Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6844/2023/1
Works approval holder	Ausvision Rural Services Pty Ltd
ACN	106 075 763
Registered business address	Unit 6, 78-84 Catalano Circuit CANNING VALE WA 6151
DWER file number	DER2023/000638
Duration	23/04/2024 to 22/04/2027
Date of issue	23/04/2024
Premises details	Hillside Meat Processors 148 Boxsell Road NARROGIN WA 6312 Legal description - Lot 50 on Diagram 80743 & Lot 6 on Plan 233183

Prescribed premises category description **(Schedule 1, *Environmental Protection Regulations 1987*)**	**Assessed production capacity**
Category 15: Abattoir: premises on which animals are slaughtered	Not more than 16,200 liveweight tonnes per annual period (sheep and goats)

This works approval is granted to the works approval holder, subject to the attached conditions, on 23 April 2024, by:

Caron Goodbourn

Digitally signed by Caron Goodbourn
Date: 2024.04.23 11:50:16 +08'00'

Manager, Process Industries

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Interpretation

In this works approval:

(a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:

  (i) if dated, refers to that particular version; and

  (ii) if not dated, refers to the latest version and therefore may be subject to change over time;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

The works approval holder must ensure that the following conditions are complied with:

Construction phase

Infrastructure and equipment

1. The works approval holder must:

(a) construct the infrastructure;

(b) in accordance with the corresponding design and construction requirements; and

(c) at the corresponding infrastructure location

as set out in Table 1.

Table 1: Design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location
1.	Outdoor lairage yard (25m x 13.16m)	Constructed in the location depicted in Schedule 1: Maps, Figure 2 and in accordance with the lairage design in Figure 3, including: (a) a clay liner installed in accordance with the requirements specified in Schedule 2; to achieve a minimum hydraulic conductivity (permeability) of 1 x 10^{-9} m/s across the entire area of the lairage yard base; and (b) 200 mm high bund to be constructed using in-situ clay around the northern, western, and eastern perimeter of the lairage yard.	Labelled as “Lairage Area” in Yard 13 of Schedule 1: Maps, Figure 2
2.	Carcass burial pit	Constructed in the location depicted in Schedule 1: Maps, Figure 2, including: (a) Dimensions to be 30 m x 3 m x 1.5 m deep. (b) Excavated to no deeper than 1.5 m below ground level. (c) Must have a clay liner installed in accordance with the requirements specified in Schedule 2; to achieve a minimum hydraulic conductivity (permeability) of 1 x 10^{-9} m/s across the base and sides of the pit.	Labelled as “Proposed Burial Pit” Schedule 1: Maps, Figure 2.
3.	Evaporation pond	Constructed in the location depicted in Schedule 1: Maps, Figure 2 and in accordance with the pond design in Figure 3, including: (a) Must be constructed with a minimum operational storage capacity of 127m^3, excluding the allowance of 400 mm freeboard. Pond dimensions to be at least 16.25 m long by 8 m wide by 1.1 m deep; (b) Internal pond wall embankment slopes of 3:1 (horizontal: vertical); (c) 200 mm high bund must be constructed using in-situ clay around the northern and eastern perimeter of the pond; (d) Installed with a surveyed freeboard marker that enables the freeboard to be measured in	Labelled as “Evaporation Pond” in Yard 13 of Schedule 1: Maps, Figure 2. See Schedule 1: Maps, Figure 3 for specifications of design.

	Infrastructure	Design and construction requirements	Infrastructure location
		millimetres and can be viewed by a person standing near the edge of the pond; and (d) Clay liner installed in accordance with the requirements specified in Schedule 2; to achieve a minimum hydraulic conductivity (permeability) of 1 x 10^{-9} m/s across the base and sides of the pond.	
4.	Drain conveying wastewater from the outdoor lairage yard to the evaporation pond	Constructed in the location depicted in Schedule 1: Maps, Figure 2 and in accordance with the drain design in Figure 3, including: (a) Drain dimensions to be at least 0.25 m wide by 25 m long by 0.15 m deep; (b) Located along the entire southern perimeter of outdoor lairage yard 13; (c) Drain must be constructed with a 3.7% slope towards a concrete sump (see infrastructure 5: Concrete sump, below); and (d) Clay liner installed in accordance with the requirements specified in Schedule 2; to achieve a minimum hydraulic conductivity (permeability) of 1 x 10^{-9} m/s across the base and sides of the drain.	Labelled as "Drain and Sump" in Figure 2. See Schedule 1: Maps, Figure 3 for specifications of design.
5.	Concrete sump and solids screen	Constructed in the location depicted in Schedule 1: Maps, Figure 2 and in accordance with the sump design in Figure 3 and Figure 4, including: (a) Sump to be 1.2 m deep, including 0.1 m freeboard, with a minimum operational storage capacity of 34 L; (b) Sump to have a grate cover (solids screen) of at least 200 mm x 200 mm; and (c) Discharge pipe (from the sump to the pond) diameter to be at least 0.2 m.	Labelled as "Drain and Sump" in Figure 2. See Schedule 1: Maps, Figure 4 for specifications of design.

Compliance reporting

2. The works approval holder must within 30 calendar days of the infrastructure required by condition 1 being constructed and prior to commissioning the infrastructure:

(a) undertake an audit of their compliance with the requirements of condition 1; and

(b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:

(a) certification by a third party qualified professional engineer that the evaporation pond, drain, sump and their components as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

(b) certification by the works approval holder that the outdoor lairage yard and burial pit, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

(c) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and

(d) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Time limited operations phase

Commencement and duration

4. The works approval holder may only commence time limited operations for the infrastructure identified in condition 1:

(a) where the CEO has notified the works approval holder that the Environmental Compliance Report for that item of infrastructure as required by condition 2 meets the requirements of that condition; or

(b) where at least 10 business days have passed after the Environmental Compliance Report for that item of infrastructure as required by condition 2 has been submitted to the CEO.

5. The works approval holder may conduct time limited operations for the infrastructure specified in condition 6:

(a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 4; or

(b) until such time as a licence for the infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 5(a)

Time limited operations requirements and emission limits

6. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements during time limited operations

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Outdoor lairage yard	(a) Must only hold a maximum of 700 animals (sheep and goats) at any one time. (b) Maintenance of 200 mm high bunding around the northern, western, and eastern perimeter of the lairage yard.	Labelled as “Lairage Area” in Yard 13 of Schedule 1: Maps, Figure 2
2.	Carcass burial pit	(a) For the burial of paunch and carcasses only; (b) All deposited waste material must be fully covered with a layer of soil within 1 hour of disposal and remain fully covered at all times.	Labelled as “Proposed Burial Pit” Schedule 1: Maps, Figure 2.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
3.	Evaporation pond	(a) Must only accept wastewater from the lairage yard, that has first passed through the solids screen. (b) Must maintain a 200 mm high bund wall around the perimeter of the pond to divert stormwater away from entering the pond (c) A minimum operational freeboard of at 400 mm must be maintained. (d) Maintain the freeboard marker in good working and legible order.	Labelled as "Evaporation Pond" in of Schedule 1: Maps, Figure 2.
4.	Drain, concrete sump and solids screen	(a) Must be managed and maintained to prevent spills, leaks and blockages. (b) Solids must be collected from the sump daily, semi-dried on the existing paunch and manure storage area (PMSA) concrete pad, prior to offsite disposal.	Labelled as "Drain and Sump" in Figure 2.
5.	Freeboard marker in evaporation pond	(a) A record must be taken at least weekly during the months of May, June, July, August and September of freeboard (mm) and include inspector's name, signature, date and time of inspection in a logbook and made available upon request. (b) The CEO must be notified within 48 hours of becoming aware of a 400mm freeboard being exceeded and this notification must include proposed measures for lowering the level of the water in the evaporation pond	Labelled as "Evaporation Pond"

Compliance reporting

7. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 30 calendar days before the expiration date of the works approval, whichever is the sooner.

8. The works approval holder must ensure the report required by condition 7 includes the following:

(a) a summary of the time limited operations, including timeframes and:

(i) daily number of animals held in the new outdoor lairage area; and
(ii) recorded freeboard levels in the evaporation pond; and
(iii) volumes of screened solids collected from the solids sump and taken to the concrete pad

(b) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable); and

(c) a review of performance and compliance against the conditions of the works approval.

Records and reporting (general)

9. The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:

(a) the name and contact details of the complainant, (if provided);

(b) the time and date of the complaint;

(c) the complete details of the complaint and any other concerns or other issues raised; and

(d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.

10. The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:

(a) the works conducted in accordance with condition 1;

(b) any maintenance of infrastructure that is performed in the course of complying with condition 6; and

(c) complaints received under condition 9.

11. The books specified under condition 10 must:

(a) be legible;

(b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

(c) be retained by the works approval holder for the duration of the works approval; and

(d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 3 have the meanings defined.

Table 3: Definitions

Term	Definition
AS 1289.3.1.2 – 2009	means the Australian Standard 1289.3.1.2-2009 *Methods of testing soils for engineering purposes – Soil classification tests – Determination of the liquid limit of a soil – One point Casagrande method (subsidiary method)*, as amended from time to time.
AS 1289.3.3.1 – 2009	means the Australian Standard 1289.3.3.1-2009 *Methods of testing soils for engineering purposes – Soil classification tests – Calculation of the plasticity index of a soil*, as amended from time to time.
AS 1289.3.6.1 – 2009	means the Australian Standard 1289.3.6.1-2009 *Methods of testing soils for engineering purposes – Soil classification tests – Determination of the particle size distribution of a soil – Standard method of analysis by sieving*, as amended from time to time.
AS 1289.3.8.1:2017	means the Australian Standard 1289.3.8.1:2017 *Methods of testing soils for engineering purposes – Soil classification tests – Dispersion – Determination of Emerson class number of a soil*, as amended from time to time.
AS 1289.5.2.1	means the Australian Standard 1289.5.2.1:2017 *Methods of testing soils for engineering purposes – Soil compaction and density tests – Determination of the dry density / moisture content relation of a soil using modified compactive effort*, as amended from time to time.
AS 1289.5.4.2	means the Australian Standard 1289.5.4.2-2007 *Methods of testing soils for engineering purposes – Soil compaction and density tests – Compaction control test – Assignment of maximum dry density and optimum moisture content values*, as amended from time to time.
AS 1289.6.7.1	means the Australian Standard 1289.6.7.1-2001 *Methods of testing soils for engineering purposes – Soil strength and consolidation tests – Determination of permeability of a soil*, as amended from time to time.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Department	means the department established under section 35 of the *Public Sector Management Act 1994* and designated as responsible for the administration of Part V Division 3 of the EP Act.
discharge	has the same meaning given to that term under the EP Act.

Term	Definition
emission	has the same meaning given to that term under the EP Act.
Environmental Compliance Report	means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been constructed and/or installed in accordance with the works approval.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structure at their lowest point.
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map Figure 1 in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
works approval	refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions.
works approval holder	refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval.

END OF CONDITIONS

Schedule 1: Maps

Premises map

Figure 1: Map of premises boundary

New infrastructure location map

Figure 2: Location of the new outdoor lairage yard, proposed evaporation pond and proposed carcass burial pit

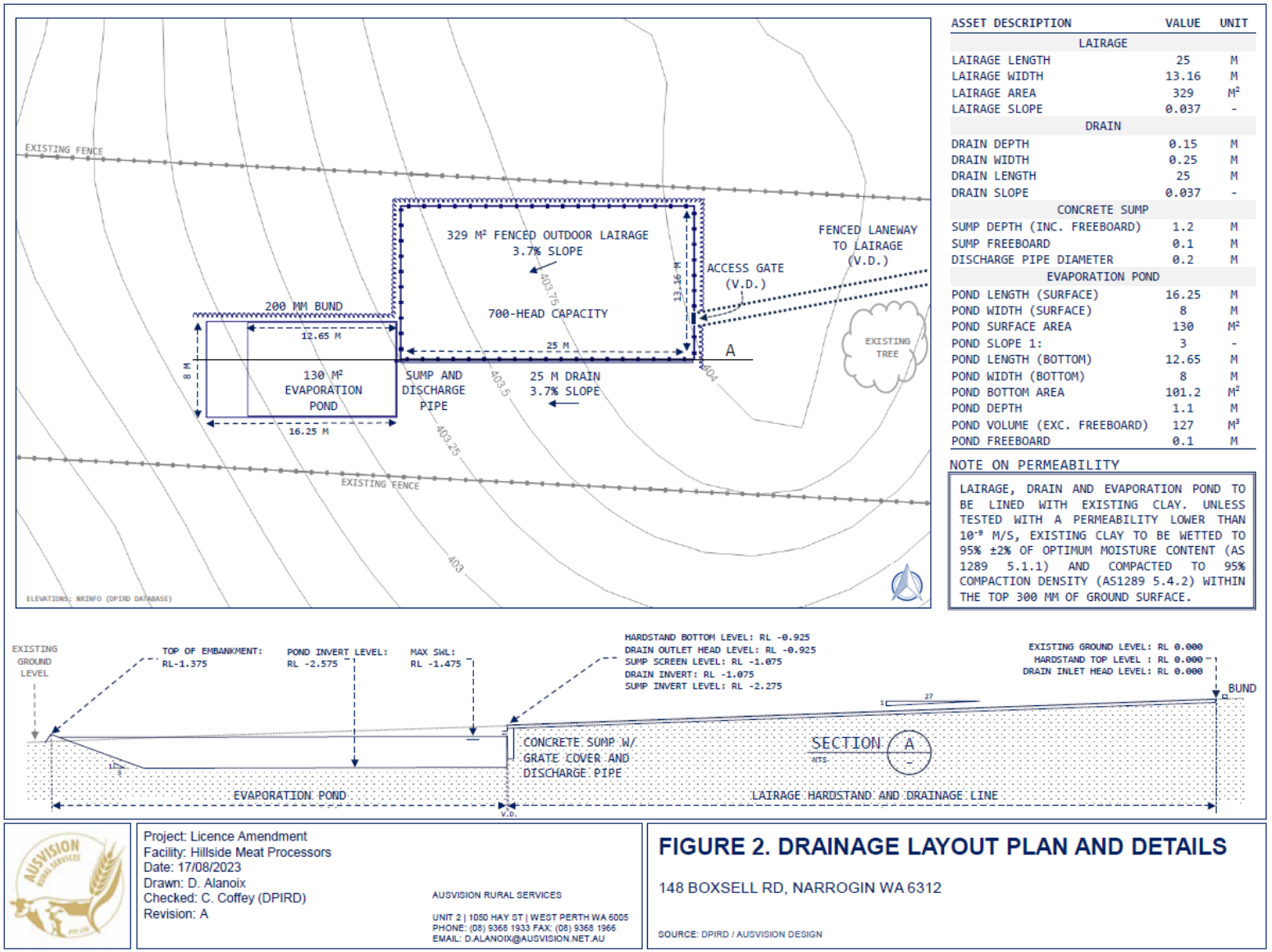

Figure 3: Drainage layout

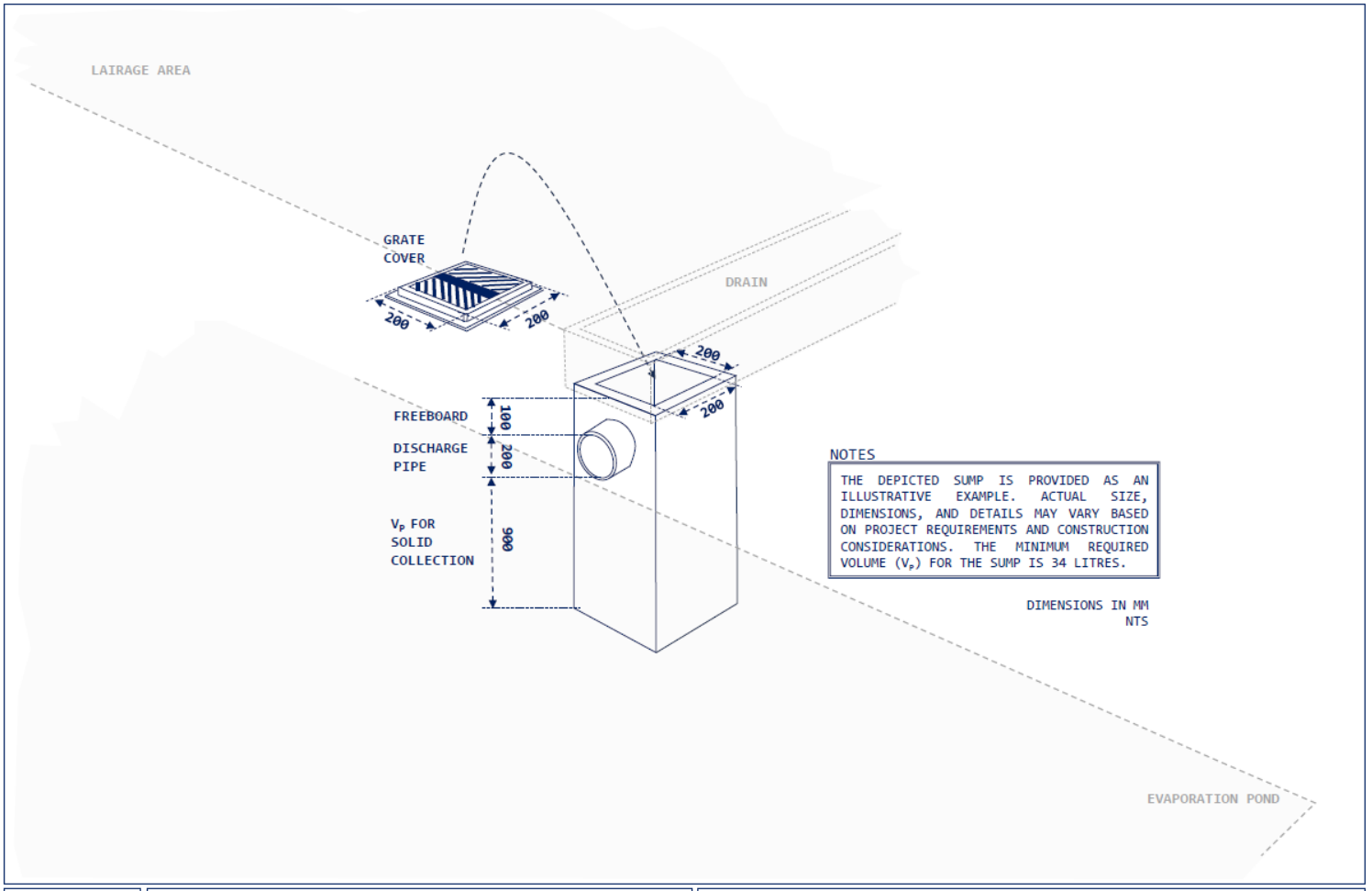

Figure 4: Sump and solids screen design details

Schedule 2: Clay liner requirements

Liner material

1. Soils used for the lining must conform to a design specification for an effective water retaining structure. The soils must be free from plant roots and reactive, soluble and organic matter. The selected liner material must consist of an inert and insoluble blend of sand, clay and silt particles that meet the minimum criteria described in Table 4.

Table 4: Minimum criteria for soil liners

Soil characteristic	Acceptability criterion	Test method
Percentage fines	>25% passing a 75 µm sieve	AS 1289.3.6.1 – 2009
	>15% passing a 2 µm sieve	
Liquid limit	30% to 70%	AS 1289.3.1.2 – 2009
Plasticity index	>15	AS 1289.3.3.1 – 2009
Emerson class number	5 to 6	AS 1289.3.8.1:2017

2. The liner material must be homogenous in nature and properties, with no sandy patches exceeding the liner specification or rocks retained on a 37.5 mm sieve. Any non-conforming liner material must be removed and replaced with conforming soil. Where necessary, soils may be blended or have bentonite clay mixed in to achieve desired uniformity and geo-technical characteristics.
3. The liner material properties must not be altered by acidic or alkaline content of the contained waste.

Liner construction

4. Liners must be installed in at least two layers of equal thickness to ensure adequate compaction is achieved and to minimise the risk of leakage. The liner material must be moisture-conditioned to achieve the maximum (in place) design soil density exceeding the 95% maximum dry density determined using AS 1289.5.2.1:2017 and AS 1289.5.4.2 – 2007.
5. The minimum thickness of the completed compacted liner must be 300 mm and construction tolerances must be within 50 mm.
6. The completed liners must uniformly cover both the base and perimeter (where relevant) of the lairage yard, burial pit, drain and evaporation pond to achieve one integrated holding facility, respectively.
7. Test cores must be taken from the completed lairage yard, burial pit, drain and evaporation pond as follows:
   (a) tests must be conducted based on a four-by-four grid equally spaced over the base of any repaired sections; and
   (b) one full depth core test per 30 lineal m of perimeter embankment;
   (c) each soil sample core must have its coefficient of permeability determined via an accredited soil testing laboratory in accordance with AS 1289.6.7.1 – 2001. The maximum acceptable core coefficient of permeability is 10^{-9} m/s when subjected to 1 m pressure head of water; and
   (d) core test holes must be refilled with cement slurry, bentonite or other suitable sealant.
8. The lairage yard, burial pit, drain and evaporation pond must be proof-tested to confirm

the initial seepage from each containment module is less than 4 kL/ha/day of contained area under 1 m water pressure (head) 24 hours after flooding.