



Works Approval

Works approval number W3061/2025/1

Works approval holder Brightstar Resources Limited

ACN 100 727 491

Registered business address Level 2, 36 Rowland Street
SUBIACO WA 6008

Application number APP-0029987

Internal number INS-0003061

Duration 30/10/2025 to 29/10/2030

Date of issue 30/10/2025

Premises details Menzies Gold Mine

Legal description -
M29/153, M29/154 and M29/14

As defined by the coordinates in Schedule 2 of this works approval

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 85: Sewage facility	30 m ³ /day

This works approval is granted to the works approval holder, subject to the attached conditions, on 30 October 2025, by:

Grace Heydon

Manager, Waste Industries

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

Works approval history

Date	Reference number	Summary of changes
30/10/2025	W3061/2025/1	APP-0029987. Works approval granted.

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;
 unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (e) 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 and/or install the infrastructure and/or equipment;
 - (b) in accordance with the corresponding design and construction / installation requirements; and
 - (c) at the corresponding infrastructure location as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Fixed Film Bioreactor WWTP	(a) WWTP to be able to treat up to 30 m³/day of sewage and constructed to meet the following specifications: i. Primary Settling Tanks and Balance Tanks - 4 x 50,000L Tanks ii. Aeration Treatment Unit with aerobic reactor and clarifier chambers - 2 x 21,500 L Tanks (each with a 12,500 L Aerobic reactor volume and a 5,900L clarifier chamber) iii. Emergency overflow Effluent Tank - 1 x 50,000L Tank iv. Chlorine Contact Tanks - 2 x 9,000L Tank (b) WWTP must be able to treat sewage to the following output emission standards: i. pH – 6.5 to 8.5 ii. E. coli <1000 cfu/100ml iii. Total Nitrogen – <60 mg/L iv. Total Phosphorus – <18 mg/L v. Total Suspended Solids – <30 mg/L vi. Free Chlorine – 0.5 to 2.0 mg/L vii. Biochemical Oxygen Demand – 20 mg/L (c) WWTP to have at least 1-day emergency storage capacity. (d) Tanks holding untreated wastewater and TWW to have alarms fitted (audible and visual) to detect high volume levels. (e) Flow meters to be installed to record the influent/effluent volumes that are received/sent from the WWTP.	As shown in Figure 1 and Figure 2 of Schedule 1.

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		(f) Effluent discharge flow meters to be located on the output line after the WWTP. (g) Chemical storage to be banded in accordance with Australian Standard 1940 <i>The Storage and Handling of Flammable and Combustible Liquids</i>. (h) Above ground infrastructure must be located on a concrete hardstand. (i) All sewage storage and treatment tanks, vessels, transfer pipelines and conveyance infrastructure must be impermeable and free of leaks or defects. (j) Must be constructed to prevent stormwater from entering the WWTP and storage infrastructure.	
2.	ISF	The ISF must be at least 1.71 ha in area. The WWTP ISF must include: a) 1.2 m tall sprinklers that are positioned to ensure even distribution of TWW; b) Incorporate a 5m buffer from the sprinklers surrounding the ISF; and c) Fencing with visible safety signage installed to deter access.	As shown in Figure 1 of Schedule 1

Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed:
 - (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 civil 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.

Environmental commissioning phase

Environmental commissioning requirements and emission limits

4. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 2 of this works approval.
5. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 2 may only be carried out:
 - (a) in accordance with the corresponding commissioning requirements; and
 - (b) for the corresponding authorised commissioning duration.

Table 2: Environmental commissioning requirements

Infrastructure	Commissioning requirements	Authorised commissioning duration
WWTP	- Volumetric flow meters are maintained on the WWTP outlet to the ISF; - Bunds must be maintained and repaired to ensure uncontaminated stormwater is directed away from the bund; and - Spills of chemicals outside of a vessel/container are cleaned up immediately.	For a period not exceeding 90 calendar days in aggregate.
ISF	- Not more than 30m³ per day of TWW to be applied to the ISF. - Irrigation is managed to prevent ponding and pooling of TWW on the ground surface of the ISF; and - No TWW is permitted to discharge from the ISF identified in Schedule 1 Figure 1.	

6. During environmental commissioning, the works approval holder must ensure that the emission(s) specified in Table 3, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Table 3: Authorised discharge points during environmental commissioning

Emission	Discharge point	Discharge point location
TWW from the WWTP	Sprinklers within the ISF	As shown in Figure 3 of Schedule 1

Monitoring during environmental commissioning

7. The works approval holder must monitor emissions during environmental commissioning in accordance with Table 4.

Table 4: Emissions and discharge monitoring during environmental commissioning

Discharge point	Monitoring location	Parameter	Frequency	Averaging Period	Unit	Method
WWTP outlet	WWTP TWW outlet as depicted in yellow in Figure 3 of Schedule 1	E. coli	Weekly	Spot sample	cfu/100mL	AS/NZS 5667.1
		Thermotolerant coliforms				
		BOD ₅				
		Total suspended solids				
		Total nitrogen				
		Total phosphorus				
		pH ¹	Daily or continuous online	N/A	pH units	
		Residual chlorine		N/A	mg/L	
		Volume	Continuous	Cumulative daily	m ³	N/A

Note 1 – non-NATA in situ testing permitted

8. All sample analysis must be undertaken by laboratories with current accreditation from the National Association of Testing Authorities (NATA) for relevant parameters, unless otherwise specified in Table 4.
9. The works approval holder must record the results of all monitoring activity required by condition 7.

Environmental commissioning report

10. The works approval holder must submit to the CEO an Environmental Commissioning Report within 30 calendar days of the completion date of environmental commissioning for each item of infrastructure specified in Table 2.
11. The works approval holder must ensure the Environmental Commissioning Report required by condition 10 of this works approval includes the following:
 - (a) a summary of the environmental commissioning activities undertaken, including timeframes and amount of wastewater processed;
 - (b) a summary of the TWW monitoring results recorded in accordance with condition 7;
 - (c) copies of laboratory reports for treated effluent monitoring results recorded in accordance with condition 7;
 - (d) a review of the works approval holder's performance and compliance against the conditions of this works approval; and

- (e) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

Time limited operations phase

Commencement and duration

12. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1 where the Environmental Compliance Report as required by condition 3 has been submitted by the works approval holder for that item of infrastructure.
13. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1 (as applicable):
- 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
 - until such time as a licence for that item of 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

14. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment 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

Infrastructure	Operational requirement	Infrastructure location
WWTP	a) No more than 30 m³ of TWW is processed per day; b) Sludge is transferred off-site; c) Bunds must be maintained and repaired to ensure uncontaminated stormwater is directed away from the bund; d) In the event of a leak/spill, the source will be isolated, and any contaminated soil remediated or disposed of to an appropriately licensed facility; and e) Chemicals are stored in accordance with Australian Standard <i>AS3780-2008 Storage and Handling of Corrosive Substances</i>.	As shown in Figure 1 and Figure 2 of Schedule 1
ISF	• Not more than 30m³ per day of TWW to be applied to the ISF. • Irrigation is managed to prevent ponding and pooling of TWW on the ground surface of the ISF; and • No TWW is permitted to discharge from the ISF.	As shown in Figure 1 of Schedule 1

15. During time limited operations, the works approval holder must ensure that the emission specified in Table 6, is discharged only from the corresponding discharge points and only at the corresponding discharge point location.

Table 6: Authorised discharge points during time limited operations

Emission	Discharge point	Discharge point location
TWW from the WWTP	Sprinklers within the ISF	As shown in Figure 1 of Schedule 1

Monitoring during time limited operations

16. The works approval holder must monitor emissions during time limited operations in accordance with Table 7.

Table 7: Emissions and discharge monitoring during time limited operations

Discharge point	Monitoring location	Parameter	Frequency	Averaging Period	Unit	Method
WWTP outlet	WWTP TWW outlet as depicted in yellow in Figure 3 of Schedule 1	<i>E. coli</i>	Weekly	Spot sample	cfu/100mL	AS/NZS 5667.1
		Thermotolerant coliforms			mg/L	
		BOD ₅				
		Total suspended solids				
		Total nitrogen				
		Total phosphorus				
		pH ¹	Daily or continuous online	N/A	pH units	
		Residual chlorine		N/A	mg/L	
		Volume	Continuous	Cumulative daily	m ³	N/A

17. For the monitoring activity required by condition 16, the works approval holder must:
- record the results;
 - handle and preserve all water samples collected during the monitoring of the WWTP in accordance with AS 5667.1 and AS 5667.10; and
 - have analysis conducted by a laboratory with current National Association of Testing A(NATA) accreditation for the parameters specified.

Compliance reporting

18. 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.
19. The works approval holder must ensure the report required by condition 18 includes the following:
 - (a) a summary of the time limited operations, including date(s) for commencement of time limited operations, timeframes and amount of wastewater processed;
 - (b) a summary of monitoring parameter results obtained during time limited operations under condition 16;
 - (c) copies of laboratory reports for TWW monitoring results recorded in accordance with condition 17;
 - (d) a summary of the environmental performance of each item of infrastructure or equipment as installed, which at minimum includes:
 - (i) assessment of the WWTP performance against operational requirements in condition 14;
 - (e) a review of performance and compliance against the conditions of the works approval and the Environmental Commissioning Report; and
 - (f) where the specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

Records and reporting (general)

20. 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.
21. 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 5 and 14;
 - (c) monitoring programmes undertaken in accordance with condition(s) 7 and 16; and
 - (d) complaints received under condition 20.

- 22.** The books specified under condition 21 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 8 have the meanings defined therein.

Table 8: Definitions

Term	Definition
AS5667.1:1998	means <i>Australian Standard 5667.1:1998 Water Quality – Sampling</i> .
AS 5667.10	means Australian Standard 5667.10 Water quality - Sampling Guidance on sampling of waste waters
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 <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
cfu	means colony forming units.
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> 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.
<i>E. coli</i>	means <i>Escherichia coli</i> .
emission	has the same meaning given to that term under the EP Act.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
Environmental Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
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.

Term	Definition
EP Act	<i>Environmental Protection Act 1986 (WA).</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA).</i>
ISF	means Irrigation Spray Field depicted in and labelled as “WWTP Spray Field” in Figure 1.
m ³	means cubic metres
mg/L	means milligrams per litre
NATA	means National Association of Testing Authorities.
NATA accreditation	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map 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.
TWW	means Treated Wastewater
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.
WWTP	means Wastewater Treatment Plant

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1)

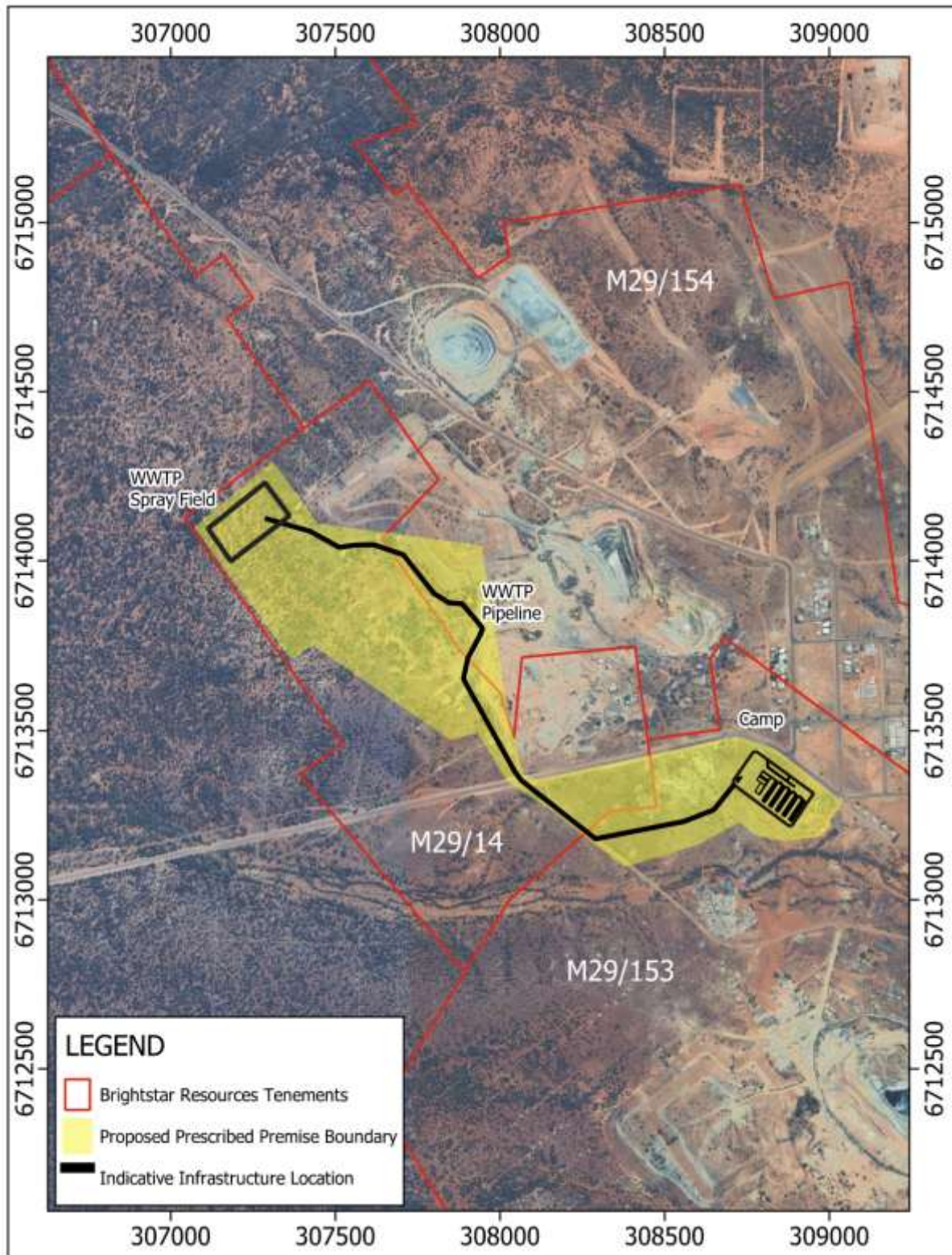


Figure 1: Prescribed premises boundary

WWTP layout map

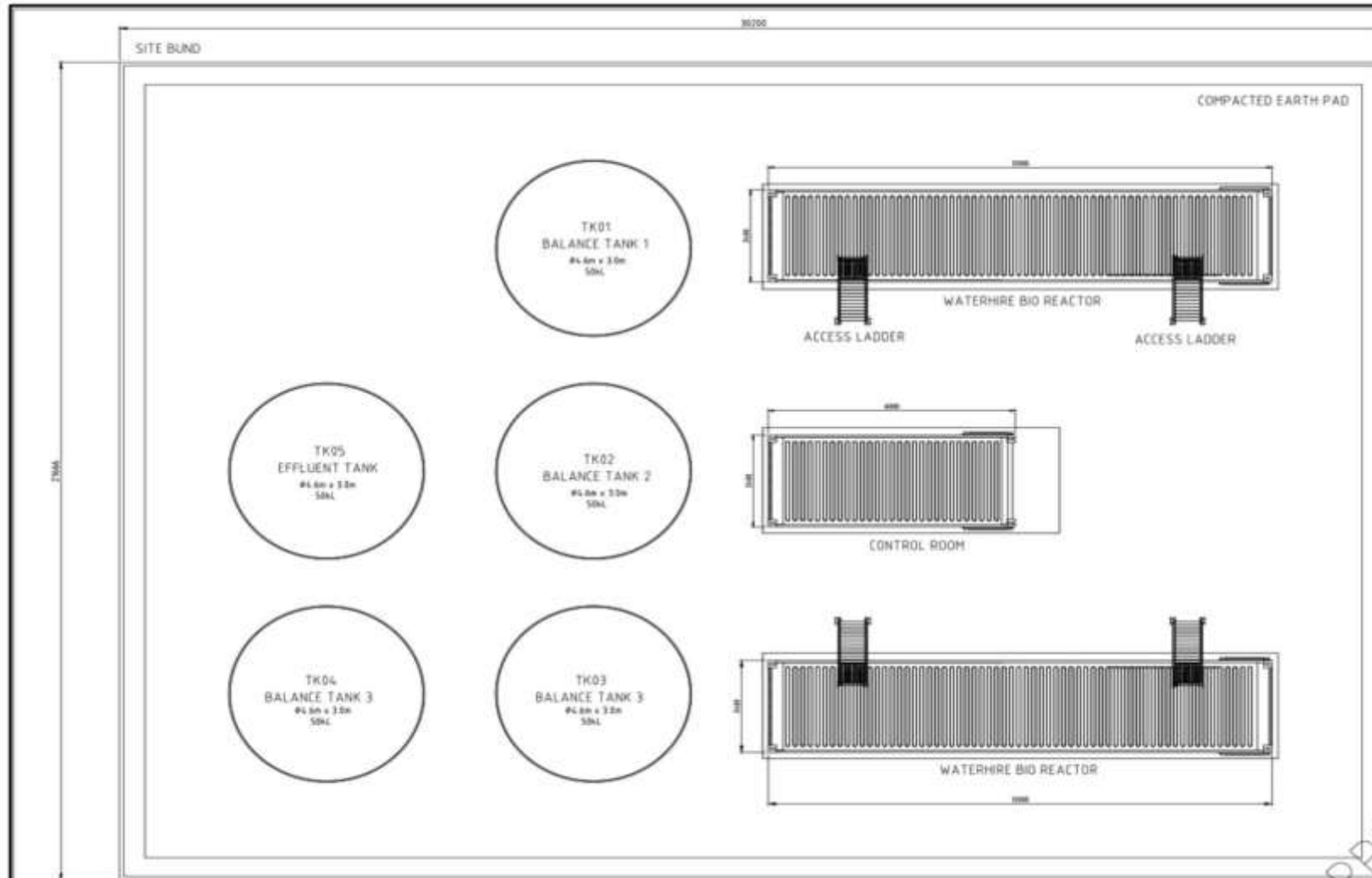


Figure 2: WWTP layout

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WWTP emission point map

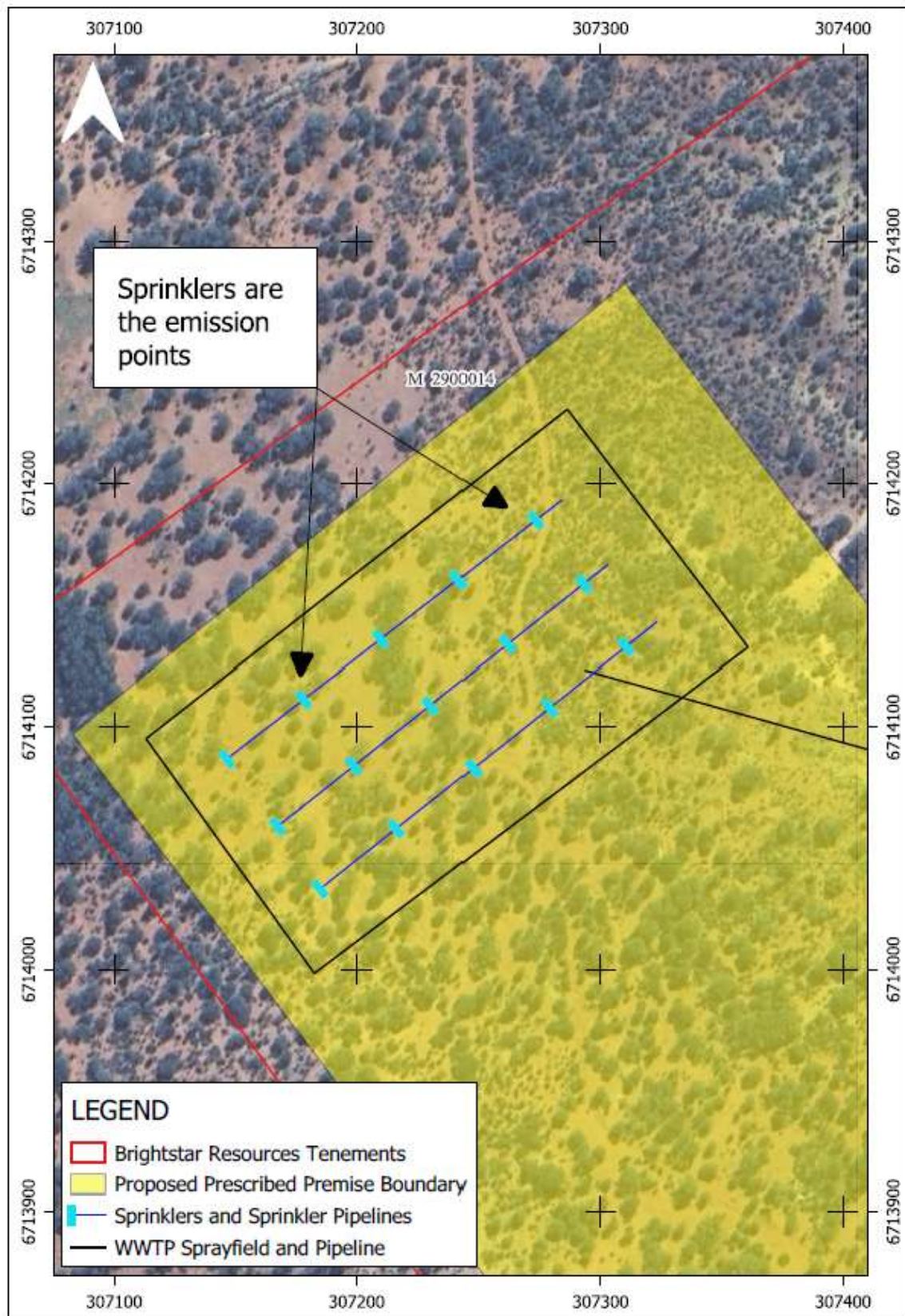


Figure 3: Map of WWTP emission points

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Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 9.

Table 9: Premises boundary coordinates (GDA2020)

	latitude	longitude
1.	-29.691690	121.009100
2.	-29.688220	121.006199
3.	-29.686584	121.008577
4.	-29.688234	121.009953
5.	-29.688885	121.015026
6.	-29.693527	121.015804
7.	-29.694977	121.016225
8.	-29.695147	121.016720
9.	-29.694080	121.022975
10.	-29.694449	121.024156
11.	-29.694733	121.024574
12.	-29.695747	121.026066
13.	-29.695831	121.026190
14.	-29.696273	121.025796
15.	-29.696398	121.025816
16.	-29.696637	121.025594
17.	-29.696696	121.025303
18.	-29.696702	121.025025
19.	-29.696769	121.024623
20.	-29.696724	121.024052
21.	-29.696549	121.023453
22.	-29.696224	121.023052
23.	-29.696831	121.021676

24.	-29.697380	121.019419
25.	-29.695913	121.017295
26.	-29.695062	121.015817
27.	-29.693718	121.014904
28.	-29.693914	121.014043
29.	-29.691292	121.009745
30.	-29.691690	121.009100