

16/03/2026

Ref: 25045

City of Kalamunda
2 Railway Road
KALAMUNDA WA 6076

Dear Sir Madam,

Addendum to Development Application for Micro Brewery – Lot 787 (No. 485) Walnut Road, Pickering Brook

We act on behalf of the Hogghouse Trust, the commercial lessee of the above property. This submission relates specifically to the proposed use of an existing approved building for a small-scale micro-brewery.

This addendum is intended to be read in conjunction with Appendix 1, 2 and 3 and supersedes some elements originally proposed as part of the original submission.

1. Site Context and Proposal

- **Location:** Lot 787 (No. 485) Walnut Road, Pickering Brook
- **Zoning:** Rural Agricultural under the City of Kalamunda LPS3.
 - Middle Helena Public Drinking Water Source Area (PDWSA), Priority 2 (P2).
- **Existing Infrastructure:** Operations confined entirely to the existing approved shed; no new clearing or native vegetation removal.
- **Operational Scale:**
 - Brewing: 2 days/week
 - Packaging/dispatch: 2 days/week
 - Maximum staff: 3
 - Vehicle movements: ≤1 small utility vehicle for dispatch; minimal traffic impact directly related to staff egress/ingress
- **By-Products:** Solid waste (spent grain, yeast, hop matter) stored in sealed, hardstand mega bins and removed weekly for beneficial reuse.
- **No Groundwater Extraction:** Scheme Water is transported to site in small quantities (1000L), consistent with the limited scale of brewing operations.

This ensures all operations are contained, controlled, and low-intensity, minimising risk to water resources, surrounding agriculture, and ecological values.

2. Wastewater and Trade Waste Management

The application has been revised to fully align with DWER / DoH / Council expectations for P2 areas, with a dedicated wastewater containment and off-site disposal system designed to prevent any discharge to land or groundwater.

2.1 Wastewater Generation

- Estimated wastewater: 1.5 L per L beer produced → ~1,800 L/week
- Fortnightly total: ~3,600 L
- Characteristics: Elevated BOD/COD, suspended solids, yeast, and pH variation due to biodegradable cleaning agents

2.2 Containment System

- Tank 1 (Primary, Underground): 5,000 L HDPE, fully certified AS/NZS 1546.1, watertight, with 80% high-level alarm. No infiltration or discharge permitted.
- Tank 2 (Secondary, Above-Ground): 5,000 L UV-stabilised polyethylene, fully bunded (≥110% containment), screened vent, lockable contractor suction point, high-level alarm.
- Pump & Rising Main: Submersible pump, DN50 HDPE pressure line, manual and automatic control, high-level interlock.
- Off-Site Removal: Licensed liquid waste contractor collects wastewater every 14 days; all collection, transport, and disposal documented for compliance.

2.3 Treatment Considerations

- No on-site treatment occurs; system is designed solely for containment and secure off-site disposal.
- System is not connected to sewer or stormwater, ensuring no contamination of the catchment.
- Buffer capacity (10,000 L total) accommodates variations in production, cleaning, and collection delays.

2.4 Odour and Amenity Controls

- Tanks sealed; above-ground tank vented via screened vent.
- Wastewater is transferred regularly to avoid anaerobic conditions.
- Monitoring: weekly visual checks, monthly high-level alarm testing, quarterly bund inspections, documented in operational logs.

2.5 Chemical Management

- Cleaning agents: Biodegradable, food-grade (PBW, Star San)
- pH balancing: manually managed prior to off-site removal, stored securely
- All chemical storage and handling comply with Australian standards and DWER guidance

This design addresses DWER's concerns regarding wastewater, treatment suitability, and odour, demonstrating full containment, risk minimisation, and compliance with P2 source protection objectives.

3. Solid Waste Management

- Solid by-products (spent grain, yeast, hop matter) stored in sealed mega bins on hardstand areas.
- Removed off-site weekly for beneficial reuse as livestock/poultry feed.
- No on-site composting, land application, or exposure to stormwater.
- Operational controls: bins maintained, covered, inspected, and cleaned; spills managed immediately.

This approach prevents leachate, odour, and pest attraction, consistent with industry best practice.

4. Land Use Compatibility and Strategic Context

Public Drinking Water Source Area (PDWSA): The property is within the Middle Helena P2 PDWSA. Risk minimisation is achieved through:

- No on-site discharge; all wastewater is contained and removed off-site by a licensed contractor.
- No groundwater extraction; water is delivered in small, controlled volumes sufficient for production.
- Containment systems designed with buffer capacity exceeding fortnightly wastewater volumes (~10,000 L capacity for 3,600 L expected fortnightly).

Surrounding Land Use: Existing orchards, rural residences, and cleared areas. The building is located in a historically cleared portion, ensuring:

- No habitat loss or vegetation clearing.
- Coexistence with agricultural operations (machinery, bird deterrents, chemical spraying).

Risk Assessment:

- Wastewater is fully contained with dual-tank storage, bunded containment, alarms, and off-site disposal.
- Odour, pest, and chemical risks are mitigated through sealed storage, weekly inspection, and use of biodegradable cleaning agents.
- Operational scale: Max 3 staff, ≤3 vehicle movements/day; negligible impact on traffic or orchard logistics.

5. City of Kalamunda Tourism Strategy

Alignment with Tourism Objectives:

- Supports boutique agricultural and craft food production in line with Action 2.2 of the Strategy.
- Promotes Pickering Brook and Bickley Valley as premium destinations for artisanal beverages.
- Utilises seasonal fruit that is famous in the Pickering Brook locality in craft brewing

Visitor Experience:

- Potential for off-site “meet the brewer” experiences at festivals, restaurants and local markets.

Sustainability and Landscape Integration:

- No new clearing or expansion; building reuse ensures minimal environmental footprint.
- Wastewater fully contained and removed off-site; solid by-products reused as livestock feed.

Economic and Cultural Contribution:

- Supports local agri-tourism sector and contributes to the regional economy.
- Enhances awareness of the Bickley Valley as a high-quality craft beverage region.

The proposal aligns with the City’s Tourism Strategy, providing a sustainable, low-impact agri-tourism activity that complements existing rural uses.

Summary

The proposal provides a low-impact, well-managed tourism and rural enterprise that:

- Delivers strong alignment with catchment protection objectives;
- Demonstrates regulatory compliance and best-practice wastewater management;
- Contributes to the local economy through sustainable agri-tourism.

We respectfully request the City’s favourable consideration of this Development Application. Should you have any queries or require clarification, please do not hesitate to contact the undersigned.

Please contact the undersigned with any question regarding this application.

Yours faithfully

ADAM OLIVARI
Senior Planner

Appendix 1: OPERATIONAL STATEMENT

1. Nature of the Use

- 1.1 The site is to be used solely for the production and off-site distribution of beer, as a microbrewery operation.
- 1.2 No on-site sales, tasting, or consumption of alcohol shall occur unless a separate development application is approved by the City of Kalamunda
- 1.3 All brewing, packaging, storage, and related operational activities shall occur entirely within the existing approved building, with no expansion beyond the cleared area
- 1.4 Any future expansion, change of use, or additional activities (e.g., restaurant, bar, retail, or increased production) requires a separate Development Application.

2. Operating Days and Hours

Activity	Days	Hours	Notes
Brewing	Monday–Friday	8:00 am – 5:00 pm	Limited to 2 brewing days per week; exact days scheduled by operator
Packaging & Distribution	Monday–Friday	8:00 am – 5:00 pm	Limited to 2 additional days per week
Deliveries / Vehicle Movements	Monday–Friday	8:00 am – 5:00 pm	Must comply with vehicle limits in Section 4

3. Staffing

- Maximum 3 staff members on-site at any one time.
- All staff must be trained in operational, environmental, and safety procedures.
- Staff shall adhere to all odour, wastewater, chemical handling, and emergency protocols described in this statement.

4. Vehicle Access and Deliveries

- Deliveries and distribution shall be conducted using vehicles with a maximum 3.5 t GVM.
- Maximum of ten vehicle movements per day.

- Vehicles are to access only existing cleared areas
- All deliveries and collections must occur within approved operating hours.

5. Waste Management

5.1 Wastewater Generation: Approximately 1,800 L/week from brewing, clean-in-place, and floor washdown activities.

5.2 Containment: Wastewater is to be fully contained within a two-tank system:

- Tank 1 (Underground): 5,000 L HDPE, watertight, with high-level alarm.
- Tank 2 (Above-Ground): 5,000 L UV-stabilised polyethylene tank within an impermeable bund ($\geq 110\%$ capacity)

5.3 Off-Site Removal: Wastewater shall be collected every 14 days by a licensed liquid waste contractor and disposed at an approved facility.

5.4 No discharge to land is permitted.

5.5 Monitoring: Weekly tank level checks, monthly alarm testing, quarterly bund inspections, and annual pump servicing.

6. Solid Waste and By-Products

- Spent grains, yeast, and hop matter shall be stored in sealed, lidded mega bins on hardstand.
- Material shall be removed weekly for beneficial reuse as livestock feed.
- No composting, land application, or disposal on site is permitted.
- Bins must be inspected regularly and maintained in good condition to prevent odour, leachate, or pest attraction

7. Cleaning, Chemicals, and pH Management

- Only biodegradable, food-grade cleaning agents (e.g., PBW, Star San) shall be used.
- Cleaning activities must occur over bunded areas draining to Tank 1; no discharge to ground or stormwater.

- pH adjustments, if required, shall be contained and disposed via Tank 1/2 system.
- All chemical storage shall comply with relevant safety and environmental regulations.

8. Odour Management

- Brewing and fermentation occur in a sealed, mechanically ventilated building with carbon filtration.
- Spent grains and yeast are sealed and removed weekly.
- Regular inspection and maintenance of ventilation and odour control systems is mandatory.
- An odour log shall be maintained and made available to the City upon request.

9. Noise and Amenity

- All operations occur within the building.
- Maximum operational noise levels shall comply with Environmental Protection (Noise) Regulations 1997.
- No external machinery, equipment, or amplification shall be operated outside approved hours.

10. Bushfire and Emergency Procedures

- Operations shall comply with the submitted Bushfire Management Plan.
- Maximum of 3 staff reduces risk, and all staff are trained in evacuation protocols.

11. Traffic and Access

- Expected traffic: ≤3 staff arrivals and departures/day; 1 small delivery vehicle per collection cycle. No more than 10 vehicle movements per day.
- All vehicle movements confined to existing access roads and cleared areas.

12. Operational Limits for Approval

- Maximum brew volume: 1,200 L/week
- Maximum staff: 3.

- Brewing, packaging, and delivery restricted to existing building footprint.
- No on-site retail, tasting, or consumption.
- All wastewater and by-products removed off-site.

13. Monitoring and Record-Keeping

- Maintain logs for:
 - Wastewater tank levels, pump-outs, and contractor collection dockets.
 - Solid by-product removal.
 - Odour management and complaints.
 - Cleaning and chemical use (including SDS documentation).
- Records to be available to the City on request.

Appendix 3 – Bushfire Emergency Procedure

Fire Danger Rating (FDR) – Moderate – Extreme

- Staff to remain vigilant
- Responsibility: During warmer months, the Site Manager (Chris Hogg) will monitor the daily FDR via the City of Kalamunda or DFES website.

Fire Danger Rating (FDR) – Catastrophic

- No operations are to occur on days rated *Catastrophic* under the Australian Fire Danger Rating System. Staff shall not attend site.
- Responsibility: During warmer months, the Site Manager (Chris Hogg) will monitor the daily FDR via the City of Kalamunda or DFES website.

Fire in the Vicinity

- If DFES issues an *Advice* or *Watch and Act* warning for the area, all staff will immediately close the building and evacuate the site.
- The direction of evacuation will follow instructions from DFES, the City of Kalamunda, or the Incident Controller.

Egress Arrangements

- Primary egress is achieved by travelling approximately 250 m south along Walnut Road to its intersection with Patterson Road.
- From this point, two egress options are available depending on the fire's location and the direction advised by the Incident Controller:

1. Northbound via Patterson Road

- Travel north on Patterson Road to Walnut Road.
- Turn left onto Walnut Road, then left again onto Lawnbrook Road.
- This route leads into Lesmurdie and onward to the Kalamunda townsite via a right turn onto Canning Road.

2. Southbound via Patterson Road

- Travel south on Patterson Road to Pickering Brook Road.
- Turning right (west) provides access to Canning Road, leading into Lesmurdie and the Kalamunda townsite.
- Turning left allows travel towards Welshpool Road East, providing an exit from the Darling Ranges into the foothills (e.g., Wattle Grove / Forrestfield).

Note: Final destinations are to be determined by the Incident Controller based on prevailing conditions.

Refer to Fire Emergency Egress Map

Shelter-in-Place

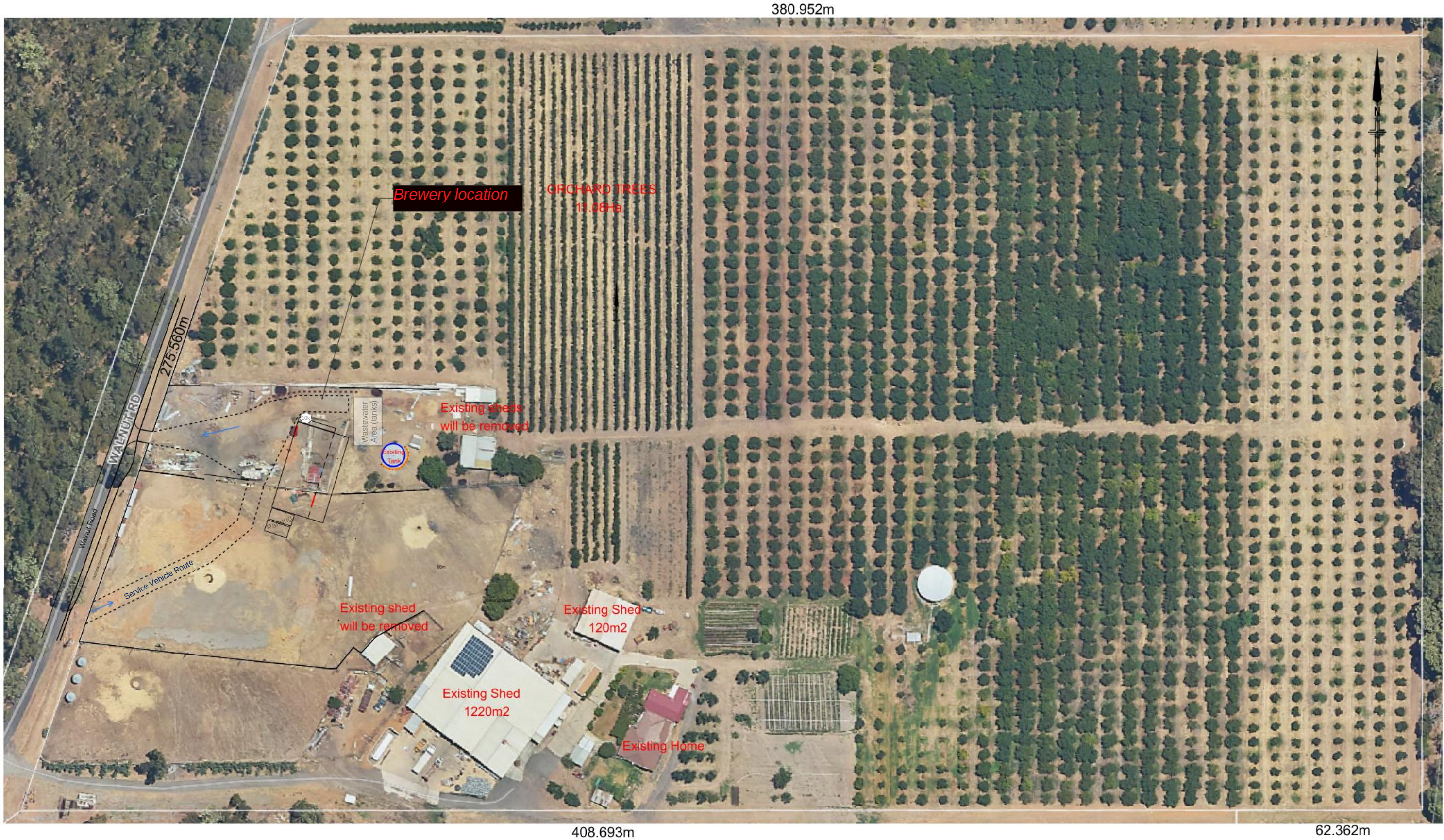
- If safe egress is not possible and shelter-in-place becomes the only viable option, staff will follow the instructions of the Incident Controller.
- This scenario is considered highly unlikely, as early evacuation measures above are designed to occur well before conditions deteriorate.

Staff Preparedness

- All onsite staff will complete fire warden training.
- Fire extinguishers will be accessible to all staff to suppress any small, manageable fires that may occur on the property.

Total Fire Ban

- No activities outside the building are permitted during a declared Total Fire Ban.



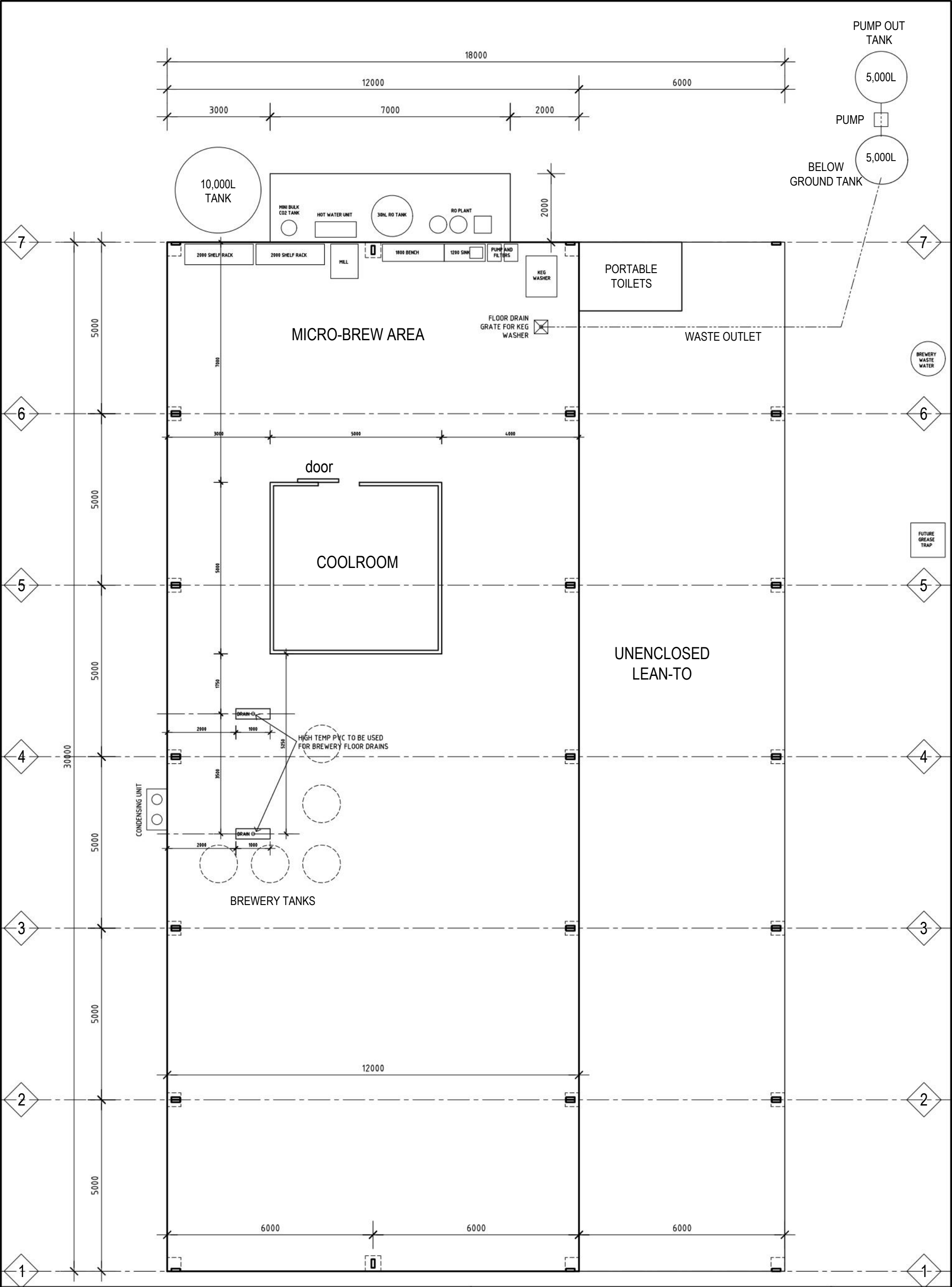
Survey completed by Brenton Tidow, Qualified Surveyor
Spatial Sciences- Surveying, Mining and Engineering 51384.

FILE: FM1024 Lot 787 Walnut Road.dgn

0	14/05/2024	ISSUED FOR REVIEW	BT	BT	BT
REV	DATE	DESCRIPTION	SURVEYED	DRAFT	APPROVED
REVISIONS					

CONTOUR AND FEATURE SURVEY LOT 787 Walnut Road. EXISTING OVERALL SITE PLAN	
DRAWING NUMBER	REVISION
FM1024_D002	0





**Waste Management Plan Incorporating
Wastewater Collection and Off-Site
Disposal System**

Hogg Culture Brewing Co.

485 Walnut Road

Pickering Brook – WA 6076

**Proposed Micro-Brewery – Priority 2 (P2)
Public Drinking Water Source Area**

Conceptual Engineering Report (Metric Units)

Prepared for: Chris Hogg

Date: 12 March 2026

Executive Summary

The measures outlined in this report are designed to ensure that micro-brewery wastewater is fully contained on site and removed for off-site treatment, preventing any discharge to land that could infiltrate to groundwater and impact the drinking water catchment. The system has been designed to minimise risks to drinking water quality and demonstrate consistency with the source protection objectives applicable to Priority 2 (P2) Public Drinking Water Source Areas.

In addition to wastewater, solid brewing byproducts including spent grain, yeast and hop matter are managed separately. These materials are stored in sealed mega bins on hardstand areas and are removed from site for beneficial reuse as livestock and poultry feed.

The wastewater system has been conservatively designed, with a total available storage capacity of 10,000 litres, exceeding the maximum anticipated fortnightly wastewater volume of approximately 3,600 litres. This provides additional buffer capacity to manage variations in production, cleaning intensity and collection timing.

Wastewater generated from brewing, cleaning and wash-down activities is fully contained on site using a two-tank system consisting of an underground primary collection tank (Tank 1) and an above-ground holding tank (Tank 2). Wastewater is transferred between tanks via a pump system and removed from site every 14 days by a licensed liquid waste contractor for disposal at an approved treatment facility.

The micro-brewery will produce approximately 1,200 litres of finished beer per week. Based on industry-standard brewing and cleaning practices, wastewater generation is estimated at approximately 1.5 litres of wastewater per litre of beer produced, equating to an average wastewater volume of approximately 1,800 litres per week.

This report provides a concise overview of waste and wastewater management arrangements for the proposed micro-brewery located within a Priority 2 (P2) Public Drinking Water Source Area.

1. Introduction

This Waste Management Plan and Wastewater Disposal Plan has been prepared for a micro-brewery operating within a Priority 2 (P2) Public Drinking Water Source Area. The plan describes the collection, storage, transfer, odour management, risk management and off-site disposal of wastewater generated by micro-brewery operations. The design objective is to protect drinking water quality and site amenity by ensuring wastewater is fully contained on site and removed for off-site treatment, thereby preventing any discharge to land that could infiltrate to groundwater.

2. Wastewater Generation and Characteristics

Average wastewater generation is approximately 1,800 litres per week (L/week), comprising brewhouse vessel cleaning, floor washdown and clean-in-place (CIP) activities. Over a two-week (14-day) period, the expected volume is approximately 3,600 litres. Typical characteristics include elevated BOD/COD, suspended solids, yeast and variable pH due to cleaning chemicals. No on-site treatment is proposed; wastewater is stored and removed off-site by a licensed contractor.

3. Design Basis

The system is sized for a two-weekly (fortnightly) collection cycle with conservative buffer capacity. No overflow, infiltration or soakage systems are provided. The system uses two numbered tanks (primary underground, secondary above-ground) with alarmed level control and secondary containment for the above-ground tank.

4. System Overview

Wastewater from internal floor drains, brewhouse washdown and CIP discharges to Tank 1 (underground). A submersible pump transfers wastewater through a rising main to Tank 2 (above-ground) for scheduled pump-out by a licensed liquid waste contractor. The above-ground tank is located within an impermeable bund providing secondary containment ($\geq 110\%$ of tank volume). No connections to stormwater or sewer are provided.

5. Tank 1 – Underground Primary Wastewater Collection Tank - Certified to AS/NZS1546.1

Capacity: 5,000 L. Material: Watertight HDPE. Installation: fully buried with ≥ 300 mm compacted sand bedding and compacted backfill. Indicative dimensions (rectangular form): 2.8 m (L) $\times$ 1.3 m (W) $\times$ 1.4 m (D). Fittings and controls: sealed access lid, inspection opening, and high-level alarm set at approximately 80% capacity ($\approx 4,000$ L). No overflow or infiltration outlets are permitted.

6. Pump and Rising Main

A submersible wastewater pump transfers effluent from Tank 1 to Tank 2. The rising main is DN50 (50 mm) HDPE pressure pipe. Controls include automatic and manual modes, low-level pump protection, and high-level alarm interlock to prevent overfilling of Tank 2.

7. Tank 2 – Above-Ground Wastewater Holding Tank

Capacity: 5,000 L. Type: UV-stabilised polyethylene vertical tank. Indicative dimensions: approximately 2.0 m diameter × 2.3 m height. Fittings include a screened vent, lockable contractor suction point, level indicator and high-level alarm. The tank is clearly labelled 'Mirco-Brewery Wastewater – Off-site Disposal Only – No Stormwater'.

8. Bunded Secondary Containment for Tank 2

The above-ground tank is located within an impermeable bund providing secondary containment. The bund is designed to contain at least 110% of the largest tank volume. For a 5,000 L tank, the required containment volume is 5,500 L. The adopted design has a wall height of 0.50 m and internal plan dimensions of approximately 3.35 m × 3.35 m, providing a containment volume of approximately 5,610 L. The bund floor and walls are sealed, contain no penetration and are maintained normally dry.

9. Waste Collection and Off-Site Disposal

Wastewater is removed from Tank 2 every 14 days by a licensed liquid waste contractor and transported to an approved wastewater treatment facility (Contract is in Place for Collection and Disposal). Waste tracking documentation, including collection dockets and disposal receipts, is retained on site for regulatory compliance.

10. Monitoring and Maintenance

Tank levels are visually checked weekly. High-level alarms are tested monthly. The bund is inspected quarterly for structural integrity and cleanliness. Pumps are serviced annually in accordance with manufacturer recommendations. All monitoring, inspection and maintenance activities are documented and retained on site.

11. Odour Management

Mirco-Brewery wastewater has the potential to generate odour if allowed to become anaerobic during storage. Odour management measures have been incorporated into the system design and operation to ensure that emissions do not adversely impact site amenities or nearby receptors.

Odour control measures include sealed construction of both Tank 1 and Tank 2, venting of Tank 2 via a screened vent, and regular transfer of wastewater to avoid prolonged stagnation. Storage volumes have been conservatively sized to support a 14-day collection cycle without extended retention times.

Operational controls include maintaining the tanks closed except during inspection or pump-out, prompt response to high-level alarms, and adherence to the scheduled off-site collection frequency. If odour is detected, contingency measures may include increasing collection frequency, flushing of transfer lines, or installing a carbon filter on the tank vent.

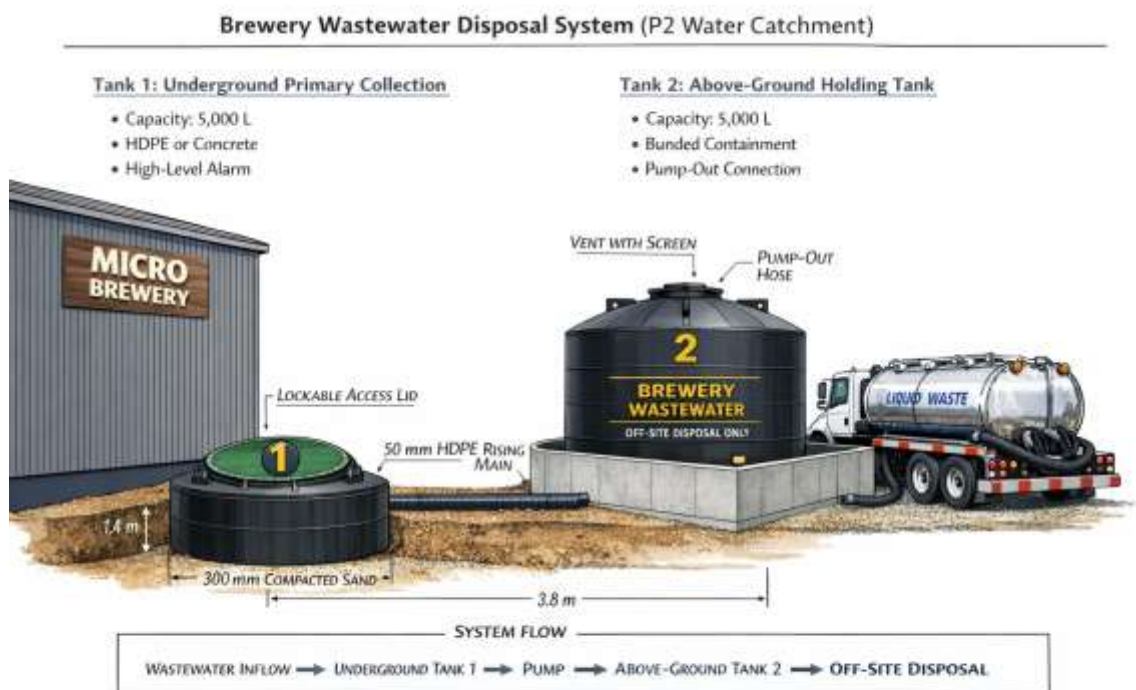
12. Risks, Hazards, Mitigation and Controls

Hazard / Risk	Potential Consequence	Mitigation	Controls / Monitoring
Tank 2 failure (above-ground)	Release to land	Impermeable bund $\geq 110\%$ capacity	Quarterly bund inspections; spill kit
Tank 1 failure (underground)	Soil or groundwater impact	Watertight certified tank; no infiltration	Alarm testing; emergency pump-out
Overflow due to delayed collection	Uncontrolled discharge	Two tanks with alarmed capacity and buffer	Weekly level checks; contingency contractor
Pump or rising main failure	Interrupted transfer	Protected pump and DN50 rising main	Routine testing; annual servicing
Odour generation	Amenity impacts	Sealed tanks; controlled storage duration	Odour checks; contingency controls

13. Compliance Statement

The wastewater disposal system uses two numbered tanks (Tank 1 underground and Tank 2 above-ground) with alarmed operation, odour management measures and banded secondary containment. Wastewater is removed off-site by a licensed contractor on a 14-day cycle with a contract in place for collection and disposal.

14. Schematic Representation of proposal



15. Solid Waste Management – Brewing Grains, Yeast and Hop Matter

In addition to wastewater, the micro-brewery generates solid organic by-products including spent brewing grains, surplus yeast and hop matter. These materials are managed separately from liquid waste streams to prevent contamination of land, surface water and groundwater within the Priority 2 (P2) Public Drinking Water Source Area.

Spent grains, yeast and hop matter are collected directly from the brewing process and stored in sealed mega bins located on a hardstand area. The mega bins are fitted with lids and are maintained in good condition to prevent leachate generation, odour and attraction of pests or vermin.

The contents of the mega bins are removed from site on a regular basis and supplied for beneficial reuse as supplementary feed for livestock and poultry. No processing, composting or land application of these materials occurs on site.

Operational controls include keeping mega bins covered when not in use, routine inspection and cleaning of bins, immediate clean-up of any spills, and timely removal of material from site. Solid waste handling activities do not involve any discharge to land that could impact groundwater.