Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6507/2021/1
Works approval holder	GSM Mining Company Pty Ltd
ACN	165 235 030
Registered business address	Level 5 50 Colin Street WEST PERTH WA 6005
DWER file number	DER2021/000014
Duration	13/07/2021 to 12/07/2026
Date of issue	13/07/2021
Premises details	Granny Smith Gold Mine Legal description - M38/18, M38/161, M38/162, M38/167, M38/191, M38/205, M38/287, M38/380, M38/389, M38/397, M38/440, M38/532, M38/525, M38/690, M38/691, M38/692, M38/725, L38/50, L38/51, L38/79, L38/80, L38/87, L38/96, L38/106, L38/144, L38/145, L38/144, L38/146 and L38/209 As defined by the Premises map in Schedule 1

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	**Assessed production capacity**
Category 5: Processing or beneficiation of metallic or non-metallic ore	4,500,000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 13 July 2021, by:

Carmen Standring
Digitally signed by Carmen Standring
Date: 2021.07.13 16:30:52 +08'00'

A/MANAGER, RESOURCE 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
13/07/2021	W6507/2021/1	Works approval granted to allow embankment raise to Tailings Storage Facility Cell 3.

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
TSF Cell 3 Stage 1 lift	• Maximum crest level of 433.76 mRL; • Constructed to the specifications outlined in Figure 2 of Schedule 1; • Constructed to provide a minimum 300mm total freeboard (including an allowance for a 1% AEP 72 hour rain event) above the normal operating pond; • Tailings used in construction must be deposited in layers of no more than 300 mm; • Tailings used in construction must be compacted to a minimum dry density ration of 98% SMDD within a target moisture content of 2% to -2%; • During construction tailings must only be deposited from within chainage 2100m – 1300m as indicated by the green line in Figure 3 of Schedule 1.	Chainage (clockwise) 600m – 0m of TSF Cell as depicted in Figure 3 of Schedule 1.
TSF Cell 3 Stage 2 lift	• Maximum crest level of 433.76 mRL; • Constructed to the specifications outlined in Figure 2 of Schedule 1; • Constructed to provide a minimum 300mm total freeboard (including an allowance for a 1% AEP 72 hour rain event) above the normal operating pond; • Tailings used in construction must be deposited in layers of no more than 300 mm; • Tailings used in construction must be	Chainage (clockwise) 3700m – 3100m of TSF Cell as depicted in Figure 3 of Schedule 1.

Infrastructure	Design and construction requirements	Infrastructure location
	compacted to a minimum dry density ration of 98% SMDD within a target moisture content of 2% to -2%; • During construction tailings must only be deposited from within chainage 2100m – 1300m as indicated by the green line in Figure 3 of Schedule 1.	
TSF Cell 3 Stage 3 lift	• Maximum crest level of 433.76 mRL; • Constructed to the specifications outlined in Figure 2 of Schedule 1; • Constructed to provide a minimum 300mm total freeboard (including an allowance for a 1% AEP 72 hour rain event) above the normal operating pond; • Tailings used in construction must be deposited in layers of no more than 300 mm; • Tailings used in construction must be compacted to a minimum dry density ration of 98% SMDD within a target moisture content of 2% to -2%; • During construction tailings must only be deposited from within chainage 2100m – 1300m as indicated by the green line in Figure 4 of Schedule 1.	Chainage (clockwise) 3100m – 2100m of TSF Cell as depicted in Figure 4 of Schedule 1.
TSF Cell 3 Stage 4 lift	• Maximum crest level of 433.76 mRL; • Constructed to the specifications outlined in Figure 2 of Schedule 1; • Constructed to provide a minimum 300mm total freeboard (including an allowance for a 1% AEP 72 hour rain event) above the normal operating pond; • Tailings used in construction must be deposited in layers of no more than 300 mm; • Tailings used in construction must be compacted to a minimum dry density ration of 98% SMDD within a target moisture content of 2% to -2%; • During construction tailings must only be deposited from within chainage 2100m – 1300m as indicated by the green line in Figure 4 of Schedule 1.	Chainage (clockwise) 1300m – 600m of TSF Cell as depicted in Figure 4 of Schedule 1.

Infrastructure	Design and construction requirements	Infrastructure location
TSF Cell 3 Stage 5 lift	• Maximum crest level of 433.76 mRL; • Constructed to the specifications outlined in Figure 2 of Schedule 1; • Constructed to provide a minimum 300mm total freeboard (including an allowance for a 1% AEP 72 hour rain event) above the normal operating pond; • Tailings used in construction must be deposited in layers of no more than 300 mm; • Tailings used in construction must be compacted to a minimum dry density ration of 98% SMDD within a target moisture content of 2% to -2%; • During construction tailings must only be deposited from within chainage 300m – 3100m as indicated by the green line in Figure 5 of Schedule 1.	Chainage (clockwise) 2100m – 1300m of TSF Cell as depicted in Figure 5 of Schedule 1.
Decant causeway, return water pipeline and skid-mounted electrical works	• To be raised by 1 m to allow for the increase in tailings storage within TSF Cell 3. • Temporary pipework construction permitted to facilitate TSF lifts.	Within TSF Cell 3 as depicted in Figure 1 of Schedule 1.

Emission controls

2. The works approval holder must take all reasonable and practicable measures to prevent stormwater run-off becoming contaminated by the activities and operations undertaken at the premises.

Compliance reporting

3. The works approval holder must within 30 calendar days of a TSF Cell 3 Stage lift 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.

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

(a) certification by a Qualified, Competent Civil or Structural 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.

Records and reporting

5. 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.

6. 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; and

(c) complaints received under condition 5.

7. The books specified under condition 6 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 2 have the meanings defined.

Table 2: 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.
Qualified, Competent Civil or Structural Engineer	means a person who: (a) holds a Bachelor's degree recognised by Engineers Australia; and (b) has a minimum of five years of experience working in a supervisory role in 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
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 pink the map below (Figure 1).

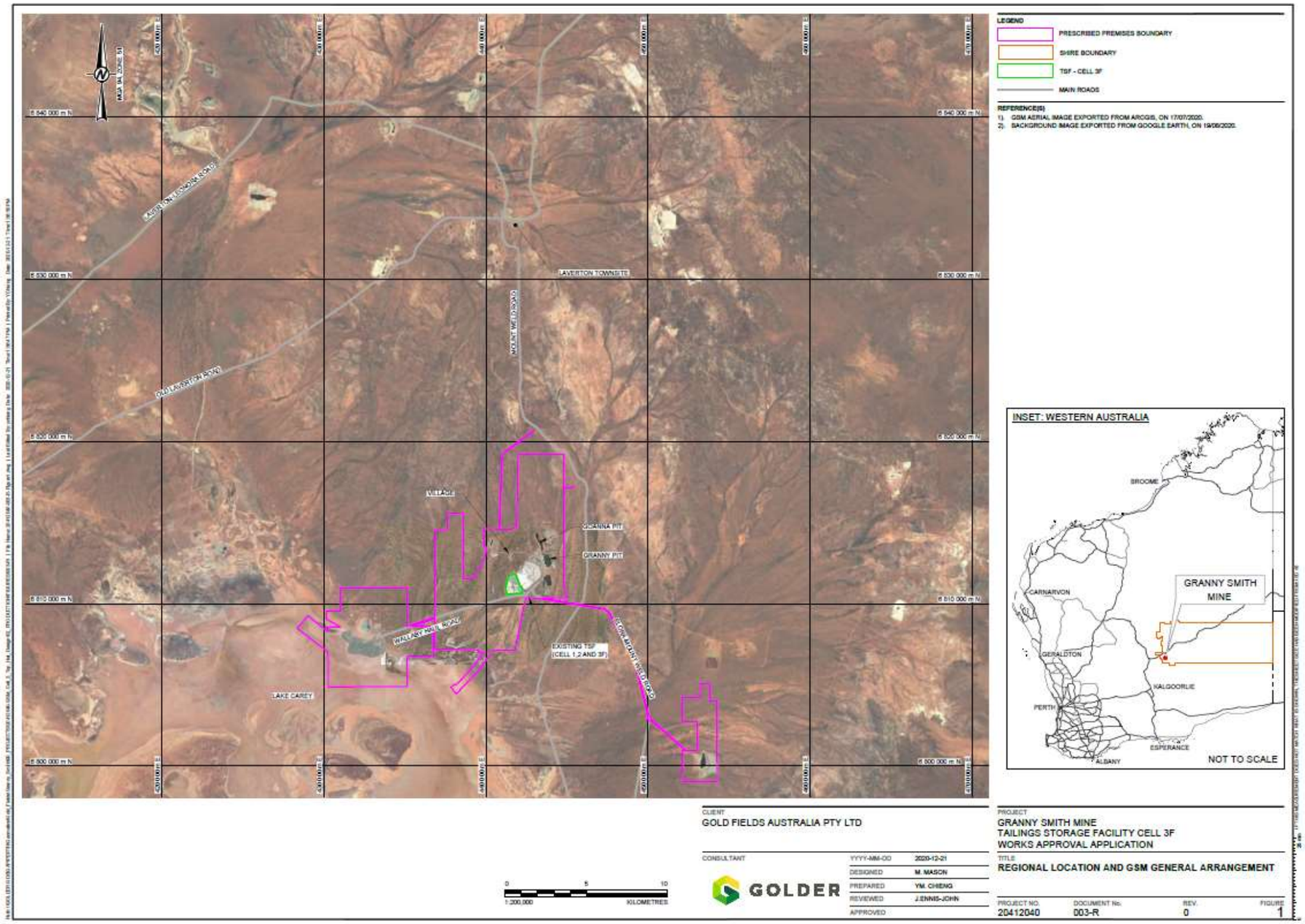

Figure 1: Map of the boundary of the prescribed premises

TSF lift construction specification

The TSF lift construction specifications are outlined in Figure 2 below, where:

- Zone A – tailings harvested from Cell 1 or Cell 2 for bulk fill in the raise; and
- Zone C – non-acid forming selected waste rock sourced from on-site Waste Rock Dumps (WRD) used as erosion protection, and for bulk fill in the decant access ways.

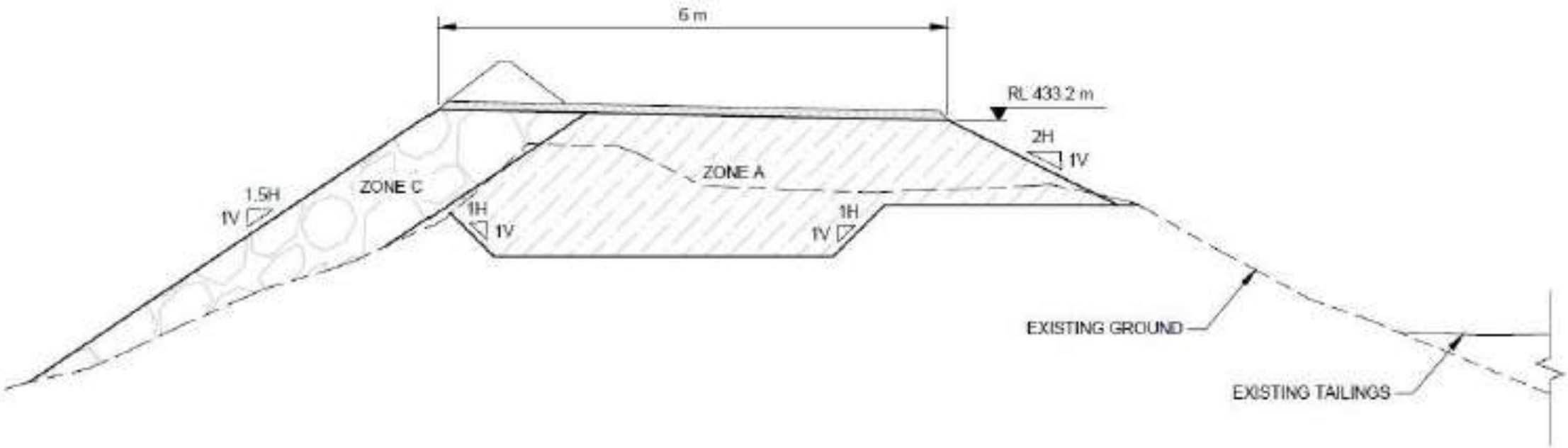

Figure 2: TSF Lift construction specifications

TSF lift construction stages

The TSF lift construction stages are outlined in Figures 3 - 5 below.

Figure 3: Cell 3F construction stage 1 (left) and 2 (right)

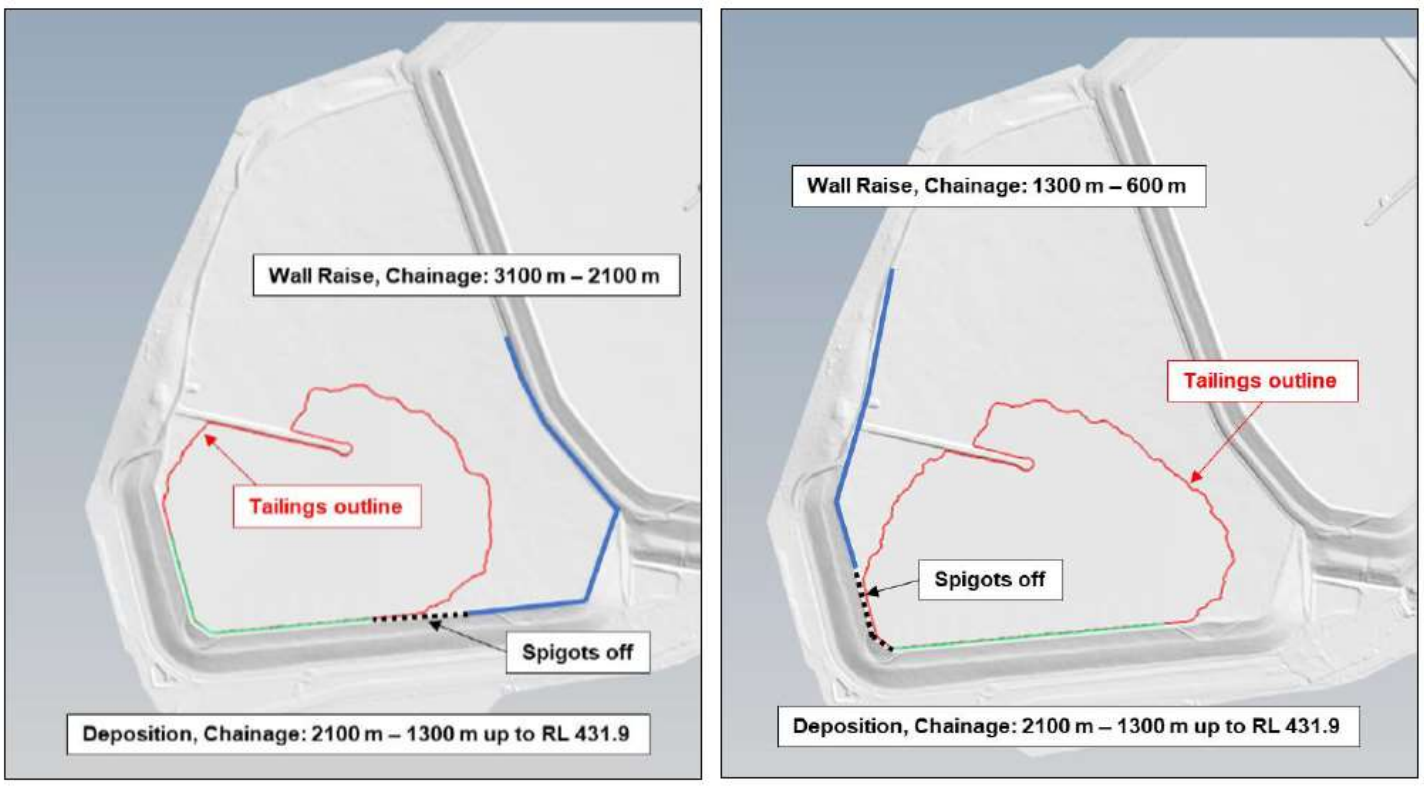

Figure 4: Cell 3F construction stage 3 (left) and 4 (right)

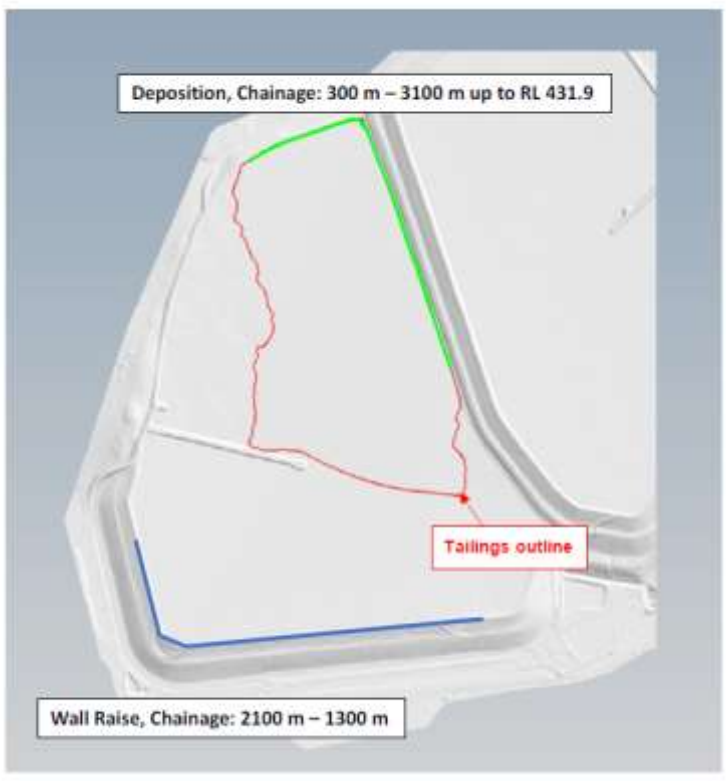

Figure 5: Cell 3F construction stage 5