



Works approval number	W2940/2025/1
Works approval holder	Kalgoorlie Consolidated Gold Mines Pty Ltd
ACN	009 377 619
Registered business address	Level 4, 500 Hay Street SUBIACO WA 6008
DWER file number	INS-0002940
Duration	19/06/2025 to 18/06/2028
Date of issue	19/06/2025
Premises details	Fimiston Processing Plant Black Street, KALGOORLIE WA 6430 Legal description Mining tenements M26/308, M26/778 and M26/725

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	27,000,000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 19 June 2025, by:

Fiona Westcott

MANAGER, RESOURCE INDUSTRIES

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

Works approval history

Date	Reference number	Summary of changes
19 June 2025	W2940/2025/1	Works approval granted for the construction and time limited operations of Fimiston II Extension TSF, Cell G.

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 critical containment 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: Critical containment infrastructure design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location
1.	Fimiston II Extension TSF, Cell G – starter embankment	<ul style="list-style-type: none"> Height of Fimiston II Extension TSF, Cell G starter embankment maximum of 8 m (359.5m RL), constructed as per design shown in Figure 3 An underdrainage system along the upstream toe of the starter embankment and into the TSF, extending to beneath the final decant pond location, as shown in Figure 4. Starter embankment constructed such that the fill will be moisture conditioned to a minimum of -1 / +2% of the optimum moisture content, placed in 300 mm thick layers and compacted to a minimum of 98% standard maximum dry density. Decant access causeway constructed such that the fill will be moisture conditioned to a minimum of $\pm 2\%$ of the optimum moisture content, placed in 300 mm thick layers and compacted to a minimum of 95% standard maximum dry density. Turret system decant with skid mounted surface pump. The minimum top of embankment freeboard of 300 mm marked. Stormwater drains installed along the eastern sides of the TSF. External toe drains (downstream side of the embankment). 	As shown in Schedule 1: Figure 1
2.	Pipelines carrying tailings and decant return water	<ul style="list-style-type: none"> Equipped with automatic cut-outs in the event of a pipe failure; or Provided with secondary containment sufficient to contain any spill for a period equal 	Installed within the pipeline corridor as shown in Schedule 1: Figure 2

	Infrastructure	Design and construction requirements	Infrastructure location
		to the time between routine inspections.	

Construction of groundwater monitoring wells

- The works approval holder must design, construct, and install groundwater monitoring wells in accordance with the requirements specified in Table 2.

Table 2: Infrastructure requirements – groundwater monitoring bores

Infrastructure	Design, construction, and installation requirements	Monitoring well location(s)	Timeframe
Groundwater monitoring bores	<p><u>Well design and construction:</u> Designed and constructed in accordance with <i>ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores</i>. Well screens must target the part, or parts, of the aquifer most likely to be affected by contamination¹. Where temporary/seasonal perched features are present, wells must be nested, and the perched features individually screened.</p> <p><u>Logging of borehole:</u> Soil samples must be collected and logged during the installation of the monitoring wells. A record of the geology encountered during drilling must be described and classified in accordance with the Australian Standard Geotechnical Site Investigations AS1726. Any observations of staining / odours or other indications of contamination must be included in the bore log.</p> <p><u>Well construction log:</u> Well construction details must be documented within a well construction log to demonstrate compliance with <i>ASTM D5092/D5092M-16</i>. The construction logs shall include elevations of the top of casing position to be used as the reference point for water-level measurements, and the elevations of the ground surface protective installations.</p> <p><u>Well development:</u> All installed monitoring wells must be developed after drilling to remove fine sand, silt, clay and any drilling mud residues from around the well screen to ensure the hydraulic functioning of the well. A detailed record should be kept of well development activities and included in the well construction log.</p>	Identified as "Monitoring bores" in Schedule 1, Figure 5 (6 bores)	Must be constructed, developed (purged), and determined to be operational by no later than 6 months prior to the commencement of deposition of tailings into Fimiston II Extension TSF, Cell G.

Infrastructure	Design, construction, and installation requirements	Monitoring well location(s)	Timeframe
	<p><u>Installation survey</u>: the vertical (top of casing) and horizontal position of each monitoring well must be surveyed and subsequently mapped by a suitably qualified surveyor.</p> <p><u>Well network map</u>: a well location map (using aerial image overlay) must be prepared and include the location of all monitoring wells in the monitoring network and their respective identification numbers.</p>		

Note 1 refer to Section 8 of Schedule B2 of the *Assessment of Site Contamination NEPM* for guidance on well screen depth and length.

3. The works approval holder must, within 90 calendar days of the monitoring wells being constructed, submit to the CEO a well construction report evidencing compliance with the requirements of condition 2.

Construction of seepage recovery bores

4. The works approval holder must design, construct and install the Stage 1 production bores in accordance with the requirements specified in Table 3.

Table 3: Infrastructure requirements – production bores

Infrastructure	Design and construction/installation requirements	Seepage recovery bore locations
Stage 1 production bores for recovery of seepage from the Fimiston II Extension TSF, Cell G	<ul style="list-style-type: none"> Installation of seepage recovery bores by a suitably qualified hydrogeologist. Drilling and construction of the seepage recovery bores will be in accordance with the <i>Minimum Construction Requirements for Water Bores in Australia</i>¹. The vertical (top of casing) and horizontal position of each seepage recovery bore must be surveyed and subsequently mapped by a suitably qualified surveyor. A seepage recovery bore location map (using aerial image overlay) must be prepared and include the location of all seepage recovery bores and their respective identification numbers. 	The number and location of Stage 1 production bores to be determined by a suitably qualified hydrogeologist.

Note 1 refer to *Minimum Construction Requirements for Water Bores in Australia* Fourth Edition published by National Uniform Drillers Licensing Committee 2020

Compliance reporting (critical containment infrastructure)

5. The works approval holder must within 90 calendar days of the Critical Containment Infrastructure identified 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 a Critical Containment Infrastructure Report on that compliance.
6. The Critical Containment Infrastructure Report required by condition 5 must include as a minimum the following:
- (a) certification by a suitably qualified geotechnical engineer that each item of critical containment infrastructure or component thereof, as specified in condition 1, has been built and installed in accordance with the requirements specified in condition 1.
 - (b) as constructed plans and a detailed site plan showing the location and dimensions for each item of critical containment infrastructure or component thereof, as specified in condition 1.
 - (c) photographic evidence of the installation of the infrastructure.
 - (d) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person; and
 - (e) include monitoring data indicating the baseline ambient environmental conditions at the premises prior to and immediately following construction of Fimiston II Extension TSF, Cell G.
7. The monitoring of the baseline ambient environmental conditions required under condition 6(e) must be undertaken in accordance with the requirements of Table 4.

Table 4: Determination of baseline ambient environmental conditions

Parameter	Monitoring location	Unit	Frequency	Averaging period	Method	
					Sampling	Analysis
SWL	All proposed monitoring bores as established under condition 2 of this licence.	mbgl	Prior to the commencement of deposition of tailings into Fimiston II Extension TSF, Cell G.	Spot sample	In accordance with AS/NZS 5667.11	In accordance with AS/NZS 5667.1
pH ¹		-				
EC ¹		(mS/cm)				
TDS		mg/L				
CN-Free						
WAD-CN						
CN-Total						

Note 1: In-field non-NATA accredited analysis permitted.

Time limited operations phase

Commencement and duration

8. The works approval holder may only commence time limited operations for an item of critical containment infrastructure identified in condition 10:
- (a) where the CEO has notified the works approval holder that the Critical Containment Infrastructure Report for that item of infrastructure as required by condition 5 meets the requirements of that condition.
9. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 10 (as applicable):

- (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 8 for that item of infrastructure; or
- (b) 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 9(a).

Time limited operations requirements and emission limits

- 10.** 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

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Fimiston II Extension TSF, Cell G	<ul style="list-style-type: none"> Minimum freeboard of 300 mm. Decant pond of no more than 15% of surface area of Fimiston II Extension TSF, Cell G during normal operating conditions. In the event that the size of the supernatant pool becomes greater than the target size (e.g. due to a high rainfall event), decant water from the TSFs will be used as a priority for mineral processing in preference to groundwater derived from remote saline water borefields. Underdrainage When deemed necessary, seepage recovery bores are to be installed as per condition 4 and to the design and construction / installation requirements in Table 3. 	As located in Schedule 1, Figure 1 and Figure 2
2.	Pipelines carrying tailings and decant return water	<ul style="list-style-type: none"> Equipped with automatic cut-outs in the event of a pipe failure; or Provided with secondary containment sufficient to contain any spill for a period equal to the time between routine inspections. 	

Time limited operations – authorised discharge points for emissions

- 11.** During time limited operations, the works approval holder must ensure that the emission(s) specified in Table 6, are discharged from the corresponding discharge point(s) and at the corresponding discharge point location(s).

Table 6: Authorised discharge point

	Emission	Discharge point	Discharge point location
1.	Tailings	Fimiston II Extension	As located in Schedule 1, Figure 1

	Emission	Discharge point	Discharge point location
		TSF, Cell G	and Figure 2

Monitoring during time limited operations

- 12.** The works approval holder must monitor the groundwater during time limited operations for concentrations of the identified parameters in accordance with Table 7.

Table 7: Monitoring of ambient concentrations during time limited operations

Parameter	Monitoring location	Unit	Frequency	Averaging period	Method	
					Sampling	Analysis
SWL	All proposed monitoring bores as established under condition 2 of this licence.	m bgl	Quarterly	Spot sample	In accordance with AS/NZS 5667.11	In accordance with AS/NZS 5667.1
pH ¹		-				
EC ¹		(mS/cm)				
TDS		mg/L				
CN-Free						
WAD-CN						
CN-Total						

Note 1: In-field non-NATA accredited analysis permitted.

- 13.** The works approval holder must record the results of all monitoring activities required by condition 12.

Compliance reporting

- 14.** The works approval holder must submit to the CEO a report on the time limited operations within 60 calendar days of the completion date of time limited operations or 60 calendar days before the expiration date of the works approval, whichever is the 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 and amount of tailings discharged; and
 - (b) a summary of monitoring results obtained during time limited operations under condition 12.

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 10.
 - (c) monitoring programmes undertaken in accordance with conditions 7, 10, 12; 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 8 have the meanings defined.

Table 8: 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 <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
critical containment infrastructure	means the items of infrastructure listed in condition 1.
Critical Containment Infrastructure Report	means a report to satisfy the CEO that works of critical containment infrastructure have been constructed in accordance with the works approval.
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.
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	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
KCGM	The works approval holder, Kalgoorlie Consolidated Gold Mines Pty Ltd
monthly period	means a one-month period commencing from [day X] of a month until [day (X-1)] of the immediately following month. <i>e.g. "means a one-month period commencing from the seventh day of a month until the sixth day of the immediately following month."</i>
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)

Term	Definition
	in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
suitably qualified geotechnical engineer	means a person who: <ul style="list-style-type: none"> • holds a Bachelor of Engineering recognised by the Australian Institute of Engineers; and • has a minimum of five years of experience working in geotechnical engineering including experience in the design of tailings storage facilities.
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: Maps

Premises map

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

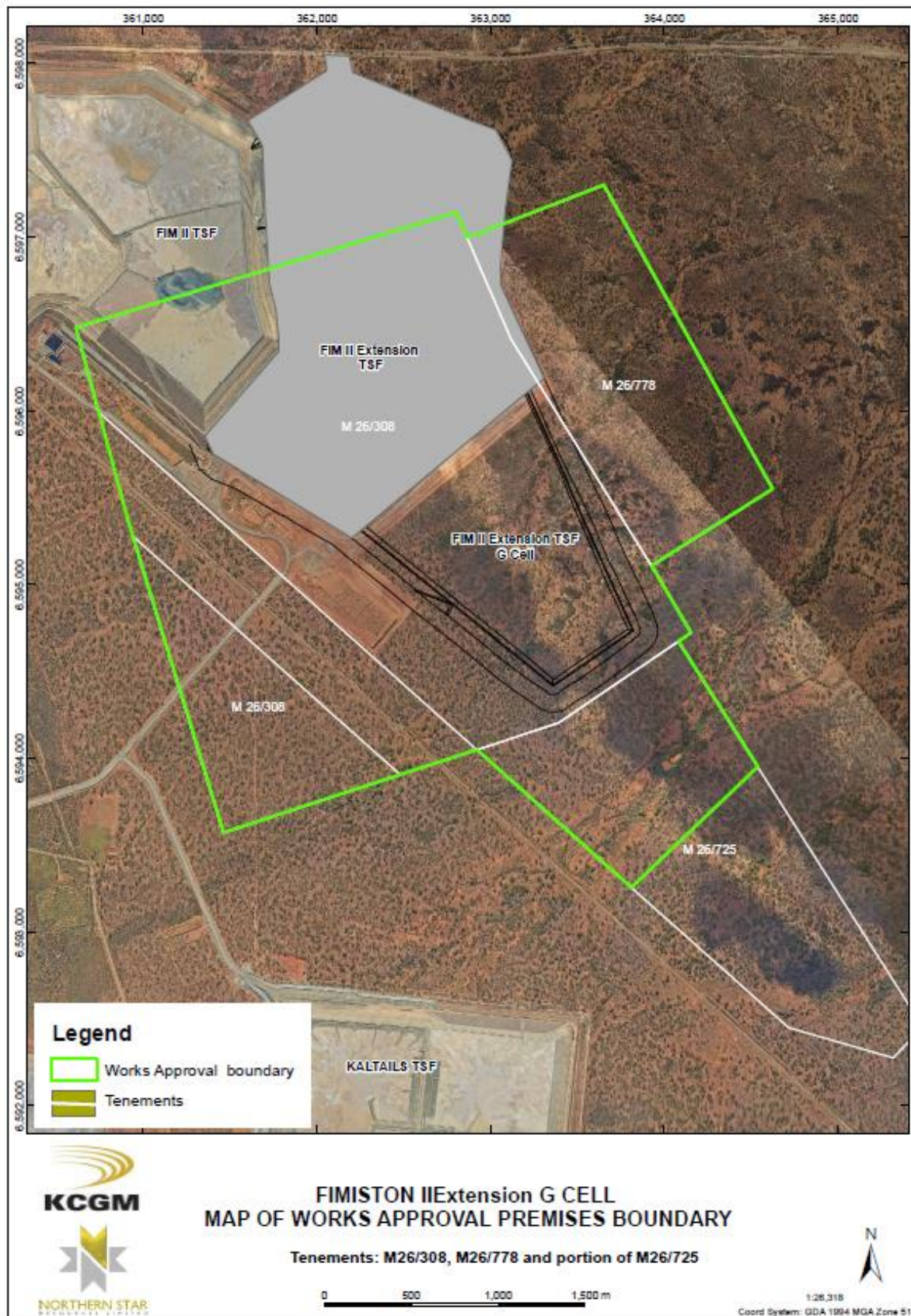


Figure 1: Map of the boundary of the prescribed premises

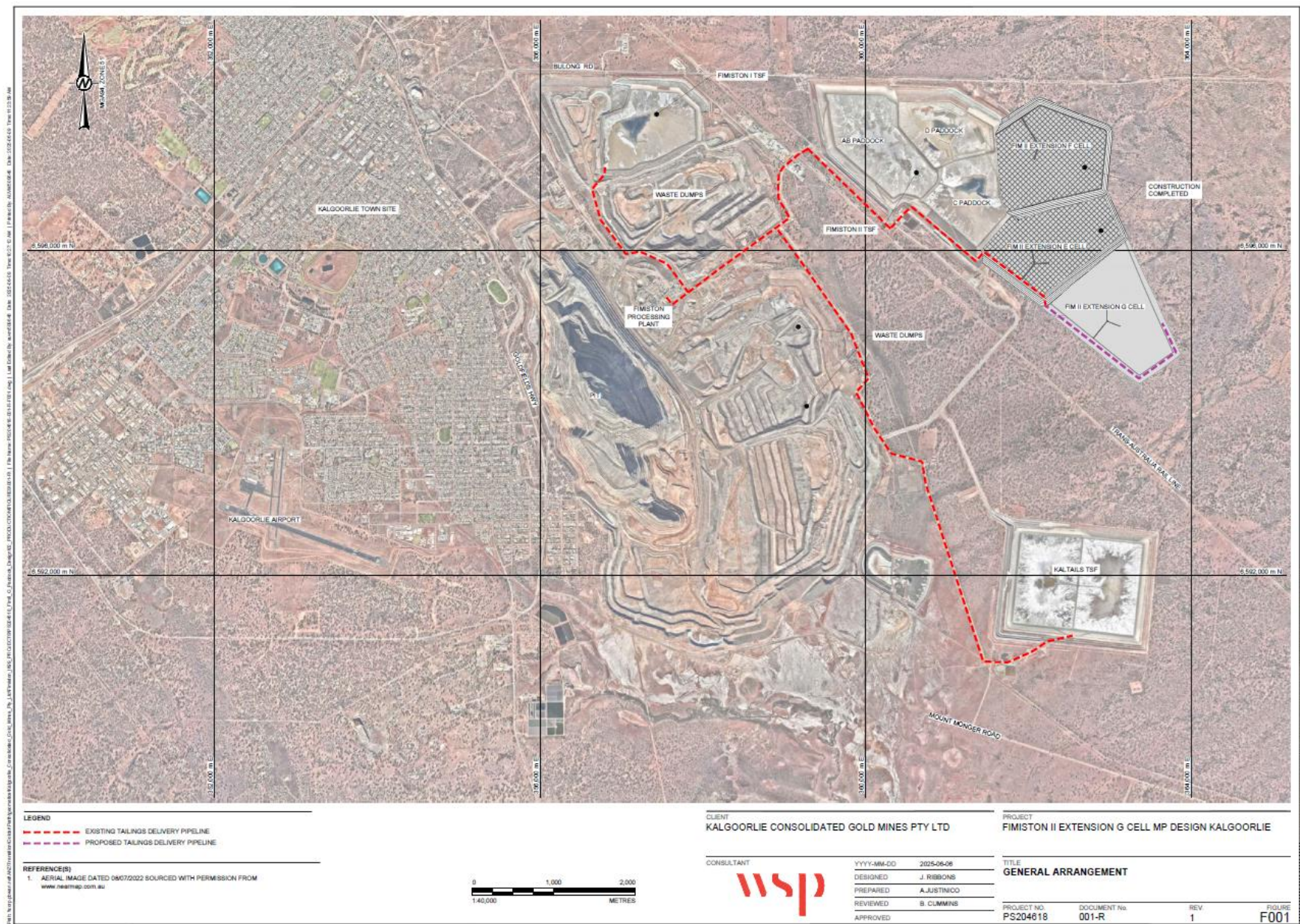


Figure 2: Existing KCGM pipeline corridor between processing plant and TSFs

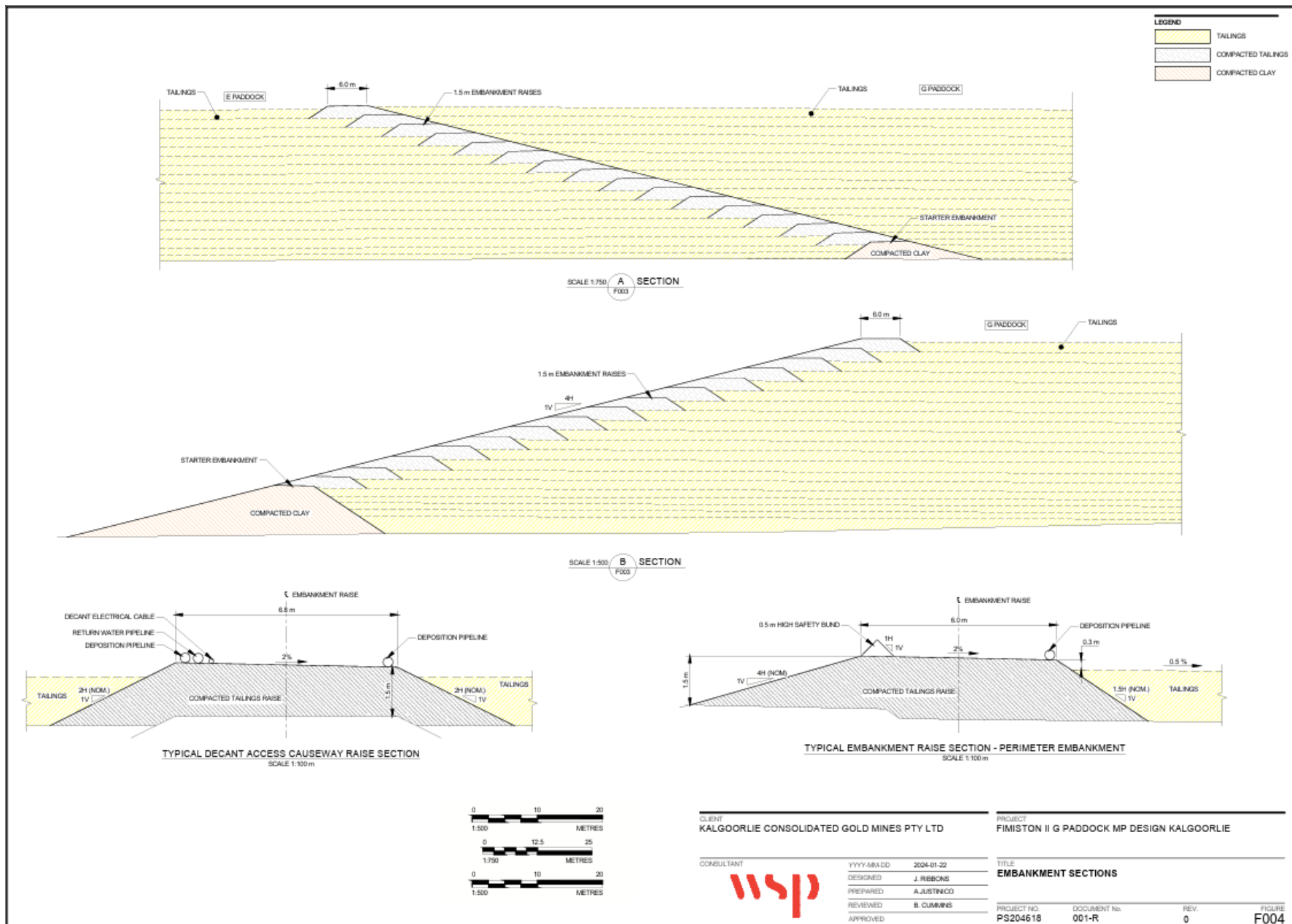


Figure 3: Fimiston II Extension TSF, Cell G embankment design

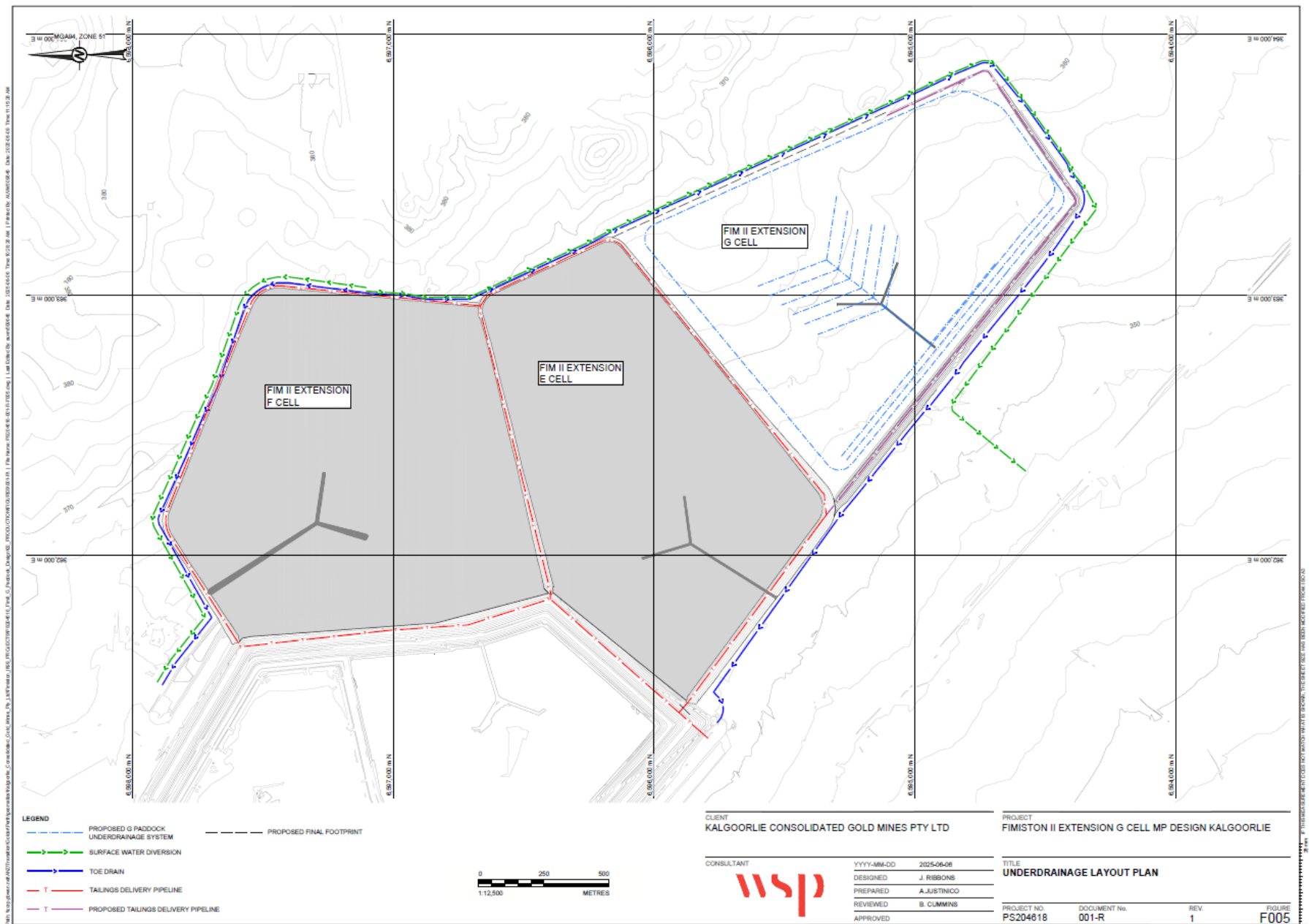


Figure 4: Fimiston II Extension TSF, Cell G underdrainage design

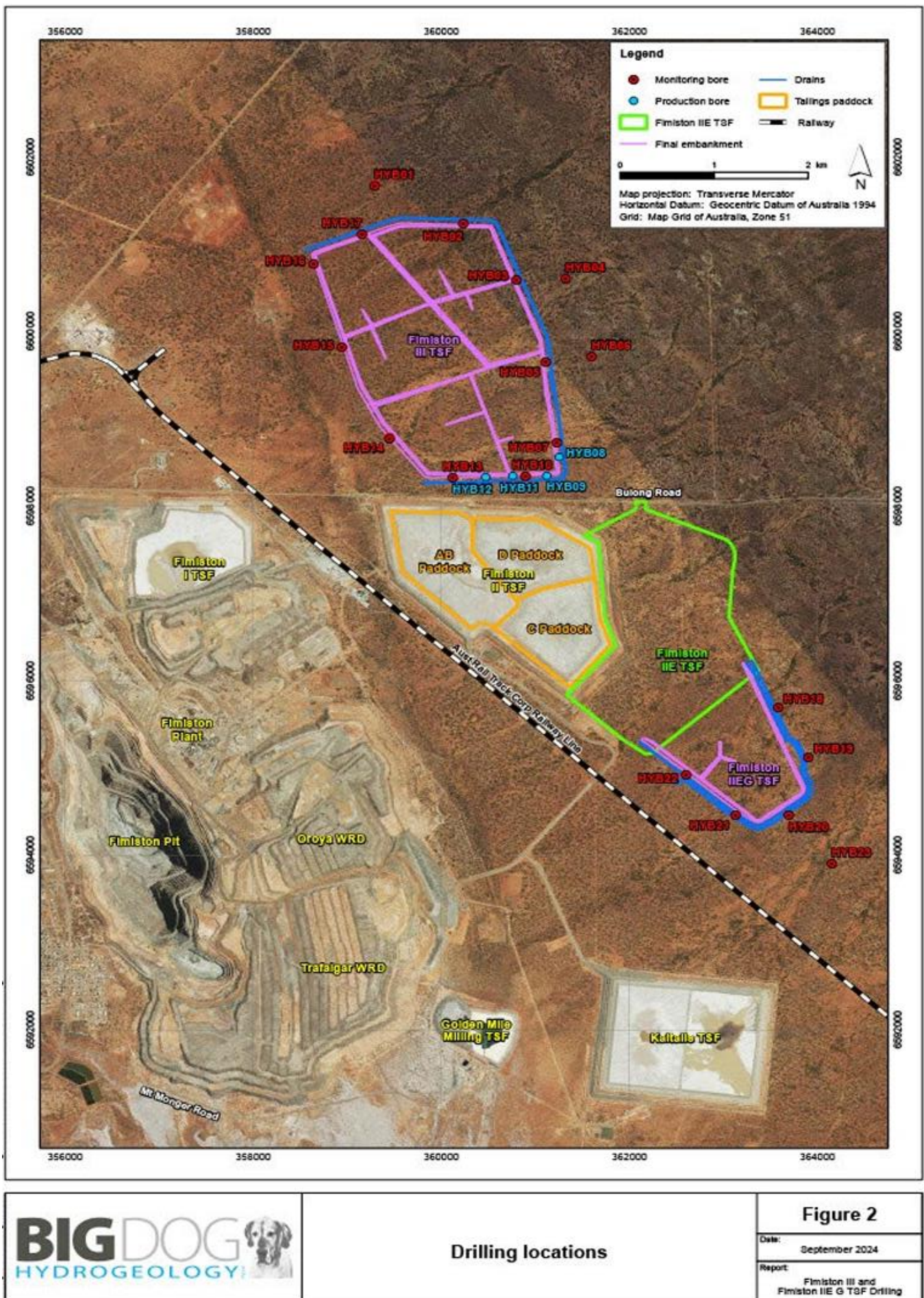


Figure 5: Fimiston II Extension TSF, Cell G proposed monitoring bore locations