maps at the time this assessment is undertaken. The receptor addresses are verified using VicPlan<sup>7</sup>.

Table 5 Sensitive receptors identified within approximately 2 km radius from the site boundary

Receptor ID	Address	Type of receptors	UTM 54 S		Approximate distance from site boundary (m)	Direction relative to the site boundary
			x	y		
R1	326 Rodborough Road	Residential	764,682	588,9624	1,145	E
R2	381 Rodborough Road	Residential	764,138	588,9413	592	E
R3	159 Strathlea Road	Residential	763,882.3	588,8206	696	E
R4	Strathlea Road	Residential	763,415	588,7794	227	SE
R5	321 Strathlea Road	Residential	763,460	588,7141	38	E
R6	355 Strathlea Road	Residential	763,424	588,6790	95	SE
R7	9 Hurns Road	Residential	763,174	588,6178	722	SE
R8	63 Hurns Road	Residential	762,679	588,6268	723	S
R9	444 Strathlea Road	Residential	763,167	588,5527	1,370	SE
R10	457 Strathlea Road	Residential	763,232	588,5465	1,425	SE
R11	472 Strathlea Road	Residential	763,120	588,5282	1,621	SE
R12	557 Strathlea Road	Residential	763,707	588,4597	2,311	SE
R13	375 Clarkes Road	Residential	761,113	588,5398	1,848	SW
R14	80 Whites Lane	Residential	760,355	588,3656	3,721	SW
R15	174 Nicholls Bridge Road	Residential	757,913	588,5910	3,719	SW
R16	44 Connor Lane	Residential	755,997	588,7488	5,393	W
R17	1366 Rodborough Road	Residential	760,707	588,9011	975	W
R18	1290 Rodborough Road	Residential	759,942	588,9373	1,800	W
R19	85 Keystone Mine Road	Residential	760,115	589,5362	6,371	NW
R20	2580 Pyrenees Highway	Residential	762,079	589,1680	2,435	N

<sup>6</sup> [redacted]

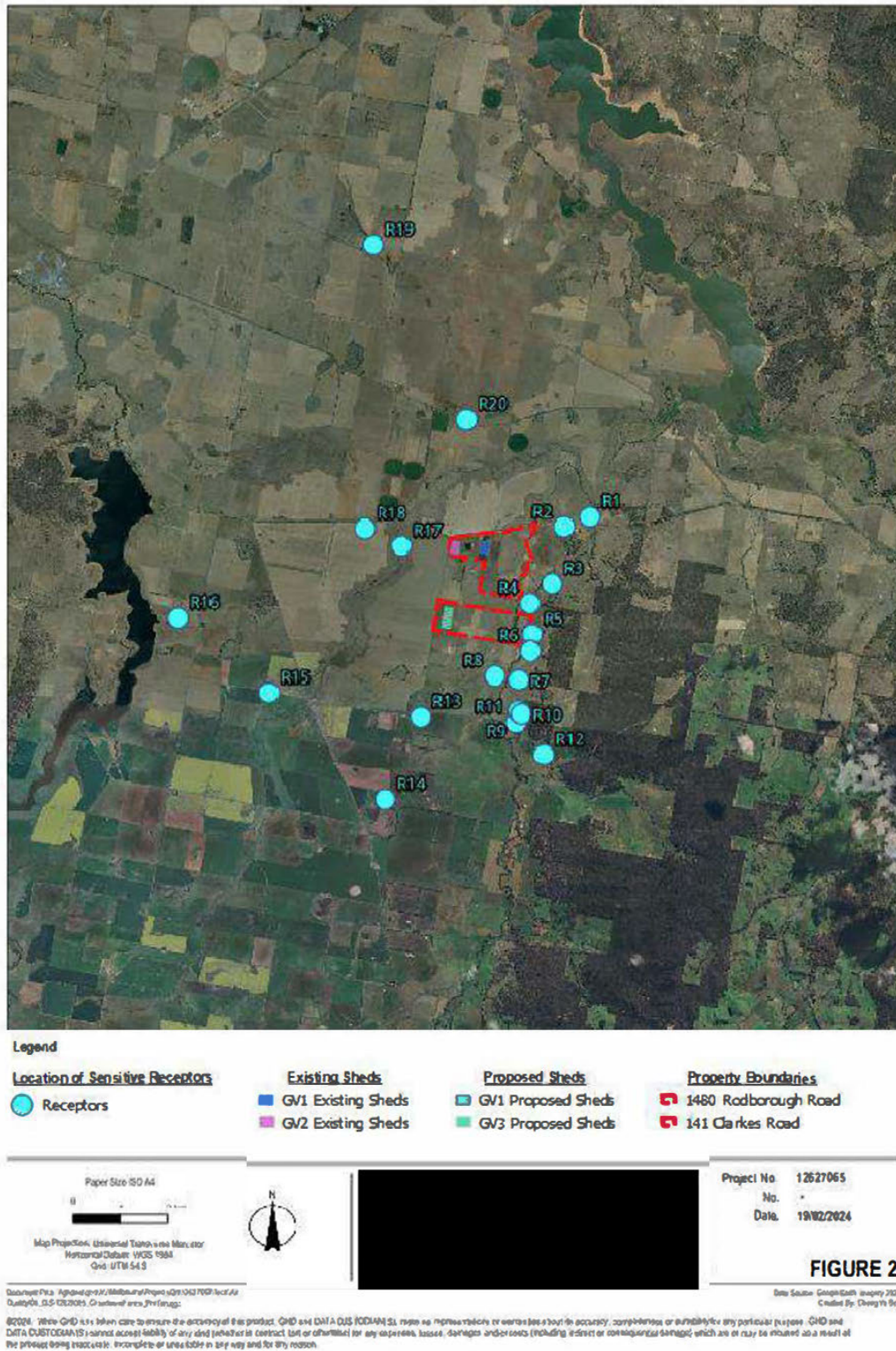


Figure 2 Sensitive receptor locations

## 4. Meteorology

The characterisation of local wind patterns generally requires accurate site-representative hourly recordings of wind direction and speed over a period of at least a year.

The nearest [REDACTED] meteorological stations to the site is Ballarat Aerodrome<sup>8</sup> (45 km southwest of the site) and Bendigo Airport<sup>9</sup> (50 km northeast of the site). Given that the terrain is complex between each of these sites and too far away to be representative of wind conditions at the broiler farms, this data was not considered in the assessment. An on-site automatic weather station (AWS) was installed at a representative location and the details are presented in Section 4.1 of this report.

### 4.1 Onsite weather data

The on-site weather station was installed according to the standards outlined in the Australian Standard AS 3580.14.2014 - *Methods for sampling and analysis of ambient air – Part 14: Meteorological monitoring for ambient air quality monitoring applications*. The map coordinates for the location of the onsite meteorological mast are at approximately 761,777 m E and 5,887,787 m S (WGS 84 UTM 54S). Figure 3 below shows the weather station that was installed. All data was recorded in 10-minute intervals and the period of data provided for this assessment is from October 2016 to June 2019. The following hourly averaged parameters are included in the data set provided:

- Wind speed measured at 10 m (m/s)
- Wind direction measured at 10 m (degrees)
- Sigma theta (degrees)
- Temperature measured at ~10 m (°C)
- Temperature measured at ~2 m (°C)
- Global solar radiation (W/m<sup>2</sup>)

As there are no other nearby local surface observations from the BoM near the site providing information such as cloud data, pressure and relative humidity data, meteorological data representative of the site is generated using TAPM and CALMET, with surface observation data input from the onsite weather data. In summary, TAPM was utilised to produce a three-dimensional hourly wind field for the site. Results of the TAPM model run were then utilised as initial guess field for modelling in CALMET in the “Hybrid” mode. Detailed information on the setup of TAPM and CALMET, as well as model validation, are presented in Appendix A. GHD selected the period between 1 January 2017 and 31 December 2018 (two years) to model as the surface observation data was provided by ProTen.

The effects of wind on dispersion patterns can be examined using the general wind climate and atmospheric stability class distributions. The general wind climate at a site is displayed by means of wind rose plots, giving the incidence of winds from different directions for various wind speed ranges. In this assessment, the prevailing wind directions and the relative incidence of more stable light wind conditions are of particular interest. These are assessed and presented in Section 4.2 and 4.3.

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<sup>8</sup> BoM station ID 89002

<sup>9</sup> BoM station ID 81123



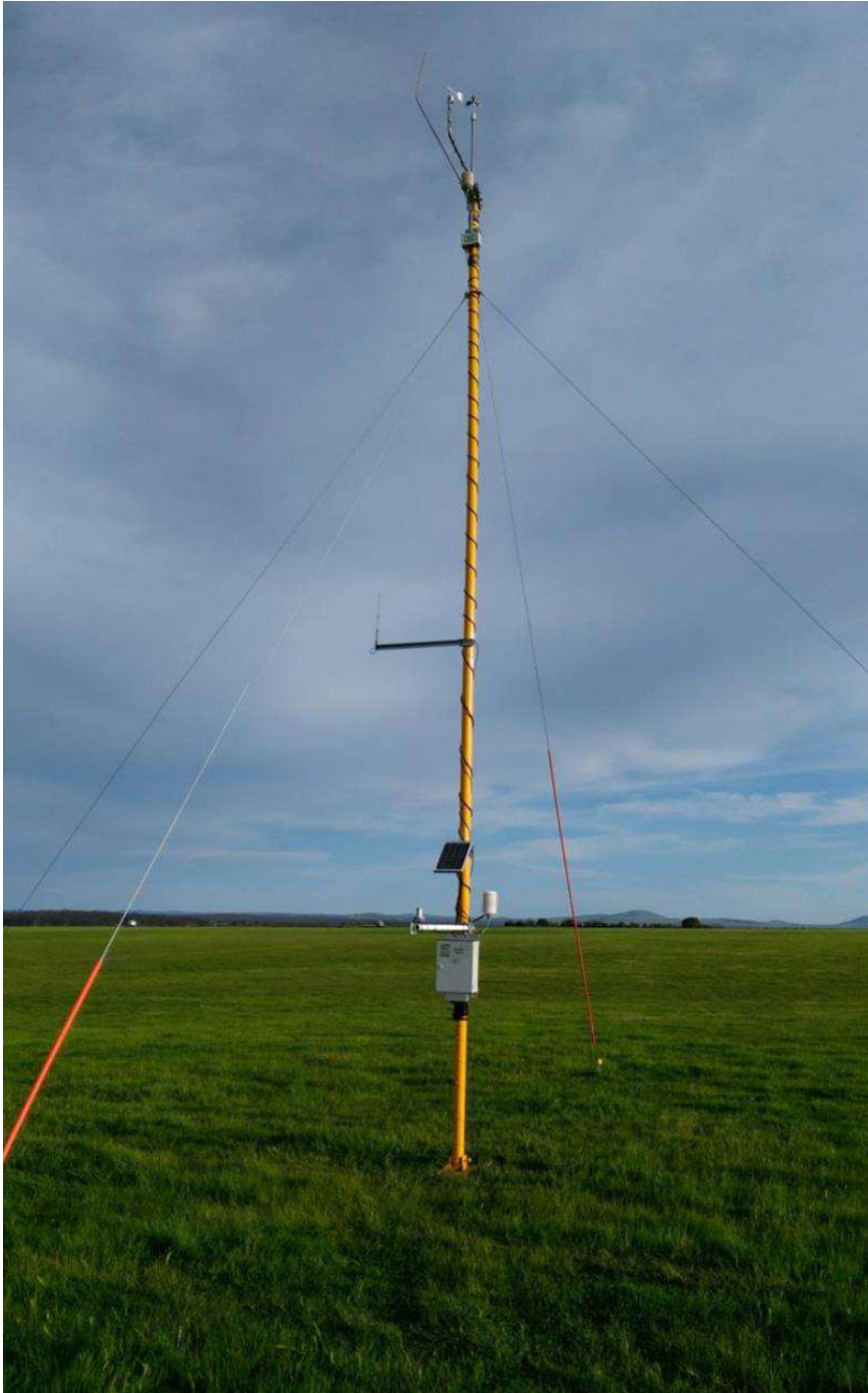


Figure 3 Moolort Broiler Farm on-site weather station as installed





## 4.2 Wind pattern

### 4.2.1 Long term pattern in wind

The average wind rose for the data period is shown in Figure 4 and it shows the following features:

- The predominant annual average wind direction is from the south-southwest comprising 14% of all incident winds, followed by winds from the south (12%) and the south-southeast (7%).
- The average wind speed is at 4.1 m/s.
- Winds from the east-southeast, southeast, west-southwest and west occur less than 5% of the time for each direction.
- The observed wind speed distribution indicates that the largest proportion of light winds (less than 2 m/s) are from the east (5%) and east-northeast (4%). This indicate poor dispersion conditions dispersion which odour is likely to disburse to the west and west-southwest than other directions.
- Figure 5 presents the annual wind roses between 1 January 2017 and 31 December 2018. The annual average wind speed ranged between 3.9 m/s and 4.2 m/s, and the predominant wind directions (south-southwest, south and south-southeast) were similar between the years.

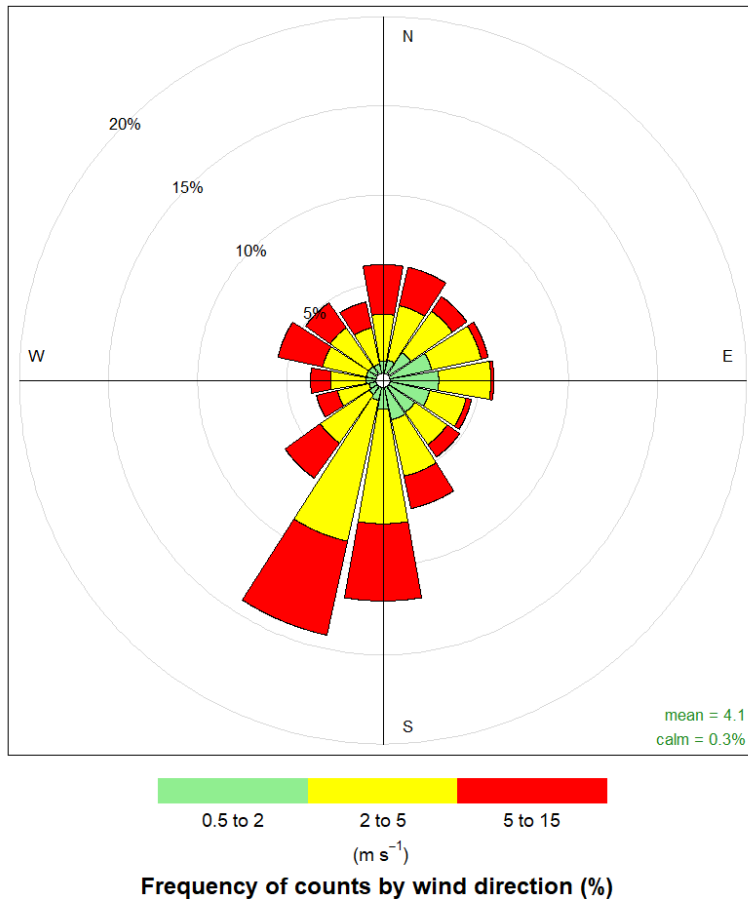


Figure 4 CALMET extracted wind at the site for the period between 1 January 2017 and 31 December 2018

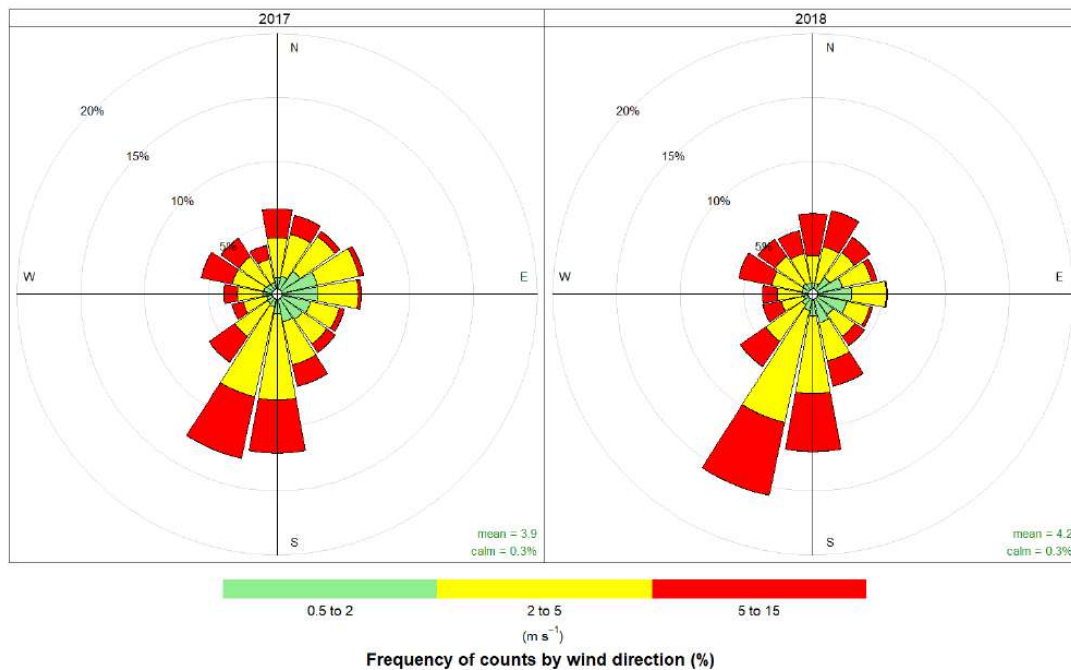


Figure 5 Annual windroses extracted at the site

### 4.2.2 Seasonal pattern in wind

The seasonal wind roses for the same period are presented in Figure 6 and show that:

- The predominant wind direction in summer is south-southwest occurring approximately 20% of the time, followed by winds from the south (17%).  
Light winds (< 2 m/s) occur approximately 11 % of the time.
- The predominant wind direction in winter is north occurring approximately 9% of the time, followed by winds from the north-northeast (8.7%).  
Light winds (< 2 m/s) occur approximately 30% of the time.
- The predominant wind direction in spring is south-southwest comprising 15% of all incident winds, followed by winds from the south (10%).  
Light winds occur approximately 15% of the time.
- The predominant wind direction in autumn is south-southwest comprising 14% of all incident winds, followed by south (13%).  
Light winds (< 2 m/s) occur approximately 20% of the time.
- The incidents of light winds (< 2 m/s) are greatest in winter, followed by autumn.



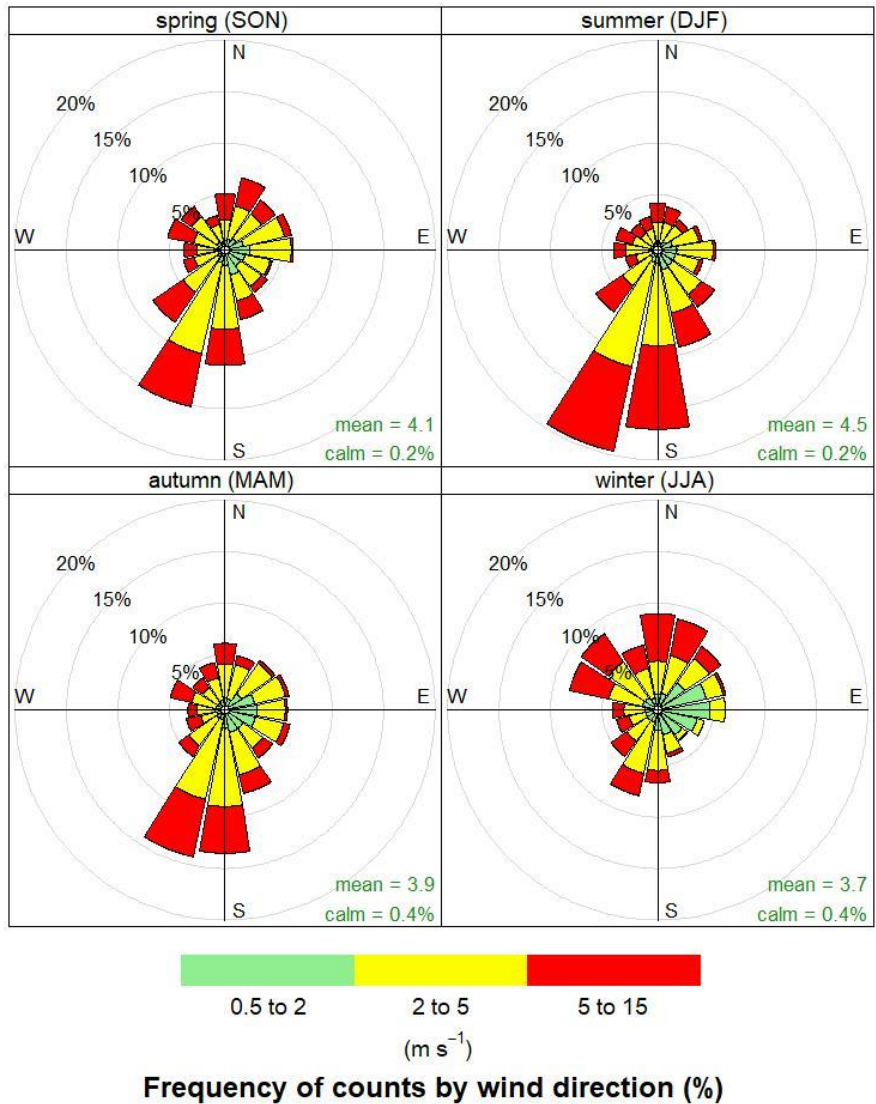


Figure 6 Seasonal windroses

### 4.3 Pattern of atmospheric stability

Atmospheric stability substantially affects the capacity of a pollutant such as gas, particulate matter or odour to disperse into the surrounding atmosphere upon discharge and is a measure of the amount of turbulent energy in the atmosphere.

There are generally six Pasquill – Gifford classes (A – F) used to describe atmospheric stability, and these classes are grouped into three stability categories:

- Unstable (classes A – C)
- Neutral (class D)
- Stable (classes E – F)



Under unstable conditions, dispersions of emissions from near-ground sources are good due to convectively vertical turbulent mixing. Neutral stability (Class D) denotes neutral atmospheric conditions, with stronger winds in moderate temperatures or lighter winds on overcast to partly cloudy days. Classes E and F denote slightly and moderately stable atmospheres when dispersion is poorest, as vertical mixing of air is suppressed.

### 4.3.1 Atmospheric stability

Figure 7 shows the frequency distribution of stability classes at the site as predicted by CALMET. The figure shows that stable atmospheres (E and F) occur for approximately 42.2%, unstable atmospheres (A, B and C) occur 24.1% and neutral conditions (D) occur 33.7% of the 2017 – 2018 model year.

Worst case pollutant dispersion typically occurs during stability class E and F conditions due to relatively low amounts of turbulence and therefore low levels of pollutant dispersion and mixing with ambient air. Stability class E and F conditions generally occur during calm periods at night and early in the morning.

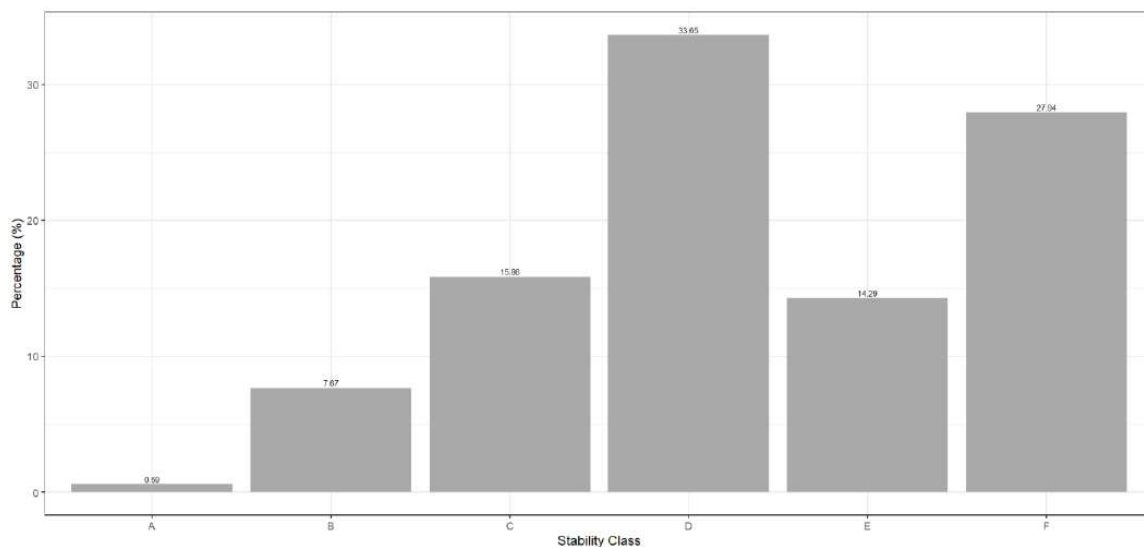


Figure 7 Stability class distribution predicted by CALMET for the site

### 4.3.2 Mixing height

Mixing height signifies the height above the surface of the earth throughout which a pollutant can be disperse. It is often associated with a sharp increase in temperature with height (inversion), and a sharp decrease in pollutant concentration.

A box plot of CALMET predicted mixing heights for the site is shown in Figure 8. During the night and early morning hours, mixing heights are lower with an average of approximately 100 m (7:00 pm to 7:00 am), which then increase after sunrise to an average of approximately 1,100 m during the day (7:00 am to 7:00 pm).

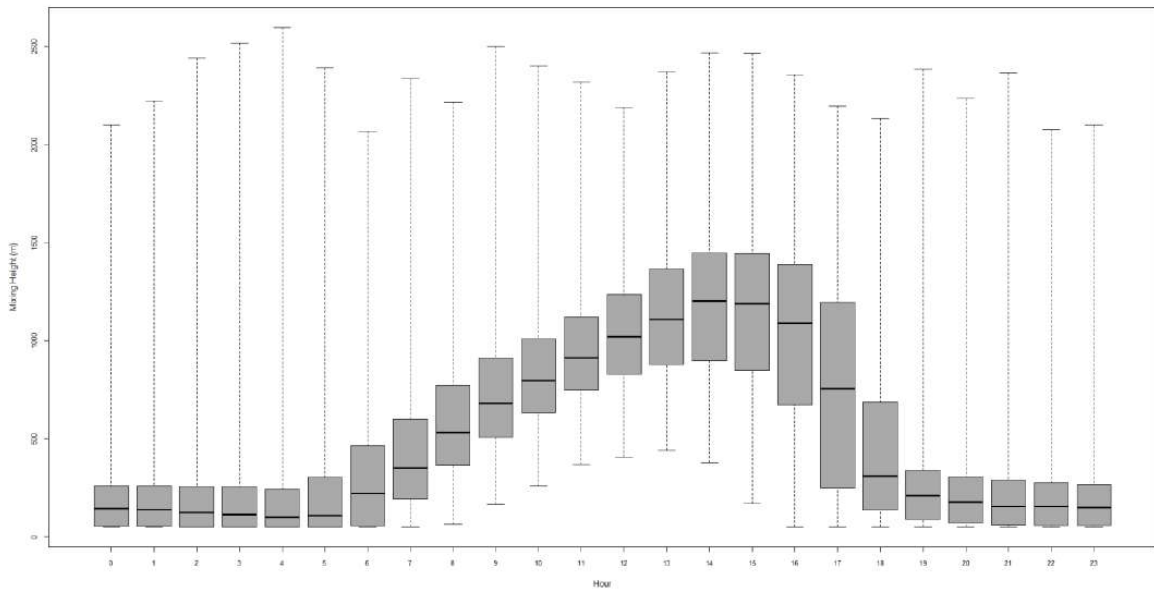


Figure 8 Mixing heights predicted by CALMET at the site



## 5. Odour Dispersion Modelling

As recommended in the [REDACTED] 1883, dispersion modelling is one of the Level 3 detailed risk assessment tools which can be used to support the evidence of odour risks of an activity and predict the likelihood of complaint. The purpose of odour dispersion modelling for this assessment is to provide an indication on the potential emission dispersion pattern from the proposed broiler farm and the likelihood of odour exposure for the nearby receptors. Modelling can also show the expected change in emissions for a proposed change or upgrade to a premises (relative modelling to determine how impacts from the existing use will change with the upgraded use).

For this assessment, the dispersion model CALPUFF (v7) was used to simulate the dispersion characteristics of odour generated from the farms at the site. CALPUFF is a non-steady state, Lagrangian Gaussian puff model recommended in AgriFutures Guide 1 for poultry farm assessments.

### 5.1 CALPUFF configuration

The model parameters and inputs were:

- Three-dimensional wind field from CALMET as described in Appendix A-2
- CALPUFF computational domain size of 18 km x 18 km with 0.3 km spacing, and a sampling grid of 15 km x 15 km with 0.3 km spacing
- CALPUFF model settings were selected based on *The Generic Guidance and Optimum Model Settings for the CALPUFF modelling System 2011* and the recommended settings in Appendix B of AgriFutures Guide 1
- The tunnel ventilation of each shed was modelled as time varying volume source at the end of each shed
- Stub stacks fitted to the duty fans on each shed were modelled as a volume source at height of 6 m above ground

### 5.2 Odour emission rates

This assessment utilised the K-factor method, also known as the Ormerod and Holmes emissions method (Ormerod and Holmes 2005)<sup>10</sup>. This method is one of the odour emission models recommended in AgriFutures Guide 1.

The K-factor emissions method is based on the relationship between the number of birds present, the stocking density of the birds, the ventilation rate and overall farm management. The K-factor method estimates hourly varying odour emission rates (OER) from a poultry farm shed using the following equation:

$$OER = 0.025 \times K \times A \times D \times V^{0.5}$$

The parameters used for the estimation of odour emissions rates from each shed are summarised in Table 6. The hourly varying bird density (D) and ventilation rate (V) for a year of typical bird growth cycles, approximately five cycles in a year, are shown in Appendix B for all existing and proposed sheds. Based on the parameters in Table 6, the modelled odour emission rate for each shed for a year is shown in Appendix C. To predict the potential worst case odour emissions, it is assumed that the birds are placed at the same time for all sheds.

<sup>10</sup> [REDACTED]



**Table 6** Parameters used in estimating odour emissions rates for each shed

Parameter	Value	Unit	Description
K	1.9	-	A K-factor of 1.9 has been selected (Based on AgriFutures Guide 1)
A	Varies between farms	m <sup>2</sup>	Calculated based on shed dimensions presented in Table 2 in Section 3.2.2 of this report.
D	Hourly varying	kg/m <sup>2</sup>	Based on the number of birds and weight of each bird in the growth cycle
V	Hourly varying	m <sup>3</sup> /s	The estimated ventilation required for a tunnel ventilated shed is based on bird age, target temperature inside the shed and ventilation profile as a percentage of maximum ventilation provided in Appendix B of AgriFutures Guide 1.

### 5.3 Modelled results

This section presents the odour dispersion modelling results for this assessment.

The five odour unit (OU) 99.9<sup>th</sup> percentile 3-minute average of odour modelling results is generally used to assess the predicted downwind odour concentrations during short time worst-case, poor dispersive meteorological conditions. This 99.9<sup>th</sup> percentile is generally taken as the level that if the odour is obvious and has an offensive character, it may lead to nuisance and resultant complaint.

Table 7 presents the odour impact predicted at the twenty receptors identified in Section 3.3 of this report, showing the 99.9<sup>th</sup> percentile 3-minute average odour concentrations and the estimated increase in odour impact as a result of bird number increase. The predicted results are also plotted in Figure 9, showing contour plots for the modelled 99.9<sup>th</sup> percentile 3-minute average odour concentrations from the current and proposed farms, over two years of modelled meteorology.

The German standard VDI 3882/1 'Determination of Odour Intensity' is also presented in Table 6 which shows the link between odour level and perceived intensity (a subjective measure) for poultry odour. Note that the Weber Fechner Law has been used to find the line of best fit of the individual presentations.

Based on the modelling results presented in Table 5 and Figure 9, as well as Table 6 on perceived intensity, the following features of the predicted results are observed:

- From the current and proposed farms, the 99.9<sup>th</sup> percentile offsite concentrations are predicted to be above the 5 OU 99.9<sup>th</sup> percentile at receptors R2 – R6, R8, R13, R17 – R18 and R20 (total of ten receptors).
- Among the ten receptors which are predicted to experience offsite concentrations above 5 OU, the increase in odour impact is most prominent at R13, followed by R8.
- Other receptors which are predicted to experience offsite concentrations below 5 OU, the increase in odour impact is most prominent at R10.
- Receptors R1, R16 and R19 are least likely to be affected by the odour from the proposed farm.
- Table 7 shows that for poultry odour, the odour level needs to almost treble before an increase in perceived intensity is registered. This comparatively gradual response to increased odour level is a relevant factor when assessing predicted peak odour levels. Hence this suggests that the increase at all receptors including the largest increase of 4.5 OU at R13 will not be perceived as the factor of increase is below 2.7.

As the 99.9<sup>th</sup> percentile odour concentrations at R2 – R6, R8, R13, R17 – R18 and R20 (total of ten receptors) are predicted to be above 5 OU, it is important to consider the likelihood of adverse odour impact at the receptors. GHD has undertaken a risk assessment on the identified receptors, presented in Section 5.4.



Table 7 Predicted odour impact at nearby receptors

Receptor	Odour impact from current farms	Odour impact from current and proposed farms	Increase in odour impact as a result of bird number increase (OU)	Factor of increase
	99.9 <sup>th</sup> percentile, 3-min average (OU)	99.9 <sup>th</sup> percentile, 3-min average (OU)		(Increase / odour from current farms)
R1	2.0	2.7	0.7	0.4
R2	5.6	7.3	1.7	0.3
R3	5.8	8.4	2.5	0.4
R4	4.3	6.4	2.1	0.5
R5	3.7	6.0	2.3	0.6
R6	3.3	5.4	2.0	0.6
R7	2.1	4.2	2.1	1.0
R8	2.5	6.1	3.6	1.4
R9	1.7	4.5	2.8	1.7
R10	1.6	4.5	2.9	1.8
R11	1.4	3.8	2.4	1.8
R12	0.8	2.1	1.3	1.7
R13	2.9	7.4	4.5	1.6
R14	1.1	2.9	1.8	1.6
R15	1.3	3.0	1.7	1.3
R16	1.3	2.0	0.7	0.5
R17	14.2	17.1	2.9	0.2
R18	8.7	11.4	2.7	0.3
R19	0.8	1.3	0.5	0.7
R20	4.8	7.0	2.2	0.5

Table 8 Perceived Intensity vs Odour Level – Poultry Odour<sup>1</sup>

Odour Strength	Intensity Level	Concentration <sup>1</sup> OU	Ratio between Intensity levels
Extremely Strong	6	144	2.7:1
Very Strong	5	52	
Strong	4	19	
Distinct	3	7.0	
Weak	2	2.5	
Very weak	1	0.92	
Not Perceptible	0	0.34	

<sup>1</sup> WA DEP 2002, "Odour Methodology Guideline", Table 3 Department of Environmental Protection Perth March 2002

[1] \_\_\_\_\_

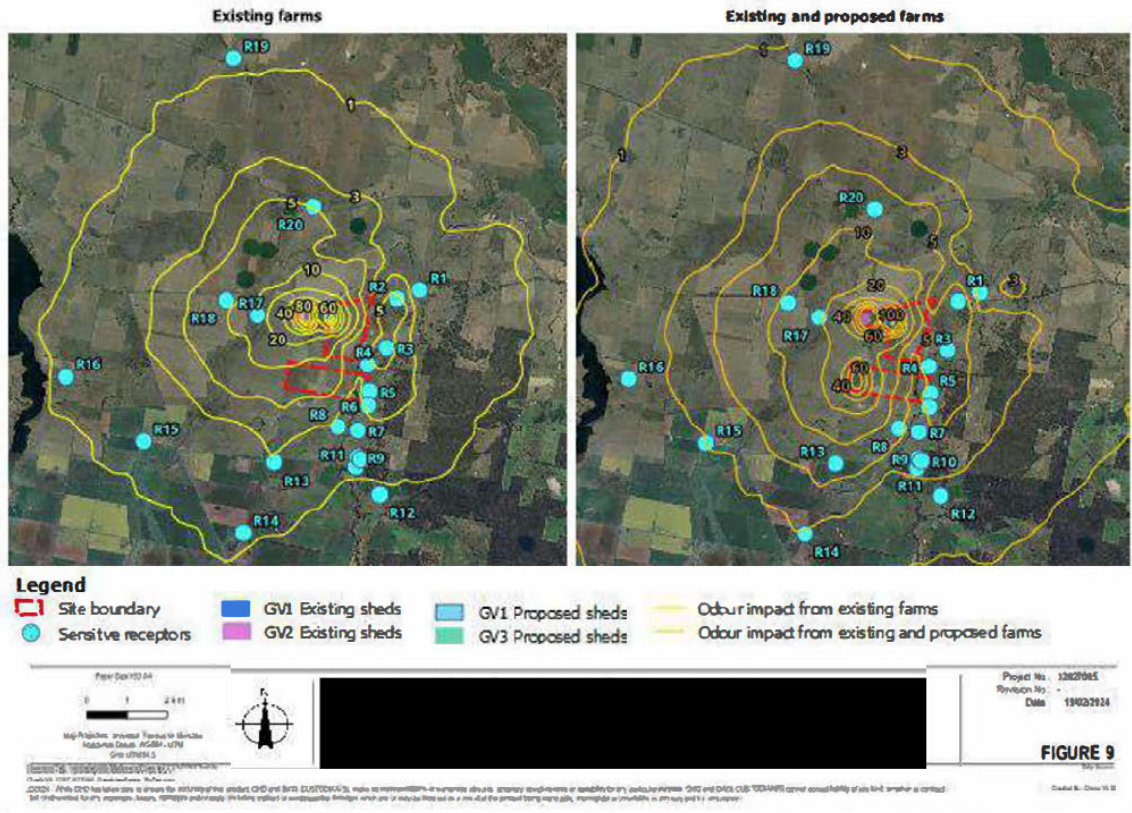


Figure 9 Predicted 99.9<sup>th</sup> percentile 3-minute average odour concentrations from the current and proposed farms (existing and proposed)

## 5.4 Risk assessment

As shown in Section 5.2, the predicted 99.9<sup>th</sup> percentile concentrations at R2, R4 – R8, R11 – R13 (total of nine receptors) are predicted to be above 5 OU. [REDACTED] has undertaken a risk assessment to assess the likelihood of adverse impact from the current and proposed farm on the identified receptors.

At the time this assessment was undertaken, there are no established risk assessment for assessing odour impact using predicted results from odour dispersion model. [REDACTED] has therefore adopted the assessment for risk of odour exposure presented in Section 6.3 of EPA Publication 1883 – *Risk of Offensive Odour using Area Surveillance Method* to assess the likelihood of the identified receptors in experiencing offensive odour from the poultry farm.

### 5.4.1 Method

The risk of offensive odour (area surveillance method) assessment outlined in [REDACTED] involves four steps when assessing the likelihood of the receiving environment in experiencing offensive odour. The description of each step, the method used and its application to this assessment are summarised in Table 9.

Table 9 Summary of recommended methods used when undertaking risk of offensive odour assessment

As described in EPA Publication 1883			Application to this assessment
Step	Description	Method	
1	Determining when source odours have been confirmed	This step is to determine if an odour was recognized, there are single or multiple odours and if the odours were obvious or subtle.  The odour character is determined using Appendix B of EPA Publication 1883.	Based on Appendix B of EPA Publication 1883, the odour character from the chicken (sheds) is categorised to have an "Unwelcome character".  [REDACTED] has categorised the intensity of odour experienced at each receptor based on the maximum 99.9 <sup>th</sup> percentile 3-minute average odour concentration predicted at the receptor. Obvious odours are odour concentrations predicted to be above 5 OU.
2	Determining the frequency at which source odours were confirmed for each odour character and its associated offensiveness potential	In EPA Publication 1883, the frequency of odour occurrence is determined from odour surveillance.	[REDACTED] determines the frequency of odour occurrence based on the number of hours the 99.9 <sup>th</sup> percentile 3-minute average maximum odour concentration has exceeded the 5 OU 99.9 <sup>th</sup> percentile at all identified receptors.
3	Combining odour frequency with odour character and intensity to determine the likelihood of odour exposure at a given point or series of points (for example in a suburb or a block)	This step involves determining the risk of odour exposure by combining odour character, intensity and frequency using Table 11, Table 12 and Table 13 from EPA Publication 1883.  These tables are presented in this report as Figure 10, Figure 11, Figure 12, respectively.	As described in method.  Note – Typically with odour risk assessments the main concern is obvious recognised odours with a clear source. However, there may be occasions where only subtle odour is occurring or obvious odour is rare (i.e., < 0.5 % of the time), in these cases we can assess the risk of odour exposure using subtle odours as in Table 13.
4	Combining the likelihood of odour exposure with the sensitivity of the receiving environment to determine the overall risk that there will be offensive odour impacts.	This step assesses the land use of the site where odour is observed and the associated beneficial uses.  The overall risk of offensive odour is determined using Table 14 and Table 15 from EPA Publication 1883, based on the surrounding land use and the risk of odour exposure outcome determined in Step 3.  Table 14 and Table 15 from EPA Publication 1883 are presented here as Figure 13 and Figure 14, respectively as a reference.	Land use is based on the land use terms and nesting diagrams in the Victoria Planning Provisions (VPP) groups, which are grouped into three categories. The dwellings surrounding the site boundary are single, isolated dwellings located in a Farming Zone so it can be assumed the receiving environment falls within the agriculture VPP land use term. The receiving environment is therefore classified as low sensitivity.

<b>Negligible exposure</b>	Almost no chance of odour exposure
<b>Low exposure</b>	Odour exposure unlikely
<b>Moderate exposure</b>	Likely chance of odour exposure
<b>High exposure</b>	Highly likely to have odour exposure
<b>Very high exposure</b>	Odour exposure near certain

Figure 10 Risk of odour exposure potential – colour key. This is Table 11 from [REDACTED]





Frequency	Hours per year (indicative)	Obvious odour character		
		unsafe	unwelcome	innocuous
0.5 - 2.0%	< 200	Yellow	Yellow	Green
2.1% - 6.0%	200 to 525.	Orange	Orange	Green
6.1% - 10%	526 to 875	Red	Orange	Orange
> 10%	(> 875 hrs/yr.)	Red	Red	Orange

Figure 11 Risk of odour based on character, obvious odour intensity and frequency of predicted odour. This is Table 12 from EPA Publication 1883

Frequency	Hours per year (indicative)	Subtle odour character (Obvious odour is < 2%)		
		unsafe	unwelcome	innocuous
0 - 2.0%	< 200	Blue	Blue	Blue
2.1% - 6.0%	200 to 525.	Green	Blue	Blue
6.1% - 10%	526 to 875	Yellow	Green	Blue
> 10%	(> 875 hrs/yr.)	Orange	Yellow	Green

Figure 12 Risk of odour based on character, subtle odour intensity and frequency of predicted odour. This is Table 13 from EPA Publication 1883

Rating	Likelihood of offensive odour
Very high	Almost certain
High	Highly likely
Moderate	Likely
Low	Unlikely but still possible

Figure 13 Risk of offensive odour key. This is Table 14 from [REDACTED]

Risk of odour exposure	Receiving environment sensitivity		
	High	Medium	Low
Very high exposure	Very high	High	Moderate
High exposure	High	High	Moderate
Moderate exposure	High	Moderate	Low
Low exposure	Moderate	Moderate	Low
Negligible exposure	Low	Low	Low

Figure 14 Risk of offensive odour. This is Table 15 from [REDACTED]



## 5.4.2 Risk assessment outcome

The overall risk of offensive odour impact at the identified receptors are derived using the method described in Section 5.4.1. [REDACTED] assessed the overall risk of offensive odour impacts as shown below:

- Overall risk of offensive odour impacts from current farms, summarised in Table 10
- Overall risk of offensive odour impacts from current and proposed farms, summarised in Table 11

Based on Table 10, the risk of offensive odour is low at all the identified receptor locations. This means all identified receptors are unlikely to experience offensive odour from the current farms.

Based on Table 11, with the establishment of the proposed farm, the risk of offensive odour is moderate at R17. The risk of offensive odour is low at the other nineteen identified receptor locations. This means receptors R17 west of the site is likely to experience offensive odour from the current and proposed farms, while the other nineteen receptors are unlikely to experience offensive odour from the current and proposed farms.

Table 10 Risk of offensive odour from current farms

Receptor	Land use sensitivity	99.9 <sup>th</sup> percentile, 3-min average (OU)	Odour intensity <sup>1</sup>	Number of 5 OU exceedance over a year	Frequency (%)	Risk odour exposure potential	Risk of offensive odour
R1	Low	2.0	Subtle	0	0.00	Negligible	Low
R2	Low	5.6	Obvious	10	0.11	Low	Low
R3	Low	5.8	Obvious	13	0.14	Low	Low
R4	Low	4.3	Subtle	6	0.07	Negligible	Low
R5	Low	3.7	Subtle	4	0.05	Negligible	Low
R6	Low	3.3	Subtle	3	0.03	Negligible	Low
R7	Low	2.1	Subtle	2	0.02	Negligible	Low
R8	Low	2.5	Subtle	2	0.02	Negligible	Low
R9	Low	1.7	Subtle	1	0.01	Negligible	Low
R10	Low	1.6	Subtle	1	0.01	Negligible	Low
R11	Low	1.4	Subtle	0	0.00	Negligible	Low
R12	Low	0.8	Subtle	0	0.00	Negligible	Low
R13	Low	2.9	Subtle	0	0.00	Negligible	Low
R14	Low	1.1	Subtle	0	0.00	Negligible	Low
R15	Low	1.3	Subtle	0	0.00	Negligible	Low
R16	Low	1.3	Subtle	0	0.00	Negligible	Low
R17	Low	14.2	Obvious	145	1.65	Moderate	Low
R18	Low	8.7	Obvious	58	0.66	Moderate	Low
R19	Low	0.8	Subtle	0	0.00	Negligible	Low
R20	Low	4.8	Subtle	7	0.08	Negligible	Low

**Note:**

1. GHD has categorised the intensity of odour experienced at each receptor based on the maximum 99.9<sup>th</sup> percentile 3-minute average odour concentration predicted at the receptor. Obvious odours are odour concentrations predicted to be above 5 OU.

Table 11 Risk of offensive odour from current and proposed farms

Receptor	Land use sensitivity	99.9 <sup>th</sup> percentile, 3-min average (OU)	Odour intensity <sup>1</sup>	Number of 5 OU exceedance over a year	Frequency (%)	Risk odour exposure potential	Risk of offensive odour
R1	Low	2.7	Subtle	1	0.0	Negligible	Low
R2	Low	7.3	Obvious	17	0.2	Low	Low
R3	Low	8.4	Obvious	27	0.3	Moderate	Low
R4	Low	6.4	Obvious	18	0.2	Low	Low
R5	Low	6.0	Obvious	13	0.1	Low	Low
R6	Low	5.4	Obvious	11	0.1	Low	Low
R7	Low	4.2	Subtle	7	0.1	Negligible	Low
R8	Low	6.1	Obvious	12	0.1	Low	Low
R9	Low	4.5	Subtle	7	0.1	Negligible	Low
R10	Low	4.5	Subtle	6	0.1	Negligible	Low
R11	Low	3.8	Subtle	4	0.0	Negligible	Low
R12	Low	2.1	Subtle	1	0.0	Negligible	Low
R13	Low	7.4	Obvious	14	0.2	Low	Low
R14	Low	2.9	Subtle	3	0.0	Negligible	Low
R15	Low	3.0	Subtle	1	0.0	Negligible	Low
R16	Low	2.0	Subtle	0	0.0	Negligible	Low
R17	Low	17.1	Obvious	220	2.5	High	Moderate
R18	Low	11.4	Obvious	115	1.3	Moderate	Low
R19	Low	1.3	Subtle	0	0.0	Negligible	Low
R20	Low	7.0	Obvious	31	0.3	Moderate	Low

**Note:**

1. GHD has categorised the intensity of odour experienced at each receptor based on the maximum 99.9<sup>th</sup> percentile 3-minute average odour concentration predicted at the receptor. Obvious odours are odour concentrations predicted to be above 5 OU.



## 5.5 Model result summary

The odour modelling results show the following features:

- From the current and proposed farms, the 99.9<sup>th</sup> percentile offsite concentrations are predicted to be above the 5 OU 99.9<sup>th</sup> percentile at receptors R2 – R6, R8, R13, R17 – R18 and R20 (total of ten receptors).
- The increase in odour impact, as a result of increase in bird numbers, is most prominent at R13, followed by R8. However, the modelled increases are unlikely to be perceived as the odour level needs to almost treble before an increase in perceived intensity is registered.
- Receptors R1, R16 and R19 are least likely to be affected by the odour from the proposed farm.

Using the odour dispersion modelling results, [REDACTED] has undertaken a risk of offensive odour assessment to assess the likelihood of the identified receptors in experiencing offensive odour from the existing and proposed farms.

[REDACTED] has categorised the intensity of odour experienced at each receptor based on the maximum 99.9<sup>th</sup> percentile three-minute average odour concentration predicted at the receptor. Obvious odours are odour concentrations predicted to be above 5 OU. The risk assessment results indicate that:

- All identified receptors are unlikely to experience offensive odour from the current farms.
- When the proposed farm is in place, receptors R17 is likely to experience offensive odour from the current and proposed farms, while the other nineteen receptors are unlikely to experience offensive odour from the current and proposed farms.

## 6. Model calibration using odour observations

In this section of the report, the odour dispersion model results are spot calibrated using the odour surveillance observations conducted by Air Odour and Compliance (AOC) Specialist – Jim Demetriou. The odour survey results are presented in the report “*Baseline Odour Assessment to Determine the Extent of Odour Plume*”, prepared by AOC Specialist for ProTen (attached as Appendix E).

The aim of this calibration is to compare and identify the likely modelled odour concentrations which could describe the ‘Obvious’ and ‘Subtle’ experienced by the surveyors. The identified odour concentrations for ‘Obvious’ and ‘Subtle’ odour is then used as the level which may lead to nuisance and resultant complaint to undertake another risk assessment with the methodology as described in Section 5.4.1.

### 6.1 Summary and findings

The odour surveillance was undertaken on four separate days around GV2, prior to first and final pickups, listed as follows:

- **Odour survey 1 – 3** were undertaken on 14 November 2023 prior to first pick.
  - Odour survey 1 undertaken between 10:20 – 11:50.
  - Odour survey 2 undertaken between 13:00 – 13:40
  - Odour survey 3 undertaken between 14:20 – 15:00
- **Odour survey 4 – 5** were undertaken on 15 November 2023 prior to first pick.
  - Odour survey 4 undertaken between 08:15 – 09:00
  - Odour survey 5 undertaken between 10:15 – 11:15
- **Odour survey 6 – 8** were undertaken on 27 November 2023 prior to final pick<sup>11</sup>.
  - Odour survey 6 undertaken between 10:15 – 11:15
  - Odour survey 7 undertaken between 12:00 – 12:40
  - Odour survey 8 undertaken between 13:30 – 14:40
- **Odour survey 9 – 10** were undertaken on 28 November 2023 prior to final pick.
  - Odour survey 9 undertaken between 07:45 – 08:45
  - Odour survey 10 undertaken between 09:30 – 10:45

Note that GV1 was unoccupied during Odour survey 1 – 5 and housed 1 – 2 day old birds during Odour survey 6 – 10.

The odour surveys were conducted under worst-case operational and meteorological conditions, accounting for temporal fluctuations. These evaluations occurred at various times throughout the day, including early morning, mid-morning, early afternoon, and late afternoon, while considering changes in wind direction and velocity. This approach provides an understanding of odour dispersion across diverse meteorological conditions.

Although no discernible trend was identified, it was observed that the distance covered by the odour plume was at its highest immediately after an increase in the air ventilation rate, typically early to mid-morning. Overall, the distance at which the odour plume travelled remained consistent for both events, ranging from 470-630 m for event 1 and 320-600 m for event 2. The distance has been calculated from the centroid of the shed sources to the outermost red dot (representing obvious odour).

It was notable that there were no cumulative odour effects from Grandview 1. The absence of detectable odour from Grandview 1, coupled with staggered grow cycles, contributes to low odour emissions from one farm when the other is at its peak.

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<sup>11</sup> Note that 3,892 birds were removed from shed 1 on the 26 November between 14:30 and 15:00.

## 6.2 Calibration methodology

The odour dispersion model is updated and run based on the following:

- The number and age of birds present at GV2 during the four days when odour surveys were undertaken
- Average temperature, wind speed, wind direction, relative humidity and cloud amount observed on those days

A summary of the above data used to update the odour dispersion model is summarised in Table 12. The updated odour dispersion model results are then compared with the odour survey results to identify odour concentrations for 'Obvious' and 'Subtle' odour.

Table 12 Summary of data used to update odour dispersion model

Odour survey number	GV2 bird		Average temperature	Average wind speed	Average wind direction	Relative humidity	Cloud amount <sup>12</sup>
	Maximum Age	Number	°C	m/s	°	%	tenths
1 – 2	29	385,350	13	3	203 – 225	66	10
3 – 4			13	2.5	158 – 180	66	10
5			16	2.5	248	57	10
6	42	246,919	17	1.5	180	38	5
7 – 8			25	3.5	225	38	1
9			13	2	203	67	7
10			23	1.5	158	67	7

## 6.3 Calibrated results

The odour dispersion model, updated with the data presented in Table 12, are plotted with the odour intensities recorded during the odour surveys and are presented in Appendix D. Using figures presented in Appendix D, odour concentration which could be described as 'Obvious' is determined as follows:

- 'Obvious' odour – Identifying the lowest contour areas of odour concentrations where the odour intensity was still observed as obvious.

Table 13 presents the derivation of odour concentrations identified as 'Obvious' odours. It shows that the odour concentration which could describe 'Obvious' odour is 10 OU.

Table 13 Determining odour concentrations which could be described as 'Obvious'

Odour survey	The lowest contour areas of odour concentrations where the odour intensity was still observed as obvious (OU)
1	4
2	5
3	15
4	15
5	9
6	19
7	7
8	7
9	9
10	70 (outlier, excluded from assessment)
<b>Average</b>	<b>10</b>

<sup>12</sup> Based on Bendigo Airport data which is measured in eighths

## 6.4 Updated risk assessment

As shown in Section 5.3, the predicted 99.9<sup>th</sup> percentile concentrations at receptors R2 – R6, R8, R13, R17 – R18 and R20 (total of ten receptors) are predicted to be above 5 OU and [REDACTED] has undertaken a risk assessment to assess the likelihood of adverse impact from the current and proposed farm on the identified receptors, as shown in Section 5.4.2. In this section of the report, another risk assessment is undertaken using the odour concentrations which could be described as 'Obvious' odour, determined in Section 6.3.

The overall risk of offensive odour impact at the identified receptors are derived using the method described in Section 5.4.1. [REDACTED] assessed the overall risk of offensive odour impacts as shown below:

- Overall risk of offensive odour impacts from current farms, summarised in Table 14.
- Overall risk of offensive odour impacts from current and proposed farms, summarised in Table 15.

Based on Table 14, the risk of offensive odour is low at all the identified receptor locations. This means all identified receptors are unlikely to experience offensive odour from the current farms.

Based on Table 15, with the establishment of the proposed farm, the risk of offensive odour is low at all the identified receptors. This means all identified receptors are unlikely to experience offensive odour from the current and proposed farms. Figure 15 presents the risk of offensive odour plot around the current and proposed farm which shows the area of medium and low offensive odour risks.

Table 14 Risk of offensive odour from current farms – Updated assessment

Receptor	Land use sensitivity	99.9 <sup>th</sup> percentile, 3-min average (OU)	Odour intensity <sup>1</sup>	Number of 10 OU exceedance over a year	Frequency (%)	Risk odour exposure potential	Risk of offensive odour
R1	Low	2.0	Subtle	0	0.00	Negligible	Low
R2	Low	5.6	Subtle	1	0.01	Negligible	Low
R3	Low	5.8	Subtle	1	0.01	Negligible	Low
R4	Low	4.3	Subtle	0	0.00	Negligible	Low
R5	Low	3.7	Subtle	0	0.00	Negligible	Low
R6	Low	3.3	Subtle	0	0.00	Negligible	Low
R7	Low	2.1	Subtle	0	0.00	Negligible	Low
R8	Low	2.5	Subtle	0	0.00	Negligible	Low
R9	Low	1.7	Subtle	0	0.00	Negligible	Low
R10	Low	1.6	Subtle	0	0.00	Negligible	Low
R11	Low	1.4	Subtle	0	0.00	Negligible	Low
R12	Low	0.8	Subtle	0	0.00	Negligible	Low
R13	Low	2.9	Subtle	0	0.00	Negligible	Low
R14	Low	1.1	Subtle	0	0.00	Negligible	Low
R15	Low	1.3	Subtle	0	0.00	Negligible	Low
R16	Low	1.3	Subtle	0	0.00	Negligible	Low
R17	Low	14.2	Obvious	28	0.32	Low	Low
R18	Low	8.7	Subtle	4	0.04	Negligible	Low
R19	Low	0.8	Subtle	0	0.00	Negligible	Low
R20	Low	4.8	Subtle	0	0.00	Negligible	Low

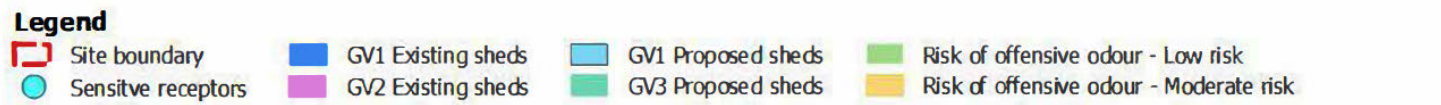
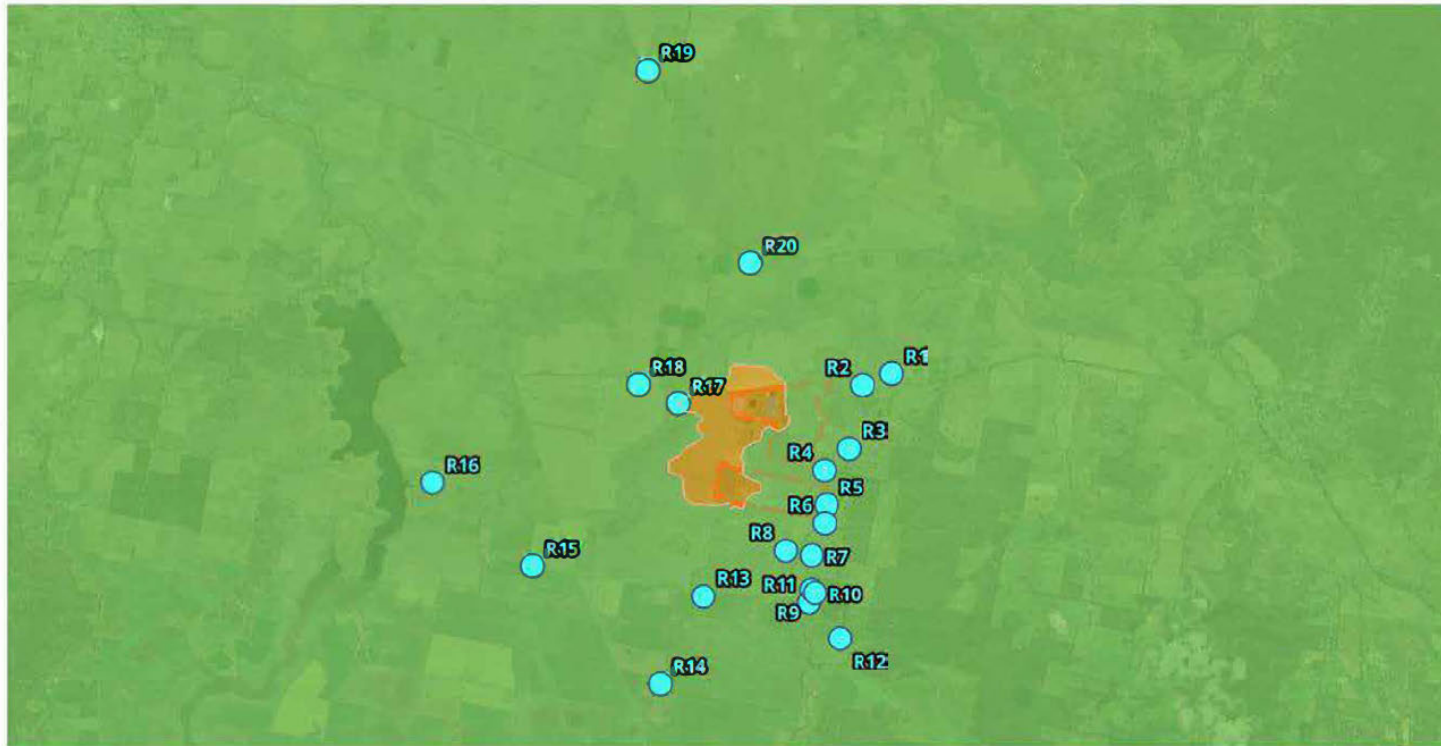
**Note:**  
 1. [REDACTED] has categorised the intensity of odour experienced at each receptor based on the maximum 99.9<sup>th</sup> percentile 3-minute average odour concentration predicted at the receptor. Obvious odours are odour concentrations predicted to be above 10 OU.



Table 15 Risk of offensive odour from current and proposed farms – Updated assessment

Receptor	Land use sensitivity	99.9 <sup>th</sup> percentile, 3-min average (OU)	Odour intensity <sup>1</sup>	Number of 5 OU exceedance over a year	Frequency (%)	Risk odour exposure potential	Risk of offensive odour
R1	Low	2.7	Subtle	0	0.0	Negligible	Low
R2	Low	7.3	Subtle	4	0.0	Negligible	Low
R3	Low	8.4	Subtle	6	0.1	Negligible	Low
R4	Low	6.4	Subtle	2	0.0	Negligible	Low
R5	Low	6.0	Subtle	2	0.0	Negligible	Low
R6	Low	5.4	Subtle	1	0.0	Negligible	Low
R7	Low	4.2	Subtle	0	0.0	Negligible	Low
R8	Low	6.1	Subtle	2	0.0	Negligible	Low
R9	Low	4.5	Subtle	0	0.0	Negligible	Low
R10	Low	4.5	Subtle	0	0.0	Negligible	Low
R11	Low	3.8	Subtle	0	0.0	Negligible	Low
R12	Low	2.1	Subtle	0	0.0	Negligible	Low
R13	Low	7.4	Subtle	5	0.1	Negligible	Low
R14	Low	2.9	Subtle	0	0.0	Negligible	Low
R15	Low	3.0	Subtle	0	0.0	Negligible	Low
R16	Low	2.0	Subtle	0	0.0	Negligible	Low
R17	Low	17.1	Obvious	58	0.7	Moderate	Low
R18	Low	11.4	Obvious	19	0.2	Low	Low
R19	Low	1.3	Subtle	0	0.0	Negligible	Low
R20	Low	7.0	Subtle	3	0.0	Negligible	Low

**Note:**  
 1. [REDACTED] has categorised the intensity of odour experienced at each receptor based on the maximum 99.9<sup>th</sup> percentile 3-minute average odour concentration predicted at the receptor. Obvious odours are odour concentrations predicted to be above 10 OU.



**FIGURE 15**

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Figure 15 Level of risk of offensive odour plot



## 6.5 Updated risk assessment summary

Using the odour dispersion modelling results presented in Section 5.3 of this report, [REDACTED] has undertaken a second risk of offensive odour assessment incorporating the peak odour survey results to assess the likelihood of the identified receptors in experiencing offensive odour from the existing and proposed farms.

[REDACTED] has categorised the intensity of odour experienced at each receptor based on the maximum 99.9<sup>th</sup> percentile three-minute average odour concentration predicted at the receptor. Obvious odours are odour concentrations predicted to be above 10 OU based on the peak odour survey results. The risk assessment results indicate that:

- All identified receptors are unlikely to experience offensive odour from the current farms at the site.
- When the proposed farm is in place, all identified receptors are unlikely to experience offensive odour from the current and proposed farms.

## 7. Complaint Data Analysis

requested historical complaints from 2018 – 2023 from the Central Goldfield Shire Council and FOIs from Victoria. However, Council received no complaints related to odour for that area during that time, and there was no response from EPA.

The data that was used for this analysis were complaints received by the Central Goldfields Shire Council in 2016 and 2017, Mount Alexander Shire Council in 2016, and EPA in 2016 and 2017.

Between 2016 and 2017, a total of 91 odour complaints were received and alleged the source to be Grandview Poultry PTY LTD. Figure 16 presents a histogram of complaints received over this period, per year. There was a greater number of complaints received in 2016 compared to 2017.



Figure 16 Histogram of complaints received by ProTen in 2016 and 2017

Of the complaints with a pollution reporter address, there were four streets where complaints were made against Grandview Poultry as shown in Table 16. The majority of the complaints were made from Strathlea Road (7) which sits to the east and southeast of the farm, and Clarkes Road (6) to the west and southwest. Figure 17 also shows the complaint locations relative to the level of risk of offensive odour plot.

Table 16 Address and frequency of received complaints

Address	Frequency of complaints	Direction from farm
Clarkes Road	6	W, SW
Rodborough Road	1	N
Strathlea Road	7	E, SE
Hurns Road	2	S

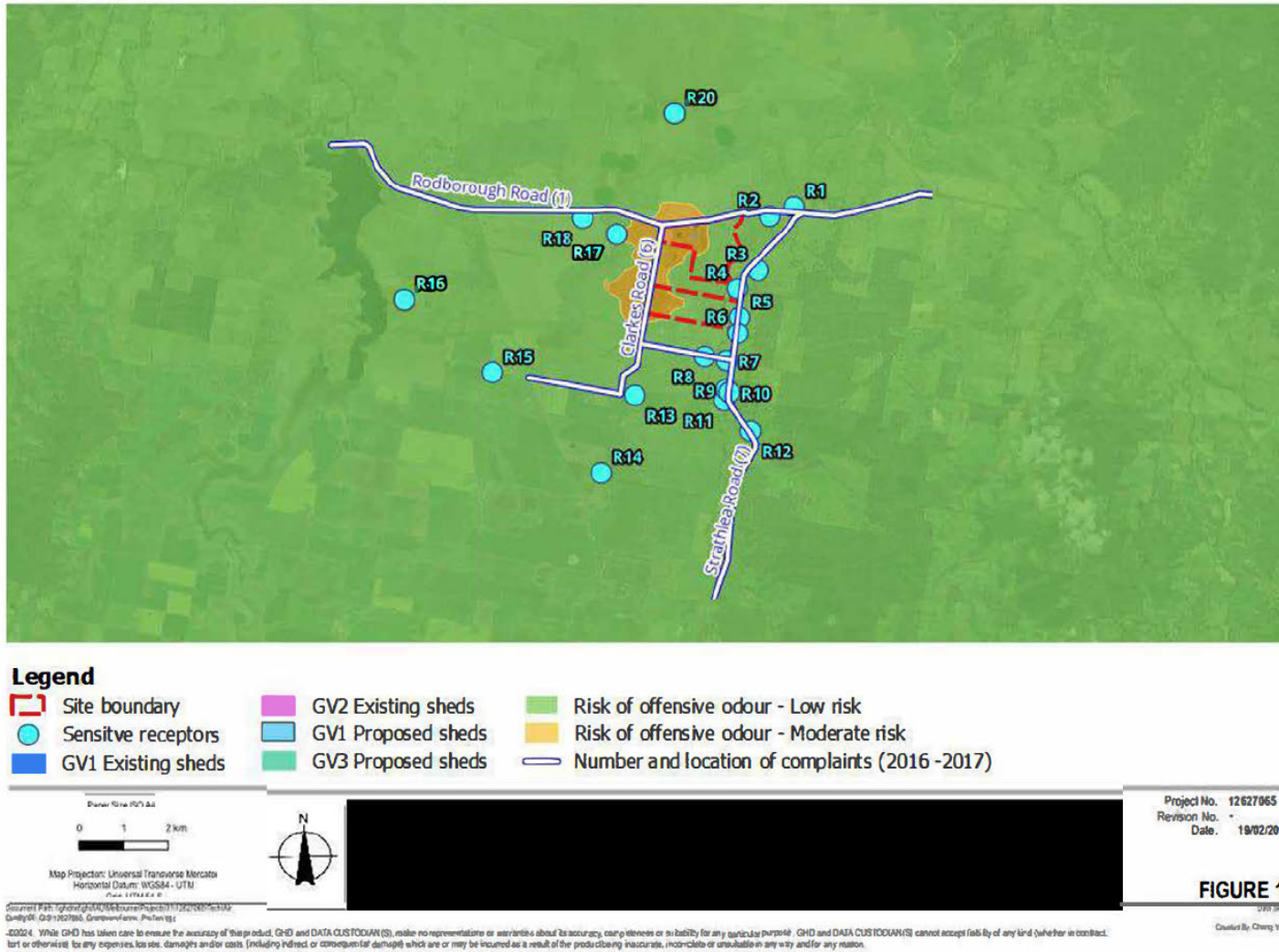


Figure 17 Number and location of complaints made against the site (2016 – 2017)

## 7.1 Observations

Based on Figure 17, the following observations were drawn:

- The nearest identified receptors along Strathlea Road are receptors R3 – R6. However, they are not located within the Moderate Risk area. There is also a lack of westerly winds placing these receptors down wind of the farm.
- The nearest identified receptors along Clarkes Road is receptor R13. However, it is not located within the Moderate Risk area. There is also a lack of southerly winds placing these receptors down wind of the farm.
- The nearest identified receptors along Rodborough Road is receptor R17. It is located at the boundary of the Moderate Risk area.
- The nearest identified receptors along Hurns Road are receptor R8 and R9. However, they are not located within the Moderate Risk area. There is also a lack of northerly winds placing these receptors down wind of the farm.
- There have been no complaints from 2018 and onwards provided to GHD.

## 8. Summary and conclusion

██████████ currently operates two farms at 1480 Rodborough Road, Moolort. It is understood that in addition to purchasing Grandview 3 (GV3) site at 141 Clarkes Road, Strathlea, ProTen intends to build additional sheds and change the number of permitted bird numbers at the new site and to the existing Grandview 1 farm at 1480 Rodborough Road, Moolort, which are located north of the proposed GV3. To support the proposed expansion, ProTen has requested an Odour Environmental Risk Assessment (OERA) to be undertaken to assess the resultant odour impacts on the surrounding areas.

This report presents the OERA undertaken in accordance with ██████████ *Guidance for assessing odour and AgriFutures – Planning and environment guideline for establishing meat chicken farms: Guide 1 – Assessment guide* for the proposed expansion of the existing broiler farm at 1480 Rodborough Road, Moolort and 141 Clarkes Road, Strathlea, to understand odour risks associated with proposed operations.

### Odour dispersion modelling results

The odour impact from the proposed expansion of the current farms was assessed using CALPUFF model. The predicted 99.9<sup>th</sup> percentile 3-minute average of off-site odour concentrations over two years of modelled meteorology were assessed against the five odour unit (OU) level to understand the predicted downwind odour concentrations during short time worst-case, poor dispersive meteorological conditions. The five odour unit is generally taken as the level that if the odour is obvious and has an offensive character, it may lead to nuisance and resultant complaint.

The 99.9<sup>th</sup> percentile offsite concentrations are predicted to be above the 5 OU 99.9<sup>th</sup> percentile at receptors R2 – R6, R8, R13, R17 – R18 and R20 (total of ten receptors). The increase in odour impact, as a result of increase in bird numbers, is most prominent at R13, followed by R8. However, the modelled increases are unlikely to be perceived as the odour level needs to almost treble before an increase in perceived intensity is registered. Receptors R1, R16 and R19 are least likely to be affected by the odour from the proposed farm.

### Risk of offensive odour assessment

██████████ calibrated the odour dispersion model and compared the modelled results with odour survey observations, ██████████ identified the likely modelled odour concentrations which could describe the 'Obvious' odour experienced by the surveyors to be 10 OU. The identified odour concentrations for 'Obvious' odour is then used as the level which may lead to nuisance and resultant complaint to update the risk assessment with the methodology. The updated risk assessment results indicate that the risk of offensive odour is low at all identified receptor locations.

### Complaint Analysis

██████████ requested complaint history between 2019 – 2023 from the Central Goldfield Shire Council and ██████████. However, Council received no complaints related to odour for that area during that time, and there was no response from ██████████. The data that was used for this analysis were complaints received by the Central Goldfields Shire Council in 2016 and 2017, Mount Alexander Shire Council in 2016, and ██████████ in 2016 and 2017.

The majority of the complaints were made from Strathlea Road which sits to the east and southeast of the farm, and Clarkes Road to the west and southwest.

Comparing complaint history and Risk of offensive odour assessment, the identified receptors along Rodborough Road is receptor R17 is located at the boundary of the Moderate Risk area. Other complaints from Clarkes Road, Strathlea Road and Hurns Road are not supported by the odour surveillance, modelling or local wind patterns.

### Conclusion

For the proposed additional farm, the risk assessment indicates that odour from the proposed expansion is low at all identified receptor locations.

Based on the odour surveillance and odour modelling results the proposed third farm is considered to not adversely impact the surrounding areas and be acceptable with regards to odour impacts.

# Appendices

# Appendix A

## TAPM and CALMET setup



## A-1 TAPM

The Air Pollution Model (TAPM) Version 4 is a prognostic model developed in Australia by the Commonwealth Scientific and Industrial Research Organisation (CSIRO). The TAPM prognostic model was run to obtain a three-dimensional meteorological gridded dataset for the site for the modelled period between 1 January 2017 and 31 December 2018 (two years).

The configuration of the TAPM model was in accordance with the guidance outlined in EPA Publication 1550 and is presented in Table A.1. The setup is also consistent with the TAPM setup prepared for the assessment undertaken in July 2017.

Table A.1 TAPM model setup

Parameter	Value
Modelled Period	27 December 2016 – 01 January 2019 (Spin up days of 5 days before the selected period)
Domain centre	UTM 54S Easting – 761,398 m UTM 54S Northing – 5,889,059 m  Latitude – 37° -6.5' S Longitude – 143° 56.5' E
Number of vertical levels	35
Number of Easting Grid Points	50
Number of Northing Grid Points	50
Outer Grid Spacing	25,000 m x 25,000 m
Number of Grid Levels	5
Grid Level Horizontal Resolution	Level 2 – 10,000 m Level 3 – 3,000 m Level 4 – 1,000 m Level 5 – 300 m
Local met assimilation	None
Surface vegetation database	Default TAPM V4 database at 3-minute grid spacing – Australian vegetation soil type data provided by CSIRO Wildlife and Ecology
Terrain database	Default TAPM V4 database at 9-second grid spacing – Australian terrain height data from Geoscience Australia



## A-2 CALMET

CALMET is a meteorological model that develops hourly winds and other meteorological fields on a three-dimensional gridded domain as required as inputs to CALPUFF dispersion model. Associated two-dimensional fields such as surface characteristics and dispersion properties are also included. The interpolated wind field is then modified within the model to account for the influence of topography, sea breezes, as well as differential heating and surface roughness associated with different land uses across modelling domain. These modifications are applied to the winds at each grid point to develop a final wind field. The final hourly varying wind field thus reflects the influences of local topography and land uses.

Upon completion of TAPM modelling, a CALMET simulation was set up to run for the model period (1 January 2017 – 31 December 2019), combining the three-dimensional gridded data output from the TAPM model and site-specific surface data. Local topography and land use information were used in CALMET to refine the wind field predetermined by TAPM output. This approach is consistent with the New South Wales (NSW) Approved Methods 2022<sup>13</sup>. The CALMET model domain of 21 km x 21 km is selected to include the influence of the Great Dividing Range and EPA Rosedale South monitoring station as surface station data.

CALMET was run using the “Hybrid” mode (NOOBS = 1) with the Grid 4 TAPM data (Grid resolution of 1 km) as initial guess field. All model settings (except TERRAD, Kinematic effects and O’Brien adjustment for vertical smoothing) were selected based on the guidance document, Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System<sup>14</sup> (Generic Guidance) referenced in the NSW Approved Method 2022, for “Hybrid” mode. The CALMET model parameters selected for this assessment are summarised in Table A.2. Terrain and land use data for the CALMET modelling are presented in Figure A.1 and Figure A.2, respectively.

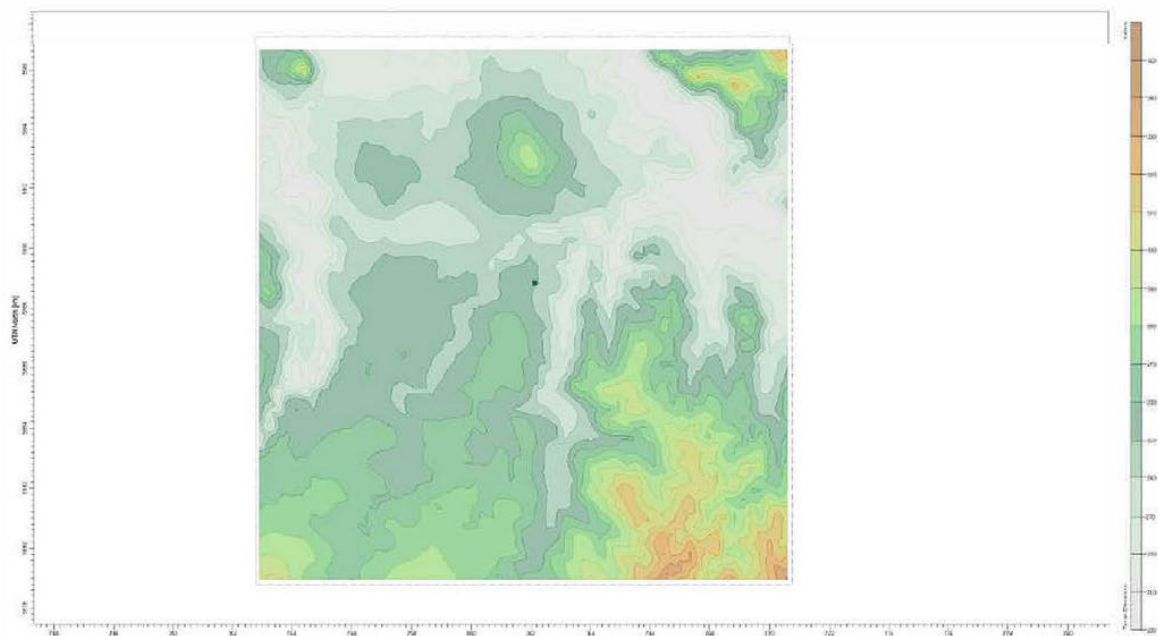
Table A.2 Summary of CALMET model parameters

Parameters	Value
Modelled period	01 January 2017 – 31 December 2018
Mode	Hybrid (NOOBS = 1)
UTM Zone	54
Domain Origin	Easting: 761.777 km Northing: 5,887.787 km
Domain size	60 X 60 at 0.3 km resolution (18 km x 18 km)
Number of vertical levels	12
Vertical levels (m)	20, 40, 60, 90, 120, 180, 250, 500, 1000, 2000, 3000
TERRAD	6 km.
Kinematics effects (IKINE)	1 (ON) A better representation of the vertical velocity was required by setting IKINE = 1 to maintain mass consistency and to more accurately represent the situations of “plume diversion” around elevated terrain.
Other CALMET settings	Slope flow effects (ISLOPE) = On Froude Adjustment (IFRADJ) = On Vertical velocity adjustment (IOBR) = On
R1, R2, RMAX1, RMAX2	R1 – 5km RMAX1 – 4km R2 and RMAX2 – 5 km (Kept consistent with 2017 assessment. No Upper air station included in assessment)
Initial guess field	TAPM.m3d file derived from Grid 4 (1 km spacing, 50 X 50 Grid points)

<sup>13</sup> New South Wales Environment Protection Authority – Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales, August 2022.

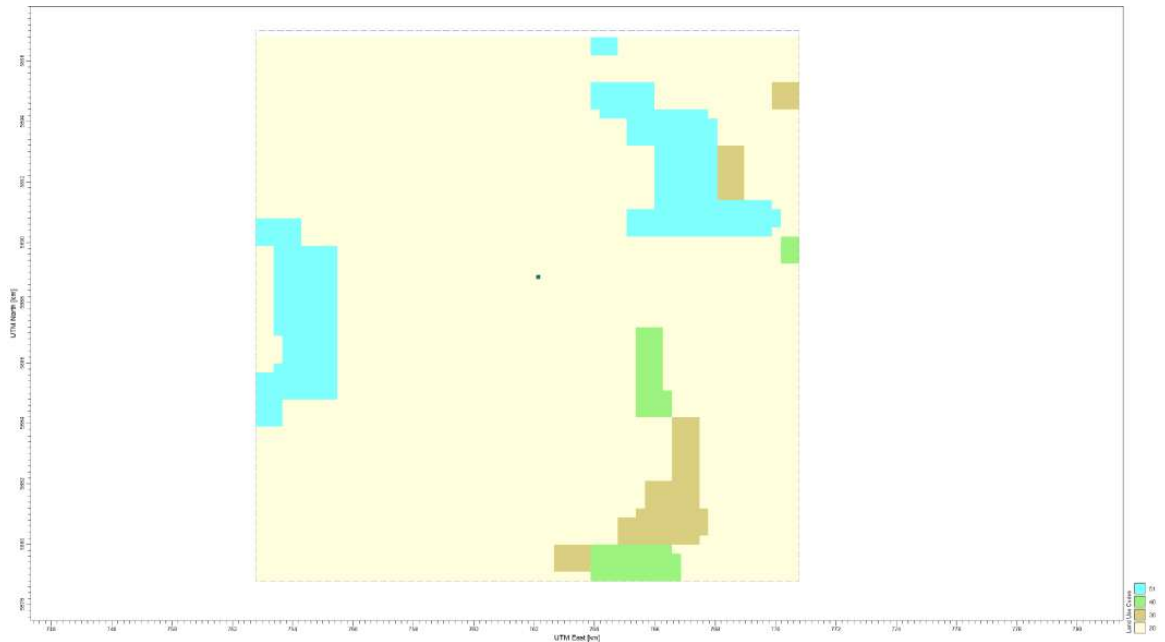
<sup>14</sup> Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion into the “Approved Methods for the Modelling and Assessments of Air Pollutants in NSW, Australia”, March 2011.

Parameters	Value
Surface station data	1480 Rodborough Road, Moolort, onsite surface station data. Easting: 761.777 km Northing: 5,887.787 km Cloud, relative humidity and surface pressure data for the surface station data file are extracted from TAPM.
Upper air data	No site-specific upper air data was used (up.dat). Upper air data is included within the TAPM .m3d initial guess field.
Land use data	The land use data for the modelling domain was derived from the Global Land Cover Characterization Version 2 for Australia Pacific, with a resolution of approximately 1 km. Land use data code: 20 – Agricultural Land 30 – Rangeland 40 – Forrest Land 51 – Streams and canals
Terrain data	The terrain data was extracted from 1 arc-second (~30 m) spaced elevation data obtained via NASA's Shuttle Topography Radar Missions (STRM1 – Version 3).



**Figure A.1** Terrain data used for CALMET modelling (18 km X 18 km, centred at the site). Square marker indicates location of the weather station.





[Redacted text]

[Redacted text]

### A-3 Model validation

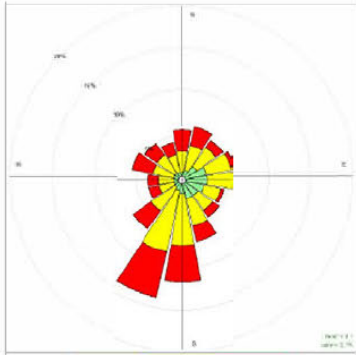
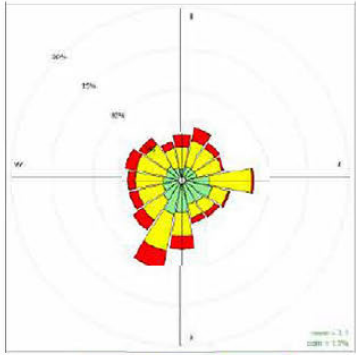
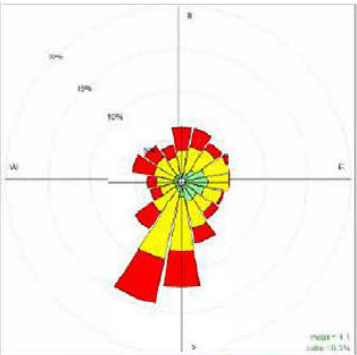
TAPM and CALMET simulated winds at [redacted] Rosedale South station are provided below to assess the validity of using TAPM as 'first-guess' wind field for CALMET, and validity of CALMET simulated winds at the site.

For the simulated meteorological year (1 January 2017 and 31 December 2018), the following is observed:

- Overall, TAPM simulated winds captured the winds along the La Trobe Valley and coastal influence from the east. However, it underpredicts wind speeds and overpredicted calm winds.

TAPM predicted predominant winds from south-southwest and south, however, it underpredicts the overall wind speeds. TAPM was considered acceptable to be used as the 'first-guess' wind field for CALMET 'Hybrid' mode run. The CALMET simulated wind extracted at the site weather station produces very similar wind patterns, wind speed and calms when compared to the winds observed at the weather station.

Table A.2 Extracted TAPM and CALMET winds at the onsite weather station (2017 – 2018)

Onsite weather station (2017 – 2018)	TAPM extracted	CALMET extracted
 <p>Frequency of counts by wind direction (%)</p>	 <p>Frequency of counts by wind direction (%)</p>	 <p>Frequency of counts by wind direction (%)</p>
<p>Mean = 4.1 m/s Calm = 0.1%</p>	<p>Mean = 3.1 m/s Calm = 1.5%</p>	<p>Mean = 4.1 m/s Calm = 0.3%</p>



### A-4 Onsite weather station data (2017 – 2018)

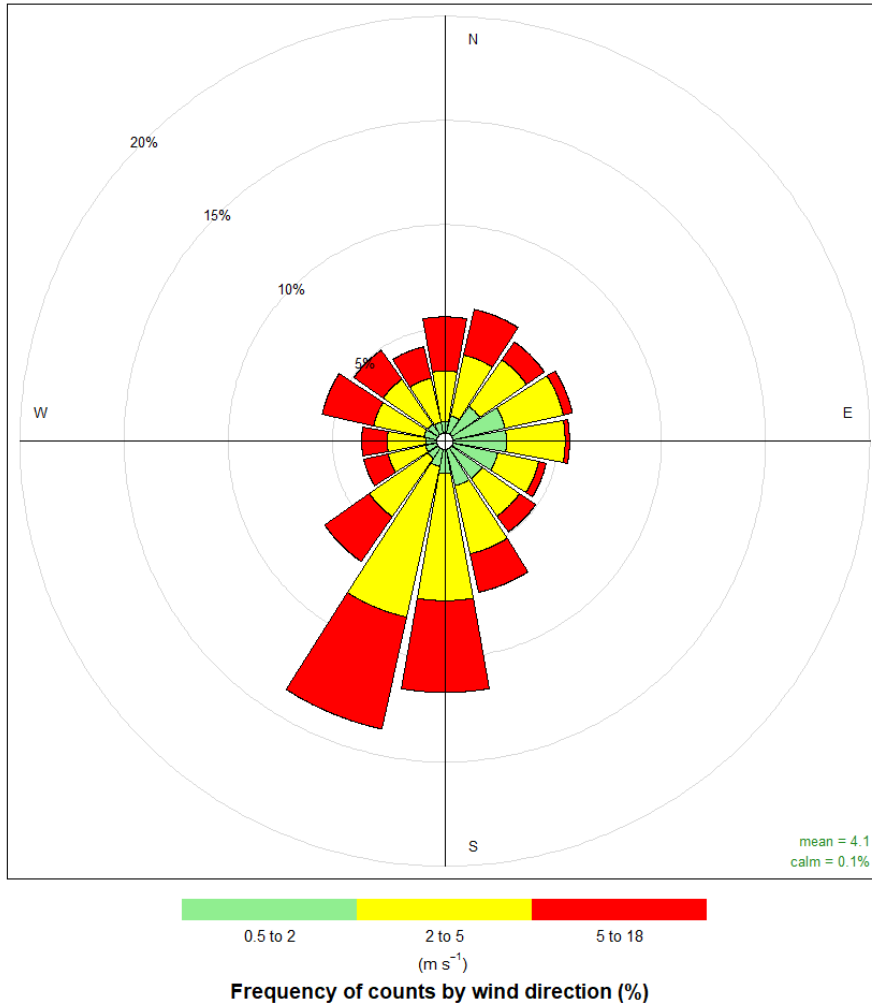


Figure A.3 Annual Windroses from onsite weather station, between 2017 and 2018



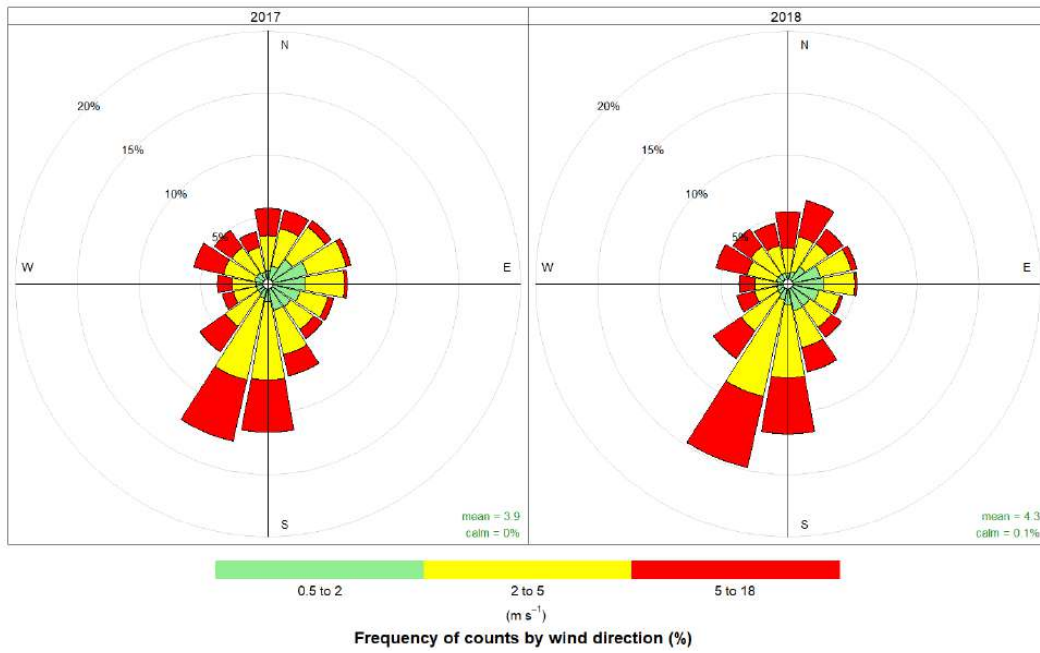


Figure A.4 Annual windroses onsite weather station





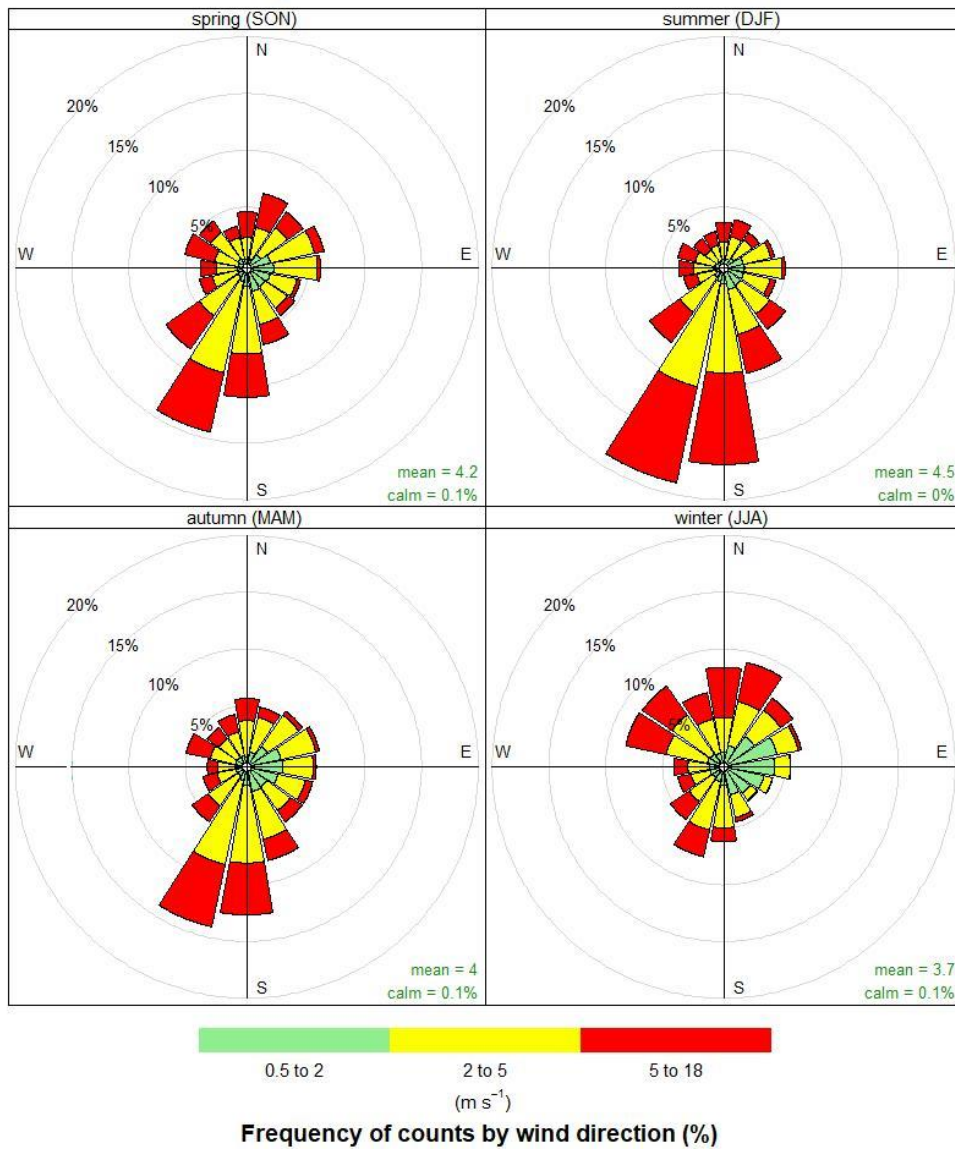


Figure A.5 Seasonal windroses at onsite weather station



# Appendix B

**Hourly varying bird density (D) and ventilation rate (V) for a year of typical bird growth cycles**

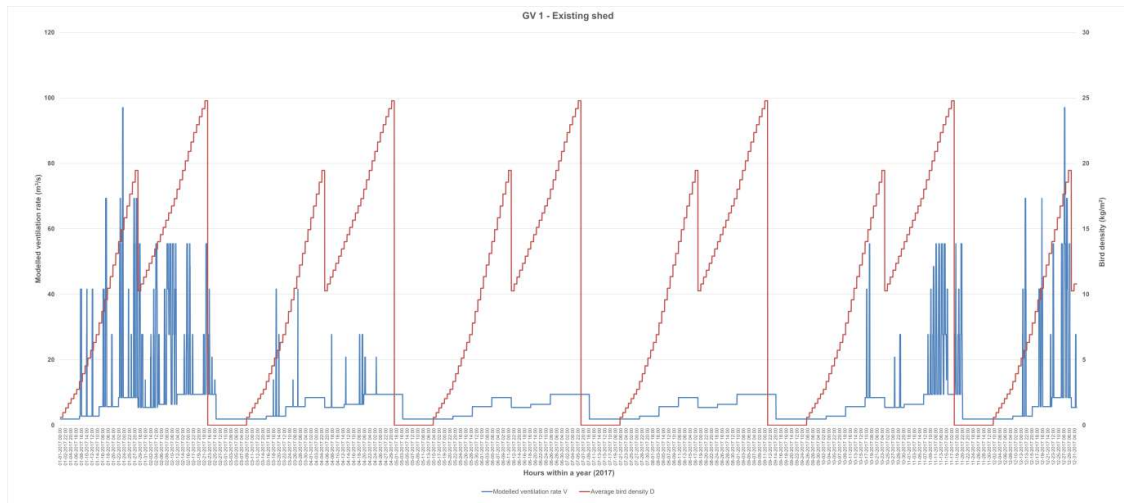


Figure B.1 GV1 – Existing shed

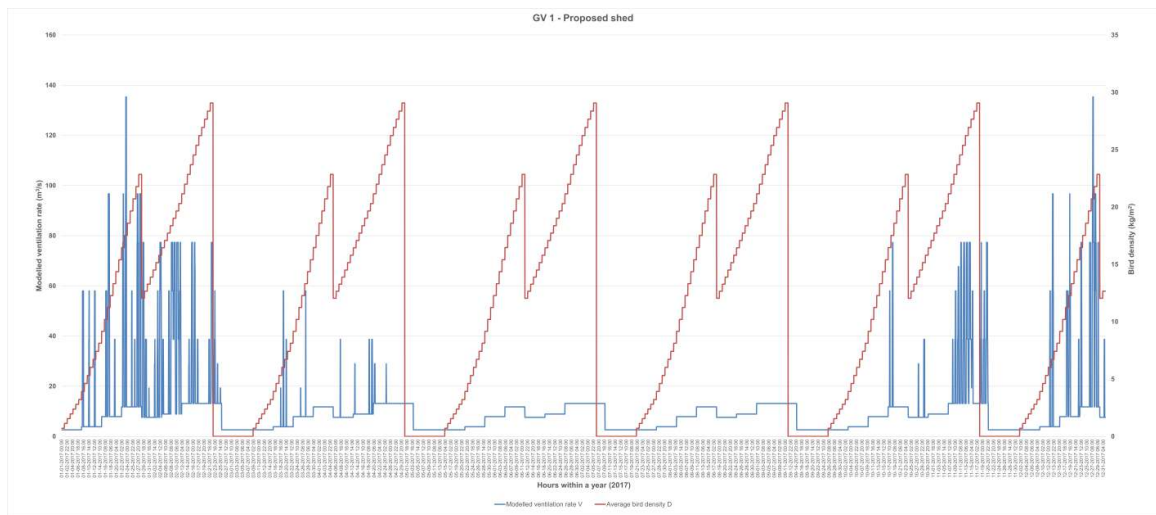


Figure B.2 GV1 – Proposed shed



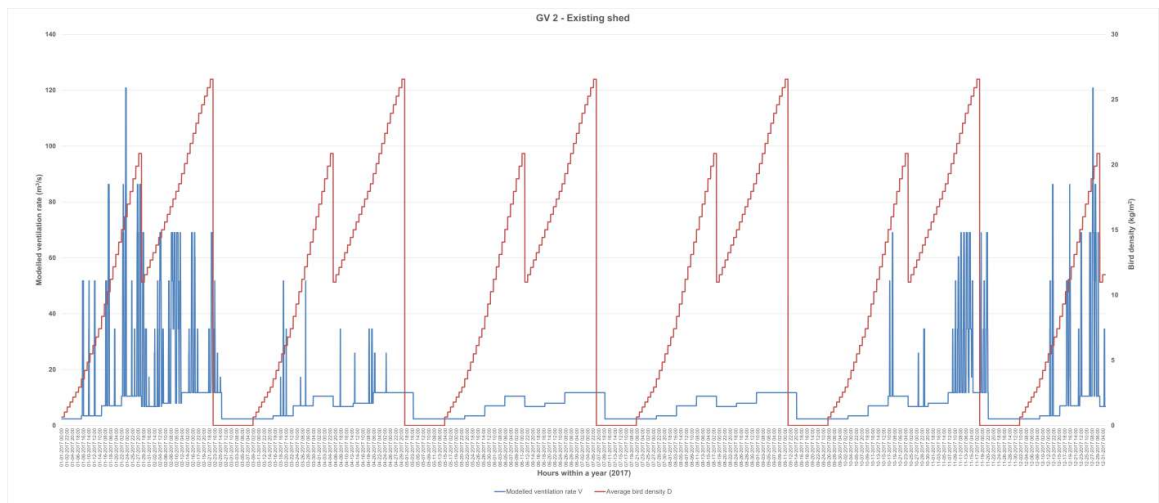


Figure B.3 GV2 – Existing shed

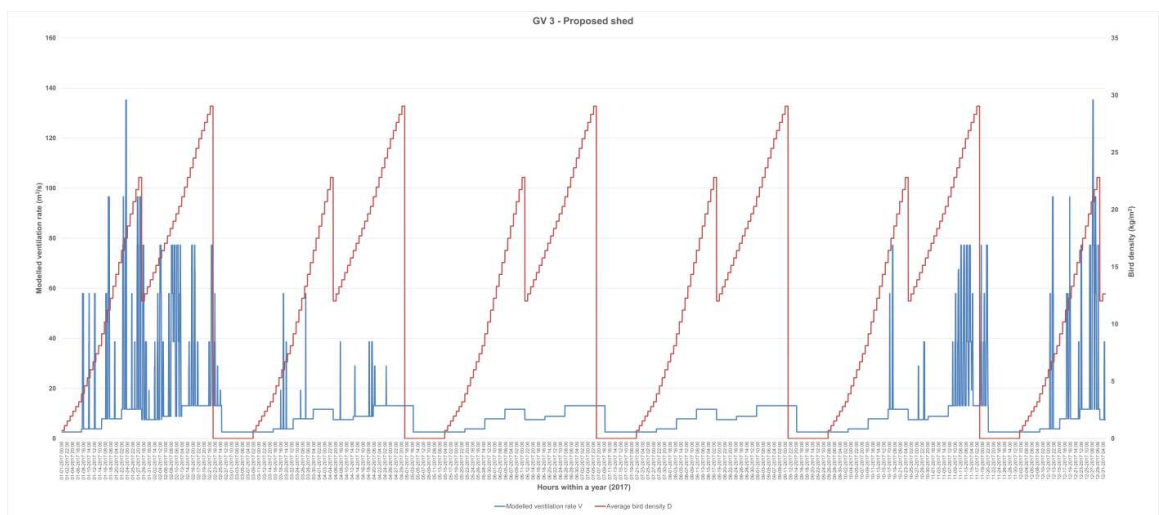


Figure B.4 GV3 – Proposed shed



# Appendix C

**Modelled odour emission rates  
throughout a year**

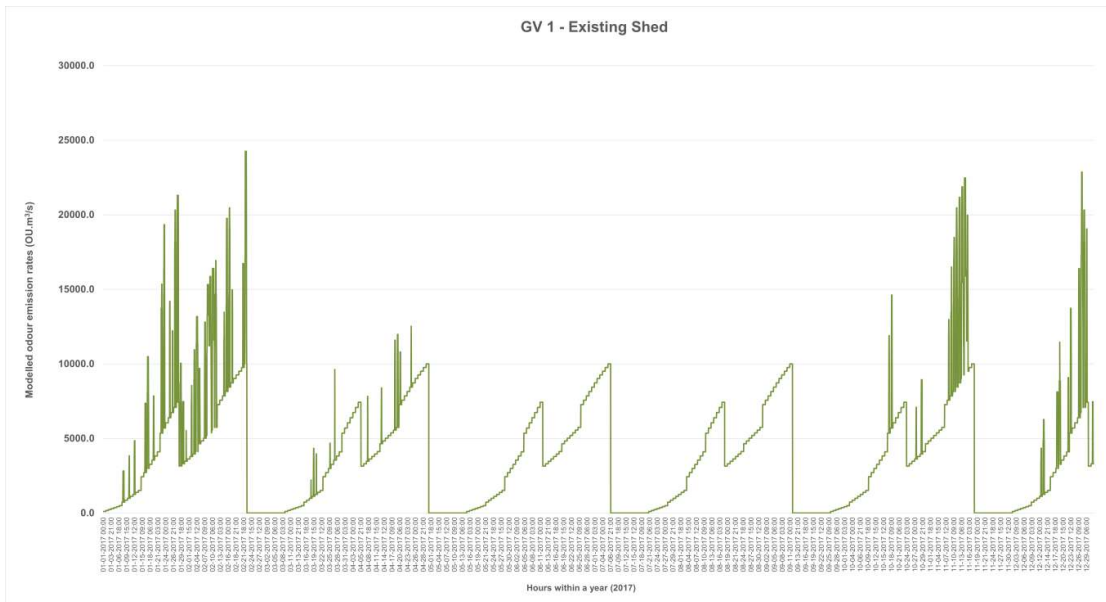


Figure C.1 GV1 – Existing shed

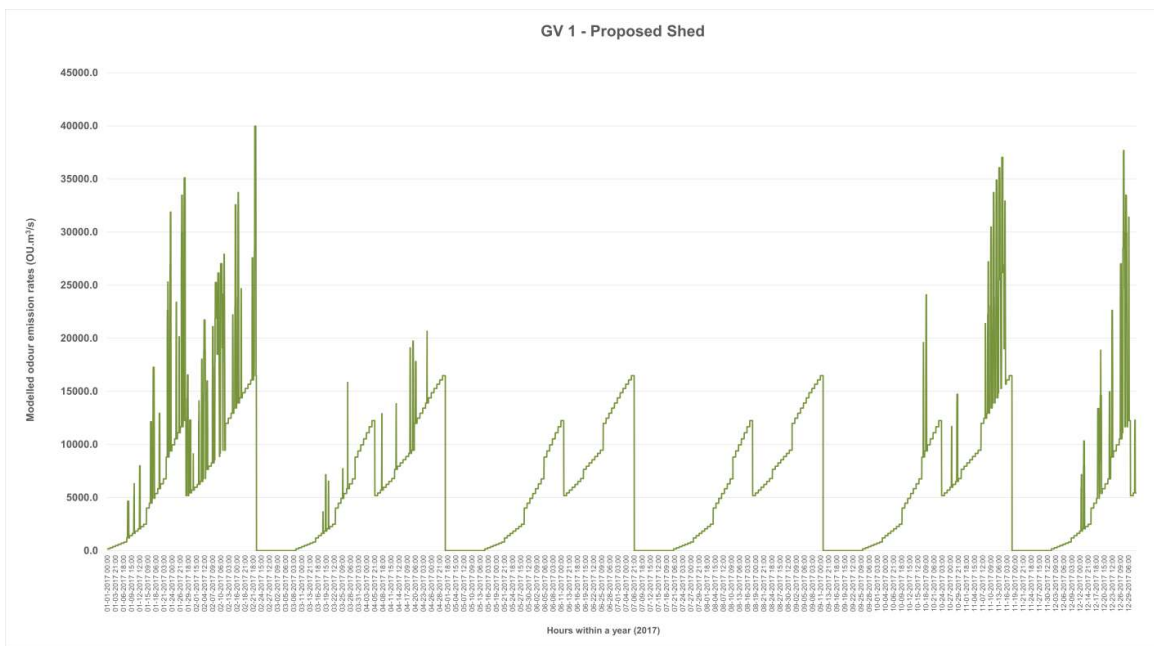


Figure C.2 GV1 – Proposed shed



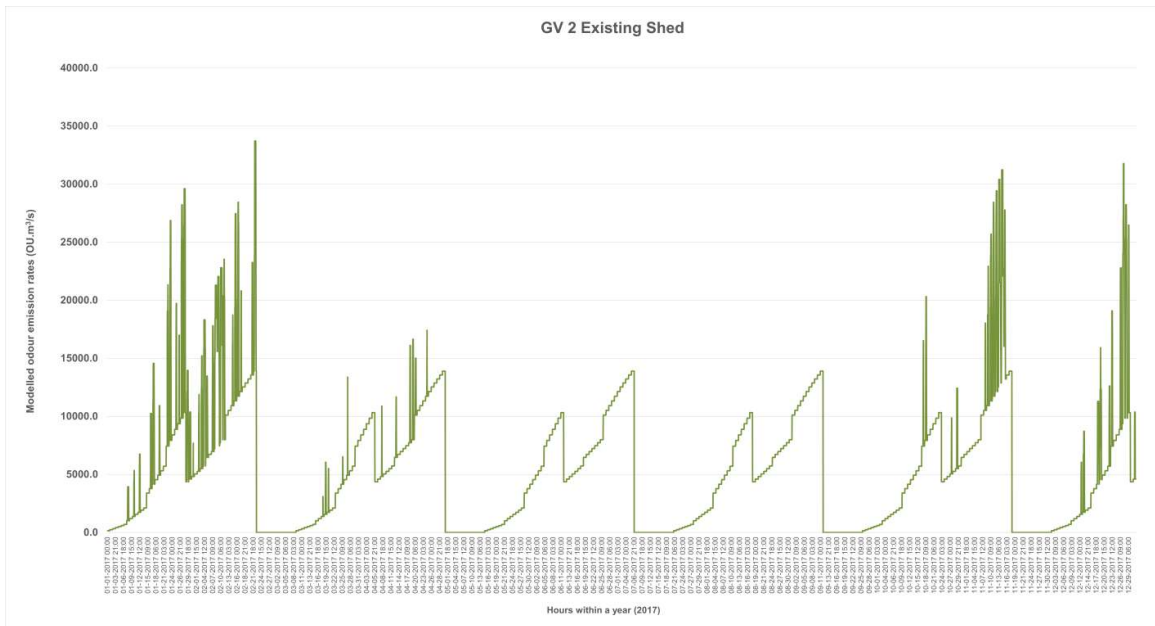


Figure C.3 GV2 – Existing shed

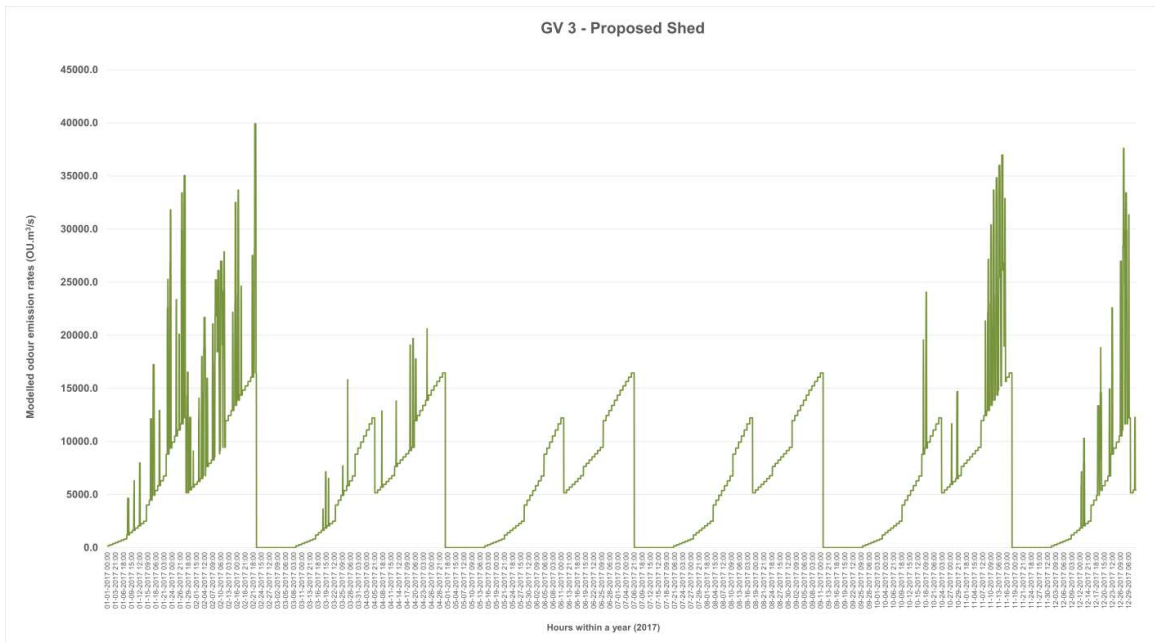


Figure C.4 GV3 – Proposed shed





# Appendix D

**Calibrated odour impact compared with odour surveys**

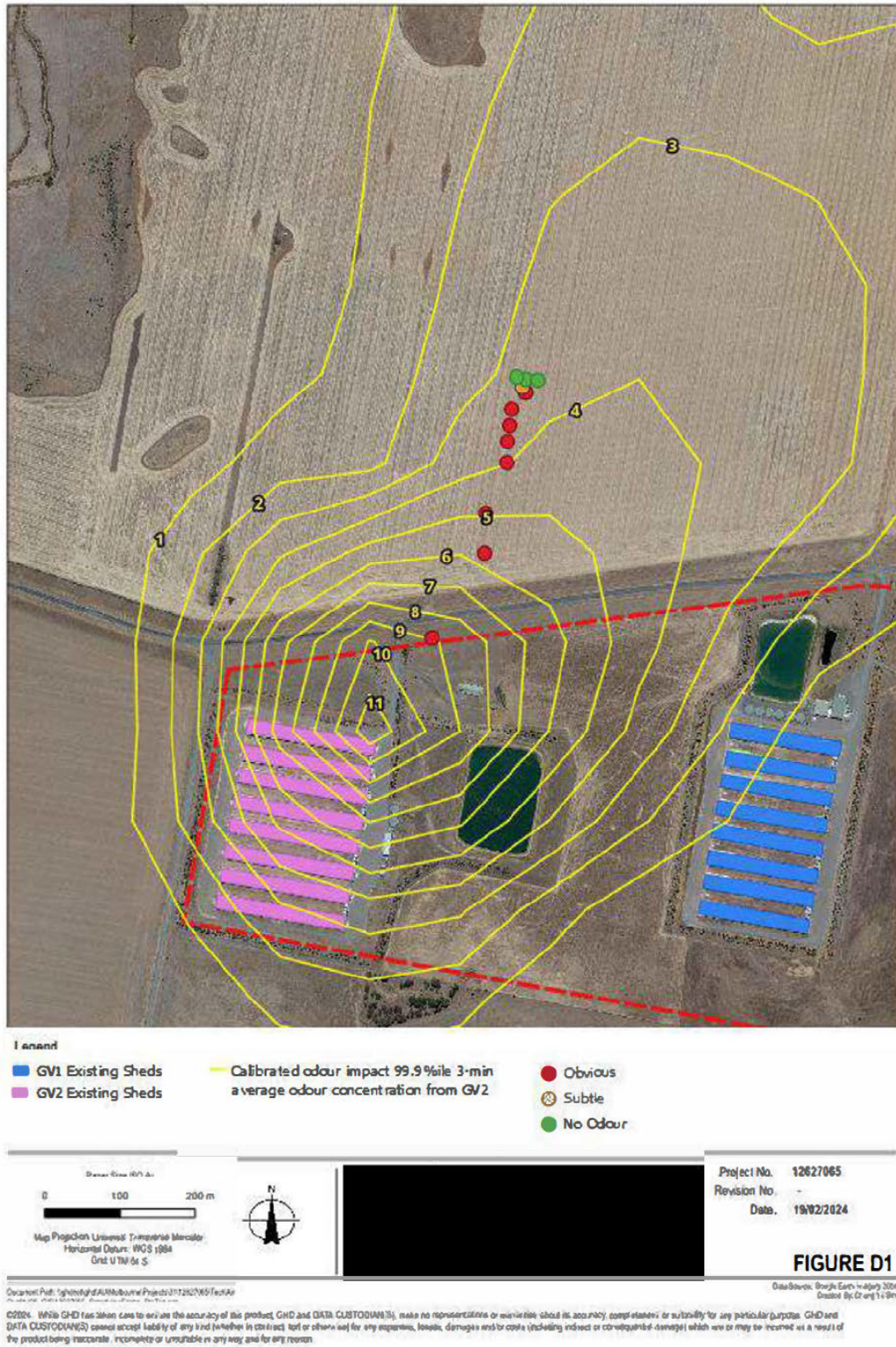


Figure D.1 Calibrated odour impact compared with Odour Survey 1





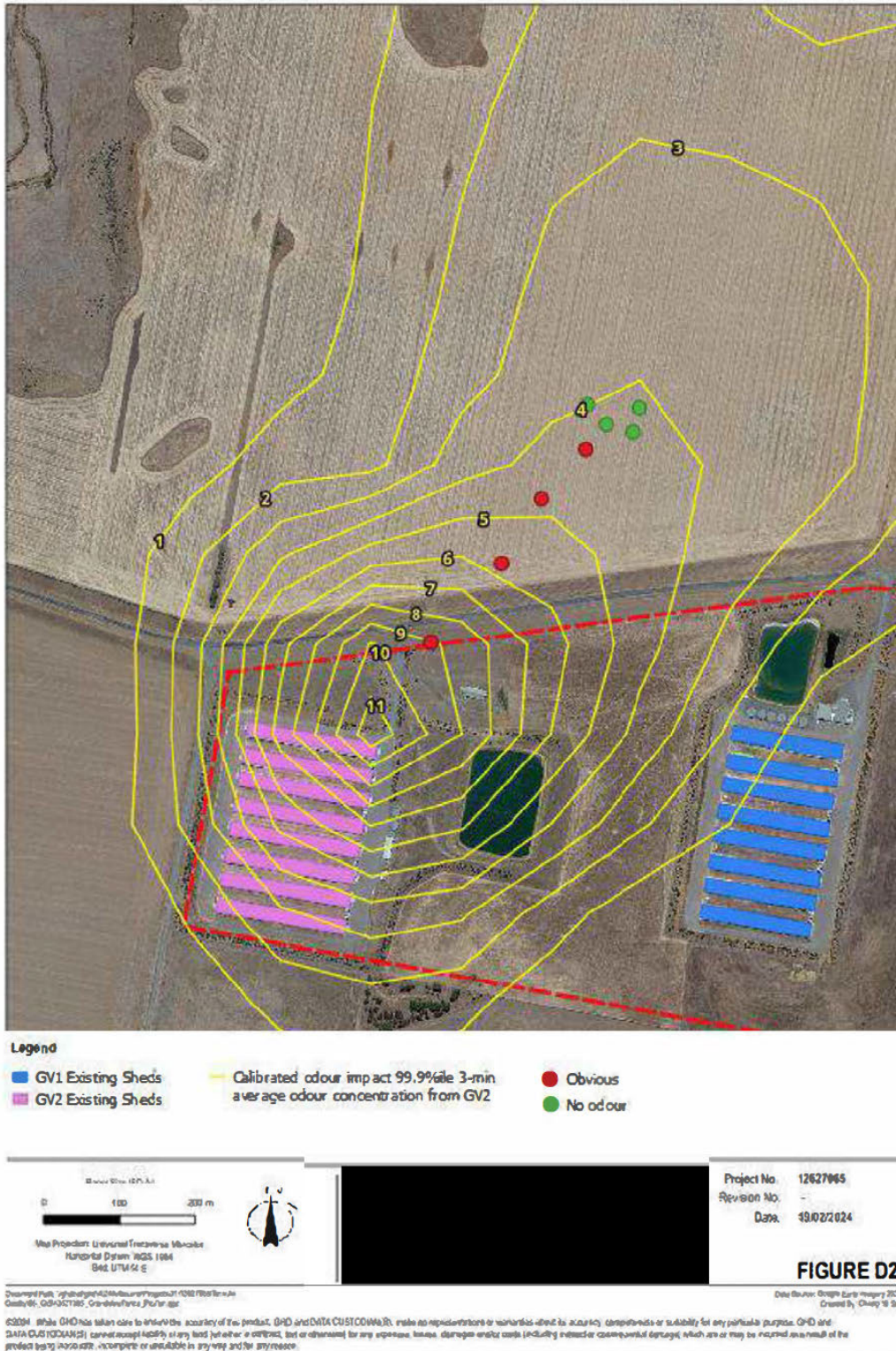




Figure D.2 Calibrated odour impact compared with Odour Survey 2







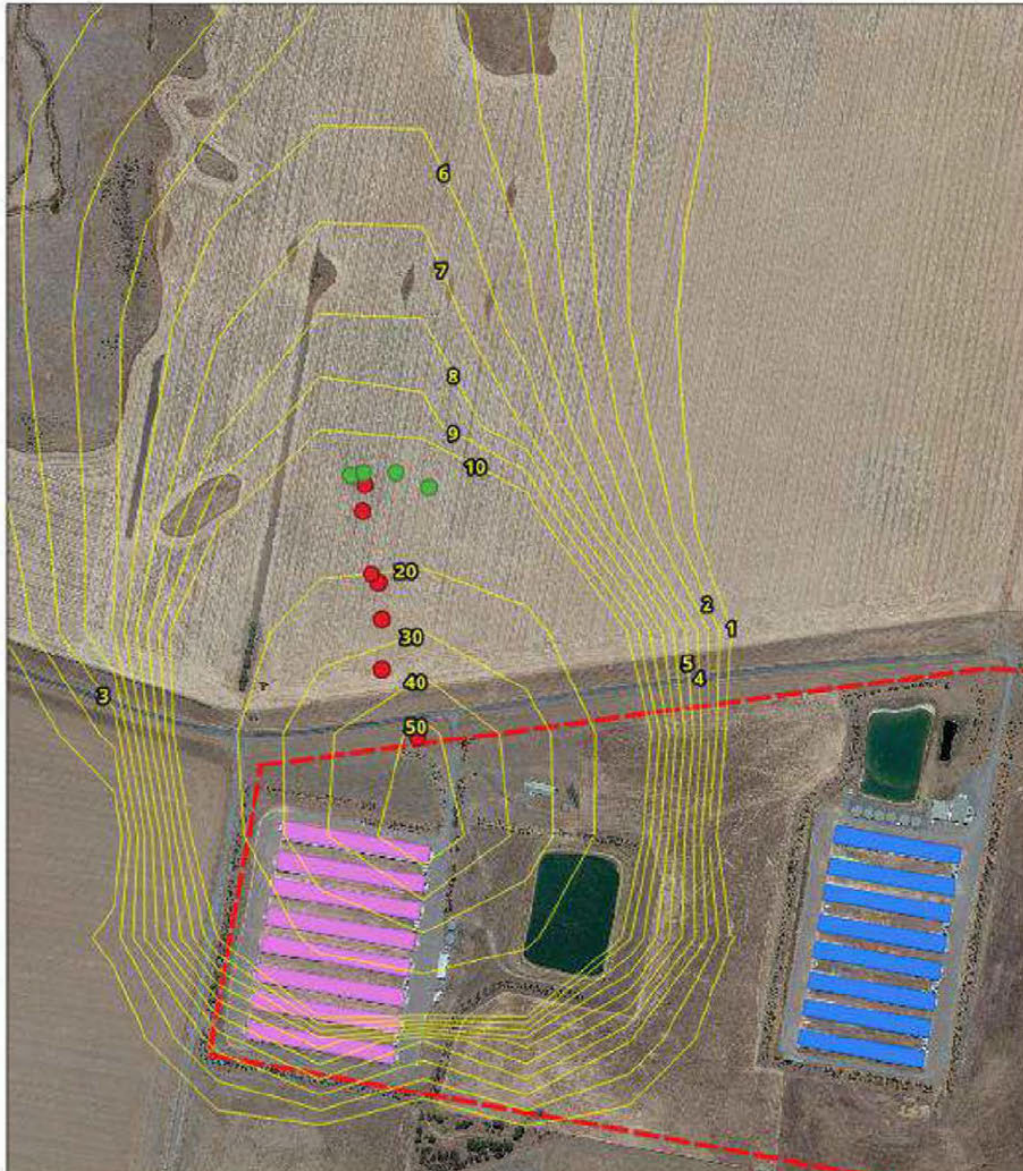
- Legend**
- GV1 Existing Sheds
  - GV2 Existing Sheds
  - Calibrated odour impact 99.99%ile 3-min average odour concentration from GV2
  - Obvious
  - No Odour

<p>Paper Size: ISO A4</p>  <p>Map Projection: Universal Transverse Mercator Horizontal Datum: WGS 1984 Grid UTM 54 S</p> 	<div style="background-color: black; width: 100%; height: 100%;"></div>	<p>Project No. 12627065 Revision No. - Date 19/02/2024</p> <p style="text-align: center;"><b>FIGURE D3</b></p> <p style="font-size: small;">Data Source: Google Earth imagery 2021 Created by: Query to SH</p>
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Figure D.3 Calibrated odour impact compared with Odour Survey 3





**Legend**

- GV1 Existing Sheds
- GV2 Existing Sheds
- Calibrated odour impact 99.9%ile 3-min average odour concentration from GV2
- Obvious
- No Odour

<p>Scale: 1:10,000</p> <p>0 100 200 m</p> <p>Map Projection: Universal Transverse Mercator Horizontal Datum: WGS 1984 GDA 2015 MGA 55</p> <p>©2024 ©The GHD has taken care to ensure the accuracy of this product. GHD and DATA CUSTODIAN(S), make no representations or warranties about its accuracy, completeness or suitability for any particular purpose. GHD and DATA CUSTODIAN(S) cannot accept liability of any kind (whether in contract, tort or otherwise) for any expenses, losses, damages and/or costs (including indirect or consequential damage) which are or may be incurred as a result of the product being inaccurate, incomplete or unavailable in any way and for any reason.</p>	<p>Project No. 12627065</p> <p>Revision No. -</p> <p>Date 19/02/2024</p>	<p><b>FIGURE D4</b></p> <p><small>Data Source: Google Earth Imagery 2022</small></p>
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Figure D.4 Calibrated odour impact compared with Odour Survey 4







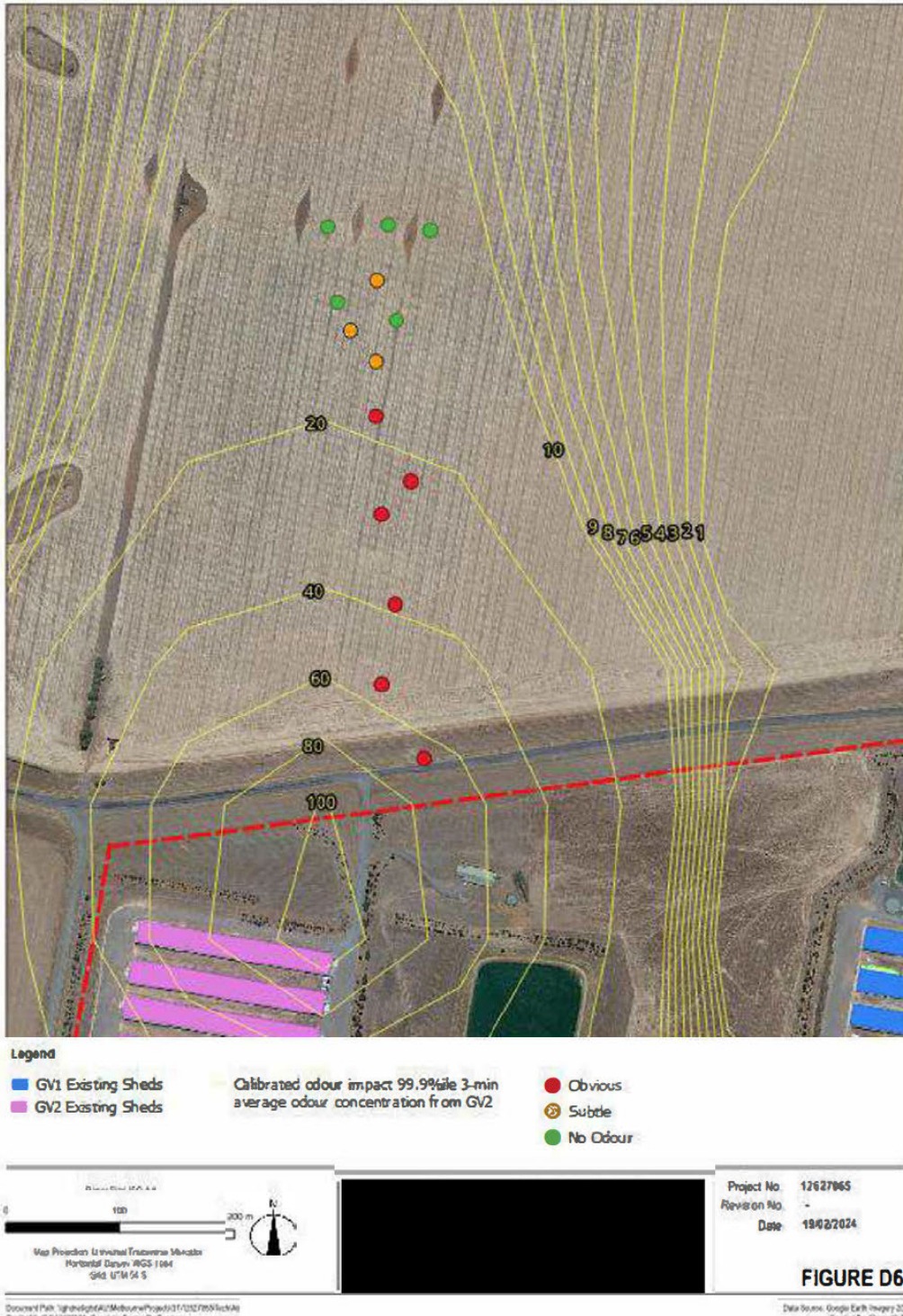


Figure D.6 Calibrated odour impact compared with Odour Survey 6







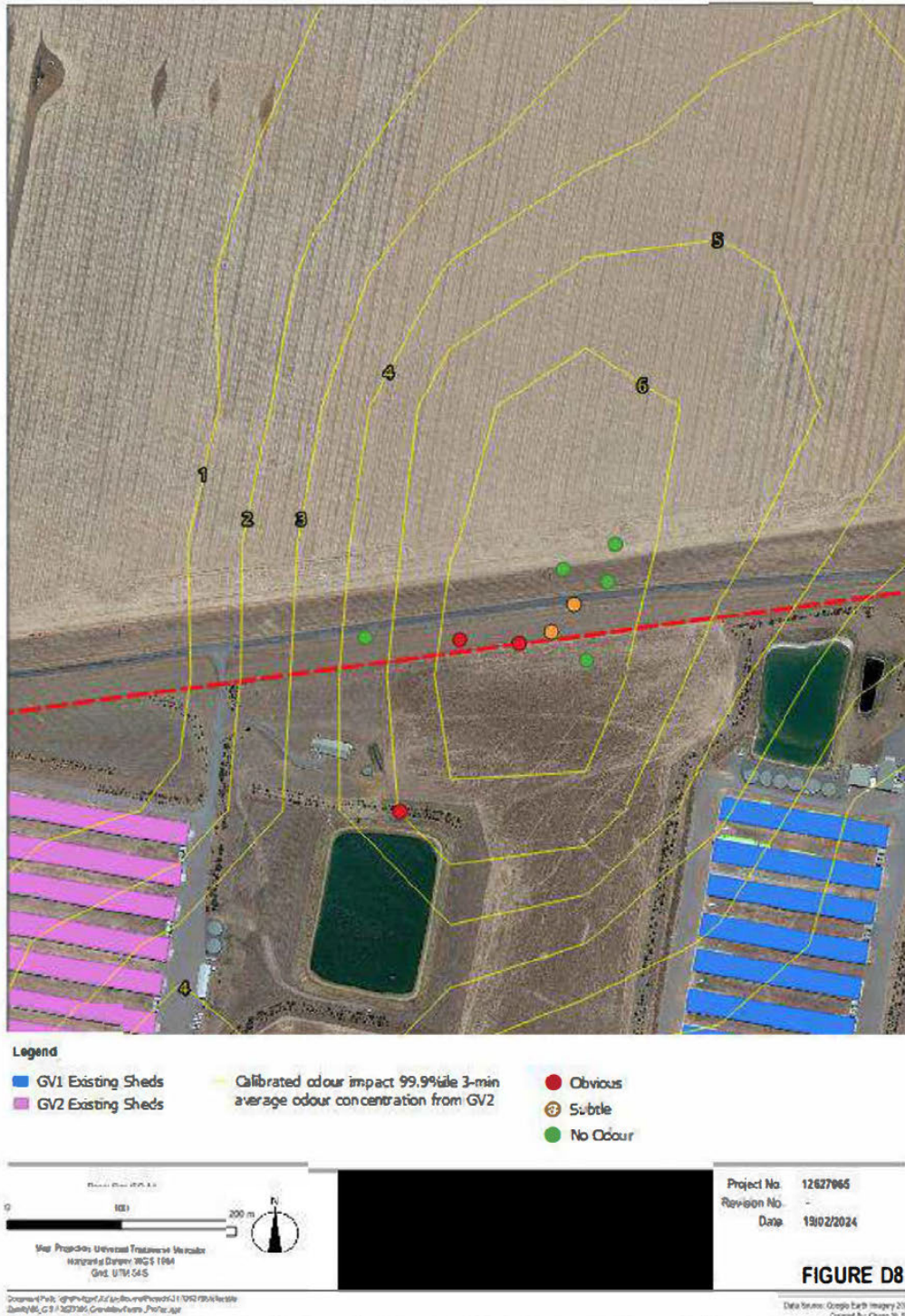


Figure D.8 Calibrated odour impact compared with Odour Survey 8





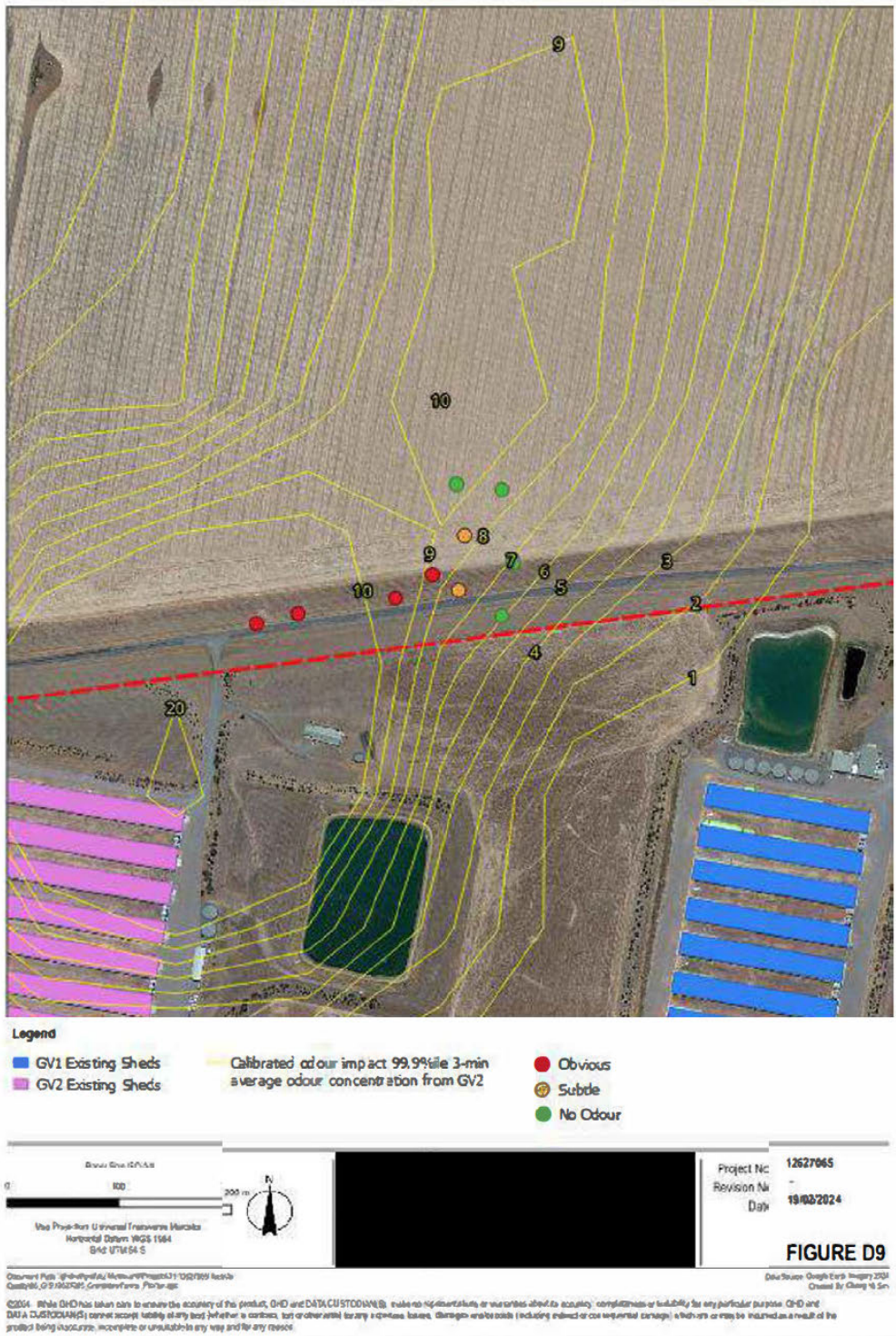


Figure D.9 Calibrated odour impact compared with Odour Survey 9



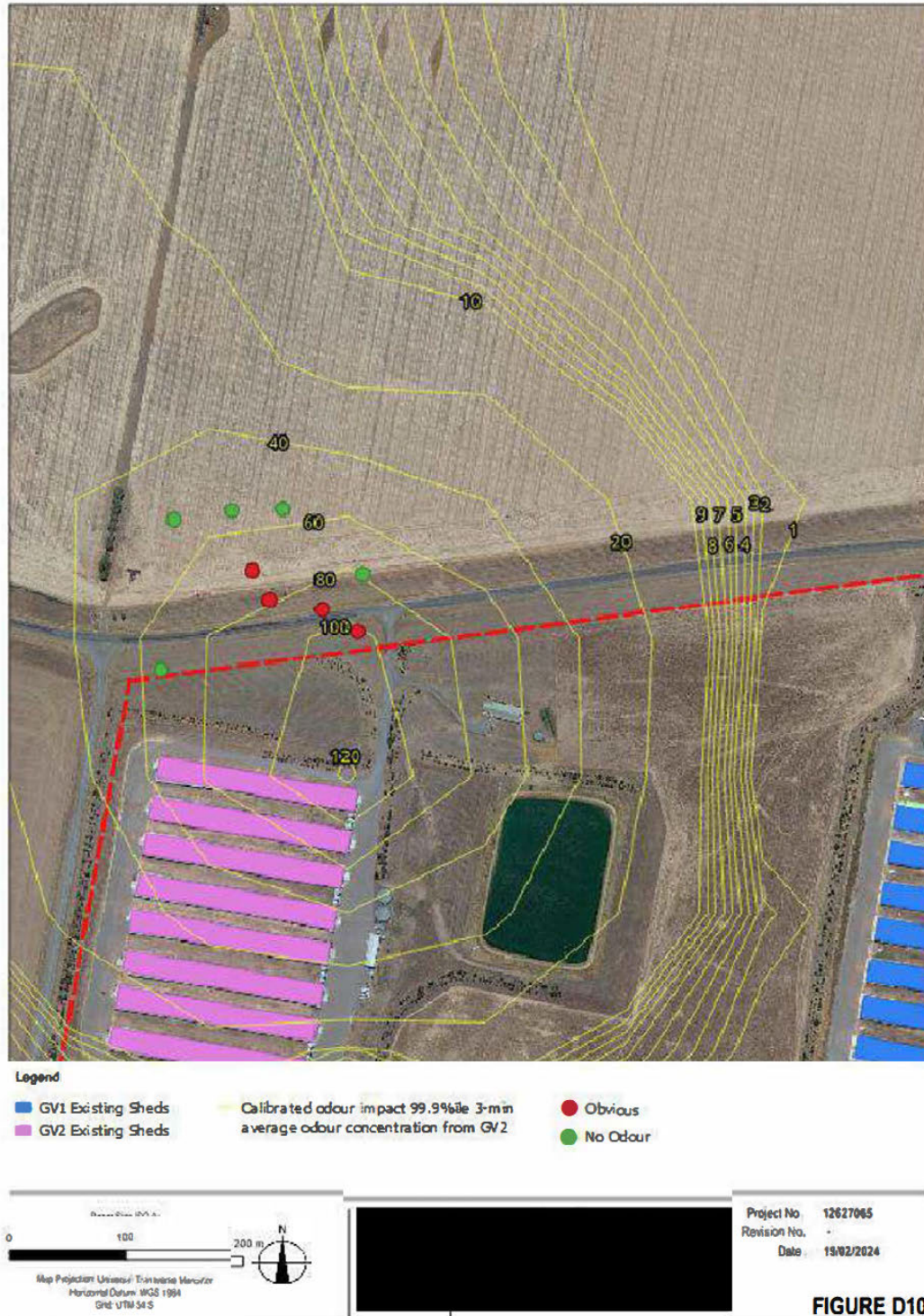


Figure D.10 Calibrated odour impact compared with Odour Survey 10



# Appendix E

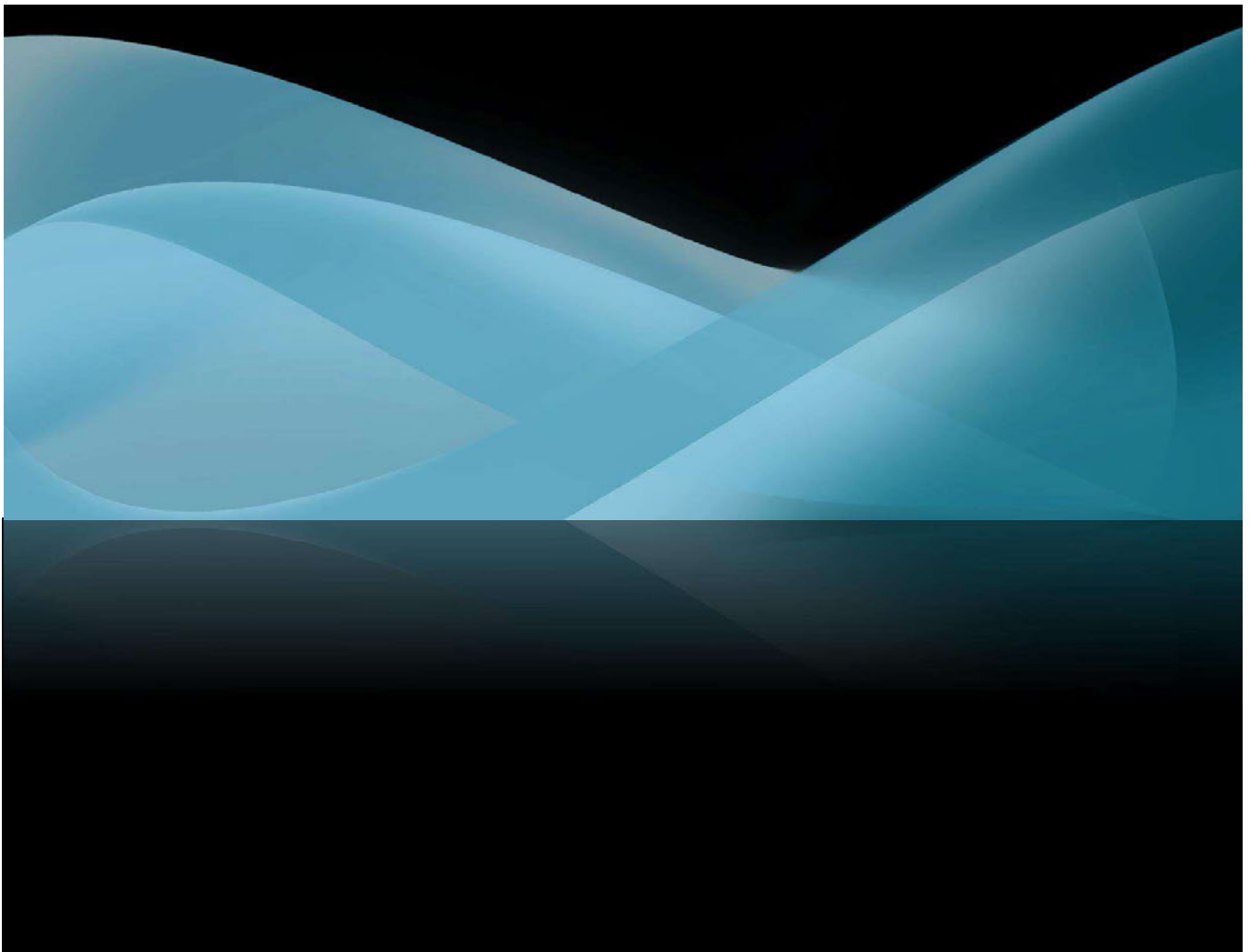
**Baseline Odour Assessment to Determine the Extent of Odour Plume”, prepared by  
████████████████████ Specialist**



*Baseline Odour Assessment to Determine the Extent of Odour Plume*

Broiler Farm Grandview 2, at 1496 Rodborough Road,  
Moolort, Vic, 3465.

14<sup>th</sup>-15<sup>th</sup> and 27<sup>th</sup>-28<sup>th</sup> November 2023





Contents

1 Introduction ..... 3

2 Odour Assessment Methodology ..... 3

3 Operating conditions ..... 4

    3.1 Assessments undertaken on 14<sup>th</sup> and 15<sup>th</sup> November 2023 ..... 4

    3.2 Assessment undertaken on the 27<sup>th</sup> and 28<sup>th</sup> November 2023 ..... 4

4 In-field Odour Assessments ..... 5

    4.1 In-field Odour Survey 1 14<sup>th</sup> November 2023, 10:20-11:50 ..... 5

    4.2 In-field Odour Survey 2 14<sup>th</sup> November 2023, 13:00-13:40 ..... 6

    4.3 In-field Odour Survey 3 14<sup>th</sup> November 2023, 14:20-15:00 ..... 7

    4.4 In-field Odour Survey 4 15<sup>th</sup> November 2023, 08:15-09:00 ..... 8

    4.5 In-field Odour Survey 5 15<sup>th</sup> November 2023, 10:15-11:15 ..... 9

    4.6 In-field Odour Survey 6 27<sup>th</sup> November 2023, 09:45-10:45 ..... 10

    4.7 In-field Odour Survey 7 27<sup>th</sup> November 2023, 12:00-12:40 ..... 11

    4.8 In-field Odour Survey 27<sup>th</sup> November 2023, 13:30-14:40 ..... 12

    4.9 In-field Odour Survey 9 28<sup>th</sup> November 2023, 07:45-08:45 ..... 13

    4.10 In-field Odour Survey 10 28<sup>th</sup> November 2023, 09:30-10:45 ..... 14

5 Discussion ..... 15

    5.1 Event 1 ..... 15

    5.2 Event 2 ..... 15

6 Conclusion ..... 15

Table 1 Odour Descriptor Definitions ..... 3

Table 2 Odour Survey 1 Grandview2 14<sup>th</sup> November 2023 10:20-11:50 ..... 5

Table 3 Odour Survey 2 Grandview2, 14<sup>th</sup> November 2023 13:00-13:40 ..... 6

Table 4 Odour Survey 3 Grandview2, 14<sup>th</sup> November 2023 14:20-15:00 ..... 7

Table 5 Odour Survey 4 Grandview 2 15<sup>th</sup> November 2023, 08:15-09:00 ..... 8

Table 6 Odour Survey 5 Grandview 2 15<sup>th</sup> November 2023, 10:15- 11:15 ..... 9

Table 7 Odour Survey 6 Grandview 2 27<sup>th</sup> November 2023, 10:15-11:15 ..... 10

Table 8 Odour Survey 7 Grandview 2 27<sup>th</sup> November 2023 12:00-12:40 ..... 11

Table 9 Odour Survey 8 Grandview 2 27<sup>th</sup> November 2023 13:30-14:40 ..... 12

Table 10 Odour Survey 9 Grandview 2 28<sup>th</sup> November 2023 07:45-08:45 ..... 13

Table 11 Odour Survey 10 Grandview 2 28<sup>th</sup> November 2023 09:30-10:45 ..... 14

Figure 1 Odour Survey 1 Grandview2 14<sup>th</sup> November 2023 10:20-11:50 ..... 5

Figure 2 Odour Survey 2 Grandview 2 14<sup>th</sup> November 2023 13:00-13:40 ..... 6

Figure 3 Odour Survey 3 Grandview 2 14<sup>th</sup> November 2023 14:20-15:00 ..... 7

Figure 4 Odour Survey 4 Grandview 2 15<sup>th</sup> November 2023 08:15-09:00 ..... 8

Figure 5 Odour Survey 5 Grandview 2 15<sup>th</sup> November 2023 10:15-11:15 ..... 9

Figure 6 Odour Survey 6 Grandview 2 27<sup>th</sup> November 2023 ,10:15-11:15 ..... 10

Figure 7 Odour Survey 7 Grandview 2 27<sup>th</sup> November 2023 12:00-12:40 ..... 11

Figure 8 Odour Survey 8 Grandview 2 27<sup>th</sup> November 2023 12:00-12:40 ..... 12

Figure 9 Odour Survey 9 Grandview 2 28<sup>th</sup> November 2023 07:45-08:45 ..... 13

Figure 10 Odour Survey 10 Grandview 2 28<sup>th</sup> November 2023 09:30-10:45 ..... 14

## 1 Introduction

In-field odour assessments were conducted on November 14th, 15th, 27th, and 28th, 2023, at Proten Broiler Farm, Grandview 2, situated at 1496 Rodborough Road, Moolort, Vic. The purpose of these assessments was to determine the extent of the odour plume emanating from the broiler sheds.

The site comprises two farms, Grandview 1 and Grandview 2, featuring 8 tunnel ventilation sheds oriented from east to west, with fans located on the east side. Grandview 1 was unoccupied during the first odour assessment and housed 1-2 day old birds during the second assessment.

Measurements were taken based on accessibility and wind direction, aiming to establish the distance travelled by the odour plume from the broiler sheds. The data collection included evaluations under normal and worst-case meteorological and operational conditions. These assessments occurred at various times throughout the day, encompassing early morning, mid-morning, early afternoon, and late afternoon.

The evaluations specifically considered worst-case operational scenarios, focusing on sheds at their peak bird weight and density, just before the initial and final pickups when odour emissions are expected to be at their highest.

## 2 Odour Assessment Methodology

All odour assessments were undertaken by [REDACTED] Specialists who has 38 years' experience in undertaking odour assessments and meets the odour screening criteria of AS4323.3.

The odour assessments undertaken were based on [REDACTED] for field odour surveillance, Publication 1881 May 2021. The plume assessment was chosen as the assessment methodology as the odour generator is the only source of odour in the area. Upwind observations were undertaken to rule out any other odour sources. The assessments commenced downwind of the source where the presence of an odour could be observed. The odour plume is then traced downwind from this point until it is delineated. The characteristic and intensity of odour is noted along random observation points throughout the plume trace. Where odour can no longer be detected along the trace, the assessor commences a zig zag pattern until the odour plume is crossed or delineated. The focus of the assessments is the interface zone where the intensity of the odour decreases and can no longer be detected. Assessment points are logged along the route with meteorological conditions noted. Wind speed was measures using a handheld anemometer.

The following odour descriptor definitions were used:

Table 1 Odour Descriptor Definitions

Descriptor	Description
Obvious	Odour is easily recognised, can be described, and may be attributed to a source. The assessor can smell it without any effort or focus on it
Subtle	Odour can be recognised only when focusing. For example, by standing still, inhaling slowly and concentrating
No odour	No odour, or odour is not strong enough to be recognised

### 3 Operating conditions

#### 3.1 Assessments undertaken on 14<sup>th</sup> and 15<sup>th</sup> November 2023

##### **Grandview 2**

##### **Sheds 1-8**

Shed 1 46,362 birds aged 32 days. with average weight of 2.05kg  
Shed 2 46,024 birds aged 32 days. with average weight of 2kg  
Shed 3 50,080 birds aged 29 days. with average weight of 1.78kg  
Shed 4 49,984 birds aged 29 days. with average weight of 1.58kg  
Shed 5 46,629 birds aged 28 days. with average weight of 1.58kg  
Shed 6 46,385 birds aged 28 days. with average weight of 1.59kg  
Shed 7 50,074 birds aged 26 days. with average weight of 1.3kg  
Shed 8 49,812 birds aged 26 days with average weight of 1.4kg

#### 3.2 Assessment undertaken on the 27<sup>th</sup> and 28<sup>th</sup> November 2023

##### Gradview 2

##### **Sheds 1-8**

##### **During Assessment**

Shed 1 28040 birds aged 45 days with average weight of 3.27 kg.  
Shed 2 27101 birds aged 44 days with average weight of 3.29 kg.  
Shed 3 30432 birds aged 43 days with average weight of 3.05kg  
Shed 4 29632 birds aged 42 days with average weight of 2.89kg  
Shed 5 30412 birds aged 41 days with average weight of 2.94kg  
Shed 6 30278 birds aged 41 days with average weight of 2.95kg  
Shed 7 34967 birds aged 39 days with average weight of 2.57kg  
Shed 8 36057 birds aged 39 days with average weight of 2.71kg

3892 birds were removed from sheds 1 on the 26<sup>th</sup> November between 2:30pm and 3:00pm.



### 4 In-field Odour Assessments

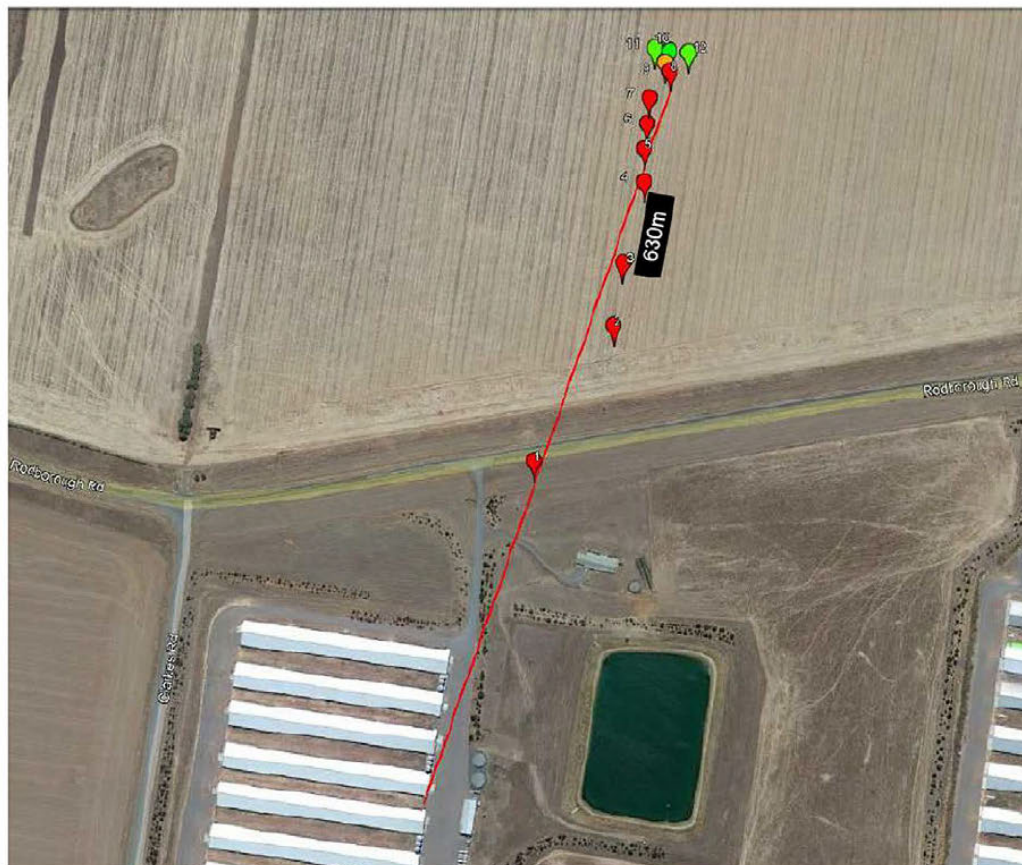
#### 4.1 In-field Odour Survey 1 14<sup>th</sup> November 2023, 10:20-11:50

Grandview 2 commenced Survey 1 at 10:20am and finished at 11:50am, the wind was oscillating between SSW and SW at 10-15km/hr, temperature 11-13°C, cloudy with some drizzle. 3 tunnel fans and 6 side fans operating during assessment.

Table 2 Odour Survey 1 Gradview2 14<sup>th</sup> November 2023 10:20-11:50

Points	Odour observation	Frequency	Distance	Latitude	Longitude
1	Obvious	80%		-37.106720°	143.948524°
2	Obvious	60%		-37.105697°	143.949269°
3	Obvious	60%		-37.105222°	143.949269°
4	Obvious	50%		-37.104607°	143.949556°
5	Obvious	50%		-37.104353°	143.949557°
6	Obvious	50%		-37.104161°	143.949582°
7	Obvious	30%		-37.103966°	143.949603°
8	Obvious	10%	630m	-37.103761°	143.949799°
9	Subtle			-37.103697°	143.949751°
10	No Odour			-37.103608°	143.949796°
11	No Odour			-37.103586°	143.949659°
12	No Odour			-37.103616°	143.949975°

Figure 1 Odour Survey 1 Gradview2 14<sup>th</sup> November 2023 10:20-11:50



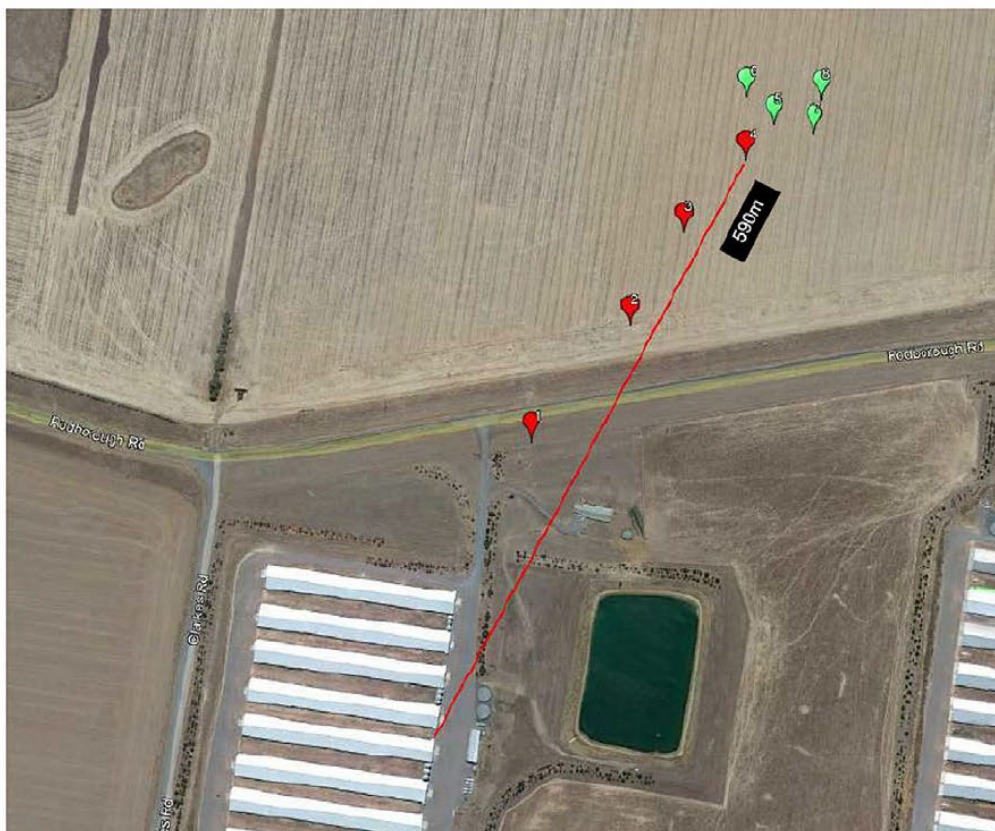
4.2 In-field Odour Survey 2 14th November 2023,13:00-13:40

Survey 2 commenced assessment at 13:00 and finished at 13:40. The wind was SW at 10-15 km/hr, cloudy and 15°C. During the assessment 5 tunnel and 6 side fans were operating.

Table 3 Odour Survey 2 Grandview2, 14<sup>th</sup> November2023 13:00-13:40

Points	Odour observation	Frequency	Distance	Latitude	Longitude
1	Obvious	50%		-37.106749°	143.948485°
2	Obvious	50%		-37.105787°	143.949495°
3	Obvious	30%		-37.105011°	143.950052°
4	Obvious	30%	590m	-37.104404°	143.950688°
5	No odour			-37.104107°	143.950979°
6	No odour			-37.103874°	143.950697°
7	No odour			-37.104181°	143.951401°
8				-37.103891°	143.951484°

Figure 2 Odour Survey 2 Grandview 2 14<sup>th</sup> November 2023 13:00-13:40





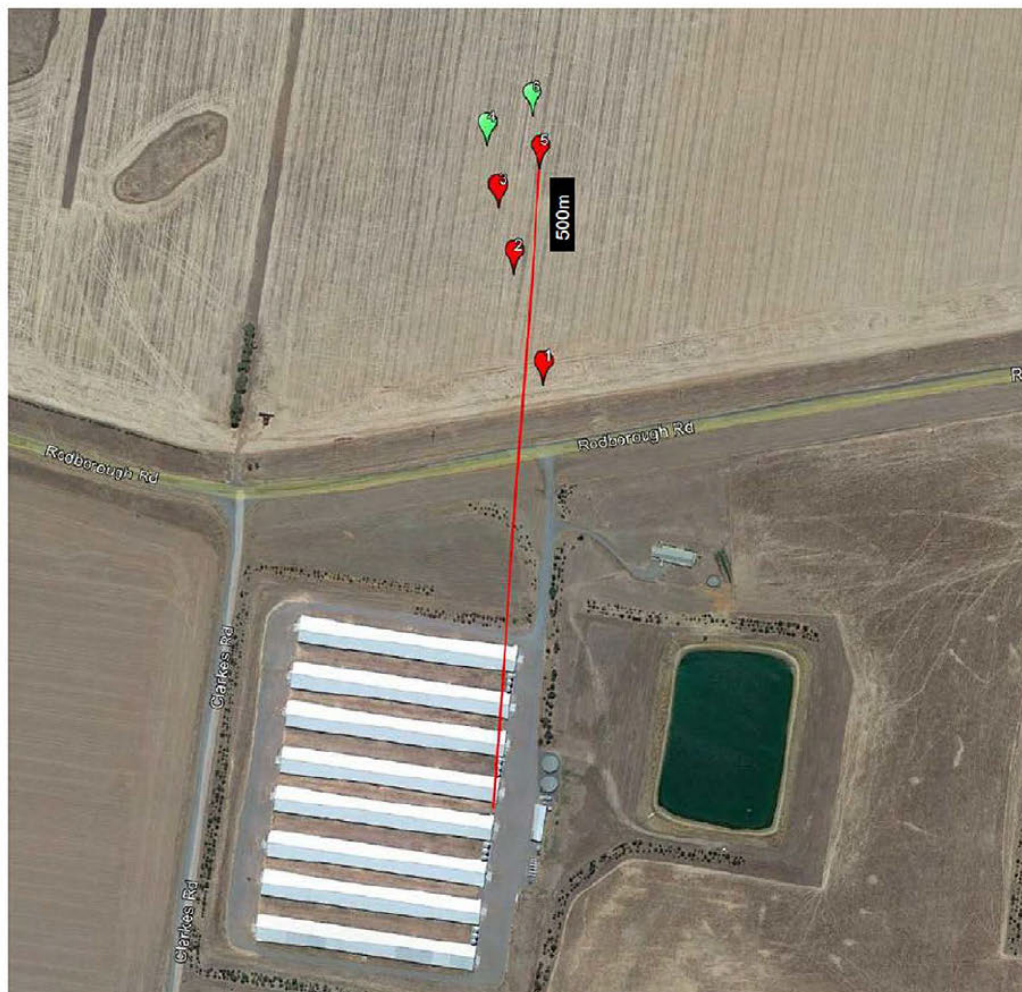
4.3 In-field Odour Survey 3 14th November 2023, 14:20-15:00

Survey 3 commenced at 14:20 and finished at 15:00. The wind was South direction at 10-25km/hr. Cloudy 14°C. During the assessment 5 tunnel and 6 side fans were operating.

Table 4 Odour Survey 3 Grandview2, 14th November 2023 14:20-15:00

Points	Odour observation	Frequency	Distance		
1	Obvious	80%		-37.106112°	143.947967°
2	Obvious	50%		-37.105327°	143.947706°
3	Obvious	20%		-37.104861°	143.947562°
4	No Odour			-37.104416°	143.947465°
5	Obvious	50%	505m	-37.104578°	143.947933°
6	No Odour			-37.104201°	143.947859°

Figure 3 Odour Survey 3 Grandview 2 14<sup>th</sup> November 2023 14:20-15:00





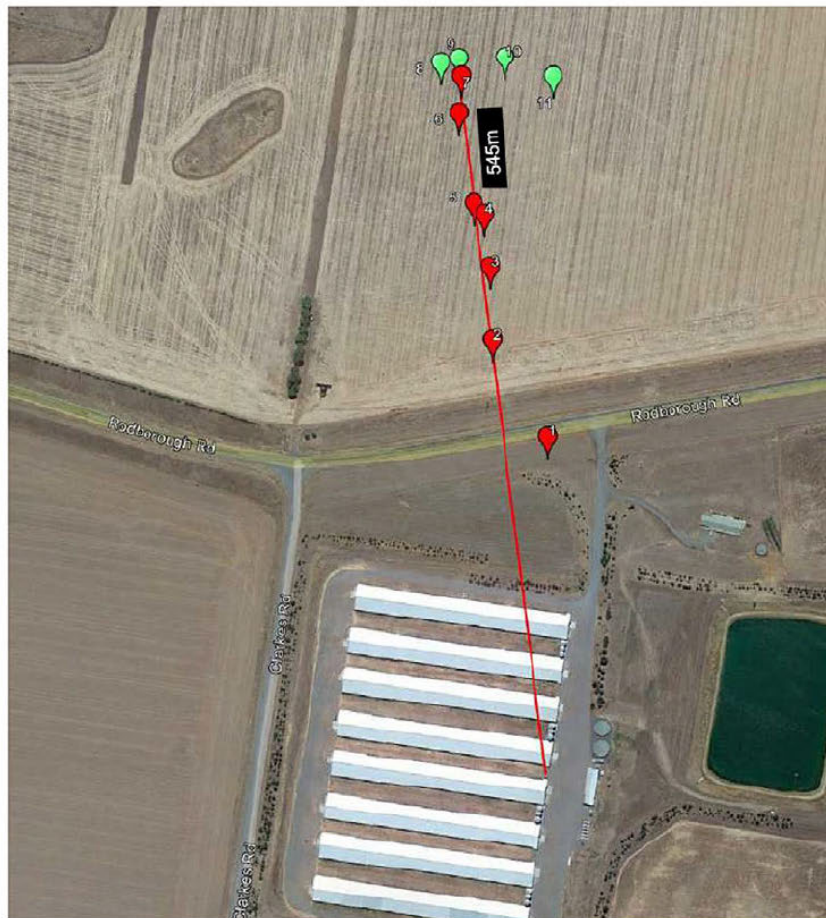
4.4 In-field Odour Survey 4 15<sup>th</sup> November 2023, 08:15-09:00

Survey 4 commenced at 08:15 and finished at 09:00. The wind was from the S to SSE, at 10km/hr and 11°C. During the assessment 3 tunnel and 6 side fans were operating

Table 5 Odour Survey 4 Grandview 2 15<sup>th</sup> November 2023, 08:15-09:00

Point	Odour observation	Frequency	Distance	Lat	Long
1	Obvious	100%		-37.106848°	143.947538°
2	Obvious	80%		-37.106151°	143.947042°
3	Obvious	80%		-37.105623°	143.947021°
4	Obvious	30%		-37.105244°	143.946967°
5	Obvious	30%		-37.105162°	143.946869°
6	Obvious	20%		-37.104506°	143.946732°
7	Obvious	10%	545m	-37.104237°	143.946752°
8	No Odour			-37.104140°	143.946562°
9	No Odour			-37.104110°	143.946728°
10	No Odour			-37.104101°	143.947143°
11	No Odour			-37.104239°	143.947579°

Figure 4 Odour Survey 4 Grandview 2 15<sup>th</sup> November 2023 08:15-09:00



4.5 In-field Odour Survey 5 15<sup>th</sup> November 2023, 10:15-11:15

Survey 5 commenced at 10:15 and finished at 11:15. The wind was from an WSW direction, 5-10km/hr, overcast and 16°C. During the assessment 6 tunnel and 6 side fans were operating

Table 6 Odour Survey 5 Grandview 2 15<sup>th</sup> November 2023, 10:15- 11:15

Points	Odour observation	Frequency	Distance	latitude	longitude
1	Obvious	80%,		-37.108072°	143.950360°
2	Obvious	80%,		-37.107930°	143.950785°
3	Obvious	60%		-37.107988°	143.951270°
4	Obvious	50%		-37.107758°	143.951686°
5	Obvious	20%		-37.107658°	143.952143°
6	Obvious	10%	470m	-37.107581°	143.952460°
7	No Odour			-37.107617°	143.952687°
8	No Odour			-37.107376°	143.952919°
9	No Odour			-37.107891°	143.952744°
10	No Odour			-37.108283°	143.952646°
11	No Odour			-37.106937°	143.952968°

Figure 5 Odour Survey 5 Grandview 2 15<sup>th</sup> November 2023 10:15-11:15





4.6 In-field Odour Survey 6 27th November 2023, 09:45-10:45

Survey 6 commenced at 09:45 and finished at 10:45. The wind was from the S-SSW direction, 5-10km/hr, 11-20°C. At the beginning of the assessment 3 tunnel and 6 side fans were operating. On completion of the assessment 7 tunnel and 6 side fans were operating.

Table 7 Odour Survey 6 Grandview 2 27th November 2023, 10:15-11:15

Points	Odour observation	Frequency	Distance	latitude	longitude
1	Obvious	80%		-37.106407°	143.948585°
2	Obvious	80%		-37.105833°	143.948145°
3	Obvious	80%		-37.105200°	143.948252°
4	Obvious	50%		-37.104489°	143.948091°
5	Obvious	50%		-37.104224°	143.948370°
6	Obvious	20%	600m	-37.103719°	143.948005°
7	Subtle			-37.103284°	143.947990°
8	No Odour			-37.102957°	143.948177°
9	Subtle			-37.103050°	143.947729°
10	No Odour			-37.102829°	143.947593°
11	Subtle			-37.102643°	143.947976°
12	No odour			-37.102205°	143.948068°
13	No Odour			-37.102236°	143.947474°
14	No Odour			-37.102240°	143.948485°

Figure 6 Odour Survey 6 Grandview 2 27th November 2023 ,10:15-11:15



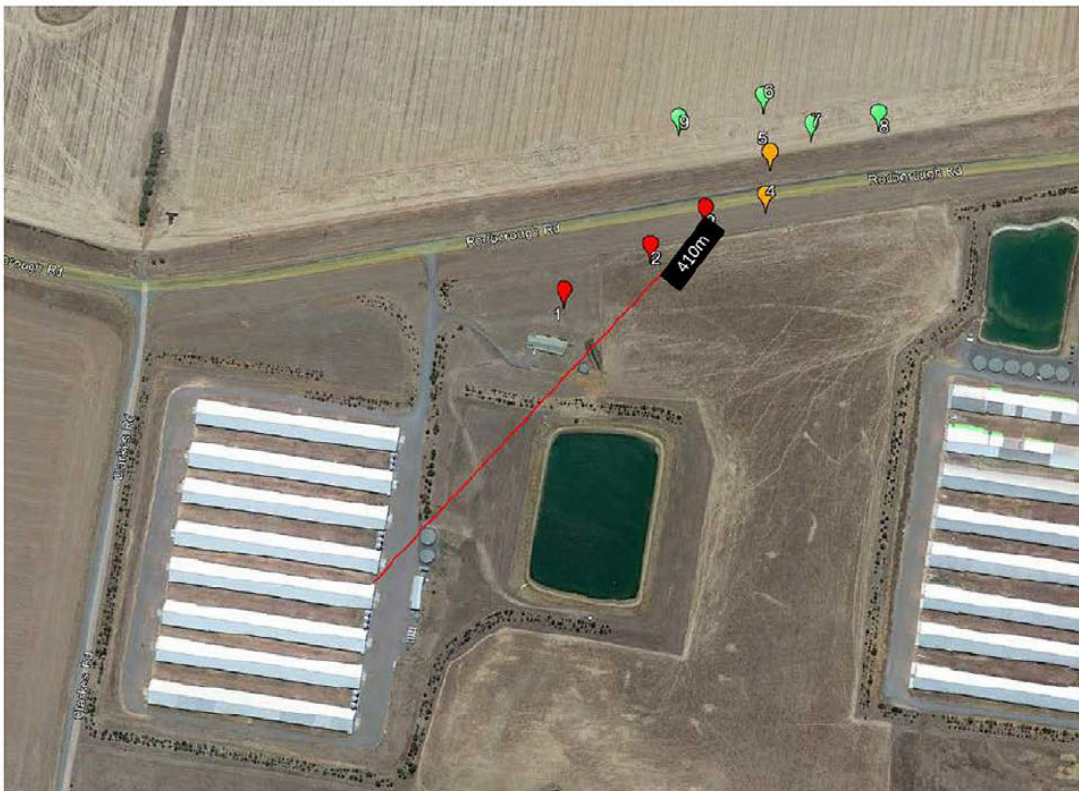
4.7 In-field Odour Survey 7 27th November 2023, 12:00-12:40

Survey 7 commenced at 12:00 and finished at 12:40. The wind was from the SW-WSW direction, 10-14km/hr, 25°C. During the assessment 7 tunnel and 6 side fans were operating.

Table 8 Odour Survey 7 Grandview 2 27th November 2023 12:00-12:40

Points	Odour observation	Frequency	Distance	latitude	longitude
1	Obvious	100%		-37.107044°	143.949280°
2	Obvious	80%		-37.106685°	143.950100°
3	Obvious	30%	410m	-37.106400°	143.950624°
4	Subtle			-37.106299°	143.951198°
5	Subtle			-37.105968°	143.951238°
6	No Odour			-37.105515°	143.951177°
7	No Odour			-37.105740°	143.951640°
8	No Odour			-37.105649°	143.952289°
9	No Odour			-37.105695°	143.950363°

Figure 7 Odour Survey 7 Grandview 2 27th November 2023 12:00-12:40





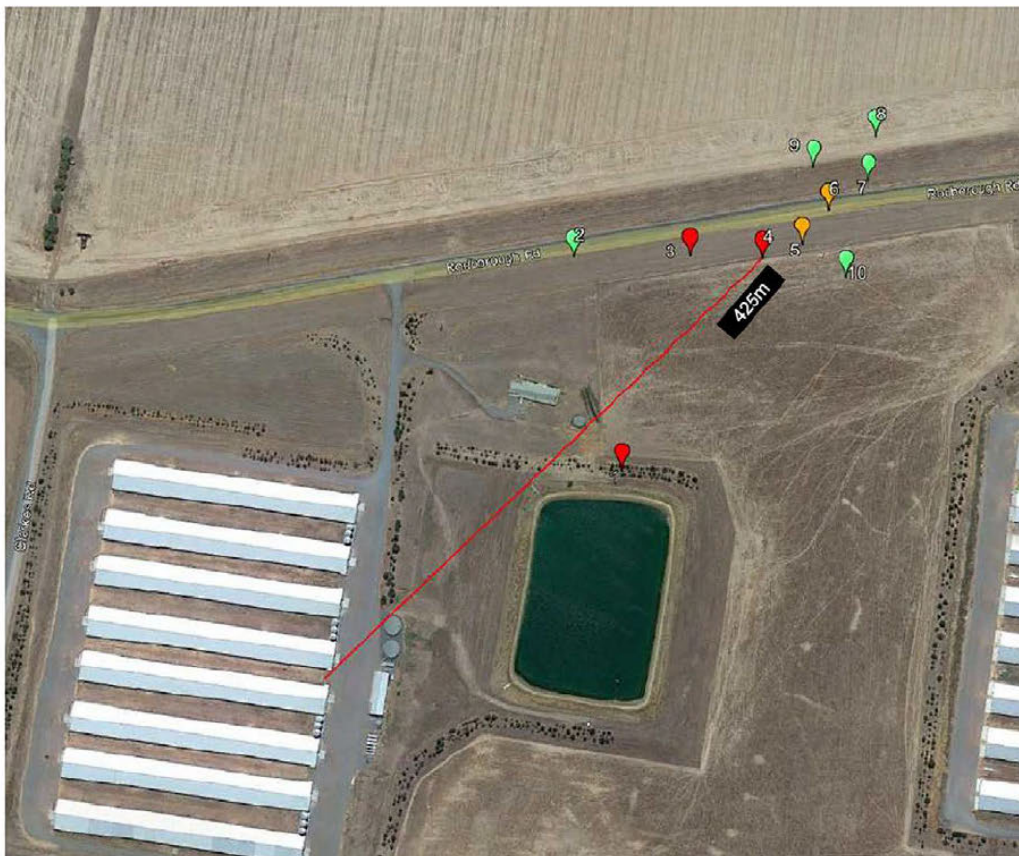
4.8 In-field Odour Survey 27th November 2023, 13:30-14:40

Survey 8 commenced assessment at 13:30 and finished at 14:40. The wind was from the SW direction at 18-21km/hr. Clear skies 25°C. During the assessment 8 tunnel and 6 side fans were operating

Table 9 Odour Survey 8 Grandview 2 27th November 2023 13:30-14:40

Points	Odour observation	Frequency	Distance	Latitude	Longitude
1	Obvious	60%		-37.107816°	143.949815°
2	No Odour			-37.106452°	143.949422°
3	Obvious	40%		-37.106440°	143.950351°
4	Obvious	20%	425m	-37.106457°	143.950938°
5	Subtle			-37.106359°	143.951251°
6	Subtle			-37.106140°	143.951466°
7	No Odour			-37.105949°	143.951791°
8	No Odour			-37.105650°	143.951856°
9	No Odour			-37.105857°	143.951350°
10	No Odour			-37.106573°	143.951605°

Figure 8 Odour Survey 8 Grandview 2 27th November 2023 12:00-12:40



4.9 In-field Odour Survey 9 28th November 2023, 07:45-08:45

Survey 9 commenced assessment at 07:45 and finished at 08:45. The wind was initially from the SSW shifting to SW direction at 8-11km/hr. partly cloudy and 13°C. During the beginning of the assessment 2 tunnel and 6 side fans were operating. On completion of the assessment 3 tunnel and 6 side fans were operating.

Table 10 Odour Survey 9 Grandview 2 28th November 2023 07:45-08:45

Points	Odour observation	Frequency	Distance	Latitude	Longitude
1	Obvious	80%		-37.106443°	143.948403°
2	Obvious	60%		-37.106351°	143.948819°
3	Obvious	60%		-37.106206°	143.949796°
4	Obvious	20%	415m	-37.106009°	143.950160°
5	Subtle			-37.106129°	143.950429°
6	No Odour			-37.106326°	143.950869°
7	No Odour			-37.105889°	143.950965°
8	Subtle			-37.105682°	143.950469°
9	No Odour			-37.105302°	143.950830°
10	No Odour			-37.105273°	143.950375°

Figure 9 Odour Survey 9 Grandview 2 28th November 2023 07:45-08:45





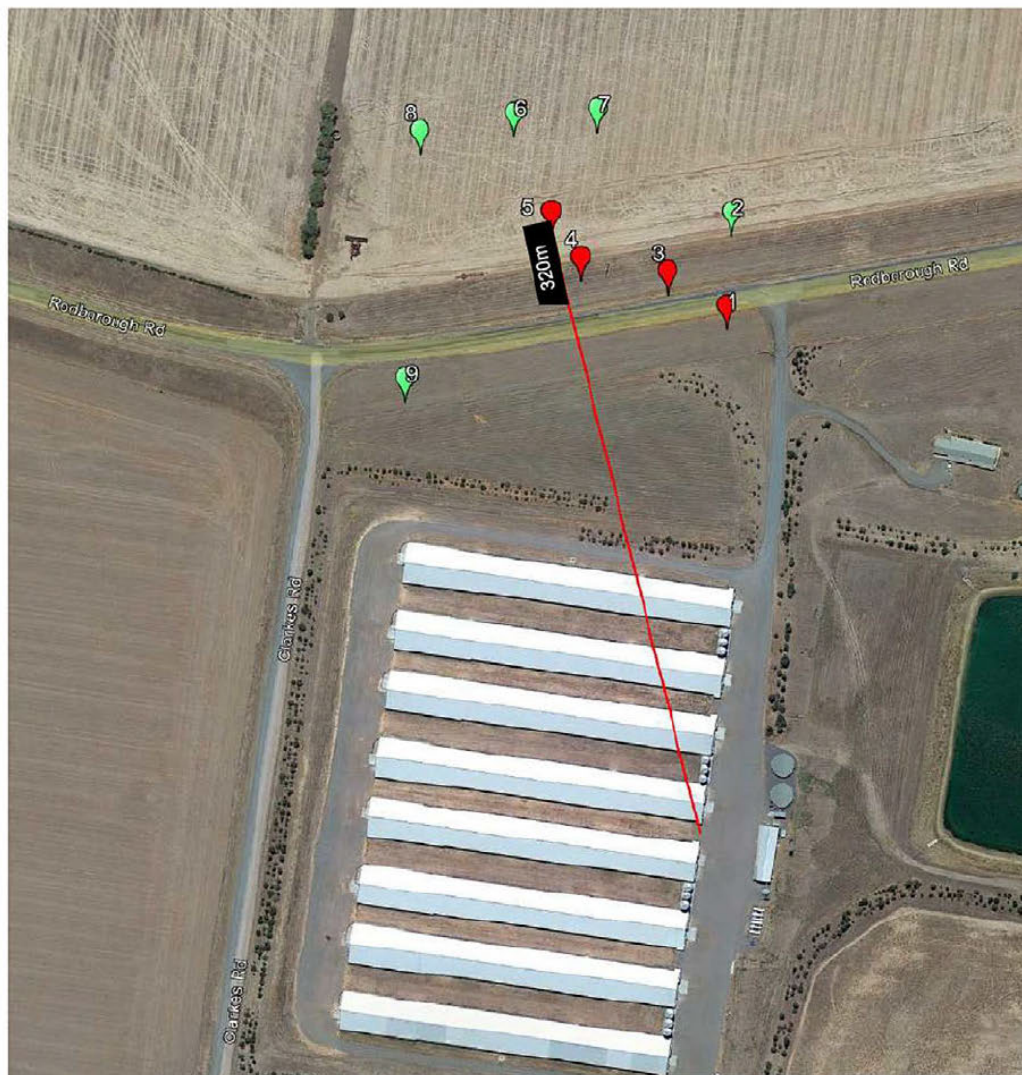
4.10 In-field Odour Survey 10 28th November 2023, 09:30-10:45

Survey 10 commenced assessment at 09:30 and finished at 10:45. The wind was initially from the S shifting to SE direction at 5-10km/hr, partly cloudy and 23°C. 6 tunnel and 6 side fans were operating.

Table 11 Odour Survey 10 Grandview 2 28th November 2023 09:30-10:45

Points	Odour observation	Frequency	Distance	Latitude	Longitude
1	Obvious	40%		-37.106745°	143.947700°
2	No Odour			-37.106304°	143.947731°
3	Obvious	60%		-37.106583°	143.947355°
4	Obvious	20%		-37.106519°	143.946844°
5	Obvious		320m	-37.106304°	143.946672°
6	No Odour			-37.105839°	143.946453°
7	No Odour			-37.105820°	143.946943°
8	No Odour			-37.105923°	143.945898°
9	No Odour			-37.107086°	143.945816°

Figure 10 Odour Survey 10 Grandview 2 28th November 2023 09:30-10:45



## 5 Discussion

Odour assessments were conducted throughout one growing cycle at Grandview 2, spanning two events. Grandview 1 remained vacant during the first event and housed 1-2 day old birds during the second, with no associated odour observed in either case.

Event 1, occurring over two days on November 14-15, 2023, involved five assessments conducted just before the initial thin-out, when the sheds were at maximum stocking density. Event 2 took place on November 27-28, 2023, covering the final thin-out and pickup phases, coinciding with the birds reaching their maximum age and weight.

These assessments considered both normal and worst-case meteorological and operational conditions. They encompassed various times of the day, including early morning, mid-morning, early afternoon, and late afternoon. Worst-case operational scenarios were also examined, such as the sheds being at maximum bird age and weight.

The highest odour emissions were observed in the morning, immediately after an increase in the air ventilation rate from the sheds. Similar to previous assessments at other broiler farms, the intensity of the odour plume diminished rapidly and was generally perceived as either obvious or no odour. It was noted that the litter on this farm was in a very dry condition.

### 5.1 Event 1

The assessments took place on November 14-15, 2023, when the birds were at their maximum density, prior to the initial thin-out. At this time, the birds were aged between 26-32 days old, and each shed housed approximately 46-50,000 birds. The evaluations were conducted under light to moderate wind speeds, varying between 5 to 25 km/hr, and with wind directions ranging from 135 to 225 degrees.

During these conditions, the odour plume observed at an obvious level, travelled distances spanning from 470 to 630 metres.

### 5.2 Event 2

The assessments on November 27-28, 2023, were carried out when the birds reached their maximum age and weight, specifically aged between 41-45 days and weighing between 2.48 and 3.2 kg. Each shed housed birds at a density ranging from 28,000 to 32,000.

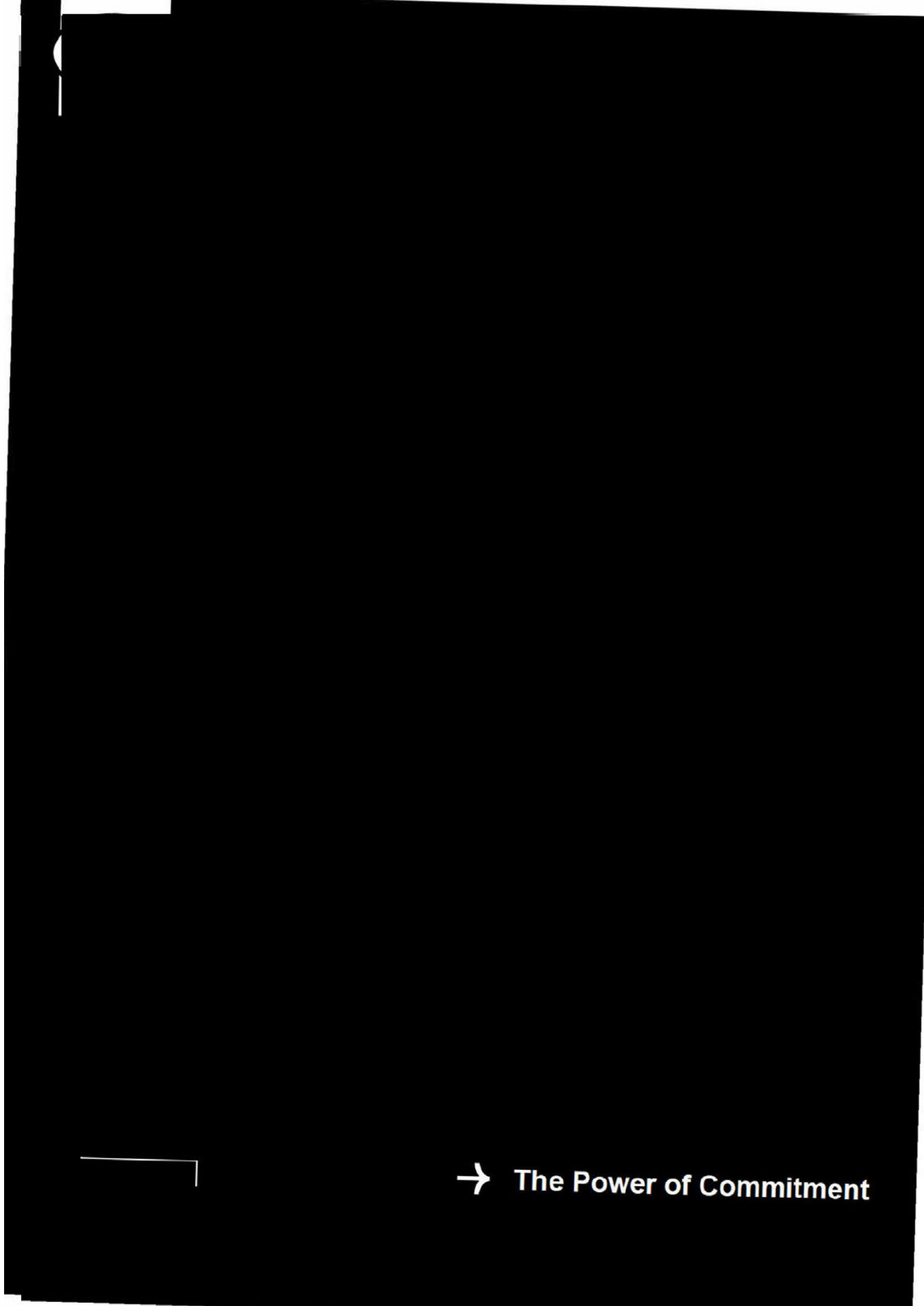
The evaluations occurred under light to moderate wind speeds, ranging from 5 to 21 km/hr, with wind directions spanning from 105 to 255 degrees. The odour plume at obvious level was observed to travel distances ranging from 320 to 600 metres.

## 6 Conclusion

In conclusion, the odour assessments were conducted under worst-case operational and meteorological conditions, accounting for temporal fluctuations. These evaluations occurred at various times throughout the day, including early morning, mid-morning, early afternoon, and late afternoon, while considering changes in wind direction and velocity. This approach provides an understanding of odour dispersion across diverse meteorological conditions.

Although no discernible trend was identified, it was observed that the distance covered by the odour plume was at its highest immediately after an increase in the air ventilation rate, typically early to mid-morning. Overall, the distance at which the odour plume travelled remained consistent for both events, ranging from 470-630m for event 1 and 320-600m for event 2.

It's notable that there were no cumulative odour effects from Grandview 1. The absence of detectable odour from Grandview 1, coupled with staggered grow cycles, contributes to low odour emissions from one farm when the other is at its peak.



→ **The Power of Commitment**

## **9 Councillor Reports and General Business**

### **10 Notices of Motion**

Nil

### **11 Urgent Business**

Nil.

### **12 Confidential Business**

Nil.

### **13 Meeting Closure**