Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6634/2022/1
Works approval holder	JD Organics T/A GO Organics
ACN	154 081 651
Registered business address	Suite 5, 56 Creaney Drive, Kingsley WA 6026
DWER file number	DER2021/000679
Duration	09/06/2022 to 08/06/2027
Date of issue	09/06/2022
Premises details	Garden Organics 276 Aurisch Road, Boonanarring WA 6503 Legal description - Part Lot 12 on Diagram 92147 As defined by the Premises map and coordinates in Schedule 1

Prescribed premises category description (Schedule 1, ***Environmental Protection Regulations 1987***)	**Assessed production / design capacity**
Category 61: Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	20,000 tonnes per annum
Category 61A: Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharges onto land.	104,000 tonnes per annum
Category 67A: Compost manufacturing and soil blending: premises on which organic material (excluding silage) or waste is stored pending processing, mixing, drying or composting to produce commercial quantities of compost or blended soils.	124,000 tonnes per annum

This works approval is granted to the works approval holder, subject to the attached conditions, on 09 June 2022, by:

Steve Checker
Digitally signed by Steve Checker
Date: 2022.06.09 17:37:30 +08'00'

Steve Checker

MANAGER WASTE INDUSTRIES
REGULATORY SERVICES

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

Works approval history

Date	Reference number	Summary of changes
09/06/2022	W6634/2022/1	Issue of new Works Approval

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 2, Table 3 and Table 4.

Table 1: Design and construction requirements for Stage 1 infrastructure

Infrastructure	Design and construction requirements	Infrastructure location
Hardstand 4, including concrete mixing pad	Hardstand layer works from bottom up: • Compacted natural ground; • 650 mm compacted clay (minimum 3 permeability tests of source material per construction stage to confirm maximum permeability of 1 x 10^{-8} m/s); • 200 mm compacted gravel; • 100 mm compacted limestone; and, • 100 mm recycled asphalt. Earthen bund 3 m x 0.5 m to prevent external surface water entering hardstand. Limestone block walls minimum 250 mm high to direct contaminated surface water flow into Leachate Sump 4 concrete sump. Surface area of 18,000 m^2, including concrete mixing slab and 20 m wide tipping apron. Clay hydraulic conductivity of less than 1 x 10^{-8} m/s Concrete mixing slab: • Hydraulic conductivity of less than 1 x 10^{-9} m/s; • 15 m x 40 m x minimum 0.15 m thick reinforced concrete; and • Cast above the 650 mm thick clay layer. Minimum 2% grade towards Leachate Pond 4	As depicted in Schedule 1, Figure 2
Leachate pond 4 concrete sump	• Hydraulically connected to Hardstand 4; • Outlet flow directed into Leachate Pond 4;	As depicted in Schedule 1, Figure 2

Infrastructure	Design and construction requirements	Infrastructure location
	• Dimensions of 4 m x 25 m x 600 mm deep; and • Reinforced concrete structure, minimum 150 mm thick.	
Leachate pond 4	• 5,880 m^3 operational capacity plus 500 mm freeboard; • 4 m deep (operational depth 3.5 m); • Prepared and compacted subgrade; and • Lined with 2.0 mm HDPE	As depicted in Schedule 1, Figure 2
Leachate pond 6	• 16,895 m^3 operational capacity plus 500 mm freeboard; • 4 m deep (operational depth 3.5 m); • Prepared and compacted subgrade; and • Lined with 2.0 mm HDPE	As depicted in Schedule 1, Figure 2
Pasteurisation bunkers 1 to 4	• Dimensions 28 m x 7 m x 9.5 m high; 7 m ceiling height; • Steel and translucent sheeting roof; • 5 m wide roller door; • Reinforced concrete side walls (tilt panels) and floor slab minimum 200 mm thick and 3% fall to leachate sump; • Air injection and leachate collection system in floor; • Minimum 1 m^3 sealed concrete leachate sump with submersible pump; • Air extraction in ceiling void; • Air blower; • Roof sprays for leachate recirculation; • Roof sprays for freshwater circulation; • Fire detection in ceiling void; and, • Associated pipework and equipment for air and leachate management systems.	As depicted in Schedule 1, Figure 2
Pond aeration systems	• Minimum of one aerator per leachate pond; and • Aerator 1.1 kW, 1.5 HP, submersible pump, floating.	Within leachate ponds 4 and 6.
Groundwater monitoring bore	• Decommission and replace MB3; • New bores; MB9, MB10 and MB11; • Decommissioned to *Department of Water* -	As depicted in Schedule 1, Figure 3

Infrastructure	Design and construction requirements	Infrastructure location
	Water Quality Protection Guidelines No. 4 Mining and Mineral Processing - Installation of Mine Site Groundwater Monitoring Bores 2000 Section 4.15; and • New bores designed and constructed in accordance with *ASTM D5092/D5092M-16: Standard Practice for Design and Installation of Groundwater Monitoring Bores*.	

Table 2: Design and construction requirements for Stage 2 infrastructure

Infrastructure	Design and construction requirements	Infrastructure location
Leachate pond 1 concrete sump	• Hydraulically connected to Hardstand 1; • Outlet flow directed into Leachate Pond 1; • Dimensions of 4 m x 25 m x 600 mm deep; and • Reinforced concrete structure, minimum 150 mm thick.	As depicted in Schedule 1, Figure 2
Leachate pond 1	• 3,050 m^3 operational capacity plus 500 mm freeboard; • 4 m deep (operational depth 3.5 m); • Prepared and compacted subgrade; and • Lined with 2.0 mm HDPE	As depicted in Schedule 1, Figure 2
Finishing product storage shed area hardstand	Hardstand layer works from bottom up: • Compacted natural ground; • 650 mm compacted clay; and, • 200 mm compacted gravel. Surface area of 11,700 m^2 Clay hydraulic conductivity of less than 1 x 10^{-8} m/s Minimum 2% grade towards Leachate Pond 5 Runoff drain directed to Leachate Pond 1	As depicted in Schedule 1, Figure 2
Storage pond 1	• 12,100 m^3 operational capacity plus 500 mm freeboard; • 3.0 m deep (operational depth 2.5 m); • Prepared and compacted subgrade; and • Lined with 2.0 mm HDPE.	As depicted in Schedule 1, Figure 2
Pond aeration systems	• Minimum of one aerator per leachate and storage pond; and	Within storage pond 1 and leachate pond

Infrastructure	Design and construction requirements	Infrastructure location
	• Aerator 1.1 kW, 1.5 HP, submersible pump, floating.	1

Table 3: Design and construction requirements for Stage 3 infrastructure

Infrastructure	Design and construction requirements	Infrastructure location
Hardstand 5, including concrete mixing pad	Hardstand layer works from bottom up: • Compacted natural ground; • 650 mm compacted clay (minimum 3 permeability tests of source material per construction stage to confirm maximum permeability of 1 x 10^{-8} m/s); • 200 mm compacted gravel; • 100 mm compacted limestone; and, • 100 mm recycled asphalt. Earthen bund 3 m x 0.5 m to prevent external surface water entering hardstand. Limestone block walls minimum 250 mm high to direct contaminated surface water flow into Leachate Sump 5 concrete sump. Surface area of 16,000 m^2, including concrete mixing slab. Clay hydraulic conductivity of less than 1 x 10^{-8} m/s Concrete mixing slab: • Hydraulic conductivity of less than 1 x 10^{-9} m/s (or equivalent); • 15 m x 40 m x minimum 0.15 m thick reinforced concrete; and • Cast above the 650 mm thick clay layer. Minimum 2% grade towards Leachate Pond 5	As depicted in Schedule 1, Figure 2
Leachate pond 5 concrete sump	• Hydraulically connected to Hardstand 5; • Outlet flow directed into Leachate Pond 5; • Dimensions of 4 m x 25 m x 600 m deep; and • Reinforced concrete structure, minimum 150 mm thick	As depicted in Schedule 1, Figure 2
Leachate pond 5	• 5,880 m^3 operational capacity plus 500 mm freeboard; • 4 m deep (operational depth 3.5 m);	As depicted in Schedule 1, Figure 2

Infrastructure	Design and construction requirements	Infrastructure location
	• Prepared and compacted subgrade; and • Lined with 2.0 mm HDPE	
Pasteurisation bunkers 5 to 8	• Dimensions 28 m x 7 m x 9.5 m high; 7 m ceiling height; • Steel and translucent sheeting roof; • 5 m wide roller door; • Reinforced concrete side walls (tilt panels) and floor slab minimum 200 mm thick and 3% fall to leachate sump; • Air injection and leachate collection system in floor; • Minimum 1 m^3 sealed concrete leachate sump with submersible pump; • Air extraction in ceiling void; • Air blower; • Roof sprays for leachate recirculation; • Roof sprays for freshwater circulation; • Fire detection in ceiling void; and, • Associated pipework and equipment for air and leachate management systems.	As depicted in Schedule 1, Figure 2
Pond aeration systems	• Aerator 1.1 kW, 1.5 HP, submersible pump, floating	Located within leachate pond 5

Table 4: Design and construction requirements for contingency infrastructure

Item No.	Infrastructure	Design and construction requirements	Infrastructure location
1	Pasteurisation bunkers 9 to 12	• Dimensions 28 m x 7 m x 9.5 m high; 7 m ceiling height; • Steel and translucent sheeting roof; • 5 m wide roller door; • Reinforced concrete side walls (tilt panels) and floor slab minimum 200 mm thick and 3% fall to leachate sump; • Air injection and leachate collection system in floor; • Minimum 1 m^3 sealed concrete leachate sump with submersible pump; • Air extraction in ceiling void; • Air blower;	As depicted in Schedule 1, Figure 2

Item No.	Infrastructure	Design and construction requirements	Infrastructure location
		• Roof sprays for leachate recirculation; • Roof sprays for freshwater circulation; • Fire detection in ceiling void; and, • Associated pipework and equipment for air and leachate management systems.	
2	Storage pond 2	• 13,600 m^3 operational capacity plus 500 mm freeboard; • 3.0 m deep (operational depth 2.5 m); • Prepared and compacted subgrade; • Lined with 2.0 mm HDPE; and • Aerator 1.1 kW, 1.5 HP, submersible pump, floating.	As depicted in Schedule 1, Figure 2
3	Decontamination shed	• Dimensions 20 m x 30 m x 9.8 m high; • Stacked sea container walls, lined with concrete L walls to protect sea containers; • Dome shelter roof; • Hardstand Area 3 floor; and • Three 6 m wide roller doors	Located on Hardstand Area 3
4	Packaging/storage sheds	• 2 x Dimensions 27 m x 15.5 m x 7 m high with 5.5 m ceiling; • Steel frame with cladding; • Steel and translucent sheeting roof; • Concrete floor 100 mm thick; • 4 m wide roller door; • Fire detection in ceiling void; and • Associated packaging equipment.	As depicted in Schedule 1, Figure 2

Compliance reporting

2. The works approval holder must within 60 calendar days of a Stage, or an individual item of infrastructure from Table 4, required by condition 1 being constructed:

(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 Suitably Qualified Engineer that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;

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

(c) 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

4. The works approval holder may only commence time limited operations for a Stage, or an individual item of infrastructure from Table 4, identified in condition 1 where the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure, unless condition 1 states that no Environmental Compliance Report is applicable for that item.

5. The works approval holder may conduct time limited operations for an item of 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 for that item of infrastructure; or

(b) for a period not exceeding 180 calendar days from the issue of this works approval, where condition 1 states that no Environmental Compliance Report is applicable.

(c) until such time, not exceeding the time period outlined in 5 (a), as approval under a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*.

Time limited operations requirements

6. During time limited operations, the works approval holder must ensure that the premises infrastructure listed in Table 5 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 5.

Table 5: Infrastructure and equipment requirements during time limited operations

	Site infrastructure	Operational requirement
1.	Hardstands 4 and 5	• Leachate must not pool on hardstand areas and leachate is to be wasted off the hardstand at the end of each working day; and • Must be maintained free from cracks, leaks or defects.
2.	Leachate ponds 1, 4, 5 and 6	• Must be maintained free from leaks, tears and defects; • A freeboard of at least 500 mm shall be maintained at all times; and • An aerator must be operational 24 hours a day.
3.	Leachate pond concrete sumps	• Must be capable of preventing solid particles, > 2 mm in size, from entering the leachate pond. • Must be maintained free of accumulated sludge.
4.	Groundwater monitoring bores	• To be maintained in good working order

Records and reporting (general)

7. 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.

8. 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 1;

(c) complaints received under condition 7.

9. The books specified under condition 8 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 have the meanings defined.

Table 6: Definitions

Term	Definition
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.
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 has been constructed in accordance with the works approval.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
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.
Suitably qualified engineer	means a person who: (a) demonstrates competency in the area of civil or structural engineering; and (b) has a minimum of at least three years working in the area of civil or structural engineering; and (c) is employed by an independent third party external to the Works Approval Holder's business; or is otherwise approved in writing by the CEO to act in this capacity.

Term	Definition
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.
waste	has the same meaning given to that term under the EP Act.
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: Premises Maps

The boundary of the prescribed premises is shown in the map below (

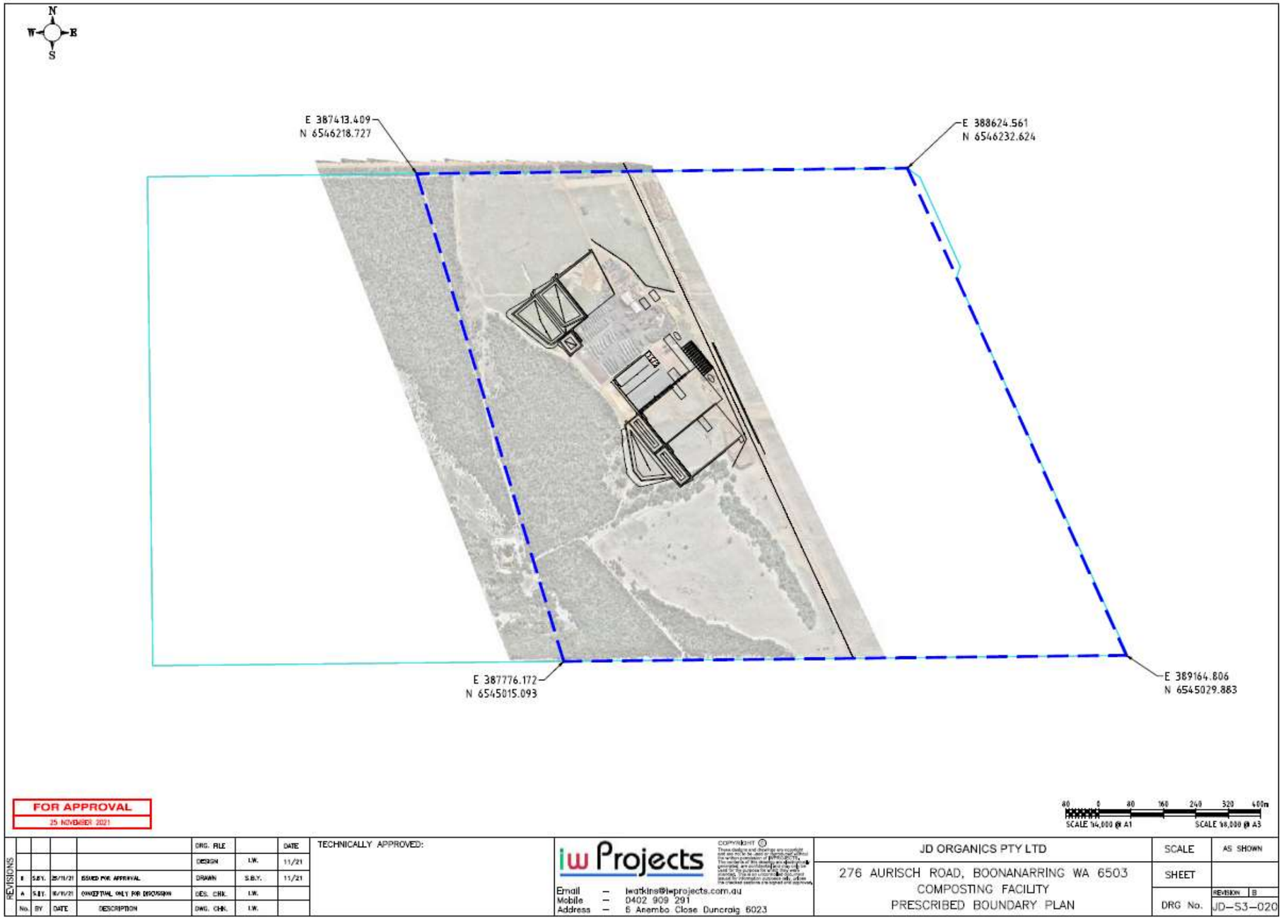

Figure **1**).

Figure 1: Map of the boundary of the prescribed premises

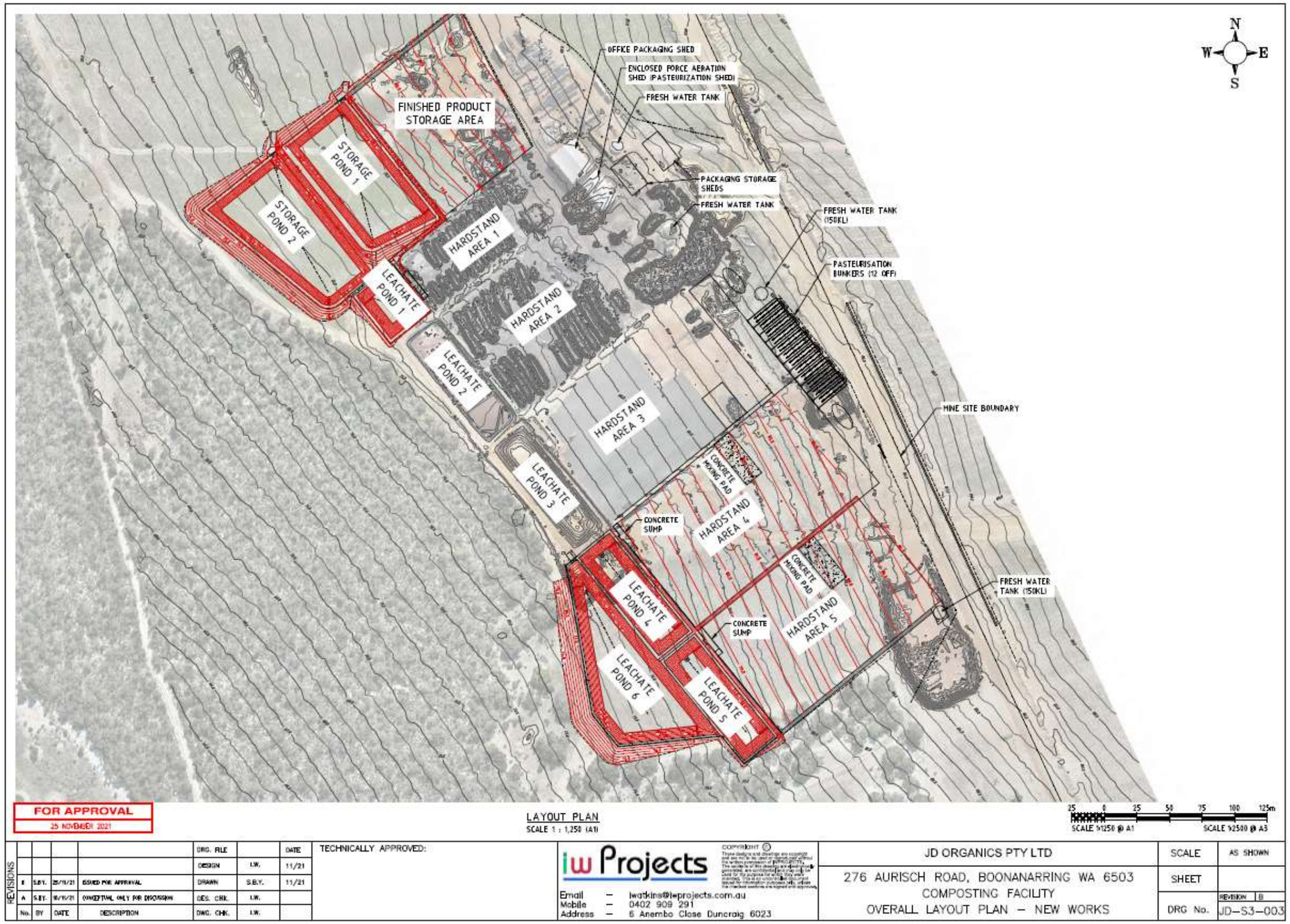

Figure 2: Map of the layout of the premises

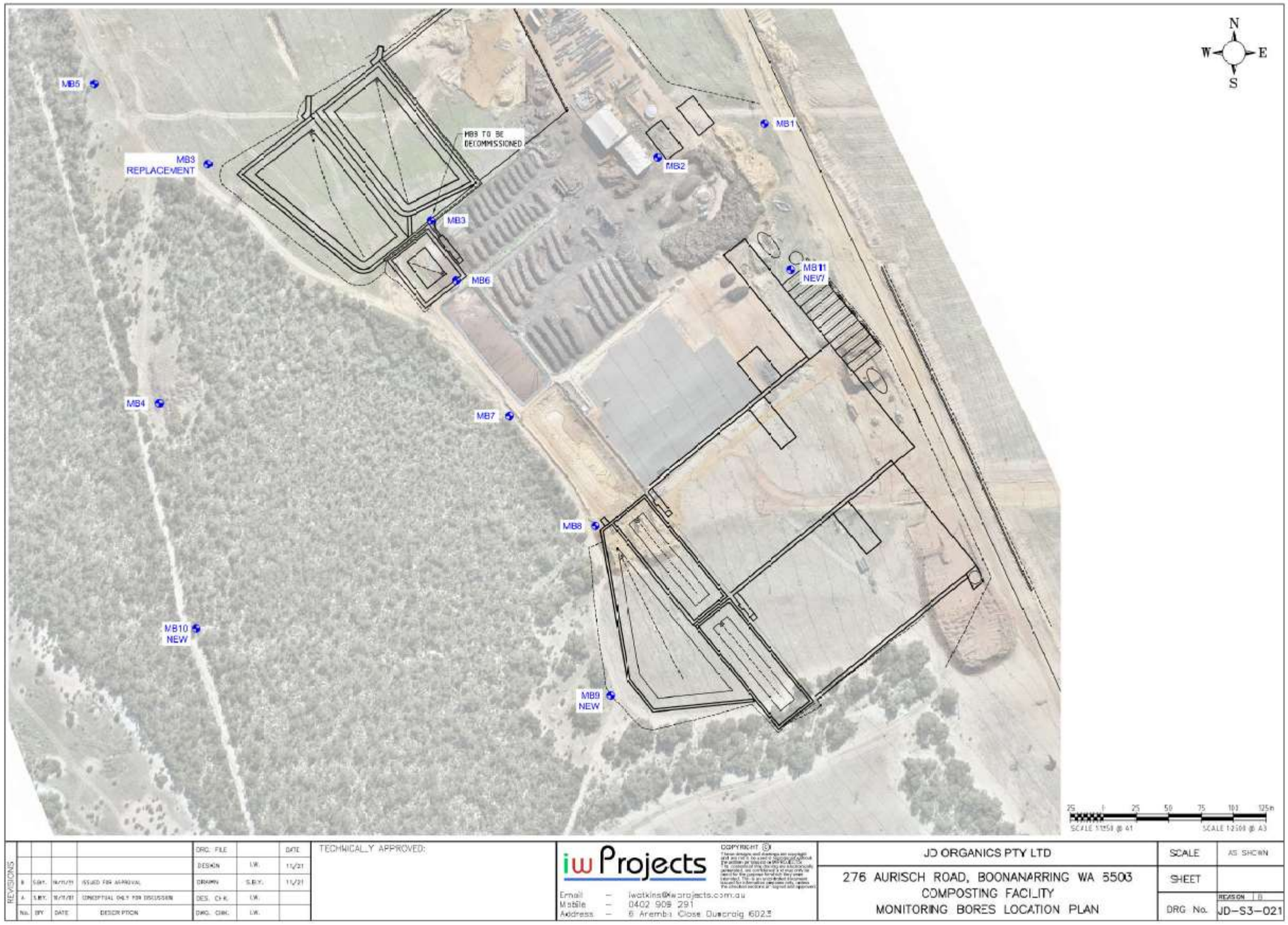

Figure 3: Map of groundwater monitoring bores

Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table .

Table 7: Premises boundary coordinates

Easting	Northing
387413.409	6546218.727
388624.561	6546232.624
387776.172	6545015.093
384164.806	6545029.883