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|------------------------------------|--|
| Works approval number | W6762/2022/1 |
| Works approval holder | Karara Mining Limited |
| ACN | 070 871 831 |
| Registered business address | Level 2 London House 216 St Georges Terrace PERTH WA 6000 |
| DWER file number | DWER2022/000570 |
| Duration | 24/03/2023 to 23/03/2026 |
| Date of issue | 23/03/2023 |
| Premises details | Karara Minesite Beneficiation Plant Mining Leases M59/649-I, M59/721-I, General Purpose Lease G59/38, Miscellaneous Licence L59/93 PERENJORI WA 6620 |

| Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>) | Assessed design capacity |
|--|--------------------------|
| Category 6: Mine dewatering - premises on which water is extracted and discharged into the environment to allow mining of ore. | 573,600 tonnes per year |

This works approval is granted to the works approval holder, subject to the attached conditions, on 23 March 2023, by:

Alana Kidd

Manager, Resources Industries

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

Works approval history

| Date | Reference number | Summary of changes |
|------------|------------------|---|
| 23/03/2023 | W6762/2022/1 | Works approval granted for dewatering Karara Pit to Terapod West Pit. |

Interpretation

In this works approval:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This works approval requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this works approval.

Works approval conditions

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

Construction phase

Infrastructure and equipment

1. The works approval holder must:
 - (a) install the infrastructure and equipment;
 - (b) in accordance with the corresponding installation requirements; and
 - (c) at the corresponding infrastructure locationas set out in Table 1.

Table 1: Installation requirements

| Infrastructure and equipment | Installation requirements | Infrastructure location |
|------------------------------|--|--------------------------------|
| Pipeline off-take | <ul style="list-style-type: none">Off-take to be installed on the existing pipeline at the turning point to BHN Pit from Karara Pit. | Schedule 1, Figure 2, Figure 3 |
| Dewatering pipelines | <ul style="list-style-type: none">1.1 km between the off-take and BHN TN;8.5 km of 250 mm poly pipe pipeline between BHN TN to Terapod West Pit;Flow meters installed to quantify discharge flow volumes;Submersible pump and generator installed at BHN TN to pump water to Terapod West Pit;Use of a pipeline with a higher-pressure rating than the expected pressure to prevent leaks;All pipelines aboveground (apart from at vehicle crossings where they are to be buried), in windrows and in existing cleared areas; andDischarge pipe/point placed far enough over the pit crest or down the pit ramp to reduce exposure to wind so that blowback to remnant native vegetation is minimised. | Schedule 1, Figure 2, Figure 3 |

2. The works approval holder must ensure that all pipelines containing environmentally hazardous substances in condition 1 are provided with secondary containment adequate to contain any spill for a period equal to the time between routine inspections.
3. The works approval holder must ensure that any saline water used for dust suppression does not run-off into surrounding vegetation.

Compliance reporting

4. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being installed:

- (a) undertake an audit of their compliance with the requirements of condition 1; and
 - (b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- 5. The Environmental Compliance Report required by condition 4, must include as a minimum the following:
 - (a) certification by an engineer that the pipeline off-take and dewatering pipelines as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
 - (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.

Time limited operations phase

Commencement and duration

- 6. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1:
 - (a) where the item of infrastructure is not authorised to undertake environmental commissioning, the Environmental Compliance Report as required by condition 4 has been submitted by the works approval holder for that item of infrastructure.
- 7. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 10 (as applicable):
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 6 (as applicable) for that item of infrastructure; or
 - (b) until such time as a licence for that item of infrastructure is granted in accordance with part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 7(a).

General

- 8. The works approval holder shall immediately recover, or remove and dispose of, spills of environmentally hazardous materials including fuel, oil, or other hydrocarbons, whether inside or outside an engineered containment system.
- 9. The works approval holder shall ensure that all material used for the recovery, removal, and/or disposal of environmentally hazardous materials is stored in an impermeable container prior to disposal at an appropriately authorised facility.

Time limited operations requirements and emission limits

- 10. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements during time limited operation

| Site infrastructure and equipment | Operational requirement | Infrastructure location |
|---|---|---|
| Pipeline off-take from Karara Pit to Blue Hills North Turkey Nest | Pipeline is designed to operate at greater flow than the current peak monthly average flow rate (22.2 L/s). | Schedule 1; Figure 2 Figure 3 |
| Pipelines to Blue Hills North Turkey Nest and Terapod West Pit | Recorded daily visual inspection for integrity and leaks. If a leak is identified, pumping is to cease immediately, pipeline to be isolated, and repairs will be made prior to pumping recommencing. | |
| Discharge point at Blue Hills North Turkey Nest | Freeboard maintained at 300 mm | |
| Discharge point at Terapod West Pit | If blowback is observed reaching surrounding native vegetation, discharge point to be modified or moved to mitigate any further impacts immediately. | |

11. During time limited operations, the works approval holder must ensure that the emission(s) specified in Table 3, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Table 3: Authorised discharge points

| Emission | Discharge point | Discharge point location |
|-------------------------------------|---|-----------------------------------|
| Hypersaline dewater from Karara Pit | Blue Hills North Turkey's Nest and Terapod West Pit | Schedule 1; Figure 2, Figure 3 |

12. During time limited operations, the works approval holder must ensure that the emissions from the discharge point listed in Table 4 do not exceed the corresponding limit(s) when monitored in accordance with condition 11.

Table 4: Emission and discharge limits during time limited operations

| Discharge point | Parameter | Limit |
|------------------|---|---------------------------------|
| Terapod West Pit | Water-level rise (standing water level) | 330 mAHD (40 m below pit crest) |

Monitoring during time limited operations

13. The works approval holder must monitor emissions during time limited operations in accordance with Table 5.

Table 5: Emissions and discharge monitoring during time limited operations

| Discharge point | Monitoring location | Parameter | Frequency | Averaging Period | Unit |
|------------------|---------------------|-----------------------------------|------------|------------------|----------------|
| Terapod West Pit | Discharge point | Volumetric flow rate (cumulative) | Continuous | Monthly | m ³ |

14. The works approval holder must record the results of all monitoring activity required by condition 13.
15. The works approval holder must monitor the groundwater and Terapod West Pit water during time limited operations for concentrations of the identified parameters in accordance with Table 6.

Table 6: Monitoring of ambient concentrations during time limited operations

| Monitoring location | Parameter ¹ | Unit | Frequency | Averaging period | Sampling Method |
|--|---|-------|-----------|------------------|---|
| | | | | | Analysis |
| TPD1001 (Figure 3) | Standing water level | mbgl | Monthly | | Field analysis² - AS/NZS 5667.1 |
| | Electrical conductivity | µS/cm | | | |
| | pH | - | | | |
| Blue Hills Turkeys Nest (Figure 3) | Total Dissolved Solids | mg/L | Monthly | Spot sample | Laboratory analysis - AS/NZS 5667.1. |
| | Turbidity | | | | |
| | Hydroxide as CaCO ₃ | | | | |
| | Total Alkalinity | | | | |
| | Perchlorate | | | | |
| | Major ions - Calcium, Magnesium, Sodium, Potassium, Chloride, Fluoride, Sulphate, Carbonate, Bicarbonate HCO ₃ | | | | |
| | Nutrients - Nitrate, Nitrite, Ammonia, Reactive Phosphorus, Total Phosphorus and Total Nitrogen Heavy metals - Arsenic, Aluminium, Beryllium, Boron, Cadmium, Cobalt, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium, Thallium, Vanadium and Zinc. | | | | |

Note 1: Level of detection is required to be sufficient to enable a comparison with the Australian and New Zealand Guidelines for Fresh & Marine Water Quality (ANZ 2020).

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

16. The works approval holder must monitor the surrounding vegetation for the parameter listed in Table 7:
 - (a) at the corresponding monitoring location;
 - (b) at no less that the corresponding frequency;
 - (c) for the corresponding averaging period; and
 - (d) using the corresponding method,
 as set out in Table 7.

Table 7: Monitoring of vegetation health

| Parameter | Monitoring location | Frequency | Averaging period | Sampling Method |
|----------------------------------|---|-----------|------------------|--|
| Vegetation health | TPDWM03 TPDWM04 (Figure 4, Table 9) | Monthly | Spot sample | Photo monitoring from set GPS position as per Figure 4 |
| Health of deep-rooted vegetation | Within 1 km of Terapod West Pit | Quarterly | | |

17. The works approval holder must record the results of all monitoring activity required by condition 15 and 16.
18. The works approval holder must ensure that:
- (a) monitoring is undertaken in each monthly period such that there are at least 15 days in between the days on which samples are taken in successive months;
 - (b) monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters; and
 - (c) where three consecutive monthly vegetation health images show impact to nearby vegetation;
 - (i) discharge is to be reduced,
 - (ii) additional production bores are to be installed within 2 months of the last photo date to intersect and recover seepage flow from the Tetrapod West pit towards affected vegetation;
 - (iii) an investigation into the cause of vegetation health decline should be undertaken by a suitably qualified professional with recommended actions to be implemented with timeframes, and submitted to the CEO within 3 months of the last photo date.
19. Where three consecutive monthly vegetation health images show recovery after the implementation of condition 18(c), the Works Approval Holder is to only increase dewatering volumes with implementation of the findings from condition 18(c)iii.

Compliance reporting

20. The works approval holder must submit to the CEO a report on the time limited operations within 30 calendar days of the completion date of time limited operations or 60 calendar days before the expiration date of the works approval, whichever is the sooner.
21. The works approval holder must ensure the report required by condition 20 includes the following:
- (a) a summary of the time limited operations, including timeframes and amount of dewater discharged;
 - (b) a summary and analysis of volumetric flow rates and water quality results obtained during time limited operations under conditions 13 and 15, to determine any trends or impacts when compared against previous data and guideline values (ANZ2020).

- (c) a summary of the environmental performance of all infrastructure as installed, which includes records detailing the:
 - (i) Pipeline off-take;
 - (ii) Pipeline to Blue Hills North Turkey Nest; and
 - (iii) Pipeline to Terapod West Pit.
- (d) a review of performance and compliance against the conditions of the works approval; and
- (e) where the manufacturer's design specifications and the conditions of this works approval have not been met, what measures will the works approval holder take to meet them, and what timeframes will be required to implement those measures.

Records and reporting (general)

- 22.** The works approval holder must record the following information in relation to complaints received by the works approval holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
 - (a) the name and contact details of the complainant, (if provided);
 - (b) the time and date of the complaint;
 - (c) the complete details of the complaint and any other concerns or other issues raised; and
 - (d) the complete details and dates of any action taken by the works approval holder to investigate or respond to any complaint.
- 23.** The works approval holder must maintain accurate and auditable books including the following records, information, reports, and data required by this works approval:
 - (a) the works conducted in accordance with condition 1;
 - (b) any maintenance of infrastructure that is performed in the course of complying with condition 10;
 - (c) monitoring programmes undertaken in accordance with conditions 13 and 15; and
 - (d) complaints received under condition 22.
- 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 works approval holder for the duration of the works approval; and
 - (d) be available to be produced to an inspector or the CEO as required.

Definitions

In this works approval, the terms in Table 8 have the meanings defined.

Table 8: Definitions

| Term | Definition |
|---------------------------------|---|
| annual period | a 12-month period commencing from [day month] until [day month] of the immediately following year. |
| BHN TN | Blue Hills North Turkey's Nest |
| BHN Pit | Blue Hills North Pit |
| books | has the same meaning given to that term under the EP Act. |
| CEO | means Chief Executive Officer. CEO for the purposes of notification means: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au |
| Department | means the department established under section 35 of the <i>Public Sector Management Act 1994</i> and designated as responsible for the administration of Part V Division 3 of the EP Act. |
| discharge | has the same meaning given to that term under the EP Act. |
| emission | has the same meaning given to that term under the EP Act. |
| Environmental Compliance Report | means a report to satisfy the CEO that the conditioned infrastructure and/or equipment has been installed in accordance with the works approval. |
| EP Act | <i>Environmental Protection Act 1986</i> (WA). |
| EP Regulations | <i>Environmental Protection Regulations 1987</i> (WA). |
| monthly period | means a one-month period commencing from day X of a month until day (X-1) of the immediately following month. |
| premises | the premises to which this works approval applies, as specified at the front of this works approval and as shown on the premises map (Figure 1) in Schedule 1: Maps to this works approval. |
| prescribed premises | has the same meaning given to that term under the EP Act. |
| quarterly | means the 4 inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March. |

| Term | Definition |
|-------------------------|---|
| suitably qualified | Means a person who: <ul style="list-style-type: none"> a) holds a relevant tertiary academic qualification; b) has a minimum of five years of experience working in the relevant area/field of expertise; and c) holds membership in a relevant professional body. |
| time limited operations | refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions. |
| works approval | refers to this document, which evidences the grant of the works approval by the CEO under section 54 of the EP Act, subject to the conditions. |
| works approval holder | refers to the occupier of the premises being the person to whom this works approval has been granted, as specified at the front of this works approval. |

END OF CONDITION

Schedule 1: Maps

Premises map

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

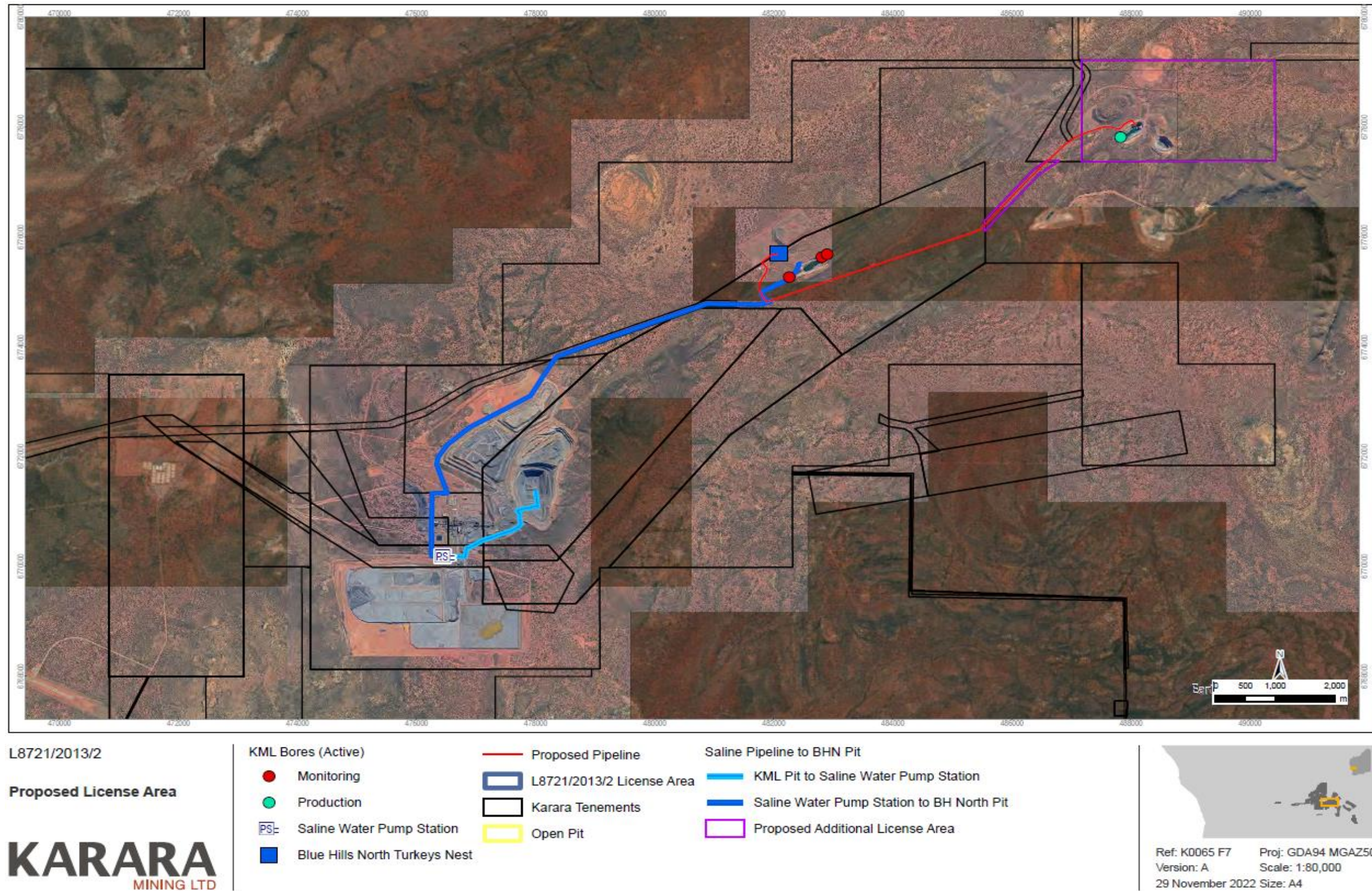


Figure 1: Map of the boundary of the prescribed premises

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IR-T05 Works approval template (v6.0) (September 2022)

The proposed pipeline off-take (purple) and pipelines (red) are shown in the map below (Figure 2).

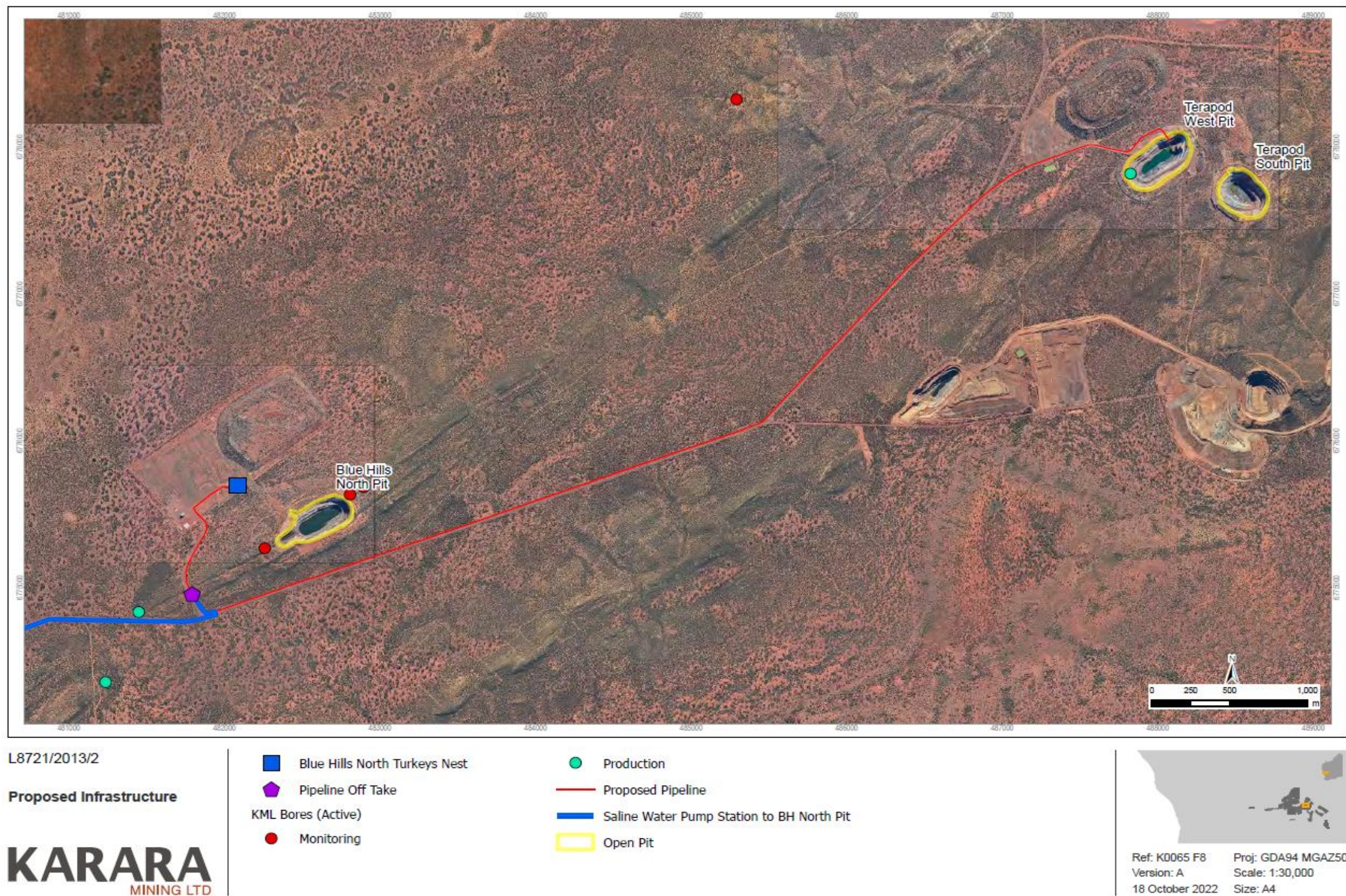
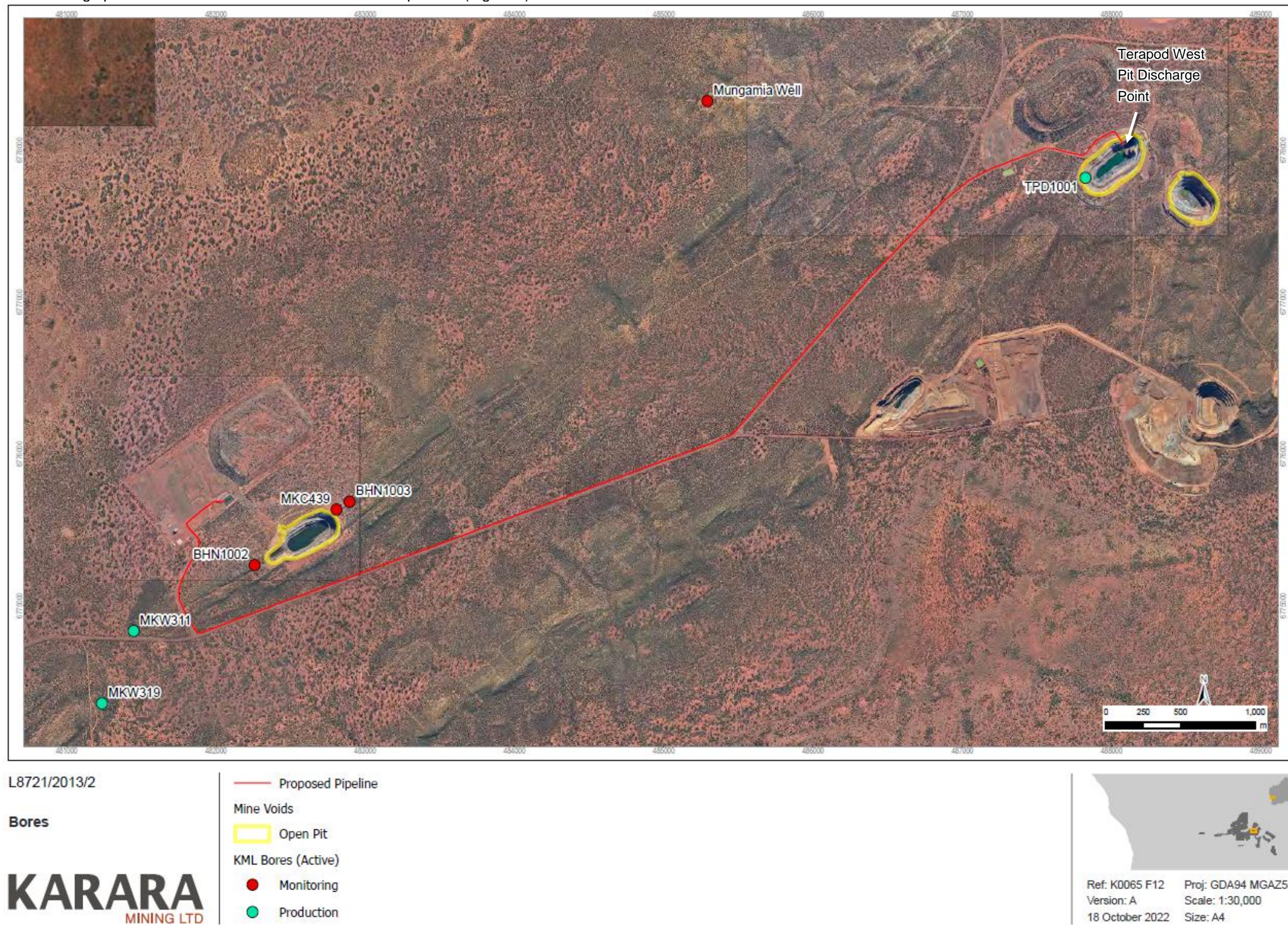


Figure 2: The proposed pipeline off-take and pipeline.

The discharge point and bore locations are shown in the map below (Figure 3).



The photo locations for vegetation health monitoring are shown in the map below (Figure 4).



Figure 4: Location points for vegetation health photo monitoring.

Schedule 2: Co-ordinates

Table 9: Co-ordinates of vegetation monitoring sites as shown in Figure 4

| Vegetation Health Photo Monitoring Site ID | Easting (MGA Zone 50) | Northing (MGA Zone 50) |
|--|-----------------------|------------------------|
| TPDWM03 | 487456 | 6778640 |
| TPDWM04 | 488271 | 6778695 |