



Licence number	L5206/1987/10
Licence holder	Wiluna Operations Pty Ltd
ACN	166 954 525
Registered business address	Level 3 / 1 Altona Street WEST PERTH WA 6005
DWER file number	2012/006906-1
Licence Duration	21/11/2013 to 30/06/2040
Date of amendment	18 November 2021
Premises details	Wiluna Mine Site WILUNA WA 6646

Being Mining tenements M53/30, M53/32, M53/468, L53/62, L53/20, M53/64, G53/18 and G53/19 part tenements M53/40, M53/44, M53/50, M53/26, M53/6, M53/95, M53/96, M53/200, M53/69, M53/24 L53/50 and L53/77 as defined by the coordinates in Schedule 4.

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: premises on which — a) metallic or non-metallic ore is crushed, ground, milled or otherwise processed; or b) tailings from metallic or non-metallic ore are reprocessed; or c) tailings or residue from metallic or non-metallic ore are discharged into a containment cell or dam.	2,200,000 tonnes per annual period
Category 6: Mine dewatering: premises on which water is extracted and discharged into the environment to allow mining of ore.	2,365,000 tonnes per annual period
Category 57: Used tyre storage (general)	300 tyres
Category 63: Class I inert landfill site: premises (other than clean fill premises) on which waste of a type permitted for disposal for this category of prescribed premises, in accordance with the Landfill Waste Classification and Waste Definitions 1996, is accepted for burial.	2,000 tonnes or more per annual period
Category 64: Class II or III putrescible landfill site: premises (other than clean fill premises) on which waste of a type permitted for disposal for this	1,500 tonnes or more per annual period

category of prescribed premises, in accordance with the <i>Landfill Waste Classification and Waste Definitions 1996</i> , is accepted for burial.	
Category 85: Sewage facility: premises — a) on which sewage is treated (excluding septic tanks); or b) from which treated sewage is discharged onto land or into waters.	78 m ³ per day

This licence amendment is granted to the licence holder, subject to the attached conditions, on 18 November 2021, by:

Christine Pustkuchen

A/SENIOR OFFICER, RESOURCE INDUSTRIES

REGULATORY SERVICES

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

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Introduction

This Introduction is not part of the Licence conditions.

DWER's industry licensing role

The Department of Water and Environmental Regulation (DWER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DWER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DWER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DWER works with the business owners, community, consultants, industry and other representatives to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DWER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licence Holder the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: <http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.

- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.

Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

The Wiluna Gold Mine operation is owned by Wiluna Operations Pty Ltd (Wiluna Operations; formerly Matilda Operations Pty Ltd)), a wholly owned entity of Wiluna Mining Corporation (formerly Blackham Resources Ltd) which acquired the Premises from Apex Gold Pty Ltd (Apex) a wholly owned subsidiary of Apex Minerals NL (AXM) on 21 March 2014. The name change from Blackham Resources Ltd to Wiluna Mining Corporation was effective from 18 June 2020, and from Matilda Operations to Wiluna Operations from 10 July 2020.

The operation is located approximately 1,000km north east of Perth, 5km south east of the town of Wiluna and comprises mining leases and miscellaneous licences covering approximately 50 square kilometres (km²) (schedule 1). Modern operations of the Wiluna Gold Mine commenced in 1984, however prior to its sale to Matilda Operations it had been in care and maintenance (commenced 25 June 2013).

Wiluna Operations holds registration R2015/2008/1 for the operation of the site landfill facility. Under Schedule 1, Part 2, category 89 of the *Environmental Protection (Rural Landfill) Regulations 1987* the landfill is classified as a Class II (Putrescible) landfill.

Wiluna Operations holds a licence, issued under the *Rights in Water Irrigation Act (1914)* to dewater for mining purposes (GWL 159247(3)). There are three sources of mine water discharged to Lake Way. These sources are Bulletin underground operations, East pit underground operations and Happy Jack pit. Mine water is pumped to Wiluna Operations evaporation and settlement pond and subsequently discharged to the lake. Bulletin mine water is first staged in Lone Hand pit to further assist in settlement of suspended solids. The mine water collected in the evaporation pond is discharged via an established 10 kilometre pipeline feeding into one of the major tributaries to Lake Way, West Creek. This water enters the lake via an energy dispersion channel lined with imported competent rock to reduce the effects of erosion.

This licence also covers the following prescribed activities on the premises:

- crushing plant;
- Tailings Storage Facilities (TSFs):
 - Tailings B (formerly Calcine Dam 507mRL – decommissioned 1985, used periodically as a pond for storage and evaporation of excess process water; now redundant as a result of June 2016 amendment for TSF Cell J);
 - Tailings C (decommissioned);
 - Western Cell to RL 521m (decommissioned);
 - Redundant BIOX Dam:
 - Tailings E and Tailings F (have been joined to create one dam and recommissioned in 2011, now redundant as a result of June 2016 amendment for TSF Cell J);
 - Tailings G (decommissioned - now redundant as a result of June 2016 amendment for TSF Cell J);
 - Tailings H 516m Australian Height Datum (AHD) – two 2.5m lift approved to 521m AHD;
 - Tailings Dam:
 - TSF K
 - In-pit tailings:
 - Golden Age pit (full – receives decant water for evaporation);
 - Republic Pit South (full – no longer in use);
 - Republic North (active landfill, very small pit, will no longer be used for the disposal of tailings);
 - Lawless pit (full –now redundant as a result of June 2016 amendment for TSF Cell J);
 - Moonlight pit (full – receives decant water for evaporation);
 - Squib pit (full – receives decant water for evaporation);
 - Essex pit (has a seepage issue – currently is not in use);
 - Adelaide pit (currently not in use);
 - Gunbarrel North pit (currently in use);
 - Gunbarrel South pit (currently in use).
- Lake Way pipeline;
- evaporation pond;
- heap leach operation;
- bacterial leaching plant;
- Carbon in Pulp (CIP)/Carbon in Leach (CIL) Gold Extraction Plant; and
- Lake Way discharge.

The Licence covers the discharge of water from the Wiluna Gold Mine dewatering program via a settling pond, abandoned pits and a ‘turkey’s nest’ to Lake Way via the Lake Way pipeline and West Creek.

The licences and works approvals issued for the Premises since 22 November 2004 are:

Instrument log		
Instrument	Issued	Description
L5206/1987/8	22/11/2004	Licence amendment
W4081	23/4/2008	Works approval for the construction of a tailings storage facility.
W4575/2009/1	12/11/2009	Works approval to establish four in pit TSF’s and one pit to hold decant liquor from the tailings.
L5206/1987/9	15/4/2010	Amendment for the addition an in-pit TSF, Essex pit.
L5206/1987/9	6/5/2010	Licence amendment
L5206/1987/9	6/8/2010	Amendment for the addition an in-pit TSF, Adelaide pit
L5206/1987/9	25/11/2011	Licence amendment
L5206/1987/9	2012	Licence amendment, authorisation of Gunbarrel North and South pits as in-pit TSFs and Lone Hand Pit hold decant liquor from the tailings.

L5206/1987/9	19/12/2012	Licence amendment. Removal of Williamson pit
L5206/1987/10	21/11/2013	Licence reissue and amendment to REFIRE format
L5206/1987/10	28/8/2014	Licence amendment. Update to Improvement Program and transfer of occupier to Matilda Operations Pty Ltd.
L5206/1987/10	10/6/2016	<p>Licence amendment to authorise the construction of TSF Cell J. Associated modification to groundwater monitoring program to add new bores and parameters for TSF Cell J and remove redundant bores. Increase to category 5 production capacity to 1,800,000 tonnes per annum. Plant upgrades associated to the category 5 increase including</p> <ul style="list-style-type: none"> • replacement of crusher primary screen • fine ore bin, • new gravity circuit; • replacement of new crusher MCC oxygen delivery systems upgrade; • replacement of new carbon regeneration kiln; • minor upgrade of process control and instrumentation systems; and • new leach tank and associated equipment. <p>Authorise tyres disposal by burial in Essex Pit. Previous improvement program closed out and removed from Licence. Addition of new improvement conditions for dust management, ecological assessment of dewatering impacts and checking of sampling ports for off gas stacks.</p>
L5206/1987/10	22/9/2016	Amendment Notice 1: Licence amendment to extend the submission date for IR1 of condition 4.1.1 by one month. Correction made to wording of IR2 of condition 4.1.1.
L5206/1987/10	24/5/2018	<p>Amendment Notice 2:</p> <ul style="list-style-type: none"> • Construction of the stage 2 lift for Tailings Storage Facility (TSF) J; • Increase the production throughput of ore processed to 1.95Mtpa; • Amendment to Licence Condition 3.4.3; and • Change of premises name from Matilda Operation to the Wiluna Mine Site.
W6248/2019/1	05/09/2019	Works Approval for TSF K, stage 1
L5206/1987/10	1/10/2019	Amendment Notice 3: Extension of licence expiry date
L5206/1987/10	5/6/2020	<p>Amendment to authorise</p> <ul style="list-style-type: none"> • Extension of licence expiry date; and • Storage and disposal of used tyres. <p>To amalgamate/consolidate separately issued amendment notices into the Licence.</p>
W6371/2020/1	23/7/2020	Works Approval for Sulphide Processing Plant
L5206/1987/10	06/08/2020	<p>Amendment to authorise</p> <ul style="list-style-type: none"> • Operation of TSF K stage 1; • Increase in category 5 throughput to 2,200,000 tonnes per annual period; • Amend premises boundary; and • Update Licence Holder and parent company names
L5206/1987/10	19/05/2021	<p>Amendment to;</p> <ul style="list-style-type: none"> • add category 64 to licence; • increase approved throughput for category 63; • update list of monitoring bores on site; and • increase approved throughput for sewage treatment plant.
L5206/1987/10	18/11/2021	Amendment to authorise the construction and operation of the Stage 2 embankment raise to TSF K.

Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION

Licence conditions

1 General

1.1 Interpretation

1.1.1 In the Licence, definitions from the Environmental Protection Act 1986 apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

‘Act’ means the *Environmental Protection Act 1986*;

‘AHD’ means the Australian height datum;

‘annual period’ means the inclusive period from 1 January until 31 December in the same year;

‘AS 4323.1’ means the Australian Standard AS4323.1 *Stationary Source Emissions Method 1: Selection of sampling positions*;

‘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 5667.4’ means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made*;

‘AS/NZS 5667.11’ means the Australian Standard AS/NZS 5667.11 *Water Quality – Sampling – Guidance on sampling of groundwaters*;

‘AS/NZS 5667.12’ means the Australian Standard AS/NZS 5667.12 *Water Quality – Sampling – Guidance on sampling of bottom sediments*;

‘averaging period’ means the time over which a limit or target is measured or a monitoring result is obtained;

‘BIOX’ means BIOX® treatment plant;

‘bund or bunding’ means an impervious structure surrounding an area ensuring containment of all materials within and has a hydraulic conductivity of less than 1×10^{-9} metres (m/s) per second;

‘CEO’ means Chief Executive Officer of the Department of Water and Environmental Regulation;

‘CEO’ for the purpose of correspondence means:

Director General
Department Administering the Environmental Protection Act 1986
Locked Bag 10
JOONDALUP DC WA 6027
Email: info@dwer.wa.gov.au

‘freeboard’ means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point;

‘Landfill definitions’ means the document titled “Landfill Waste Classification and Waste Definitions 1996” published by the Chief Executive Officer of the Department of Water and Environmental Regulation as amended from time to time.

‘Licence’ means this Licence numbered L5206/1987/10 and issued under the Act;

‘Licence Holder’ means the person or organisation named as Licence Holder on page 1 of the Licence;

‘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;

‘Premises’ means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

‘Putrescible waste’ has the same meaning given to that term in the Landfill Definitions.

‘quarterly’ means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 31 September and 1 October to 31 December in the same year;

‘Schedule 1’ means Schedule 1 of this Licence unless otherwise stated;

‘Schedule 2’ means Schedule 2 of this Licence unless otherwise stated;

‘Schedule 3’ means Schedule 3 of this Licence unless otherwise stated;

‘Schedule 4’ means Schedule 4 of this Licence unless otherwise stated;

‘six monthly’ means the 2 inclusive periods from 1 January to 30 June and 1 July to 31 December in the same year; and

‘spot sample’ means a discrete sample representative at the time and place at which the sample is taken.

1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.

1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.

1.2 Premises operation

1.2.1 The Licence Holder shall ensure that where wastes produced on the premises are processed on site they are only subjected to the processes in Table 1.2.1 and in accordance with the process limits in that table.

Table 1.2.1: Management of waste		
Waste Type	Process	Requirements
BIOX liquors	Discharge to tailings storage facility	Neutralisation
Sewage	Biological, physical and chemical treatment via sewage treatment facility	No more than 78 m ³ /day

	located as per Figure 3, Schedule 1.	
Tyres ¹	Disposal by burial in Essex Pit	Disposed in batches separated from each other by at least 100mm of soil/inert waste and each batch consisting not more than 1000 tyres.
Tyres ¹ , mill liners and poly pipes	Disposal by burial in Waste Rock Dumps specified in Figure 7, Schedule 1.	<ul style="list-style-type: none"> Disposed in batches of less than 100 tyres and mill liners in total Each batch separated by at least 100 mm of soil. Location of batches to be surveyed and the GPS coordinates recorded and marked on the site map. Final cover layer for disposed tyres will be at least 500mm in depth. Unburied tyres to be orientated or located so they cannot roll. <p>In the event of a tyre/mill liner/poly pipes fire, firefighting water is to be contained within disturbed areas within the Prescribed Premises.</p>
Tyres ¹ , mill liners and poly pipes	Disposal by burial in Waste Rock Dumps specified in Figure 7, Schedule 1.	<ul style="list-style-type: none"> Disposed in batches of less than 100 tyres and mill liners in total Each batch separated by at least 100 mm of soil. Location of batches to be surveyed and the GPS coordinates recorded and marked on the site map. Final cover layer for disposed tyres will be at least 500mm in depth. Unburied tyres to be orientated or located so they cannot roll. In the event of a tyre/mill liner/poly pipes fire, firefighting water is to be contained within disturbed areas within the Prescribed Premises.
Putrescible waste	Disposal by burial in sites Class II landfill specified in Figure 3, Schedule 1.	<ul style="list-style-type: none"> Disposal of waste by landfilling shall only take place within the Landfill Area shown in Figure X, Schedule 1. No waste shall be temporarily stored or landfilled within 35 metres from the boundary of the premises. Waste to be covered at least weekly with approximately 300mm of Type 1 inert waste or clean fill material to ensure that no waste is exposed. Waste to be covered entirely with cover material at the end of life of the landfill facility. Boundary fencing shall be maintained around the landfill facility to contain windblown waste. Clean surface water shall be diverted around putrescible waste landfill facility. <p>Potentially contaminated waters are retained onsite via bunds or surface diversions.</p>

Note 1: Additional requirements for final cover of tyres are set out in Part 6 of the *Environmental Protection Regulations 1987*.

1.2.2 The Licence Holder shall ensure that material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.2.2.

Table 1.2.2: Containment infrastructure			
Containment point reference as depicted in Figures 2, 3 and 4, Schedule 1	Storage vessel or compound	Material	Requirements
C1A	Adelaide Pit	Tailings	In pit TSF. No further tailings discharge to Adelaide Pit is authorised.
C1GBN	Gunbarrel North Pit		In-pit TSF
C1GBS	Gunbarrel South Pit		In-pit TSF

C2SQ	Squib Pit	Tailings Decant Water	In-pit TSF
C2GA	Golden Age Pit		In-pit TSF
C2ML	Moonlight Pit		In-pit TSF
C2D	Decant Water Pond		HDPE lined, engineered dam
C2H	TSF H		Surface TSF, compacted clayed mine waste starter embankment, compacted tailings up-stream lifts.
C3EP	Evaporation Pond	Mine dewater	HDPE lined, engineered embankment walls
C3LH	Lone Hand Pit	-	Mined out open pit.
-	Sewage Treatment Ponds	Sewage	6 x un-lined ponds 1 x un-lined emergency overflow pond
-	Bioremediation treatment cells (within the Happy Jack Waste Rock Dump)	Hydrocarbon contaminated soil	Clay lined (or equivalent) with a permeability of 10-9 m/s or less. All leachate runoff is directed to, and contained within, an impermeable leachate collection sump with capacity to contain and 1 in 100 year, 72 hour duration rainfall event. The leachate collection sump is lined.
TSF K	TSF K	Tailings	Surface TSF, compacted clayey mine waste embankment construction. Minimum 500mm total freeboard (operational + beach) at all times

1.2.3 The Licence Holder shall manage all containment infrastructure in Table 1.2.2 such that a minimum top of embankment freeboard of 300mm or a 1 in 100 year/72 hour storm event (whichever is greater) is maintained.

1.2.4 The Licence Holder shall manage all sewage treatment ponds such that:

- overtopping of the ponds does not occur; and
- freeboard equal to, or greater than, 300mm is maintained; and
- the integrity of the containment infrastructure is maintained; and
- for sewage storages trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter; and
- for sewage storages vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.

1.2.5 The Licence Holder shall ensure that all pipelines containing alkaline water, saline water, cyanide, process liquors, and/or tailings are either:

- equipped with telemetry systems and pressure sensors along pipelines to allow the detection of leaks and failures; or
- equipped with automatic cut-outs in the event of a pipe failure; and/or

- (c) provided with secondary containment sufficient to contain any spill for a period equal to the time between inspections.

1.2.6 The Licence Holder shall:

- (a) undertake inspections as detailed in Table 1.2.3;
- (b) where any inspection identifies that an appropriate level of environmental protection is not being maintained, take corrective action to mitigate adverse environmental consequences; and
- (c) maintain a record of all inspections undertaken.

Table 1.2.3: Inspection of infrastructure		
Scope of inspection	Type of inspection	Frequency of inspection ¹
Mine dewater pipelines	Visual integrity	Daily when operating or weekly when not operating.
Tailings delivery pipelines	Visual integrity	
Tailings return water lines	Visual integrity	
Tailings deposition	Visual assessment of beaching	
Decant Pond	Visual assessment of pond, size and location Any evidence of wildlife visitation noted	
Internal embankment freeboard of any active TSF	Visual to confirm required freeboard capacity is available	
Sewage treatment ponds	Visual assessment to confirm integrity of ponds and if required freeboard capacity is available.	Daily when operating
Sewage delivery pipelines	Visual integrity	
Landfill facility	Visual inspection of waste coverage	

1.2.7 The Licence Holder must construct the infrastructure listed in Table 1.2.4, in accordance with;

- (a) the corresponding design and construction requirement; and
- (b) at the corresponding infrastructure location;
- as set out in Table 1.2.4.

Table 1.2.4: Design and Construction requirements			
	Infrastructure	Design and construction requirement requirements	Infrastructure location/Drawing reference
1	Tailings Storage Facility (TSF) K (Stage 2) embankment raise	<ul style="list-style-type: none"> Construction of a 6 m high centreline raise to a maximum crest height of 518.5m RL including: <ul style="list-style-type: none"> - crest width of 8m; - upstream slope of 1V:2H; - downstream slope of 1V:2.5H; -existing decant access ramp raised by 6 m to 518.5m RL with a batter slope of 2H:1V. Embankment to be constructed using tailings and mine waste rock materials; Low permeability fill to have a hydraulic conductivity of 1×10^{-8} m/s or less and be 5m wide on the upstream slope of the embankment; 	TSF K embankment raise design as shown in Figures 8, 9, 10 and 11 of Schedule 2.

		<ul style="list-style-type: none"> Stormwater diversion drain to be constructed downstream of the embankment on the northern flank of TSF K in the location specified in Figure 11, Schedule 3; and Piezometers installed during Stage 1 embankment raise to be extended to Stage 2 crest level. 	
2	TSF J (Stage 2) embankment raise	<ul style="list-style-type: none"> Construct the Stage 2 Cell J embankment raise to RL 511.5m in accordance with the following documentation: <ul style="list-style-type: none"> - Knight Piesold Matilda Gold Project Tailings Storage Facility 'J' – Drawing - Stage 2 raise options – Sections A and G¹, dated 21 December 2017; - Knight Piesold Matilda Gold Project Tailings Storage Facility 'J' Final Design Rev.0 G.1 Seepage Assessment¹, dated 21 December 2017; and - Knight Piesold – Civil Works Matilda Gold Project TSF J Stage 2 Construction (Rev A)¹, dated 16 November 2016. 	N/A

Note 1: Where the details and commitments of the documents listed in condition 1.2.7 are inconsistent with any other condition of this Licence, the conditions of this Licence shall prevail.

1.2.8 The works approval holder must within 30 calendar days of an item of infrastructure required by condition 1.2.7 being constructed and/or installed:

- undertake an audit of their compliance with the requirements of condition 1.2.7; and
- prepare and submit to the CEO an Environmental Compliance Report on that compliance.

1.2.9 The Environmental Compliance Report required by condition 1.2.8, must include as a minimum the following:

- certification by a suitably qualified geotechnical engineer that the items of infrastructure or component(s) thereof, as specified in condition 1.2.7, have been constructed in accordance with the relevant requirements specified in condition 1.2.7;
- as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1.2.7; and
- be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

1.2.10 For each operational TSF the Licence Holder shall complete a monthly water balance. The water balance shall as a minimum consider the following:

- site rainfall;
- evaporation;
- decant water recovery volumes;
- seepage recovery volumes;
- volumes of tailings deposited;

to derive an estimate of seepage losses.

1.2.11 The Licence Holder shall install and operate a flow metering device to the underdrainage system outflow pipe of TSF J to record the volumes of seepage recovered.

1.2.12 The Licence Holder shall undertake the monitoring in Table 1.2.5 according to the specifications in that table.

Table 1.2.5: Monitoring of inputs and outputs					
Input/Output	Monitoring point reference	Parameter	Units	Averaging period	Frequency
Underdrainage - outflow pipe (TSF J)	Flow meter (M1)	Volumetric flow rate (cumulative)	L/day	Monthly	Continuous

1.2.13 The Licence Holder shall submit the data collected through condition 1.2.12 as part of the monthly water balance calculations required by condition 1.2.10.

1.2.14 The Licence Holder shall store used tyres on the premises in the locations as indicated on the Figure 7 (map of used tyre storage and disposal locations) in Schedule 1 of this Licence, in accordance with the following:

- (a) Total tyres stored on the Premises shall not exceed 300;
- (b) Tyre storage shall be at least 100m from hydrocarbon storage areas.
- (c) Storage area will be devoid of flammable materials.
- (d) Used tyre stacks shall not exceed 100 m² in area or 3 metres in height;
- (e) Used tyres must be stacked on their side walls or if stored on their treads, area baled with a securing device made from a non-combustible material;
- (f) The Licence Holder ensure that firefighting equipment stored onsite is capable of controlling and extinguishing a tyre fire;
- (g) The storage area must be hardstand (earthen or concrete) and bunded to prevent runoff of fire water to surrounding land; and
- (h) Following the extinguishing of a fire, the Licence Holder ensure that fire water is removed from the Premises by a carrier licensed under the *Environmental Protection (Controlled Waste) Regulations 2004*.

2 Emissions

2.1 General

2.1.1 The Licence Holder shall record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of this Licence.

2.2 Point source emissions to air

2.2.1 The Licence Holder shall ensure that where waste is emitted to air from the emission points in Table 2.2.1 it is done so in accordance with the conditions of this Licence.

Table 2.2.1: Emission points to air			
Emission point reference	Emission Point	Emission point height (m)	Source, including any abatement
Carbon Regen Kiln	Carbon regeneration kiln stack	23	Carbon regeneration kiln

Table 2.2.1: Emission points to air

Emission point reference	Emission Point	Emission point height (m)	Source, including any abatement
Gold room	Gold furnace stack	17	Gold furnace

2.3 Point source emissions to surface water

2.3.1 The Licence Holder shall ensure that where waste is emitted to surface water from the emission points in Table 2.3.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.3.1: Emission points to surface water

Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement
Lake Discharge	Lake Way Discharge sample point	Discharge into Lake Way via the Lake Discharge pipeline	Mine dewatering effluent via settling pond/s

2.3.2 The Licence Holder shall not cause or allow point source emissions to surface water greater than the limits listed in Table 2.3.2.

Table 2.3.2: Point source emission limits to surface water

Emission point reference	Parameter	Limit (including units)	Averaging period
Lake Discharge	Total suspended solids	80 mg/L	Monthly

3 Monitoring

3.1 General monitoring

3.1.1 The Licence Holder shall ensure that:

- all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
- all surface water sampling is conducted in accordance with AS/NZS 5667.4, AS/NZS 5667.6 or AS/NZS 5667.9 as relevant;
- all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
- all sediment sampling is conducted in accordance with AS/NZS 5667.12; and
- all laboratory samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured (unless indicated otherwise in relevant table).

3.1.2 The Licence Holder shall ensure that:

- monthly monitoring is undertaken at least 15 days apart;
- quarterly monitoring is undertaken at least 45 days apart;
- six monthly monitoring is undertaken at least five months apart; and
- annual monitoring is undertaken at least nine months apart.

- 3.1.3 The Licence Holder shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.
- 3.1.4 The Licence Holder shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

3.2 Monitoring of point source emissions to surface water

- 3.2.1 The Licence Holder shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

Table 3.2.1: Monitoring of point source emissions to surface water			
Emission point reference	Parameter ¹	Units	Frequency
Lake Way Discharge sample point	Cumulative water throughput volume	kL	Monthly
	Total dissolved solids, arsenic, and total suspended solids	mg/L	
	pH	-	Quarterly
	Antimony, cadmium, chromium, copper, lead, manganese, nickel, selenium, thallium, zinc	mg/L	

Note 1: Non-NATA in field analysis of pH permitted.

3.3 Process monitoring

- 3.3.1 The Licence Holder shall undertake the monitoring in Table 3.3.1 according to the specifications in that table.

Table 3.3.1: Process monitoring					
Monitoring point reference	Process description	Parameter ¹	Units	Frequency	Method
PM1	BIOX liquors discharged from the neutralisation section	pH	-	Weekly	None specified
		Arsenic	mg/L		
PM2	Combined tailings streams at the tailings outfall	pH	-	Weekly	None specified
		Arsenic	mg/L		
PM3	Decant reclaim water pond	pH	-	Weekly	None specified
		Arsenic	mg/L		
PM4B, PM4C, PM4J	Consolidated tailings from the active TSF(s) ²	pH	-	Monthly	None specified

Note 1: Non-NATA in field analysis of pH permitted.

Note 2: Only deposition to active TSFs to be reported for the period.

3.4 Ambient environmental quality monitoring

- 3.4.1 The Licence Holder shall undertake the monitoring in Table 3.4.1, Table 3.4.2 and Table 3.4.3 according to the specifications in those tables.

Table 3.4.1: Monitoring of ambient surface water quality					
	Monitoring point location	Parameter	Units	Averaging period	Frequency

Monitoring point reference	Eastings	Northings				
LW-A1	225629	7041287	Antimony, Arsenic, Cadmium, Lead, Copper, Manganese, Nickel, Selenium, Thallium, Zinc and Chromium	mg/L	Spot sample	6-monthly
LW-A2	225571	7041181				
LW-A3	225746	7041256				
LW-A4	225729	7041353				
LW-A5	226986	7041183				
LW-A6	223948	7043201				
LW-A7	224140	7042909				
LW-A8	224850	7041934				
LW-A9	228576	7041902				
LW-B1	231484	7043492				
LW-B2	231445	7044437				
LW-B3	238089	7041128				
LW-B4	241625	7035120				
LW-B5	233525	7030647				
LW-B6	232808	7028101				
LW-B7	226138	7040391				
LW-B8	229109	7038402				
LW-B9	235320	7042173				
LW-B10	238299	7028135				
LW-B11	227377	7038130				
LW-B12	231758	7043284				

Table 3.4.2: Monitoring of ambient sediment quality

Monitoring point reference and location	Parameter	Units	Averaging period
LW-A1, LW-A2, LW-A3, LW-A4, LW-A5, LW-A6, LW-A7, LW-A8, LW-A9, LW-B1, LW-B2, LW-B3, LW-B4, LW-B5, LW-B6, LW-B7, LW-B8, LW-B9, LW-B10, LW-B11, LW-B12	Antimony, Arsenic, Cadmium, Lead, Copper, Manganese, Nickel, Selenium, Thallium, Zinc and Chromium	mg/kg	Spot sample

Table 3.4.3: Monitoring of ambient groundwater quality

Monitoring point reference and location of monitoring points on map		Parameter ¹	Target	Limit	Units	Averaging period	Frequency
Tailings dams bores ^{2,3}	TD1, TD2, TD3, TD4, TD5, TD6, TD7, TD8, TD9, TD10A, TD11A, TD12J, TD13J – B, TD14J, TD15J – B, TD16J – B, TD17K, TD18K, TD19K, TD20K	Soluble arsenic	-	0.4	mg/L	Spot sample	Quarterly
		pH	-	-	-		
		Total dissolved solids,	-	-	mg/L		
		Weak acid dissociable cyanide	-	0.5			
		Total cyanide	-	-			
		Standing water level	-	-	m(bgl)		
	TD17K, TD18K, TD19K, TD20K	Standing water level	-	4			

Table 3.4.3: Monitoring of ambient groundwater quality

Monitoring point reference and location of monitoring points on map		Parameter ¹	Target	Limit	Units	Averaging period	Frequency
	TD1, TD2, TD3, TD4, TD5, TD6, TD7, TD8, TD9, TD10A, TD11A	Alkalinity, aluminium, antimony, bromide, cadmium, calcium carbonate, chloride, chromium, copper, fluoride, total iron, lead, lithium, magnesium, mercury, nitrate, potassium, strontium, sulphate, selenium, sodium, thallium, nickel and zinc	-	-	mg/L	Spot sample	Annually
	TD12J, TD13J – B, TD14J, TD15J – B, TD16J – B, TD17K, TD18K, TD19K, TD20K	Alkalinity, aluminium, antimony, bromide, cadmium, calcium carbonate, chloride, chromium, copper, fluoride, total iron, lead, lithium, magnesium, mercury, nitrate, potassium, strontium, sulphate, selenium, sodium, thallium, nickel and zinc	-	-	mg/L	Spot sample	Quarterly
In pit tailings facilities bores ²	IPT2, IPT4 – B, IPT5 – B, A1, A2, GBN1, GBN2, GBS1, GBS2, MIPT08, MIPT09, SIPT10 – B, SIPT12 – B, SIPT13 – B	Arsenic	-	0.4	mg/L	Spot sample	Quarterly
		pH	-	-	-		
		Total dissolved solids, weak acid dissociable cyanide, total cyanide	-	-	mg/L		
		Standing water level	6	4	m(bgl)		
	IPT2, IPT4 – B, IPT5 – B, A1, A2, GBN1, GBN2, GBS1, GBS2, MIPT08, MIPT09, SIPT10 – B, SIPT12 – B, SIPT13 – B	Alkalinity, aluminium, antimony, bromide, cadmium, calcium carbonate, chloride, chromium, copper, fluoride, total iron, lead, lithium, magnesium, mercury, nitrate, potassium, strontium, sulphate, selenium, sodium, thallium, nickel and zinc	-	-	mg/L	Spot sample	Annually
Dewater storage facility bores ²	LH1, LH2 – B, LH3	pH	-	-	-	Spot sample	Quarterly
		Total dissolved solids	-	-	mg/L		
		Standing water level	-	-	m(bgl)		
	LH1, LH2 – B, LH3	Calcium, sodium, potassium, nitrogen, magnesium, chloride, iron, sulphate	-	-	mg/L	Spot sample	Annually
		Arsenic	-	0.4	mg/L		Quarterly

Table 3.4.3: Monitoring of ambient groundwater quality							
Monitoring point reference and location of monitoring points on map		Parameter ¹	Target	Limit	Units	Averaging period	Frequency
Heap Leach Bores ²	HL01	pH	-	-	-	Spot sample	
		Total dissolved solids	-	-	mg/L		
		Standing water level	-	-	m(bgl)		
	HL01	Cadmium, chromium, copper, lead, mercury, nickel, aluminium, magnesium and zinc	-	-	mg/L	Spot sample	
Tailings and Decant water storage pits ²	Golden Age pit, Lawless pit, Moonlight pit, Squib pit, Essex pit, Adelaide pit, Gunbarrel North pit, Gunbarrel South pit, Republic North pit	Standing water level	-	0.7	m(bgl)	Spot sample	Quarterly

Note 1: Non- NATA in field analysis permitted for pH and TDS.

Note 2: A minimum of 90% of all bores listed in Table 3.4.3 will be sampled during any defined sampling period to allow for maintenance and operational constraints. The Licence Holder is to take all reasonable and practicable measures to maintain these bores and will advise of their operational status within the Annual Environmental Report required by this licence.

Note 3: TD12J – TD16J to be sampled following construction of bores (i.e. not from date of amendment).

3.4.2 The Licence Holder shall take the specified management action outlined in Table 3.4.4 in the case of an event in Table 3.4.4.

Table 3.4.4: Management actions		
Monitoring point reference	Event	Management action
IPT2, IPT4 – B, IPT5 – B, A1, A2, GBN1, GBN2, GBS1, GBS2, MIPT08, MIPT09, SIPT10 – B, SIPT12 – B, SIPT13 - B	Upon becoming aware of any exceedance of the target in Table 3.4.3.	The Licence Holder shall cease discharge to the receiving pit associated with the monitoring bore or pits.
		The Licence Holder shall measure the standing water level in the monitoring bore/s and/or in pit storage facility each week until such time as standing water levels in the monitoring bore/s and/or in pit storage facility are in excess of the target in Table 3.4.3.

3.4.3 The Licence Holder shall complete an annual dewatering discharge report that assesses environmental impacts associated with the mine dewater discharge. The assessment shall include:

- description of the receiving environment of Lake Way, including lake geology, topography, hydrological processes, sediment and water quality and significant flora and fauna;
- report on the dewatering discharge volumes and water quality from the Premises;
- salt and water balance estimates for the reporting period in relation to the addition of the dewatering discharge from the Premises to Lake Way;

- (d) an assessment of the impact of the discharge on the receiving environment with comparison of impacted monitoring sites against non-impacted monitoring sites;
- (e) an assessment of current results as compared to previous reporting periods; and
- (f) summary of findings, conclusions and any recommendations for the improvement of the monitoring program and/or modifications for management of the discharge to reduce impact.

4 Information

4.1 Records

- 4.1.1 All information and records required by the Licence shall:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
 - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.
- 4.1.2 The Licence Holder shall ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
 - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 4.1.3 The Licence Holder shall complete an Annual Audit Compliance Report indicating the extent to which the Licence Holder has complied with the conditions of the Licence and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 4.1.4 The Licence Holder shall implement a complaints management system that as a minimum record the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

- 4.2.1 The Licence Holder shall submit to the CEO an Annual Environmental Report within 90 calendar days after the end of the annual period. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report		
Condition or table	Parameter	Format or form ¹
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken.	None specified

-	Actual annual throughputs per prescribed premises category	
Table 1.2.1	Flow meter data to support compliance for sewage throughput	
Table 1.2.3	A summary of wildlife visitation to each active TSF, based on daily inspections	
1.2.8	Monthly water balances over operational TSFs	
2.3.1 and 2.3.2	Compliance with point source emission limits to surface water.	
Table 3.2.1	Point source emissions to surface water monitoring data	
Table 3.3.1	Process monitoring data	
Table 3.4.1	Ambient surface water quality data	
Table 3.4.2	Ambient sediment quality monitoring data	
Table 3.4.3	Ambient groundwater quality monitoring data	
4.1.3	Compliance	Annual Audit Compliance Report (AACR) – available from https://dwer.wa.gov.au
4.1.4	Complaints summary	None specified

- 4.2.2 The Licence Holder shall ensure that the Annual Environmental Report also contains:
- an assessment of the information contained within the report against previous monitoring results and licence limits and/or targets; and
 - a list of any original monitoring reports submitted to the Licence Holder from third parties for the annual period and make these reports available on request.

4.3 Notification

- 4.3.1 The Licence Holder shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.

Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
-	Breach of any limit specified in the licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable	N1
		Submit a report within seven days of being aware of the exceedance. <ul style="list-style-type: none"> The date, time and probable reason for the exceedance The period over which the exceedance occurred The extent of the discharge over that period and potential or known environmental consequences Corrective action taken or planned to mitigate adverse environmental consequences; and 	None specified

		Corrective action taken or planned to prevent a recurrence of the exceedance	
3.4.3	SWL (mbgl)	Notify the CEO within 2 working days of the exceedance of the target	N1
-	Production ceasing for an unspecified period of time	As soon as practicable after the decision has been made	None specified
-	Production recommencing	At least 28 days prior to production recommencing	None specified

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are in Schedule 3

Schedule 1: Maps

Premises and emission point map

The Premises is shown in Figure 1 below. The pink line depicts the Premises boundary. The emission point referred to in Tables 2.3.1 and 2.3.2 is also shown below.

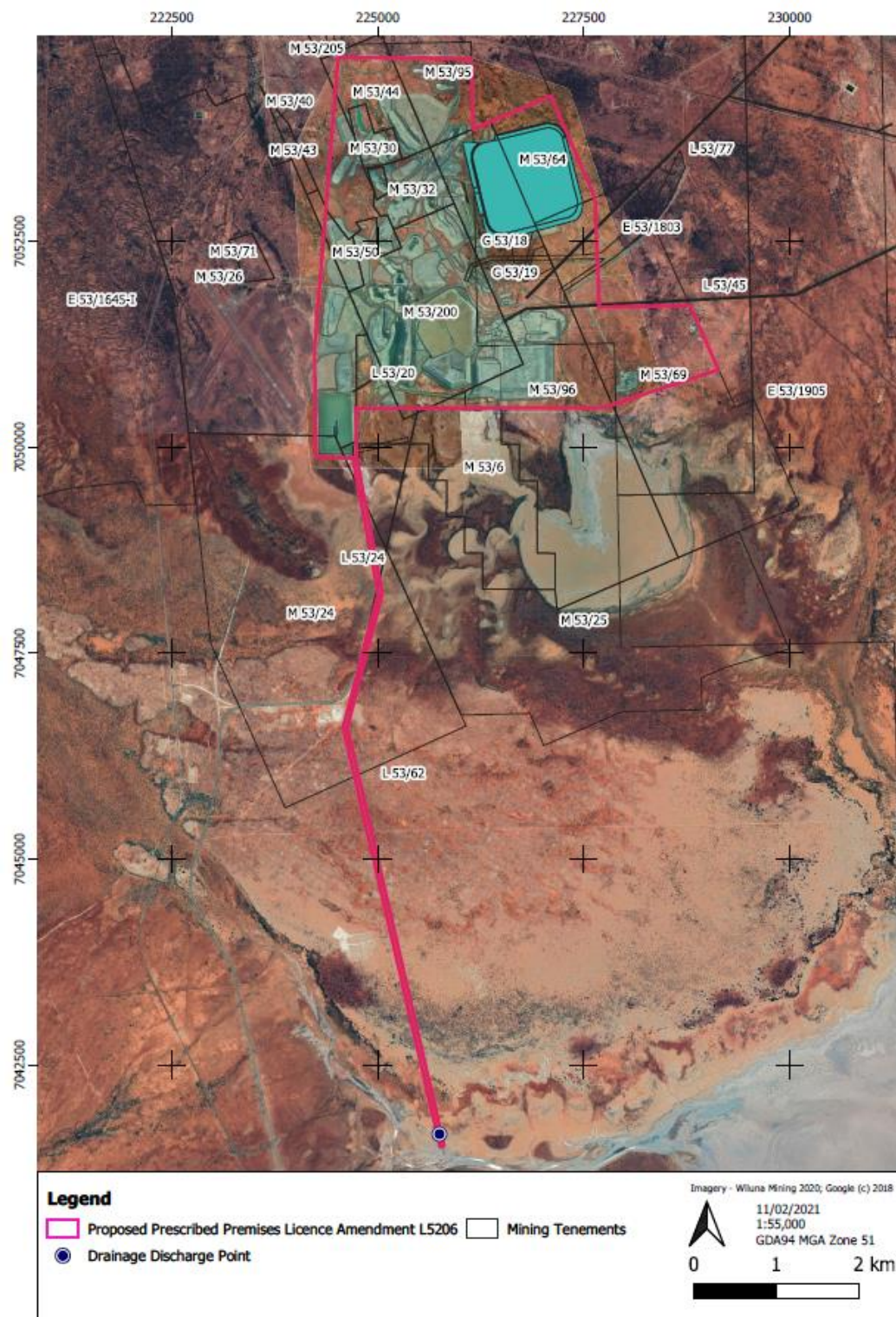


Figure 1: Premises Boundary and Lake Way discharge point

L5206/1987/10 (Date of amendment: 06/08/2020)

Map of containment infrastructure

The locations of the containment infrastructure defined in Table 1.2.2 are shown below in Figure 2, Figure 3 and Figure 4.

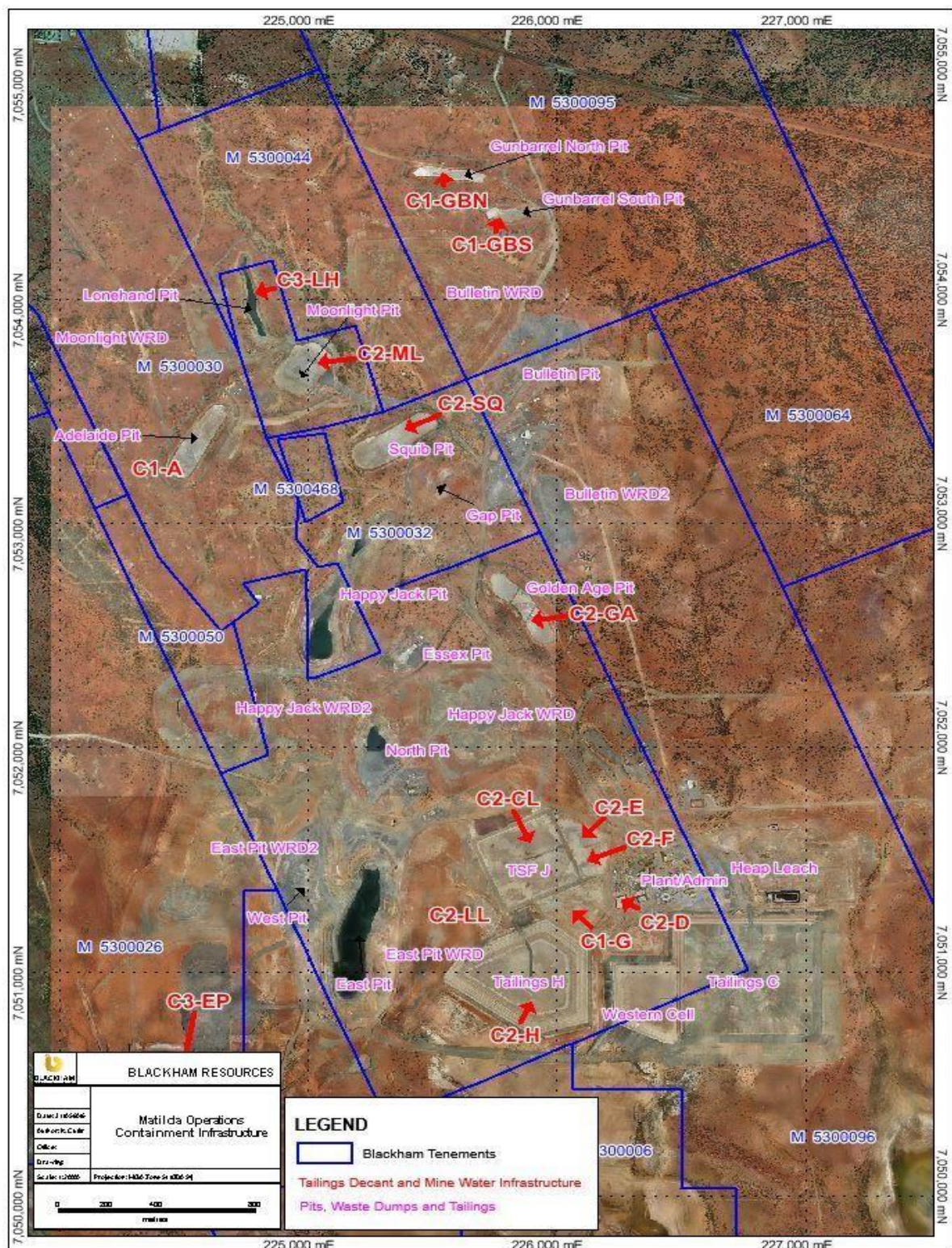


Figure 2: Locations of containment infrastructure, 1 of 3

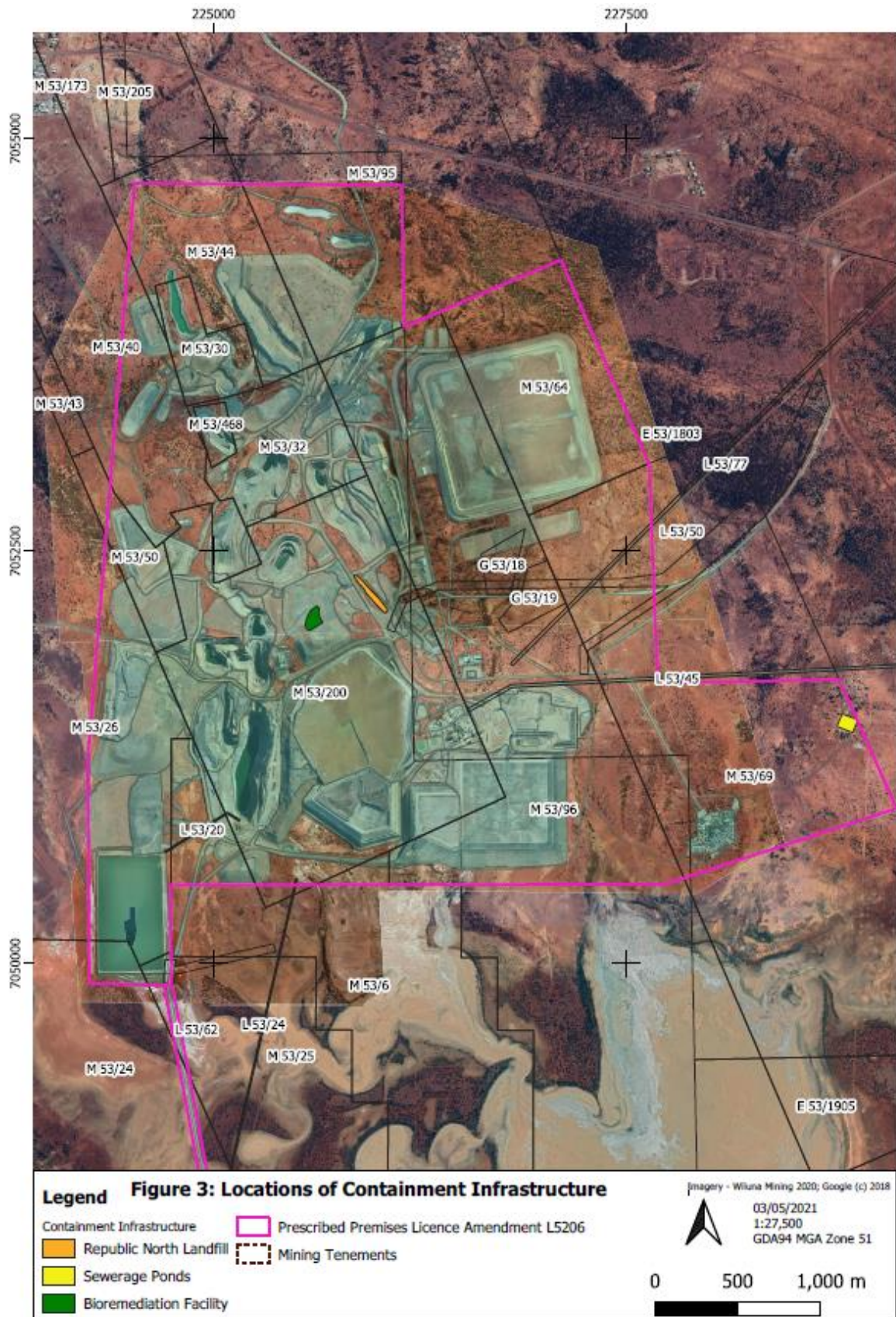


Figure 3: Locations of containment infrastructure, 2 of 3



Figure 4: Locations of containment infrastructure, 3 of 3

The locations of the monitoring points defined in Tables 3.3.1 and 3.4.3 are shown in Figure 6 below.



Figure 6: Environmental ambient groundwater monitoring bores and process monitoring points.

Map of used tyre storage, and tyre, poly pipe and mill liner disposal locations

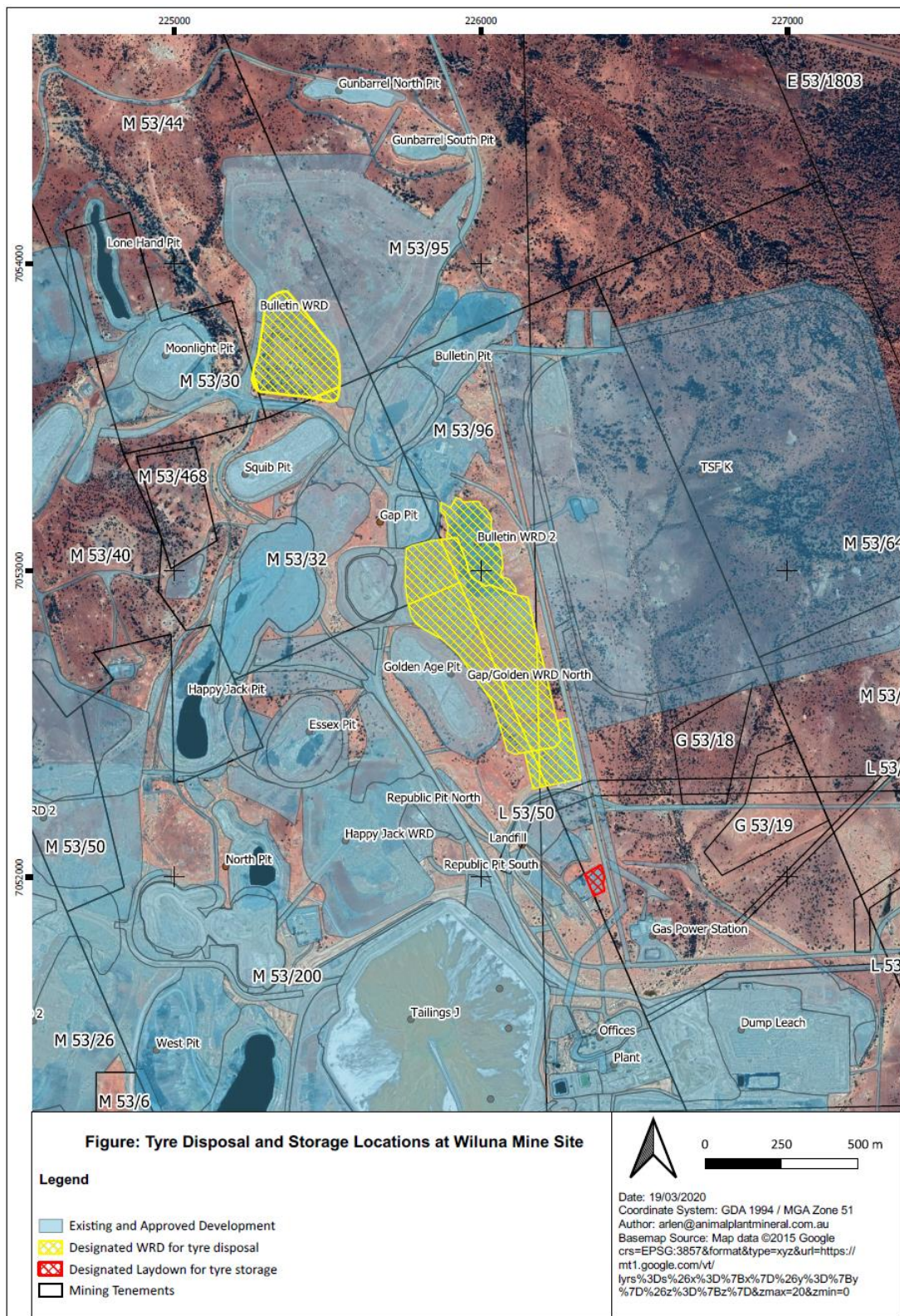


Figure 7: Tyre, mill liner, poly pipe disposal, and tyre storage locations at Wiluna Mine Site

Schedule 2: TSF K Stage 2 Design drawings

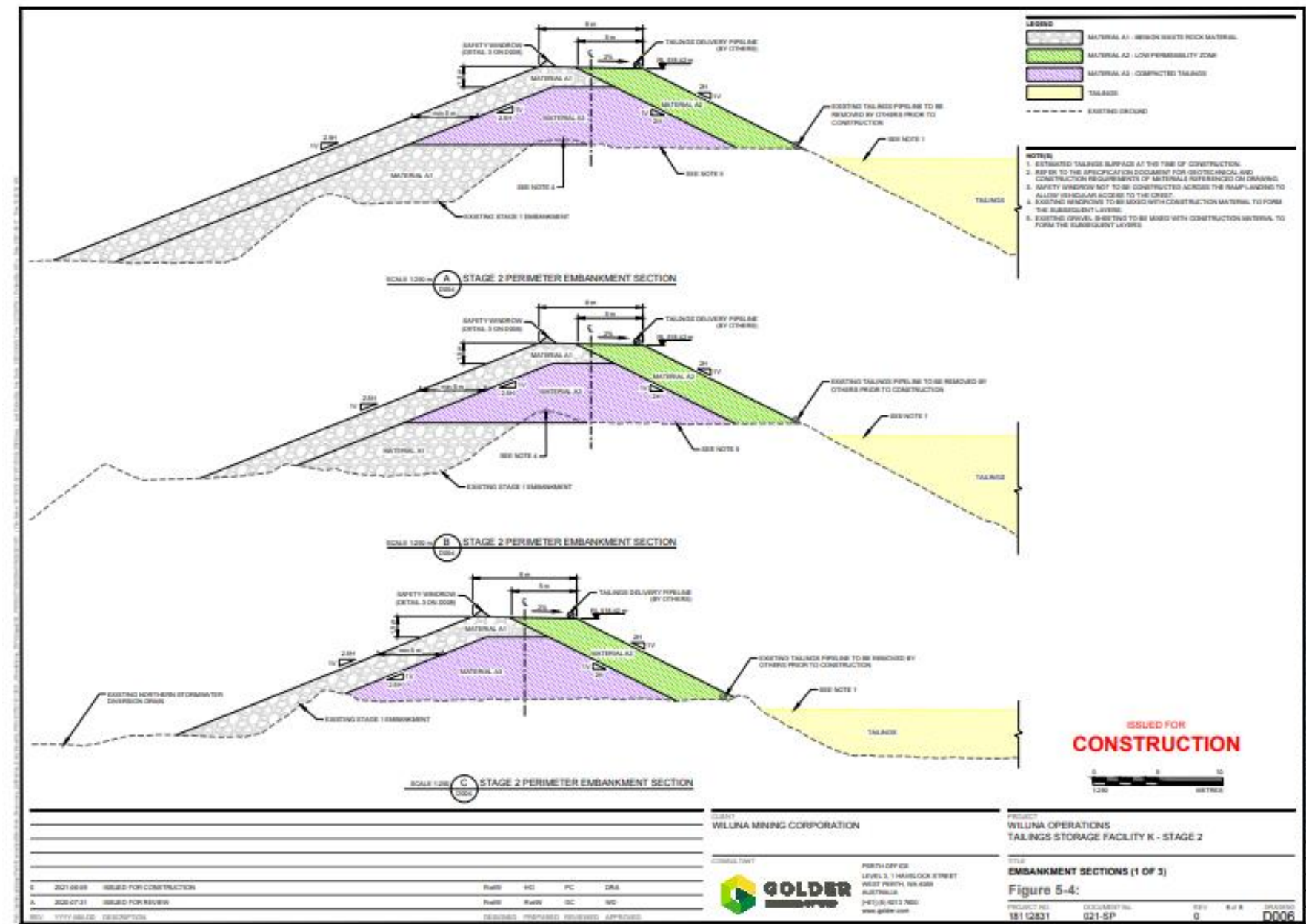


Figure 8: TSF K (Stage 2) embankment raise construction (1 of 2)

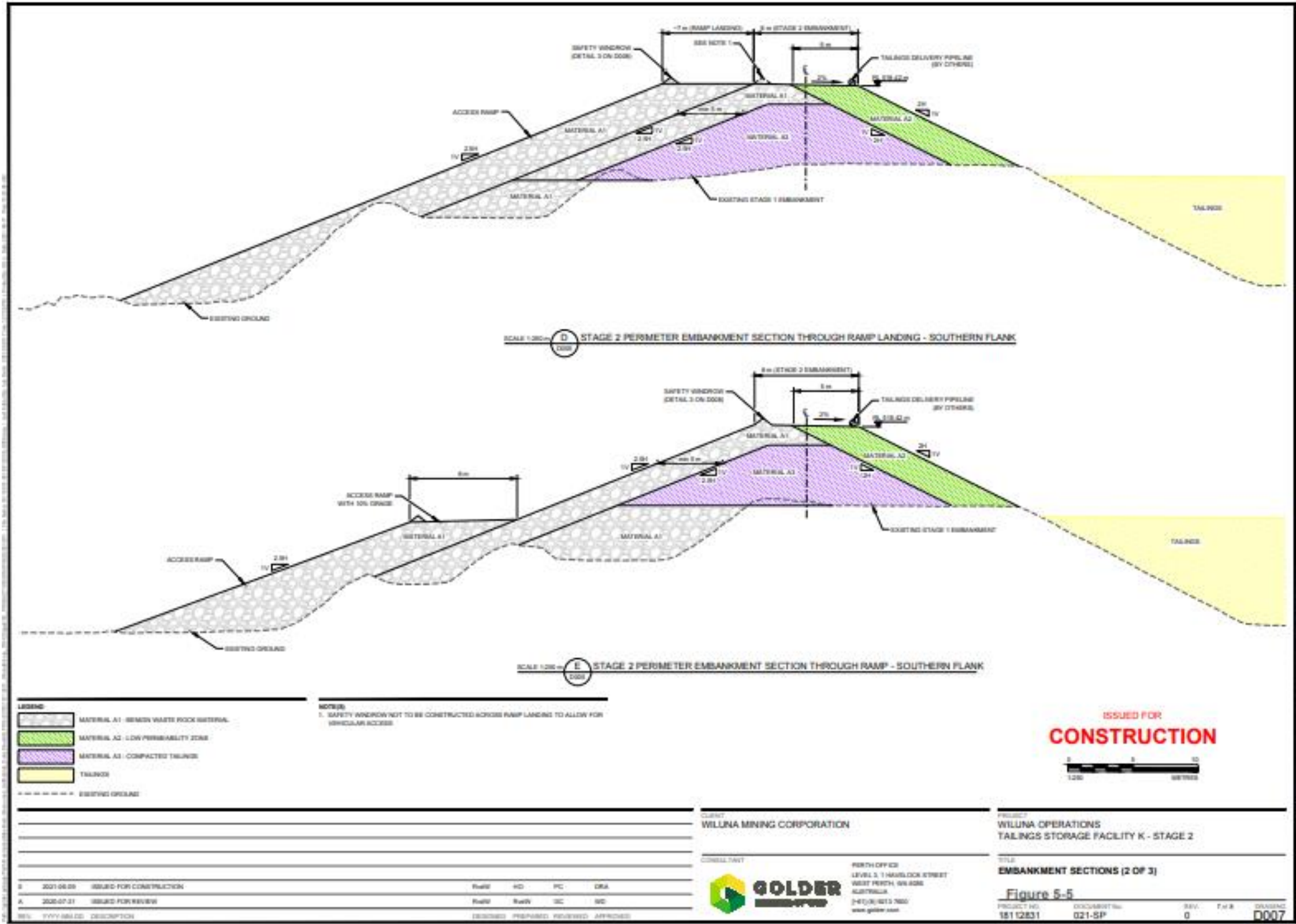


Figure 9: TSF K (Stage 2) embankment raise construction (2 of 2)

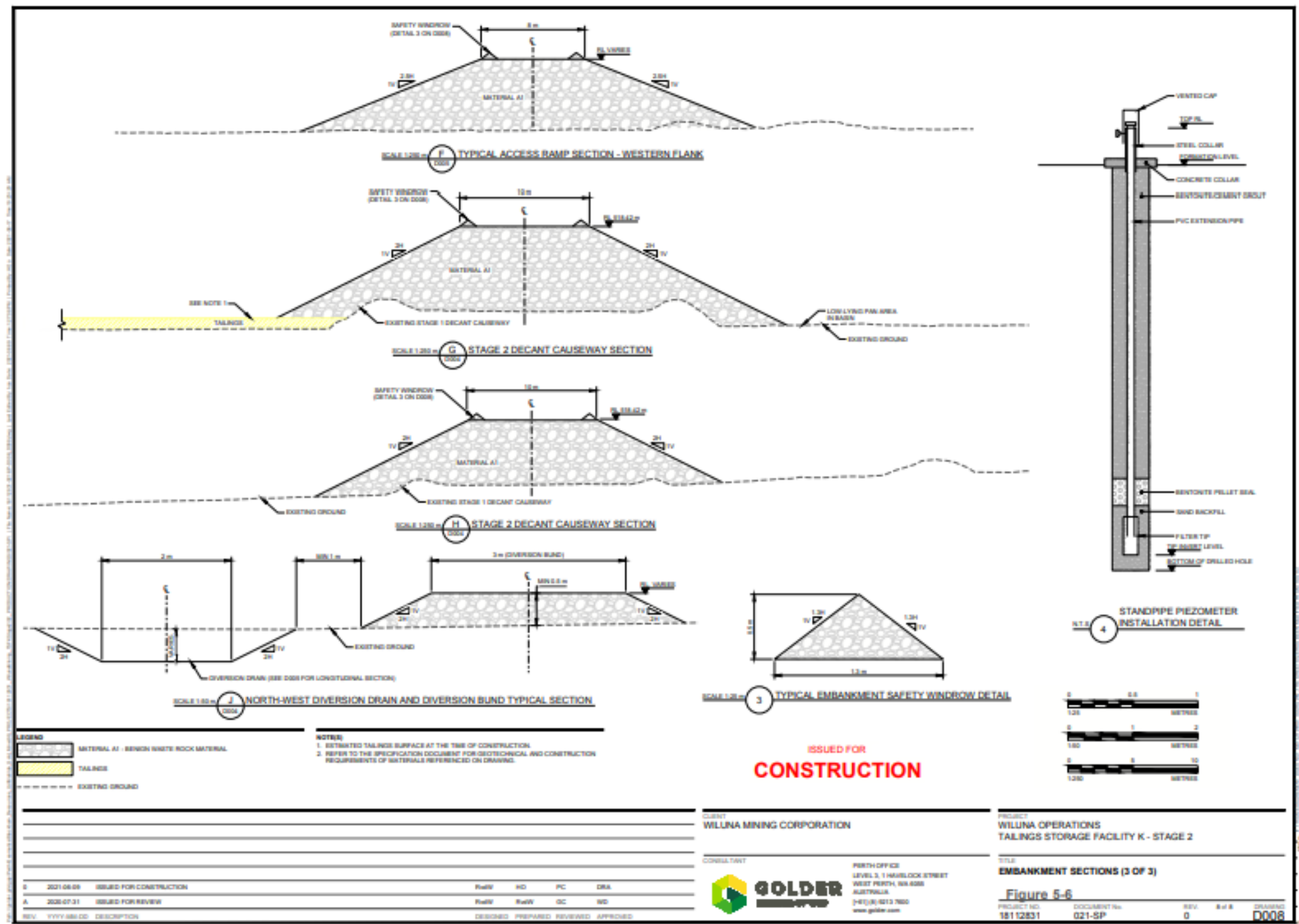


Figure 10: TSF2 embankment raise and Decant Access Causeway construction

Stormwater infrastructure management map



Figure 11: Map showing location of diversion drain alignments for TSF K Stage 2 embankment raise

Schedule 3: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

Licence: L5206/1987/10

Licence Holder: Wiluna Operations Pty Ltd

Form: N1

Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence number	
Name of operator	
Location of premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature on behalf of licence holder	
Date	

Schedule 4: Premises boundary

The premises boundary is defined by the coordinates in Table 1 below.

Table 1: Premises boundary coordinates

Easting	Northing
224742.089	7049867.493
224246.243	7049880.891
224237.22	7051229.787
224520.307	7054730.601
226140.026	7054717.772
226156.168	7053859.768
227104.963	7054265.79
227639.559	7053025.167
227691.905	7051700.305
228791.127	7051720.437
229139.702	7050941.175
227739.738	7050481.221
224737.954	7050475.195
224742.089	7049867.493
224749.593	7049865.323
224767.363	7049769.606
225057.782	7048222.789
224632.811	7046600.94
225808.067	7041517.537
225759.326	7041506.267
224581.451	7046601.803
225008.821	7048213.604
224718.419	7049760.424
224700.661	7049856.245
224700.867	7049868.443
224742.089	7049867.493
224749.593	7049865.323