Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L8345/2009/3
Licence holder	Greenstone Resources (WA) Pty Ltd
ACN	100 341 599
Registered business address	Suite 4, Level 3 83-85 South Perth Esplanade, SOUTH PERTH WA 6151
DWER file number	DER2021/000125
Duration	04/05/2021 to 03/05/2041
Date of issue	04/05/2021
Date of amendment	28/04/2025
Premises details	King of the Hills Gold Mine (KOTH) LEONORA WA 6438 Legal description - Part of mining tenements M37/67, M37/76, M37/90, M37/201, M37/222, M37/248, M37/330, M37/410, M37/429, M37/449, M37/451, M37/457, M37/547, M37/548, M37/572, M37/573, M37/574 and M37/1105 As defined by the premises boundary 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	6,000,000 tonnes per annual period
Category 6: Mine dewatering	1,000,000 tonnes per annual period
Category 52: Electric power generation	Up to 27.7 MW in aggregate
Category 54: Sewage facility	146.5 m^3/day
Category 89: Putrescible landfill site	Less than 5,000 tonnes per annual period

This licence is granted to the licence holder, subject to the attached conditions, on 28 April 2025, by:

Fiona Westcott

Digitally signed by Fiona Westcott
Date: 2025.04.28 15:10:02 +08'00'

MANAGER, RESOURCE INDUSTRIES REGULATORY SERVICES

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

Licence history

Date	Reference number	Summary of changes
04/05/2009	L8345/2009/1	New licence application.
04/05/2013	L8345/2009/2	Licence re-issue.
7/04/2016	L8345/2009/2	Licence transfer and conversion to new format.
19/01/2017	L8345/2009/2	Licence amendment to correct discharge points and include Category 12 as prescribed activity.
12/01/2018	L8345/2009/2	Amendment Notice 1 issues to change ownership to Greenstone Resources (WA) Pty Ltd.
12/04/2019	L8345/2009/2	Amendment Notice 2 issued to allow for an increase in Category 12 from 63,000 tonnes to 200,000 tonnes per annum and extend expiry date by 12 months.
14/04/2020	L8345/2009/2	Amendment Notice 3 issued to extend expiry date by 12 months.
04/05/2021	L8345/2009/3	Licence reissued in new licence format and details of Amendment Notice 1, 2 and 3 included.
16/08/2022	L8345/2009/3	Licence amendment to: • remove existing category 12: screening etc. of material; • amend the prescribed premises boundary; and • incorporate operations of category 54: sewage facility and category 89: putrescible landfill sites, these facilities were approved for construction under works approval W6413/2020/1.
16/05/2023	L8345/2009/3	Department issued mass amendment notice to change the reporting requirements of the following: • Reporting date for Environmental Report on 31/10/2023 and biennially thereafter; and • Reporting date of AACR on 31/10/2023 and annually thereafter.
29/06/2023	L8345/2009/3	Licence amendment to: • change reporting requirements of the Environmental Report from biennially to annually due to changes in risk rating of the premises; and • authorise operation of: ○ Category 5 Stage 6 (RL 429.0 m) TSF 4 Cells A and B; ○ Category 5 Processing plant and associated infrastructure; and ○ Category 52 Stage 1 Electric power generation

Date	Reference number	Summary of changes
		plant.
02/10/2023	L8345/2009/3	Licence amendment to authorise the operation of Category 5 TSF 5 Stage 1 (RL 413.0 m).
20/02/2025	L8345/2009/3	Licence amendment for the: • transfer of the remaining TSF 5 embankment lifts construction and operational requirements from works approval W6426/2020/1 and operate to a maximum height of RL 445 m (category 5); • inclusion of a tyre landfill in the North WRL (category 89); • disposal of concrete footings (inert waste) in an additional landfill adjacent to the North WRL (category 89); and • inclusion of the TSF 4 Stage 7 embankment lift from works approval W6891/2024/1.
28/04/2025	L8345/2009/3	Licence amendment to add Stage 1 upgrades to the processing infrastructure.

Interpretation

In this licence:

(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 licence:

  (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 licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirements	Infrastructure location
Gold Processing Plant infrastructure consisting of: • Run of Mine (ROM) pad • Primary and secondary crusher with associated stockpile and reclaim areas • Grinding circuit • Carbon in leach (CIL) and absorption circuit; and • Elution and gold recovery circuit.	(a) Water sprays maintained on crusher tipping areas.	As shown in Schedule 1, Figure 1. Layout of processing plant in accordance with Figure 2.
Process and Raw water ponds	a) Constructed and compacted oxide or clay material; b) Lined with 1.0 mm HDPE; and c) Can contain a 1% AEP 72hr rain event and operational freeboard of 0.3 m maintained at all times. d) Visual markers installed along embankments for freeboard monitoring.	As shown in Schedule 1, Figure 2.
TSF 4	a) Each cell operating pond maintained to allow minimum 0.5 m total freeboard (including the allowance for a 1% AEP 72hr rain event); b) Visual markers installed along embankments for freeboard monitoring; and c) Maximum operational height of TSF 4 embankment (Stage 7) is RL 433.0 m.	As shown in Schedule 1, Figure 1.
TSF 5	a) Operating pond maintained to allow minimum 0.5 m total freeboard (including the allowance for a 1% AEP 72hr rain event); b) Visual markers installed along	As shown in Schedule 1, Figure 1. VWP and SP

Site infrastructure and equipment	Operational requirements	Infrastructure location
	embankments for freeboard monitoring; c) Monthly monitoring of Vibrating Wire Piezometers (VWP) and Standpipe Piezometers (SP); and d) Maximum operational height of TSF 5 embankment is RL 445.0 m.	shown in Schedule 1, Figure 8.
Tailings and return water pipelines	a) Located above ground within earth-bunded corridors with scour pits or sumps; b) Maintain and operate the isolation valves; and c) Maintain and operate the flow and leak detection sensors.	As shown in Schedule 1, Figure 3.
Dewatering pipelines	a) Maintain and operate telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures; or b) Maintain and operate automatic cut-outs in the event of a pipe failure; or c) Be provided with secondary containment sufficient to contain any spill for a period equal to the time between daily inspections.	As shown in Schedule 1, Figure 6.
Surface water management system	a) Diversion bunds maintained to divert surface water flows around processing plant area; b) Stormwater to be managed so contaminated or potentially contaminated stormwater is captured in separate sediment control ponds; c) Contents of potentially contaminated stormwater to either be recovered and re-used in processing or treated as required; and d) Both sediment drainage ponds to be maintained to withhold a 1% AEP 72hr rain event.	As shown in Schedule 1, Figure 1. Layout of stormwater infrastructure as shown in Schedule 1, Figure 2.
Gas generators • within enclosed building; • exhaust stacks minimum 8.5 m above ground level. <u>3 x Jenbacher J620, 3.36 MW gas generators</u> • internal diameter of at least 500 mm;	a) Must be maintained to be fit for purpose; and b) Must be tuned using exhaust NO_x emissions to ensure optimal efficiency and emissions performance every 2,000 hours of operating.	Located within the “Power Station” as shown in Schedule 1, Figure 1.

Site infrastructure and equipment	Operational requirements	Infrastructure location
(Labelled as EP03 to EP05 in Figure 4) <u>4 x Jenbacher J624 4.4 MW gas generators</u> • internal diameter of at least 600 mm; (Labelled as EP06 to EP09 in Figure 4)		
Diesel generators 2 x Cummins QSX15-G8 diesel generators • exhaust stacks minimum 3.5 m above ground level; • stacks have mufflers installed; and • generators self-bunded.	a) Must be maintained to be fit for purpose; and b) May only be used for power station start-up, to support demand during maintenance of gas generators and during emergencies.	Located within the "Power Station" as shown in Schedule 1, Figure 2. Labelled as EP01 and EP02 in Figure 4.
1 x 20,000 L lubrication oil storage tank	a) All bunding to be maintained to prevent leakage to subsurface soil.	Located within the "Power Station" as shown in Schedule 1, Figure 2. Layout of power station in accordance with Figure 4.
1 x 20,000 L waste oil tank		
1 x 68,000 L diesel storage tank		
Transformer		
Oil-water separator		
WWTP	a) All sewage storage and treatment tanks, vessels, pipelines and conveyance infrastructure must be maintained so they are impermeable and free of leaks and defects; b) WWTP must be capable of storing a minimum of two consecutive days of effluent; c) Maintain standby pumps for emergencies; d) Maintain fencing and compound bunding around perimeter of WWTP; e) Sludge must be contained within sealed tanks prior to removal by a licensed controlled waste carrier for disposal within the waste rock dump (WRD) or disposal to an appropriately authorised facility; and f) Spills of wastewater or chemicals outside of a tanks, vessels and pipelines must be contained and cleaned-up as soon as	'WWTP' as shown in Schedule 1, Figure 5

Site infrastructure and equipment	Operational requirements	Infrastructure location
	they occur, if safe to do so.	
Irrigation Spray field	a) Area of WWTP Sprayfield must be at least 4.75 ha; b) Maintain fence around entire perimeter and ensure spray drift does not extend beyond perimeter fence; c) Flow meter must be maintained on the WWTP outlet to the WWTP Sprayfield to monitor volumes discharged to WWTP Sprayfield; d) Spray irrigator to be maintained to ensure no blockages to allow even and effective spray production and ensure mobility, stopping and cutoff mechanisms are functioning as per manufacturer specifications; e) Irrigation managed to prevent ponding and pooling of effluent on the ground surface of the irrigation discharge area; and f) Irrigation operations must not occur during significant rainfall events.	'WWTP Sprayfield' as shown in Schedule, Figure 5.
Tarmoola Pit[1]	N/A	As shown in Schedule 1, Figure 6.
Galahad Pit		
Tyre storage areas at workshops and stores	Tyres must be stored as follows: a) No obstruction to fire protection equipment or any related signage. b) Tyres stacked on their sides or if stored upright on their treads, within a bunded area. c) No more than 99 tyres stored at any one time. d) The tyre storage area is at least 6 m away from any combustible material, wall, building or fence. e) Individual tyre stacks area are separated at 6 m from each other and do not exceed 100 m^2 in area and 3 m in height.	Not depicted.
Tyre disposal in North WRL landfill, Landfill Area (Class II), and Landfill General Area (Class II)	Tyres must be buried as follows[2]: a) In the North WRL, further than 100 m from the final WRL batter toes and 5 m from the final top surface. b) Approximately 500 tyres per year. c) Burial under a final soil cover of not less	As shown in Schedule 1, Figures 1 and Figure 5.

Site infrastructure and equipment	Operational requirements	Infrastructure location
	than 500 mm. d) In batches of no more than 1,000 whole tyres separated from each other by at least 100 mm of soil. e) Ensures that the drainage, safety, soil erosion and soil stability is controlled. f) Covered by the end of the working day so that the waste was deposited with enough waste rock to prevent the spread of fire and harboring of disease vectors. g) Tyre burial locations must be surveyed and recorded.	

Note 1: Tarmoola Pit includes a number of minor sumps (North, Saddle or South) all of which are authorised to accept mine dewater.

Note 2: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

2. The licence holder must construct and/or install the infrastructure listed in Table 2, in accordance with;

(a) The corresponding design and construction requirement; and

(b) At the corresponding infrastructure location; As set out in Table 2.

Table 2: Infrastructure and equipment requirements

Infrastructure	Design and construction requirements	Infrastructure location
Replacement of primary crusher circuit crusher with new model Metso 50-65 Gyratory Crusher (or equivalent).	• dust collector with extraction points at the apron feeder head chute, discharge conveyor head chute and top of crusher discharge pocket • Water sprays at the crusher dump pocket • Water cart must be used for dust suppression during construction activities, when required.	As shown in Schedule 1, Figure 13.
Other processing plant upgrades: • Upgrade the Lime silo feed arrangement • Replacement of kiln in a new location • four additional adsorption tanks • one additional electrowinning cell	• Existing bunded area extended to accommodate 4 additional adsorption tanks. • Reagents are stored on concrete bunds; • Water cart must be used for dust suppression during construction activities, when required. • all inadvertent/accidental spills will be immediately cleaned up	As shown in Schedule 1, Figure 12.

• Upgrade of tailings pump and discharge pipework • Upgrade of the existing Reverse Osmosis (RO) Plant		
Existing stormwater pond to be backfilled and new stormwater pond placement	• the existing stormwater pond under the new conveyor location to be backfilled and replaced with a new pond of the same holding volume, constructed as per the original ponds with a permeability of less than $5x10^{-9}$ m/sec, to ensure all storm/firewater is captured; • diversion bunds to be constructed to separate clean water from potentially contaminated water • Stormwater to be managed so contaminated or potentially contaminated stormwater is captured in separate sediment control ponds; • Designed and maintained to withhold a 1% AEP 72hr rain event.	As shown in Schedule 1, Figure 13.

3. When constructing the infrastructure specified in Table 2, the licence holder must not depart from the requirements specified in Table 2 except:

(a) Where such departures are minor in nature and do not materially change or affect the infrastructure; and

(b) Where such departure improves the functionality of the infrastructure and does not increase the risks to public health, public amenity or the environment.

If condition 3(b) applies, then the licence holder must provide the CEO with a list of departures and demonstrate that these have not increased the risk to public health, public amenity or the environment.

4. The licence holder must within 30 days of each item of infrastructure required by condition 2 being constructed:

(a) undertake an audit of their compliance with the requirements of condition; and

(b) prepare and submit to the CEO an audit report on that compliance.

5. The report required by condition 4, must:

(a) be certified by a suitably qualified geotechnical or civil engineer that each item of infrastructure listed in Table 2 meets the corresponding specifications and at the locations set out in Table 2 and has been constructed with no material defects; and

(b) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person within the company.

6. The licence holder must ensure that any saline dewatering effluent used for dust suppression is applied in a manner that avoids damage to surrounding native vegetation.

7. The licence holder must manage the infrastructure in Table 1 such that a minimum top-of-embankment freeboard of 300 mm or a 1 in 100 year / 72-hour rain event (whichever is greater) is maintained.

8. The licence holder must:

(a) undertake inspections as detailed in Table 3;

(b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences as soon as practicable; and

(c) maintain a record of all inspections undertaken.

Table 3: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Power station storage tanks bunding	Visual integrity	Monthly
WWTP and associated infrastructure (tanks, pipelines, pipeline bunding, flow meters, alarm system (audio and visual) and tank freeboard.	Visual integrity	Weekly
Irrigation system valves, pumps, pipelines and other fittings	Visual integrity	Weekly
Tailings delivery pipelines	Visual integrity	Twice daily
Return water pipelines	Visual integrity	Twice daily
TSF embankment freeboard	To confirm required freeboard capacity is available	Daily
Tailings storage decant pond	To confirm size and location	Daily

Emissions and discharges

9. The licence holder must ensure that the emission types specified in Table 4 are discharged from the corresponding discharge point and only at the corresponding discharge point location.

Table 4: Authorised discharge points

Emission type	Discharge point	Discharge point location
Category 5: ore processing or beneficiation		
Deposition of tailings	Deposited sub-aerially through spigots located on embankment	TSF 4; and TSF 5 as shown in Schedule, Figure 1.

Emission type	Discharge point	Discharge point location
Category 6: mine dewatering		
Mine dewater from onsite sources	Tarmoola Pit[1] (open pit)	'North Pit' and 'South Pit' as shown in Schedule 1, Figure 5 and Figure 6.
	Galahad Pit	'Galahad Pit' as shown in Schedule 1, Figure 5 and Figure 6.
Category 54: sewage facility		
Treated effluent sourced from the WWTP	Sprinklers located within WWTP Sprayfield	'WWTP Sprayfield' as shown in Schedule 1, Figure 5.
Category 52: electric power generation		
PM, SO_2, CO and NO_x	Gas generators EP03-EP09	'Power station' as shown in Schedule 1, Figure 1.

Note 1: Tarmoola Pit includes a number of minor sumps (North, Saddle or South) all of which are authorised to accept mine dewater.

10. The licence holder must ensure that where waste types produced on the premises are not taken offsite for lawful use or disposal, they are managed in accordance with the requirements in Table 5.

Table 5: Management of wastes[1; 2 and 3]

Waste type	Quantity limit	Disposal location
• Clean fill • Inert waste type 1 (including concrete footings) • Uncontaminated fill • Putrescible wastes • Inert waste type 2 (tyres only)	Less than 5,000 tonnes per annual period	'Landfill Area (Class II)' and 'Landfill General Area (Class II)' as shown in Schedule 1, Figure 5. 'North WRL Tyre Landfill' and 'WRL Industrial Landfill' as shown in Schedule 1, Figure 1.

Note 1: Requirements for the management of wastes are set out in the *Environmental Protection (Rural Landfill) Regulations 2002.*

Note 2: Requirements for landfilling tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

Note 3: Additional requirements for the acceptance of controlled waste (including tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

Monitoring

General

11. The licence holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and

(c) all laboratory samples are submitted to and tested by a laboratory with current National Association of Testing Authorities (NATA) accreditation for the parameters being measured.

12. The licence holder must ensure that:

(a) quarterly monitoring is undertaken at least 45 days apart;

(b) six monthly monitoring is undertaken at least 5 months apart; and

(c) annual monitoring is undertaken at least 9 months apart.

Emissions and discharge monitoring

13. The licence holder must undertake the monitoring in Table 6 according to the specifications in that table.

Table 6: Monitoring of emissions to land

Emission point reference	Parameter	Units	Frequency
Tarmoola Pit[1]	Volume of mine dewater discharged to containment structure	kL	Annually
Galahad Pit			

Note 1: Tarmoola Pit includes a number of minor sumps (North, Saddle or South) all of which are authorised to accept mine dewater.

Process monitoring

14. The licence holder must undertake the monitoring in Table 7 according to the specifications in Table 7.

Table 7: Process monitoring

Process description	Parameter	Units	Frequency
Tailings deposition	Volumes of tailings deposited into the TSF 4 and TSF 5	Tonnes	Continuous
	Volumes of water recovered from TSF 4 and TSF 5		

15. The licence holder must undertake the monitoring in Table 8 according to the specifications in Table 8.

Table 8: Emissions and discharge monitoring

Discharge point location	Monitoring location	Parameters[1]	Units	Limit	Frequency	Sampling method
Category 54: sewage facility						
'WWTP Sprayfield' as shown in Schedule	Flow meter	Cumulative volume of wastewater discharged to WWTP Sprayfield	m^3/day	–	Continuous	–
		Escherichia coli	cfu/100			Spot

Discharge point location	Monitoring location	Parameters[1]	Units	Limit	Frequency	Sampling method
1, Figure 5.		*bacteria* (E. coli)	ml	1,000	Quarterly	sample, in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	WWTP outlet	Total coliforms				
		Biochemical oxygen demand (BOD_5)	mg/L	20		
		Total suspended solids (TSS)		30		
		Total Nitrogen		30		
		Total Phosphorus		8		
		Free Chlorine		0.2-2.0		
		pH[1]	pH units	6.5-8.5		

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

16. The licence holder must undertake the monitoring in Table 9 according to the specifications in that table.

Table 9: Monitoring of ambient groundwater

Emission point reference	Parameter	Units	Trigger level	Limit level	Frequency	Method
TSF4 monitoring bores: MBH1(S); MBH1(D); MBH2(S); MBH2(D); MBH3(S); MBH3(D); MBH6; MBH7; MBH14; MBH15; MBH17; MBH19; MBH21; and MBH23. TSF5 monitoring bores: MB20-1(S); MB20-1(D); MB20-2(S); MB20-2(D); MB20-3(S);	Standing water level[1] (SWL)	mbgl	6 mbgl	4 mbgl	Quarterly	Spot sample, in accordance with AS/NZS 5667.11
	pH[1]	pH unit	-	-		
	Electrical conductivity[1] (EC)	µS/cm	-	-		
	Total dissolved solids (TDS)	mg/L	-	-		
	Weak acid dissociable cyanide (WAD CN)		-	0.5 mg/L		
	Dissolved metals and metalloids: Arsenic (As), Cadmium (Cd), Chromium (Cr), Cobalt (Co),		-	-		

Emission point reference	Parameter	Units	Trigger level	Limit level	Frequency	Method
MB20-3(D); MB20-4(S); MB20-4(D); MB20-5(S); MB20-5(D); MB20-6(S); MB20-6(D); MB20-7(S); MB20-7(D); MB20-8; MB20-9 and MB20-10.	Copper (Cu), Iron (Fe), Lead (Pb), Manganese (Mn), Mercury (Hg), Nickel (Ni), Zinc (Zn).					
	Major ions: Calcium (Ca), Carbonate (CO_3), Chloride (Cl), Magnesium (Mg), Potassium (K), Sodium (Na), Sulphate (SO_4).		-	-		

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

17. In the event that the trigger level for standing water level is exceeded in any of the bores listed in Table 9, the licence holder must submit a seepage management plan to the CEO within 3 months of the exceedance occurring. The management plan must include installation of fit-for-purpose[1] seepage recovery bores, including justification for the number of bores and locations (as determined by a suitably qualified hydrogeologist).

Note 1: Monitoring bores should be kept separate from seepage recovery to ensure continuity and reliability of monitoring data. Conversion of monitoring bores into seepage recovery bores will therefore not be accepted.

18. The licence holder must undertake monitoring of the water balance for TSF 4 and TSF 5 each monthly period during operations, and as a minimum, record the following information:

(a) site rainfall;

(b) evaporation rate;

(c) decant water, toe drainage and recovery bore (if applicable) volumes;

(d) volume of tailings deposited;

(e) volume of water in tailings;

(f) percentage (%) of solids in tailings; and

(g) calculated seepage losses.

Management actions for limit exceedances

19. The licence holder must, in the event of a parameter in condition 15 exceeding the corresponding limit specified in that condition, undertake the management actions that correspond with the corresponding monitoring location within the corresponding timeframe as specified in Table 10.

Table 10: Management actions required in the event of limit exceedance

Monitoring location	Management action	Timeframe

WWTP outlet	• Investigate cause of exceedance; and implement corrective actions. Resample within 14 calendar days, if the exceedance is confirmed in follow up sample; • Submit a report to the CEO within 14 calendar days.	Management actions to commence immediately upon being notified of the exceedance and to continue for the duration of the exceedance.

20. The licence holder must include the following information in the report referred to in condition 19 in relation to any exceedances of any of the limits identified in that condition:

(a) the nature, volume, and characteristics of the emission(s);

(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 19 in response to the exceedance;

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

(f) the details of any action or specified measures that have 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.

Records and reporting

21. The licence holder must record the following information in relation to complaints received by the licence 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 licence holder to investigate or respond to any complaint.

22. The licence holder must:

(a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and

(b) prepare and submit to the CEO by no later than 31 October of each year an Annual Audit Compliance Report (AACR) in the approved form.

23. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:

(a) the calculation of fees payable in respect of this licence;

(b) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;

(c) monitoring programmes undertaken in accordance with conditions 13, 14, 15, 12 and 14 of this licence; and

(d) complaints received under condition 21 of this licence.

24. The books specified under condition 23 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 licence holder for the duration of the licence; and

(d) be available to be produced to an inspector or the CEO as required.

25. The licence holder must:

(a) prepare an Environmental Report that provides information in accordance with Table 11 for the preceding annual period; and

(b) submit that Environmental Report to the CEO by 31 October each year.

Table 11: Environmental reporting requirements

Condition	Requirement
Summary	• product produced; • tailings deposited; • tailings density (solid vs water content); and • volume of mine dewater discharge.
11	Record of waste type and total volumes of waste disposed in all landfill facilities.
13	Tabulated monitoring data of mine dewater discharges including the volume discharged at each discharge point.
14	Tabulated monitoring data of process volumes associated with tailings deposition and return decant water from TSF 4 and TSF5.
15	<u>WWTP monitoring</u> • volumes of treated wastewater discharged to the WWTP Sprayfield. • treated wastewater monitoring data tabulated and graphical form including the sampling date. • tabulated quarterly and annual loadings of nitrogen, phosphorus and BOD_5 applied to the WWTP Sprayfield, including an explanation of the basis for determining the loading rates. • an assessment and interpretation of the data, including comparison to historical trends.
16	<u>TSF 4 and TSF 5 groundwater monitoring</u> The results to be provided, but not limited to the following: • the dates at which monitoring was undertaken; • the raw monitoring data, for each parameter in tabulated form;

Condition	Requirement
	• cumulative time-series graphs in Microsoft Excel or similar format for each monitoring bore for standing water level in mbgl and those parameters resulting in exceedances; and • include an assessment and comparison against the ANZG 2018, baseline data and previous monitoring results.
18	Provide the following: • results of the monthly water balance monitoring in tabulated form and as cumulative time-series graphs in Microsoft Excel or similar format for each monitoring parameter; • a summary of the water balance results; and • revise and calibrate the water balance where there is a concern of seepage losses and revise the decant operations for the management of water levels.

Specified actions

Critical Containment Infrastructure and Equipment

26. The licence 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(s)

as set out in Table 12.

Table 12: Critical containment infrastructure design and construction requirements

	Infrastructure	Design and construction requirements	Infrastructure location
1.	TSF 5 general requirements	Storage area of 100 ha. Constructed to provide a minimum of 0.5 m total freeboard (including an allowance for 1% AEP 72-hour rain event) above the normal operating pond.	As shown in Schedule 1, Figure 1.
2.	TSF 5 embankment lifts Stages 2 to 7	Embankment lifts are to be constructed to the following maximum crest level heights: • Stage 2 – RL 420.5 m (7.5 m height); • Stage 3 – RL 428 m (7.5 m height); • Stage 4 – RL 433 m (5 m height); • Stage 5 – RL 437 m (4 m height); • Stage 6 – RL 441 m (4 m height); and • Stage 7 (final) – RL 445 m (4 m height). Embankment lifts are to be constructed in accordance with design specifications (i.e. embankment construction material, cross fall, and bunding), as depicted in Schedule 1, Figures 10 and 11. Rock ring decant and decant accessway must be	As shown in Schedule 1, Figures 10 and 11.

		raised in accordance with design specifications, as depicted in Schedule 1, Figure 11. Visual marker must be installed along the embankments for freeboard monitoring. Water cart must be used for dust suppression during construction activities, when required.	

27. The licence holder must within 90 calendar days of the critical containment infrastructure identified in condition 26 being constructed:

(a) undertake an audit of their compliance with the requirements of condition 26; and

(b) prepare and submit to the CEO a Critical Containment Infrastructure Report on that compliance.

28. The Critical Containment Infrastructure Report required by condition 27 must include as a minimum the following:

(a) certification by a suitably qualified geotechnical or civil engineer that each item of critical containment infrastructure or component thereof, as specified in condition 26, has been built and installed in accordance with the requirements specified in condition 26;

(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 26;

(c) photographic evidence of the installation of the infrastructure; and

(d) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

Definitions and abbreviations

In this licence, the terms in Table 13 have the meanings defined.

Table 13: Definitions and abbreviations

Term	Definition
ACN	means Australian Company Number.
AEP	means Annual Exceedance Probability.
AHD	means Australian Height Datum.
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12-month period commencing from 1 September until 31 August of the immediately following year.
ANZG 2018	means the most recent version and relevant parts of the Australian and New Zealand Governments guidelines for fresh and marine water quality (Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia). Available at www.waterquality,gov,au/anz-guidelines.
AS 1940	means *Australian Standard 1940/2004: The storage and handling of flammable and combustible liquids,* as amended from time to time.
AS 4323.1:1995	means *Australian Standard 4323.1:1995: Stationary source emissions, selection of sampling positions,* as amended from time to time.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples.*
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 *Water quality - Sampling Guidance on sampling of waste waters*.
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters.*
books	has the same meaning given to that term under the EP Act.
Category / categories	means categories of prescribed premises as set out in Schedule 1 of the *Environmental Protection Regulations 1987* (WA) (EP Regulations).
CEO	means Chief Executive Officer of the department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au

Term	Definition
Clean fill	has the meaning defined in the Landfill Definitions.
CO	means Carbon Monoxide.
cfu/100 mL	means number of colonies counted per 100 millilitres.
department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
E. coli	*Escherichia coli bacterial.*
emission	has the same meaning given to that term under the EP Act.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
ha	means hectare.
HDPE	means high density polyethylene.
Inert Waste Type 1	has the meaning defined in the Landfill Definitions.
Inert Waste Type 2	has the meaning defined in the Landfill Definitions.
kL	means kilolitre.
Landfill Definitions	means the document titled “Landfill Waste Classification and Waste Definitions 1996 (as amended 2019)” published by the Chief Executive Officer of the Department of Water and Environmental Regulation ~~(~~as amended from time to time.
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
m	means metre.
mbgl	means metres below ground level.
mg/L	means milligrams per litre.
m^3	means cubic metre.
m^3/day	means cubic meter per day.

Term	Definition
mm	means millimetre.
MW	means power output (electricity generated) in megawatts.
N/A	means Not Applicable.
NATA	means the National Association of Testing Authorities, Australia.
NATA accredited	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.
NO_x	means oxides of nitrogen, calculated as the sum of nitric oxide and nitrogen dioxide and expressed as nitrogen dioxide.
O_2	means Oxygen.
pH	means pH unit.
PM	means particulate matter.
premises	refers to 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 licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Putrescible waste	has the meaning defined in the Landfill Definitions.
RL	means Reduced Level.
significant rainfall event	a significant rainfall event is defined based on the Bureau of Meteorology website for the location of Leonora Airport. A significant rainfall event has been based on Intensity Frequency Duration (IFD), being 24 hours rainfall duration at 20% Annual Exceedance Probability (AEP). Note that a 20% AEP is equivalent to a 4.48 Annual Recurrence Internal (ARI).
SO_2	means Sulphur Dioxide.
Suitably qualified hydrogeologist	means a person who: a) holds a qualification in hydrogeology, geology, engineering or equivalent from a recognised educational institution; and b) has a minimum of three years of experience working in the field of hydrogeology.
Suitably qualified geotechnical or civil engineer	means a person who: a) holds a relevant tertiary academic qualification related to geotechnical or civil engineering; and b) has a minimum of three years of experience working in the field of geotechnical and or civil engineering.
six monthly	means the 2 inclusive periods from 1 April to 30 September and 1 October to 31 March in the following year.

Term	Definition
SP	means standpipe piezometer.
TSF	means Tailings Storage Facility.
Uncontaminated fill	has the meaning defined in the Landfill Definitions.
µS/cm	means microsiemens per centimetre.
VWP	means vibrating wire piezometer.
waste	has the same meaning given to that term under the EP Act.
waste type	means waste types identified in the Landfill Definitions, or in Schedule 1 of the Controlled Waste Regulations (as applicable).
WRD	means Waste Rock Dump.
WRL	means Waste Rock Landform.
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).

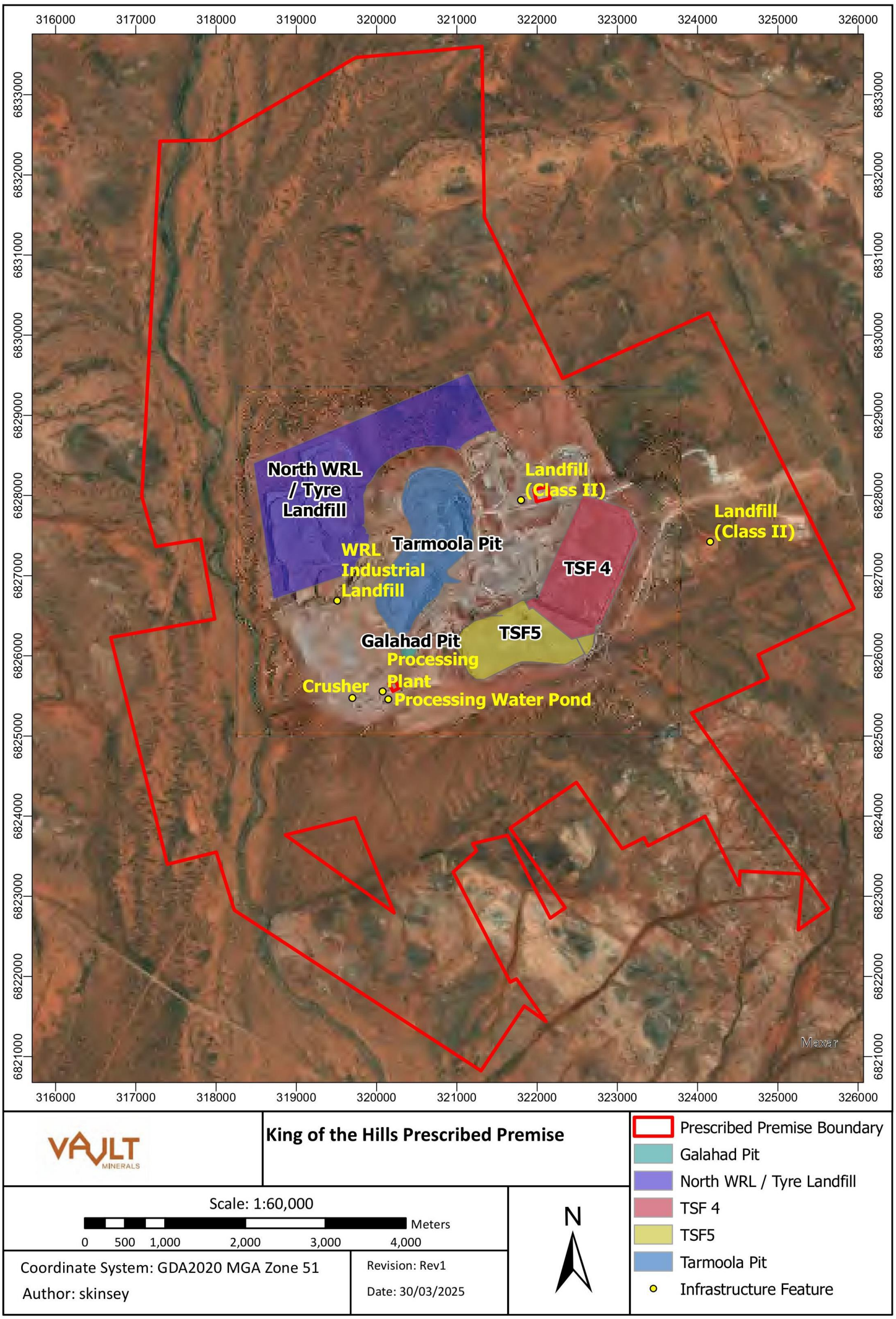

Figure 1: Map of the boundary of the prescribed premises and site layout of the main infrastructure

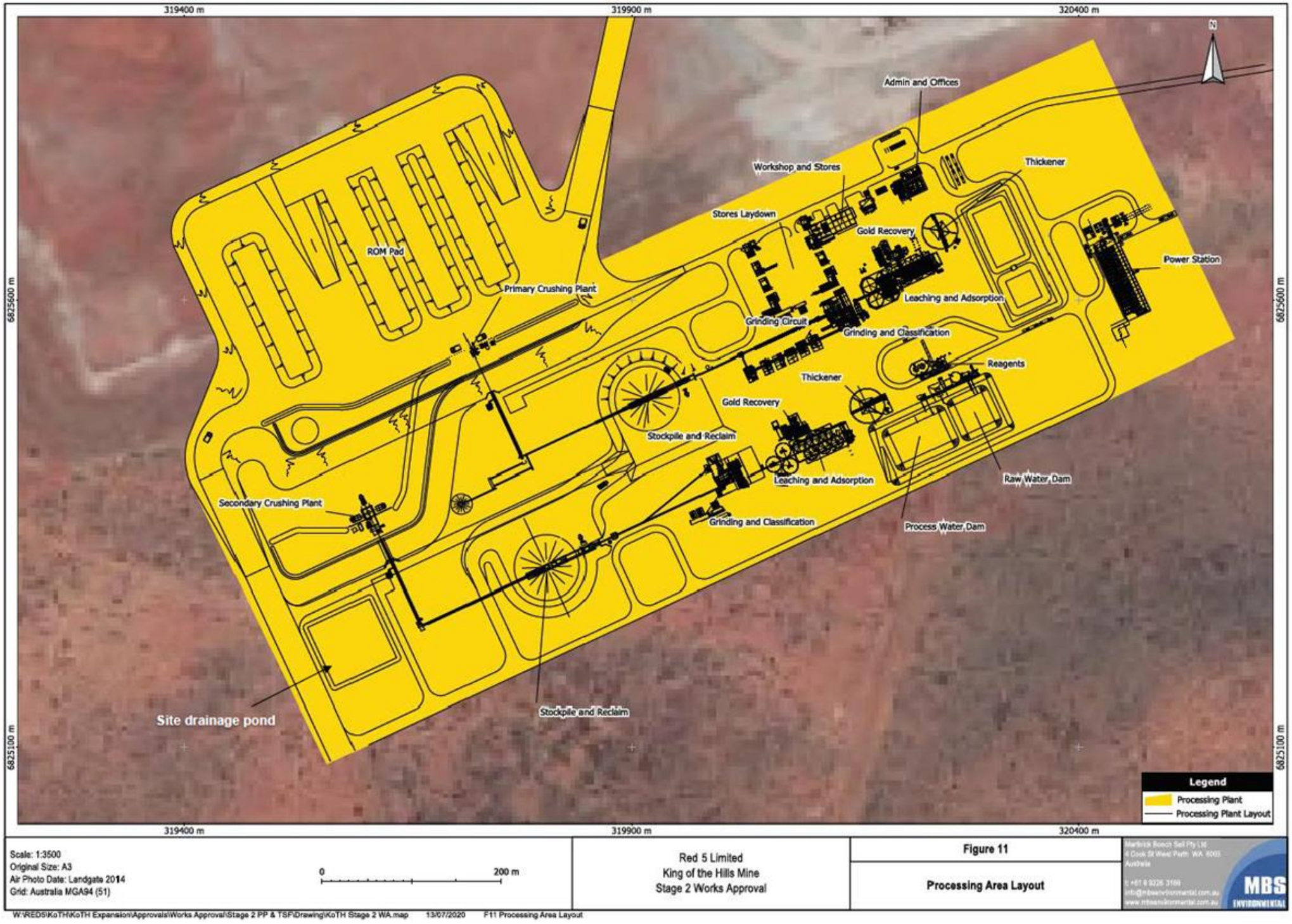

Figure 2: Processing area stormwater management infrastructure including bunding, diversion drains and 2 sediment control ponds.

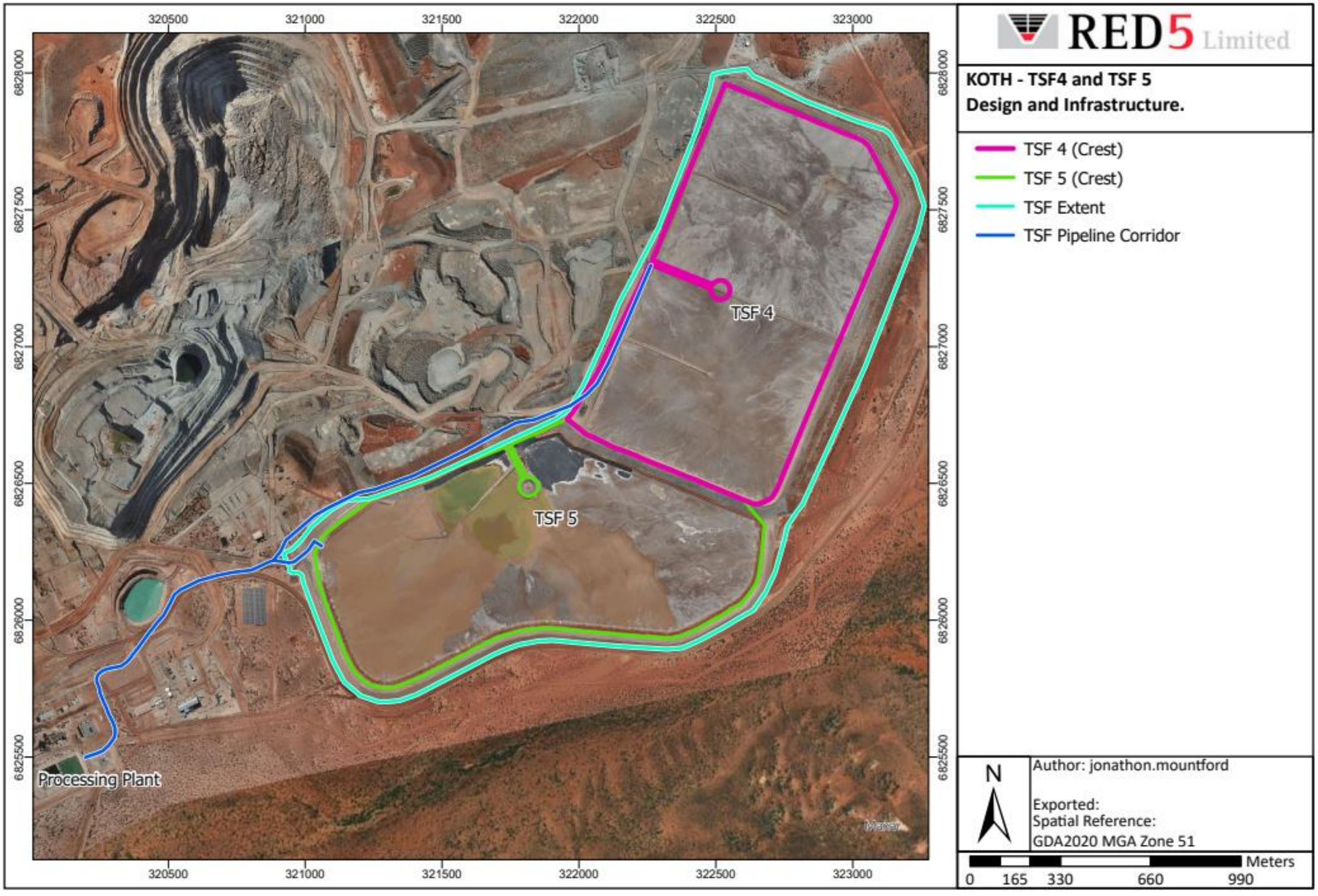

Figure 3: Tailings pipeline

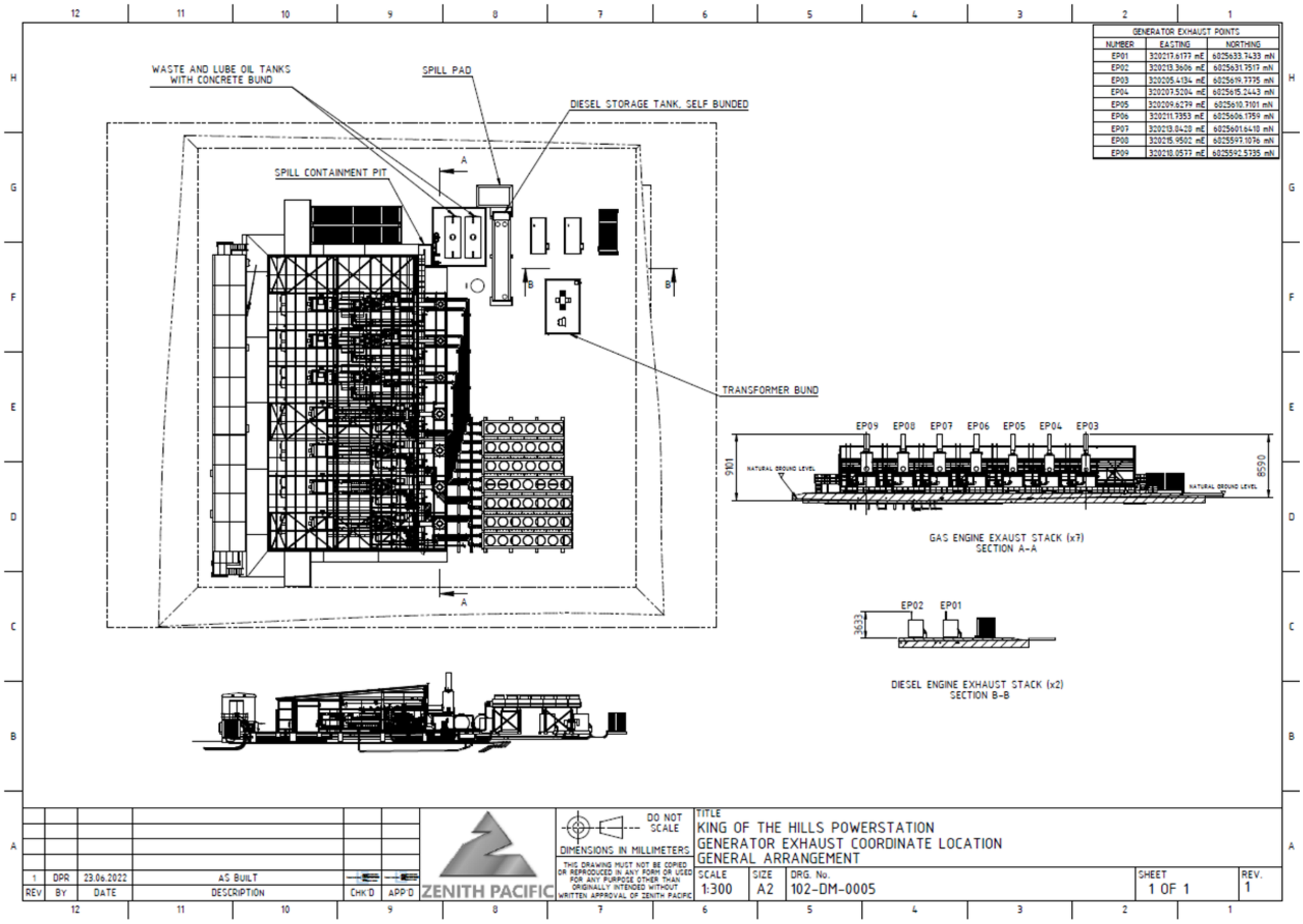

Figure 4: Power station generators layout

Emission and discharge points

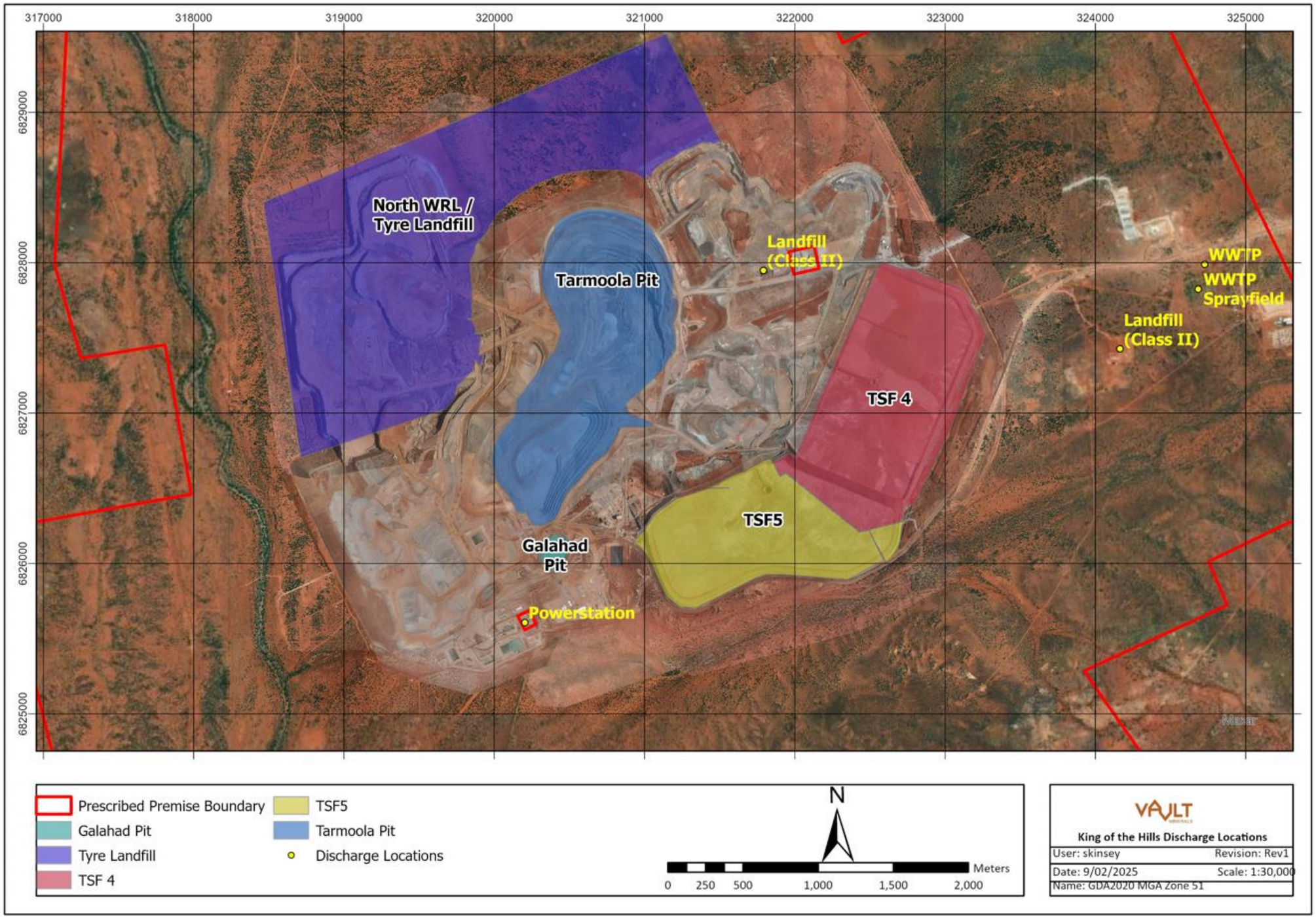

Figure 5: Authorised discharge points

Figure 6: Dewatering pipelines

Monitoring locations

Figure 7: Location of groundwater monitoring bores

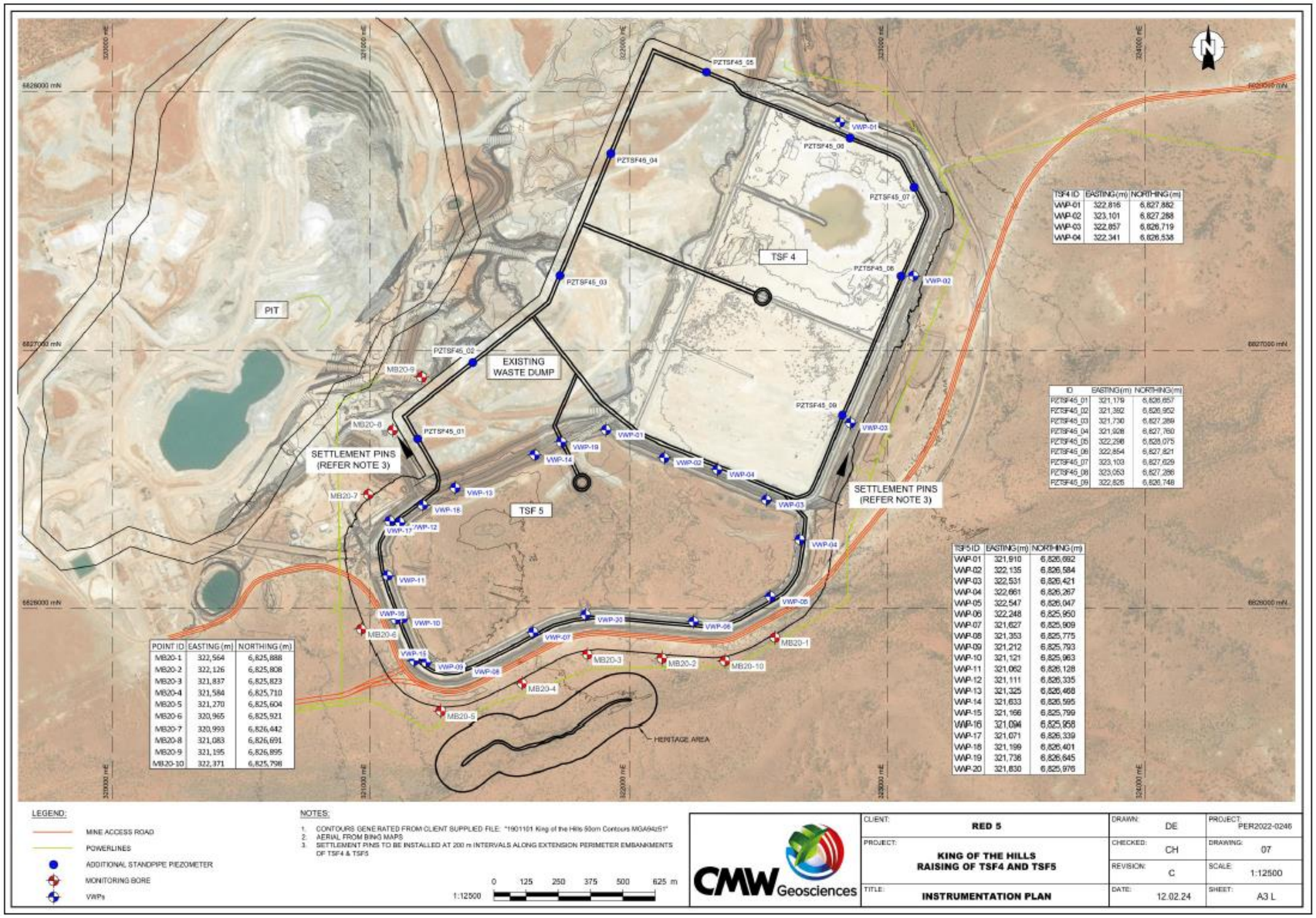

Figure 8: Location of Vibrating Wire Piezometers and Standpipe Piezometers

TSF 5 construction drawings

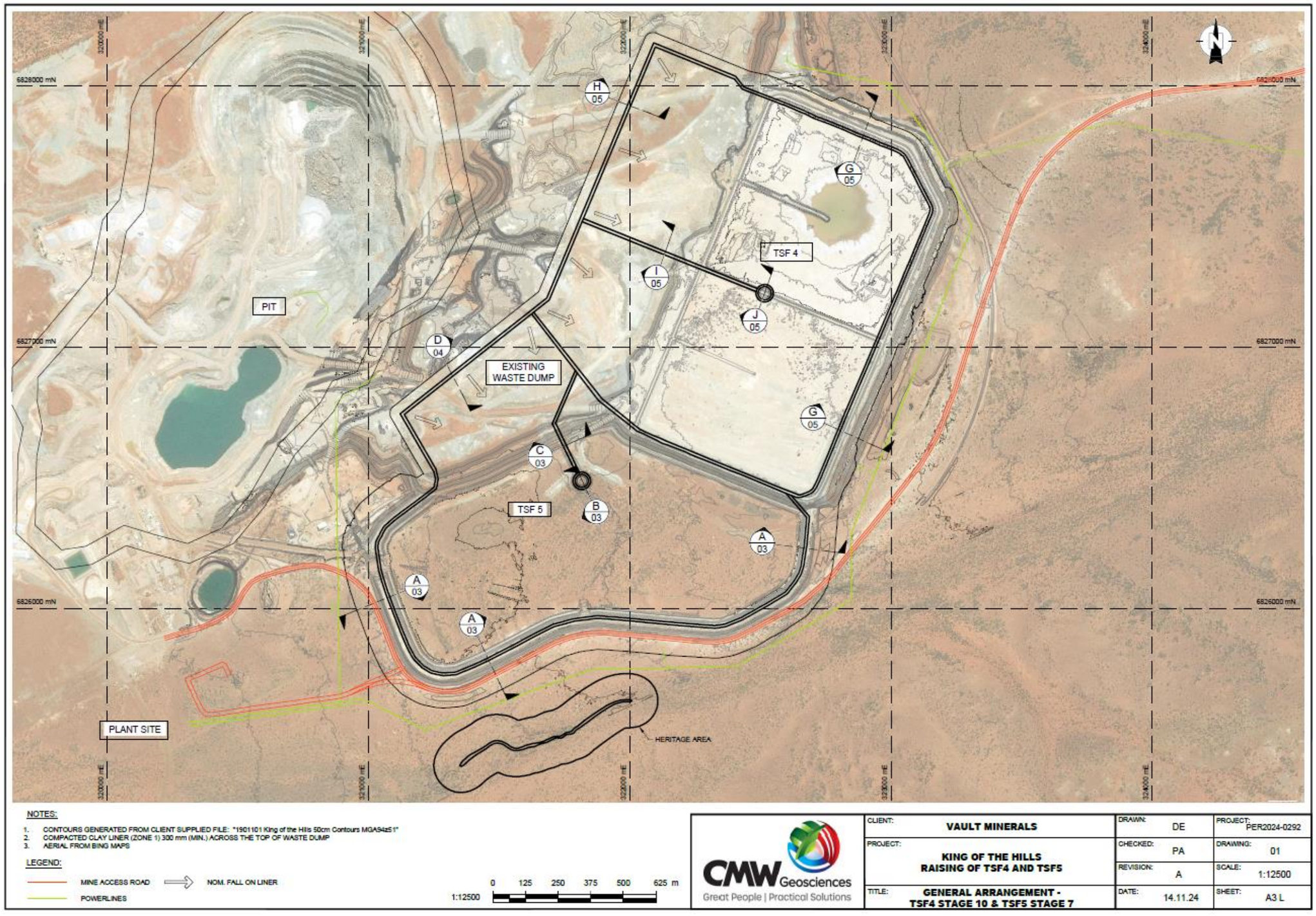

Figure 9: General arrangement – TSF 4 Stage 10 and TSF 5 Stage 7

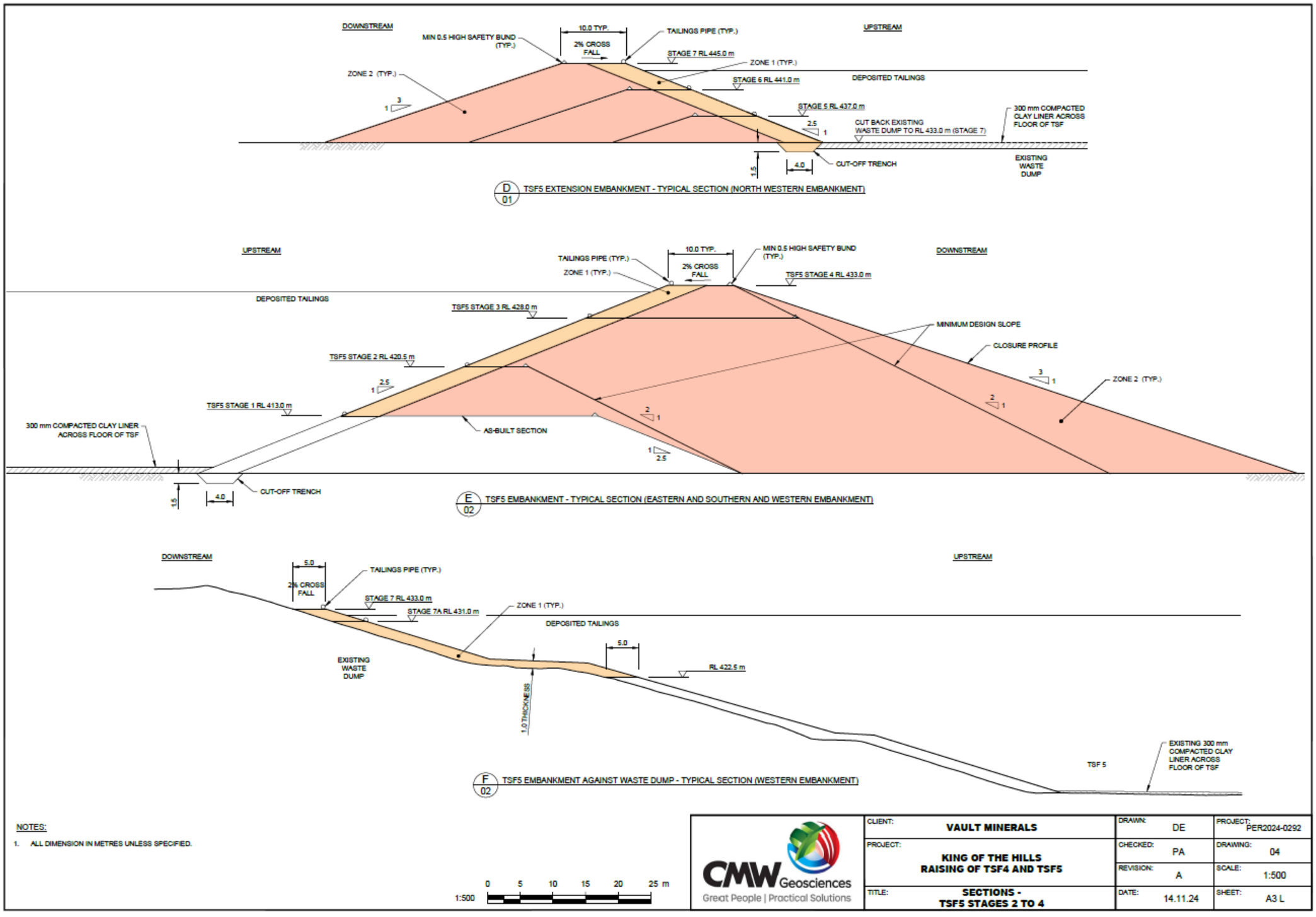

Figure 10: Sections – TSF 5 Stages 2 to 4

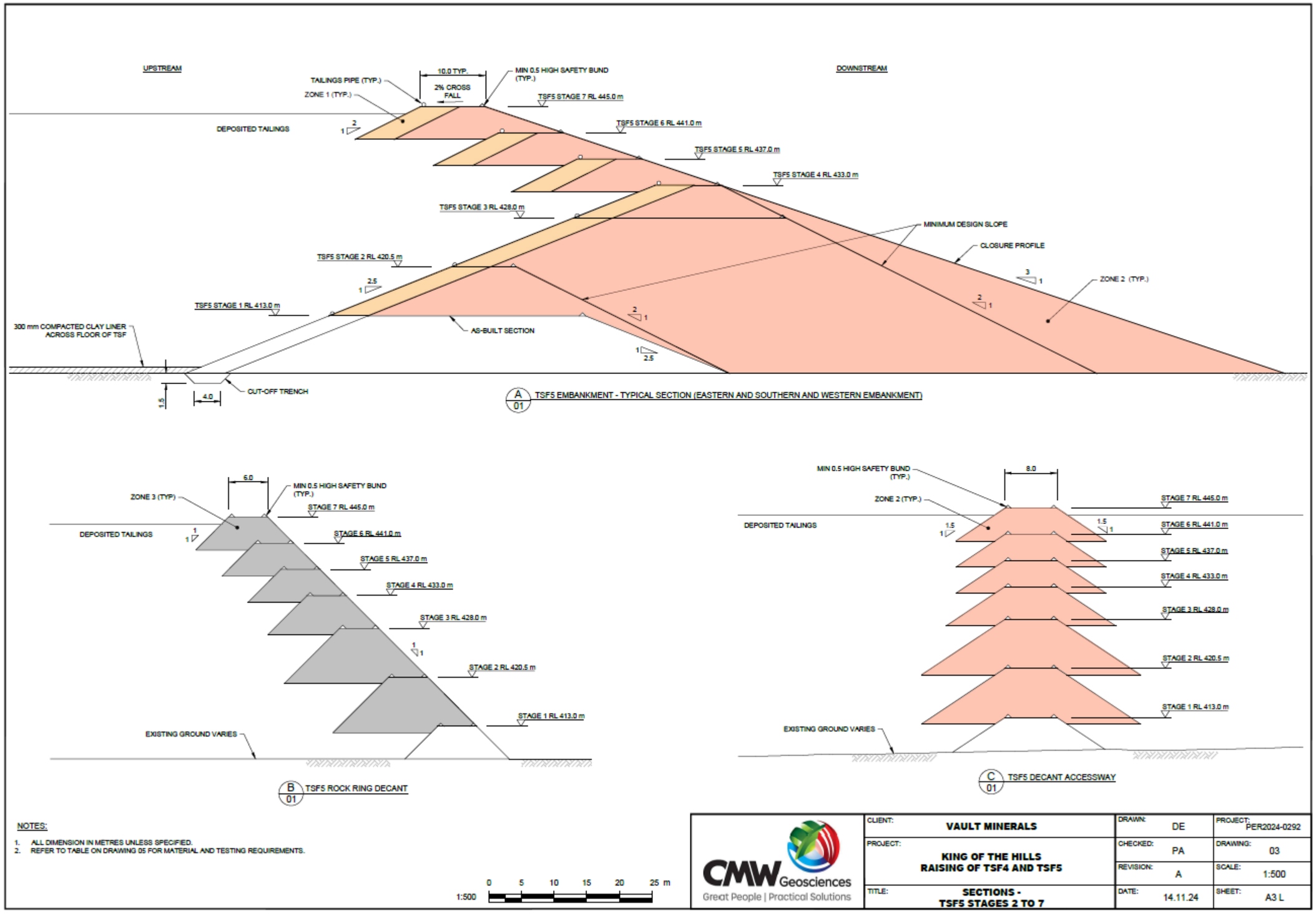

Figure 11: Sections – TSF 5 Stages 2 to 7

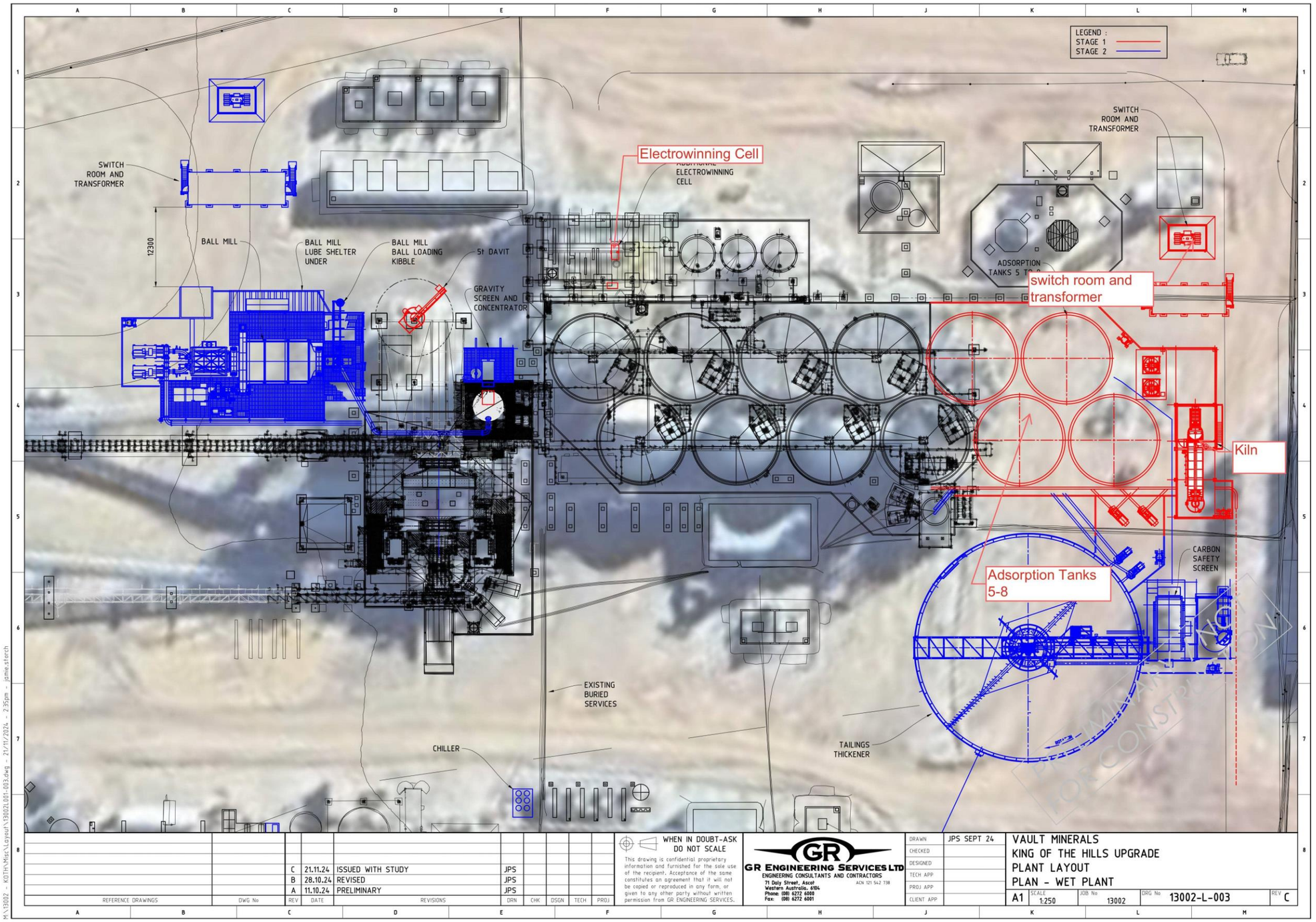

Figure 12: Wet plant upgrade (stage 1 in red, stage 2 in blue)

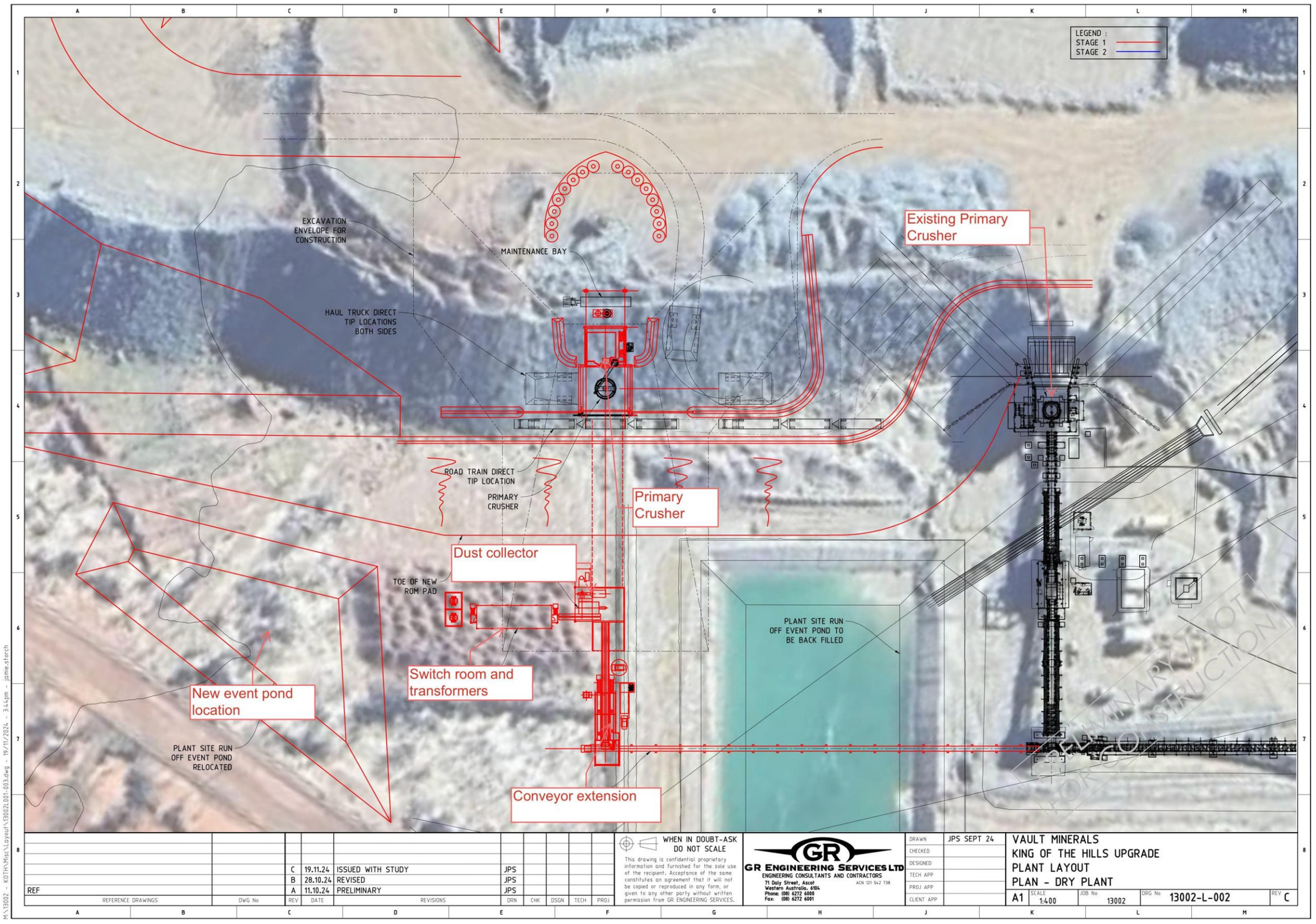

Figure 13: Stormwater pond and crusher relocation