Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6899/2024/1
Works approval holder	Aurenne MIT Pty Ltd
ACN	611 002 709
Registered business address	Level 1, 10 Ord Street WEST PERTH WA 6005
DWER file number	DER2023/000819
Duration	23/05/2024 to 22/05/2029
Date of issue	23/05/2024
Premises details	Mt Ida Gold Project Shire of Menzies Mining tenements - M29/150, M29/151, G29/29, G29/30, G29/31, G29/32, L29/143, L29/153, L29/154. L29/137, E29/1007

Prescribed premises category description **(Schedule 1, *Environmental Protection Regulations 1987*)**	**Assessed design capacity**
Category 5: Processing or beneficiation of metallic or non-metallic ore	1.4 million tonnes per annual period

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

Mariana Almeida de Moraes

Digitally signed by Mariana Almeida de Moraes
Date: 2024.05.23 09:15:15 +08'00'

Mariana de Moraes
SENIOR ENVIRONMENTAL OFFICER, RESOURCE INDUSTRIES
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Reference number	Summary of changes
23/05/2024	W6899/2024/1	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;

(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 and the infrastructure and equipment;

(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.	Integrated Waste Landform Tailings Storage Facility (IWL TSF) stage 2 raise	• Maximum crest level of 501 RL • Layout as specified in Figures 2 and 3 of Schedule 1 • Constructed to provide a minimum total freeboard of 0.7 m (including an allowance for the 1% annual exceedance probability [AEP] 72 hour rain event) above the normal operating period • Decant causeway and return water pipeline to be raised in accordance with design details outlined in Figures 2 and 3	As depicted in Figures 2, Schedule 1
2.	IWL TSF stage 3 raise	• Maximum crest level of 504 RL • Layout as specified in Figures 2 and 3 of Schedule 1 • Constructed to provide a minimum total freeboard of 0.7 m (including an allowance for the 1% annual exceedance probability [AEP] 72 hour rain event) above the normal operating period • Decant causeway and return water pipeline to be raised in accordance with design details outlined in Figures 2 and 3	As depicted in Figures 2, Schedule 1
3.	IWL TSF stage 4 raise	• Maximum crest level of 507 RL • Layout as specified in Figures 2 and 3 of Schedule 1 • Constructed to provide a minimum total freeboard of 0.7 m (including an allowance for the 1% annual exceedance probability [AEP] 72 hour rain event) above the normal operating period	As depicted in Figures 2, Schedule 1

	Infrastructure	Design and construction requirements	Infrastructure location
		• Decant causeway and return water pipeline to be raised in accordance with design details outlined in Figures 2 and 3	
4.	IWL TSF stage 5 raise	• Maximum crest level of 510 RL • Layout as specified in Figures 2 and 3 of Schedule 1 • Constructed to provide a minimum total freeboard of 0.7 m (including an allowance for the 1% annual exceedance probability [AEP] 72 hour rain event) above the normal operating period • Decant causeway and return water pipeline to be raised in accordance with design details outlined in Figures 2 and 3	As depicted in Figures 2, Schedule 1
5.	New and reinstalled tailings delivery pipelines and decant return water pipelines	• Pipelines constructed according to Australian Standards AS/NZS 2033, 4129, 4130 and 4131 for polyethylene pipes. • Pipelines located within bunded corridors for secondary spillage containment. • Equipped with leakage detection (flow and pressure monitoring) with automatic cut-outs in the event of a pipeline failure.	As depicted in Figure 3, Schedule 1

Compliance reporting

2. The works approval holder must within 30 calendar days of an item of infrastructure 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 Qualified, Competent Civil, Geotechnical or Structural Engineer that the items 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

Commencement and duration

4. 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 2 has been submitted by the works approval holder for that item of infrastructure.

5. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1:

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

b) until such time as a licence for that item is granted in accordance with Part V f 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. The works approval must ensure that only tailings sourced from the Mt Ida Gold project area are permitted to be deposited into the tailings storage facility.

7. 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	Tailings storage facility	(a) To be maintained as per the design and construction/installation requirements in condition 1, Table 1; (b) Maintain a minimum operating freeboard of 0.7 m; (c) During time limited operations, the decant pool area is to be equal to or less than 5% of the total tailings surface area; (d) Decant pond upper limit of 50mg/L weak acid dissociable cyanide (WAD) OR tailings storage facility to be netted and fenced to restrict access to birds and wildlife; and (e) Visual inspections every 12 hours and prior to and following significant rainfall events to check: i. Freeboard capacity; ii. Location and size of the decant pond (expressed as a total percentage of the surface area of the TSF); iii. Change in seepage conditions or sudden change in water	As shown in Figure 2, schedule 1

		level; iv. Signs of erosion; and Observations of fauna interacting with the TSF.	
2.	Pipelines carrying tailings and decant return water.	(a) To be maintained as per the design and construction/installation requirements in condition 1; (b) Visual inspections every 12 hours when in operation to check the integrity of pipelines and bunding; and (c) Weekly inspection of flow metres, leak detection telemetry and automatic shut-off systems	Between the TSF and the process plant
3.	Vibrating wire piezometers (VWPs)	Weekly inspections to ensure integrity of VWPs and to ensure telemetry data is downloading to a central storage location.	As shown in Figure 2, schedule 1

Emissions and discharges

8. The works approval holder must ensure that the emissions specified in Table 3 are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 3: Authorised discharge points

Emission	Discharge point	Discharge point location
Tailings from Mt Ida Gold project area	Tailings storage facility (TSF)	TSF as shown in Figure 2 of Schedule 1

Monitoring during time limited operations

9. The works approval holder must monitor groundwater during time limited operations for concentrations of the identified parameters in accordance with Table 4:

a) at the corresponding monitoring location;

b) for the corresponding parameters;

c) in the corresponding unit;

d) with the corresponding limit;

e) at no less than the corresponding frequency;

f) using the corresponding method,

as set out in Table 4.

Table 4: Monitoring of ambient groundwater concentrations during time limited operations

Monitoring location	Parameters	Triggers management action	Limit	Unit	Frequency	Sampling Method
As per Figure4, Schedule 1 IWL TSF groundwater monitoring well(s): IWL-1 IWL-2 IWL -3 IWL – 4 IWL – 5	Standing water level	6	4	Metres below ground level (mbgl)	Monthly[1]	AS/NZS 5667.1 and AS/NZS 5667.11
	pH[2]	-	-	pH units	A single sampling event undertaken between 30 and 60 calendar days following commencement of time limited operations (e.g. operation of processing plant and tailings being deposited into TSF). AND A single sampling event undertaken between 120 and 180 calendar days following commencement of time limited operations (e.g. operation of processing plant and tailings being deposited into TSF).	
	Electrical conductivity (EC)	-	-	µS/cm		
	Total Dissolved Solids	-	-	mg/L		
	Weak acid dissociable cyanide (CNwad)	-	-	mg/L		
	Acrylamide Aluminium (Al) Antimony (Sb) Arsenic III (As III) Arsenic V (As V) Beryllium (Be) Boron (B) Cadmium (Cd) Calcium (Ca) Chromium III (Cr III) Chromium VI (Cr VI Cobalt (Co) Copper (Cu) Iron (Fe) Lead (Pb) Magnesium (Mg) Manganese (Mn) Mercury (Hg) Molybdenum (Mo) Nickel (Ni) Nitrate (NO_3) Nitrite (NO_2) Potassium (K) Selenium (Se) Silver (Ag) Sodium (Na) Sulphate (SO_4^{2-}) Strontium (Sr) Total Sulfur Zinc (Zn)	-	-	mg/L		

Note 1: Monthly monitoring is undertaken at least 15 calendar days apart.

Note 2: In-field non-NATA accredited analysis permitted.

Groundwater monitoring limit exceedances

10. The works approval holder must record, investigate, take corrective action and report to the CEO within 14 calendar days, in the event of a parameter in condition 9 exceeding the corresponding limit or management action trigger.

11. The works approval holder must include the following information in the report referred to in condition 10 in relation to any exceedances of any limit identified in that condition:

a) the nature, volume and characteristics of the emissions or concentrations exceedance;

b) the time and date when the exceedance occurred;

c) whether any environmental impact occurred as a result of the exceedance and, if so, what that impact was and where the impact occurred;

d) the details of the management action(s) taken pursuant with condition 9 in response to the exceedance;

e) the details and result of any investigation undertaken into the cause of the exceedance; and

f) what action has been taken, or will be taken, to prevent the exceedance occurring again and for the purpose of minimising the likelihood of pollution or environmental harm.

Groundwater monitoring reporting requirements

12. The works approval holder must submit to the CEO, within 30 calendar days of each sampling event, a groundwater monitoring report for monitoring undertaken associated with condition 9 and must include:

(a) a clear statement of the scope of work carried out;

(b) a description of the field methodologies employed;

(c) a summary of the field and laboratory quality assurance / quality control (QA/QC) program;

(d) copies of the field monitoring records and field QA/QC documentation;

(e) an assessment of reliability of field procedures and laboratory results;

(f) a tabulated summary of results, as well as all raw data provided in an accompanying Microsoft Excel spreadsheet digital document/file (or a compatible equivalent digital document/file), with all results being clearly referenced to laboratory certificates of analysis;

(g) a diagram with aerial image overlay showing all monitoring locations and depicting groundwater level contours, flow direction and hydraulic gradient (relevant site features including discharge points and other potential sources of contamination must also be shown);

(h) an interpretive summary and assessment of the results against relevant assessment levels for water, as published in the Guideline Assessment and management of contaminated sites;

(i) an interpretive summary and assessment of results against previous monitoring results;

(j) an interpretive summary and assessment of the results against relevant assessment levels for water, as published in the Guideline Assessment and management of contaminated sites; and

(k) trend graphs to provide a graphical representation of historical results and to support the interpretive summary.

Note: General guidance on report presentation can be found in the Department's *Guideline: Assessment and management of contaminated sites*

Monitoring of water balance

13. The works approval holder must review and assess the water balance for the TSF each monthly period, and (as a minimum) record the following information:

a) site rainfall;

b) evaporation rate;

c) decant water recovery volumes;

d) volume of tailings deposited; and

e) estimate of seepage losses.

Compliance reporting

14. 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 90 calendar days before the expiration date of the works approval, whichever is sooner.

15. The works approval holder must ensure the report required by condition 14 includes the following:

(a) a summary of the time limited operations, including timeframes, amount of ore processed and tailings discharged;

(b) a summary of groundwater monitoring results obtained during time limited operations under condition 9; and

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

Records and reporting (general)

16. 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.

17. 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) monitoring programmes undertaken in accordance with condition(s) 9, 10 and 13; and

(d) complaints received under condition 16.

18. The books specified under condition 17 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 5 have the meanings defined.

Table 5: Definitions

Term	Definition
annual period	a 12 month period commencing from 1 June until 31 May of the immediately following year.
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).
mbgl	metres below ground level
monthly period	means a one-month period commencing from the first day of a month until the last day of the same month.
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.
TDS	total dissolved solids
TSF	tailings storage facility

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.
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

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

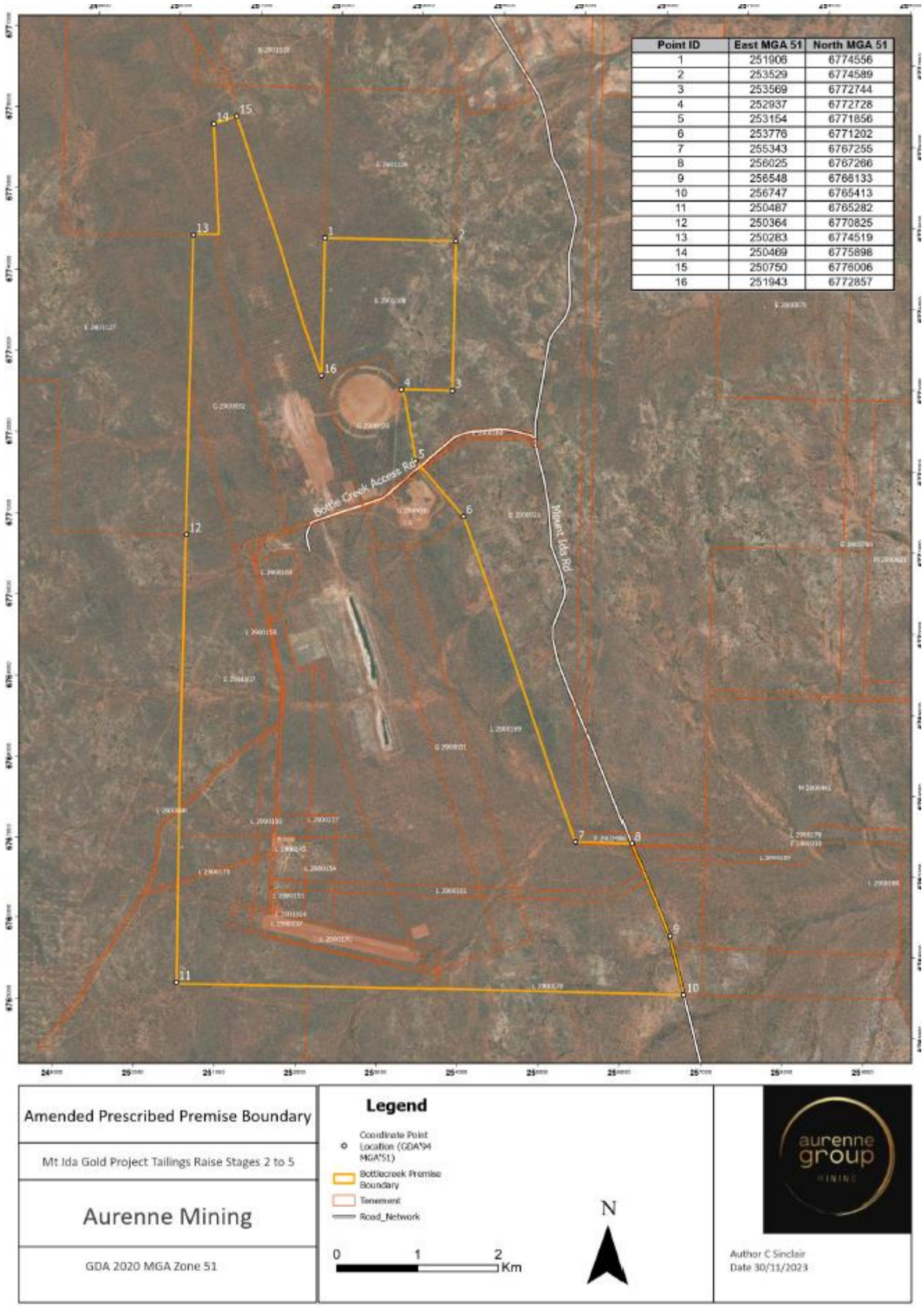

Figure 1: Map of the boundary of the prescribed premises

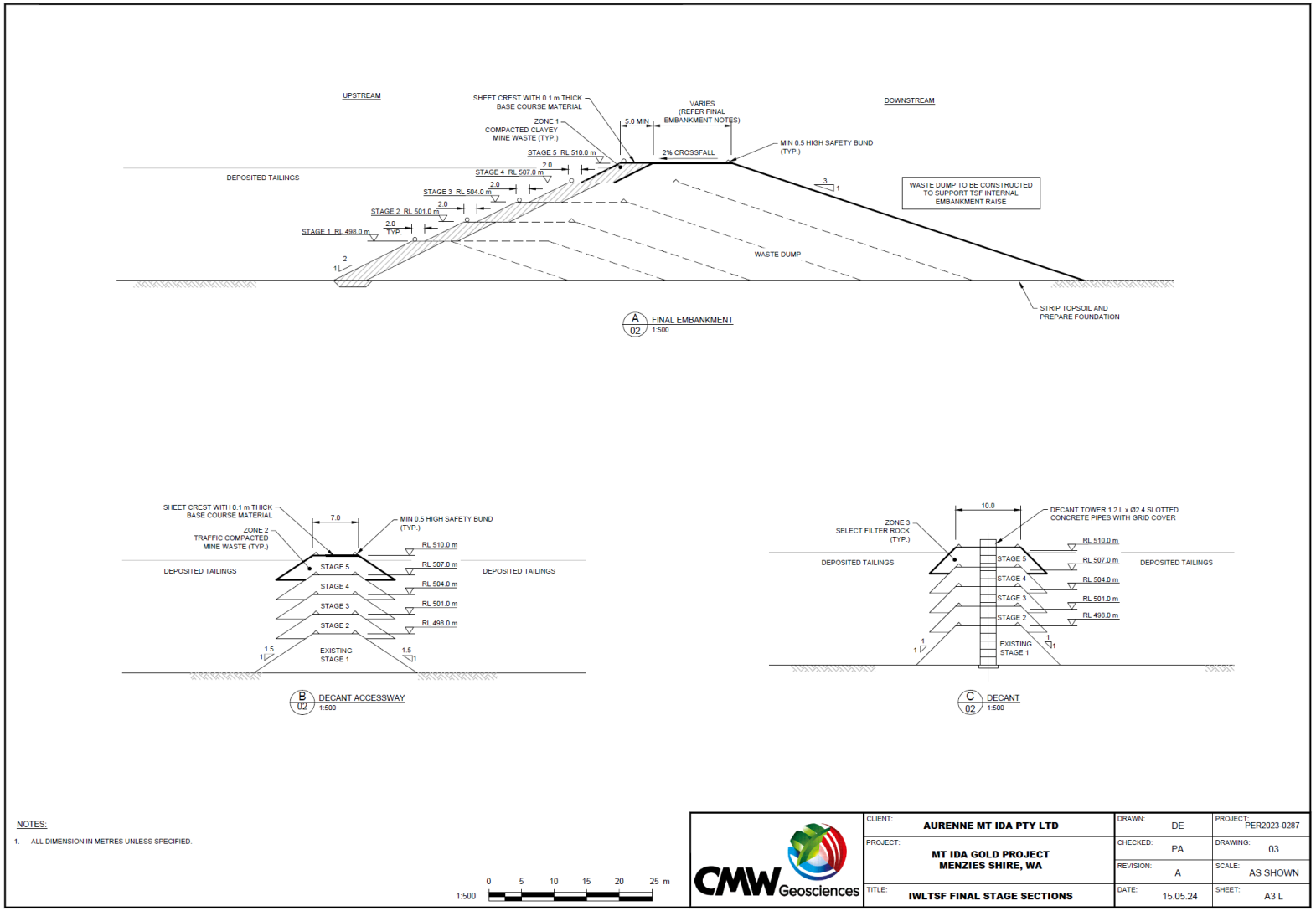

Figure 2: Cross section of IWL TSF stages 1-5

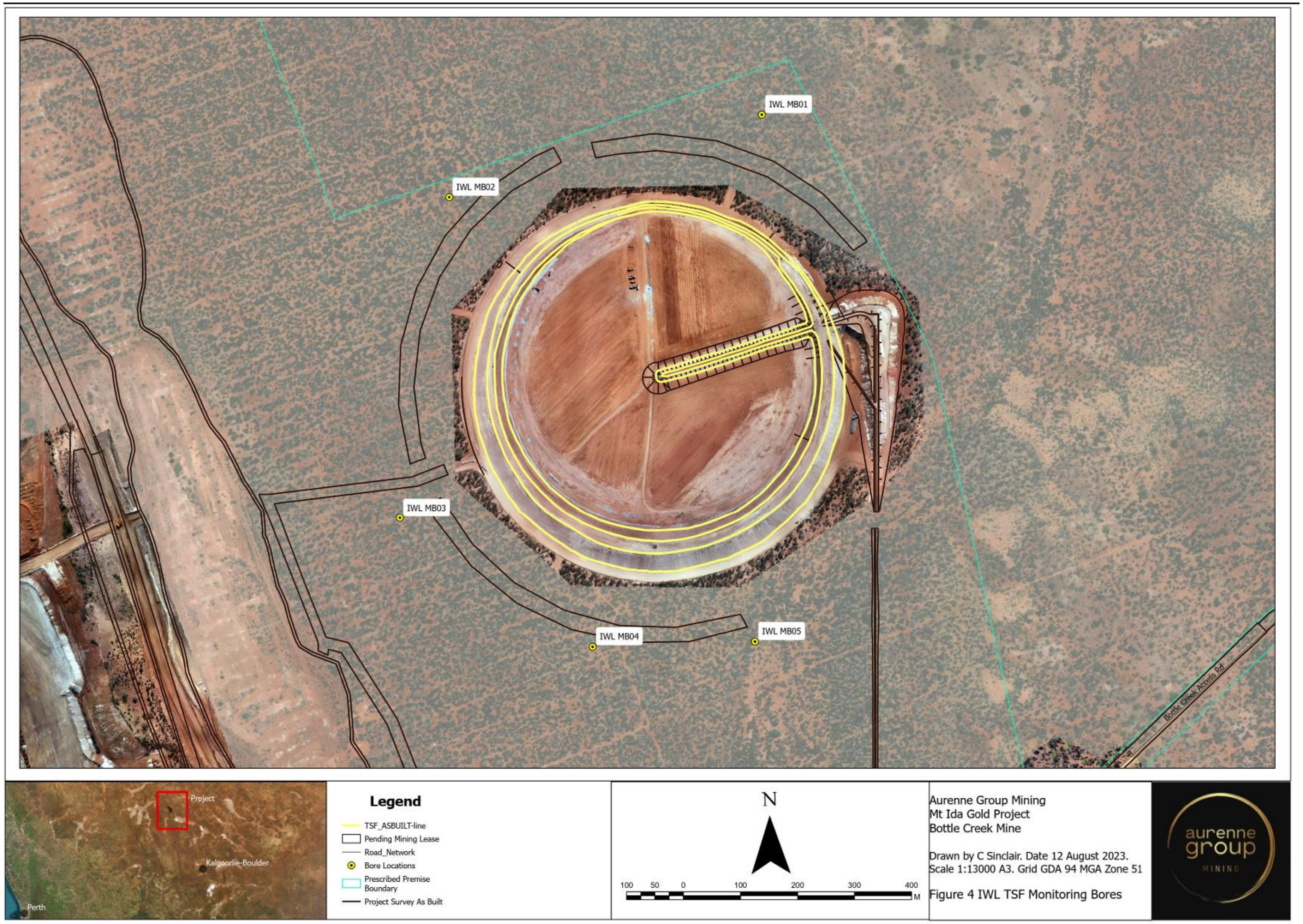

Figure 3: Monitoring bores location.