



Works approval number	W6754/2022/1
Works approval holder	Horizon Minerals Limited
ACN	007 761 186
Registered business address	163-167 Stirling Highway, Nedlands, WA 6009
DWER file number	DER2022/000601
Duration	02/03/2023 to 02/03/2028
Date of issue	02/03/2023
Premises details	Cannon Gold Project City of Kalgoorlie Boulder Legal description - Within the mining tenements M25/333, M25/357, L25/48, L26/240 and L26/270 As defined by the coordinates in Schedule 1 of the Works Approval

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed design capacity
Category 6: Mine dewatering	100,000 tonnes per annual period

This works approval is granted to the works approval holder, subject to the attached conditions, on 02 March 2023, by:

**A/MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES**

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

Works approval history

Date	Reference number	Summary of changes
02/03/2023	W6754/2022/1	Works approval granted.

Interpretation

In this works approval:

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

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

Works approval conditions

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

Construction phase

Infrastructure and equipment

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

Table 1: Infrastructure construction and installation requirements

Item	Infrastructure	Construction and installation requirements	Infrastructure location
1.	Dewatering pipeline from Cannon pit to Golden Ridge pit and associated infrastructure	(a) Pipeline to be laid from the Cannon pit to the Golden Ridge pit along the pipeline route shown in Figure 2, Schedule 1. (b) Outfall at the Golden Ridge Pit to be extended approximately 0.5 m beyond the pit crest (c) Pipeline is required to meet the following standards: <ol style="list-style-type: none"> I. AS/NZS 2033:3008: Installation of polyethylene pipe systems; II. AS/NZS 4129:2008: Fittings for polyethylene (PE) pipes for pressure applications; III. AS/NZS 4130:2009 Polyethylene (PE) pipes for pressure applications; and IV. AS/NZS 4131:2010: Polyethylene (PE) compounds for pressure pipes and fittings. (d) Pipeline to be equipped with a flowmeter (e) Pipeline to be installed with telemetry system and automatic shut-off to detect and control leaks; and (f) Pipeline to be constructed within secondary containment adequate to contain any spill for a period equal to the time between routine inspections.	Pipeline route to be located as shown in Figure 2, in Schedule 1
		(g) 4x 22kL or 2x 50kL polyethylene mine dewater storage tanks or tanks with a similar approximate volume to be located on the north-western edge of the pit	Shown as "Cannon pit dewatering transfer tanks" in Figure 3, in Schedule 1
		(h) 90kW submersible pump to be mounted on a	N/A

		pontoon and to be located within the Cannon pit lake for water abstraction	
		(i) Grunfos 55kW submersible pump or an equivalent to be utilized for water transfer	

Compliance reporting

2. The works approval holder must within 28 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or 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.
3. The Environmental Compliance Report required by condition 2, must include as a minimum the following:
 - (a) certification by a qualified engineer that the items of infrastructure or component(s) thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
 - (b) as constructed plans or photographs 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

4. The works approval holder may only commence time limited operations for an item of infrastructure identified in condition 1, where the Environmental Compliance Report as required by condition 2 has been submitted by the works approval holder for that item of infrastructure.
5. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 1 (as applicable):
 - (a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 7 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 5(a).

Time limited operations requirements and emission limits

6. During time limited operations, the works approval holder must ensure that the emissions specified in Table 2, are discharged only from the corresponding emission point, within the specified limit and only at the corresponding discharge point location.

Table 2: Authorised discharge points and emission limits

Emission	Emission limit	Discharge point	Discharge point location
Mine dewater from Cannon pit	100,000 tonnes total per annual period	Golden Ridge pit	As shown in Figure 1 and 2, in Schedule 1
		Used for dust suppression within the premises.	Within premises boundary as show in in Figure 1 in Schedule 1

7. During time limited operations, the works approval holder must ensure that the infrastructure listed in Table 3 is maintained and operated in accordance with the corresponding operational requirements set out in Table 3.

Table 3: Infrastructure and equipment requirements during time limited operations

	Infrastructure	Operational requirements
1.	Dewatering pipeline from Cannon pit to Golden Ridge pit, secondary containment (v-drains), dewatering pumps and mine dewater storage tanks	<ul style="list-style-type: none"> Daily visual inspections (during active dewatering) to ensure visual integrity of pipelines, bunds, secondary containments, leak detection system and tanks. A written log is required to be maintained for each inspection, with the record of each inspection signed by the responsible person.
2.	Golden Ridge pit and dewatering outfall	<ul style="list-style-type: none"> Daily visual inspections (during active dewatering) to ensure structural integrity and sufficient vertical freeboard within the pit is maintained to prevent overtopping.
3.	Water truck / cart	<ul style="list-style-type: none"> Dust suppression activities using excess dewater are to be carried out in a manner that minimises spray drift onto vegetation alongside roads and open areas.

Monitoring during time limited operations

8. The works approval holder must monitor emissions during time limited operations in accordance with Table 4 and record the results of all such monitoring.

Table 4: Monitoring of dewatering discharge

Monitoring Location	Parameter	Unit	Frequency	Method
Dewatering discharge to Golden Ridge pit	Volumetric flow rate	kL	Continuous	Flow metering device

Compliance reporting

9. 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 30 calendar days before the expiration date of the works approval, whichever is the sooner.

- 10.** The works approval holder must ensure the report required by condition 10 includes the following:
- (a) a summary of the time limited operations, including timeframes, the volume of dewatering discharged, and standing water level;
 - (b) a review of performance and compliance against the conditions of the works approval; and
 - (c) where 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)

- 11.** 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.
- 12.** 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 7;
 - (c) monitoring programmes undertaken in accordance with condition 9; and
 - (d) complaints received under condition 12.
- 13.** The books specified under condition 13 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 4 have the meanings defined.

Table 4: Definitions

Term	Definition
annual period	a 12 month period commencing from 1 January until 31 December of the same year.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples</i> .
books	has the same meaning given to that term under the EP Act.
Category / categories	categories of prescribed premises as set out in Schedule 1 of the <i>Environmental Protection Regulations 1987</i> (WA) (EP Regulations).
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 constructed and/or installed in accordance with the works approval.
EP Act	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
m	metres
mbgl	metres below ground level
mg/L	milligrams per litre

Term	Definition
µg/L	micrograms per litre
premises	the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
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 CONDITIONS

Schedule 1: Maps

Premises map

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

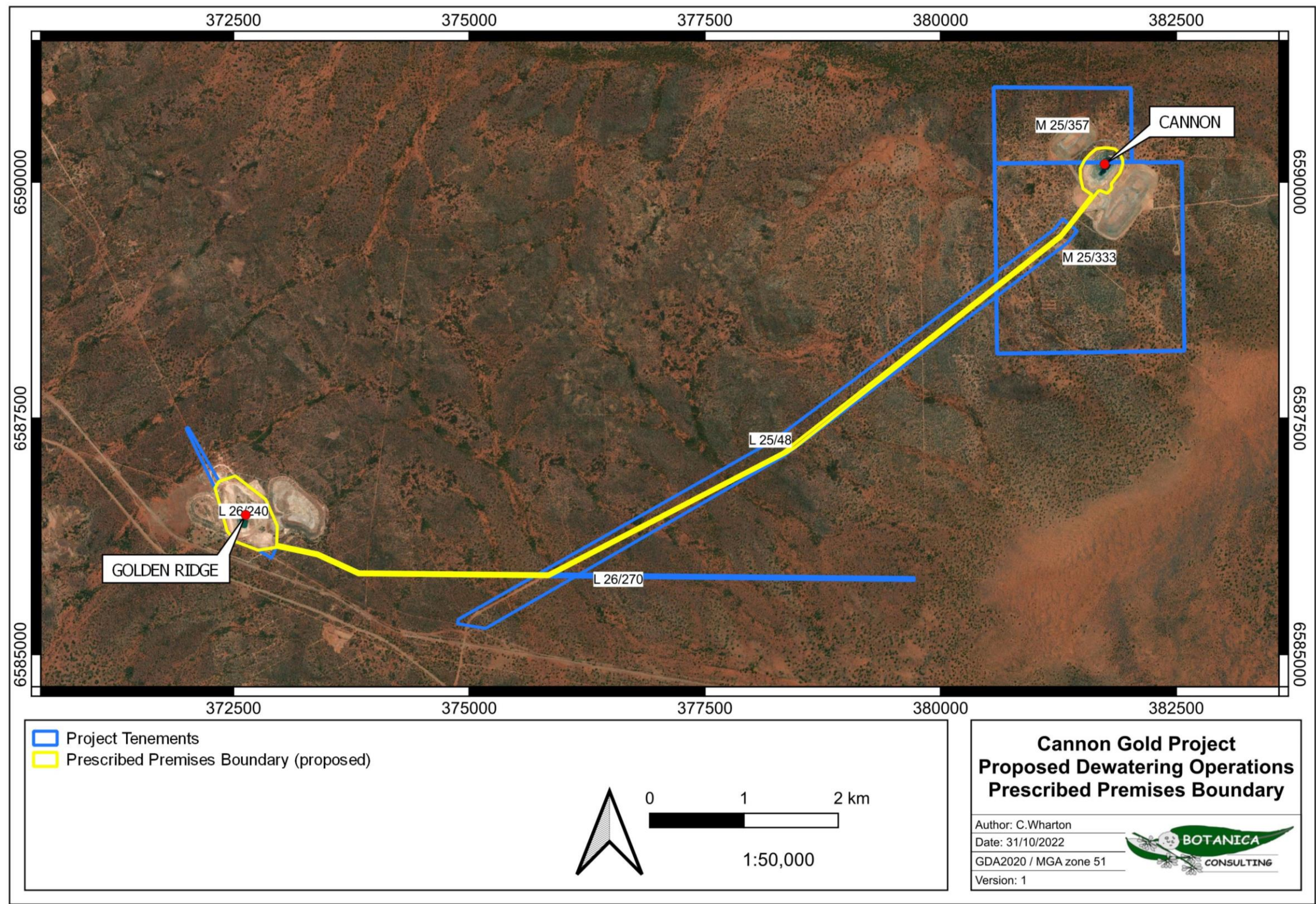


Figure 1: Map of the boundary of the prescribed premises

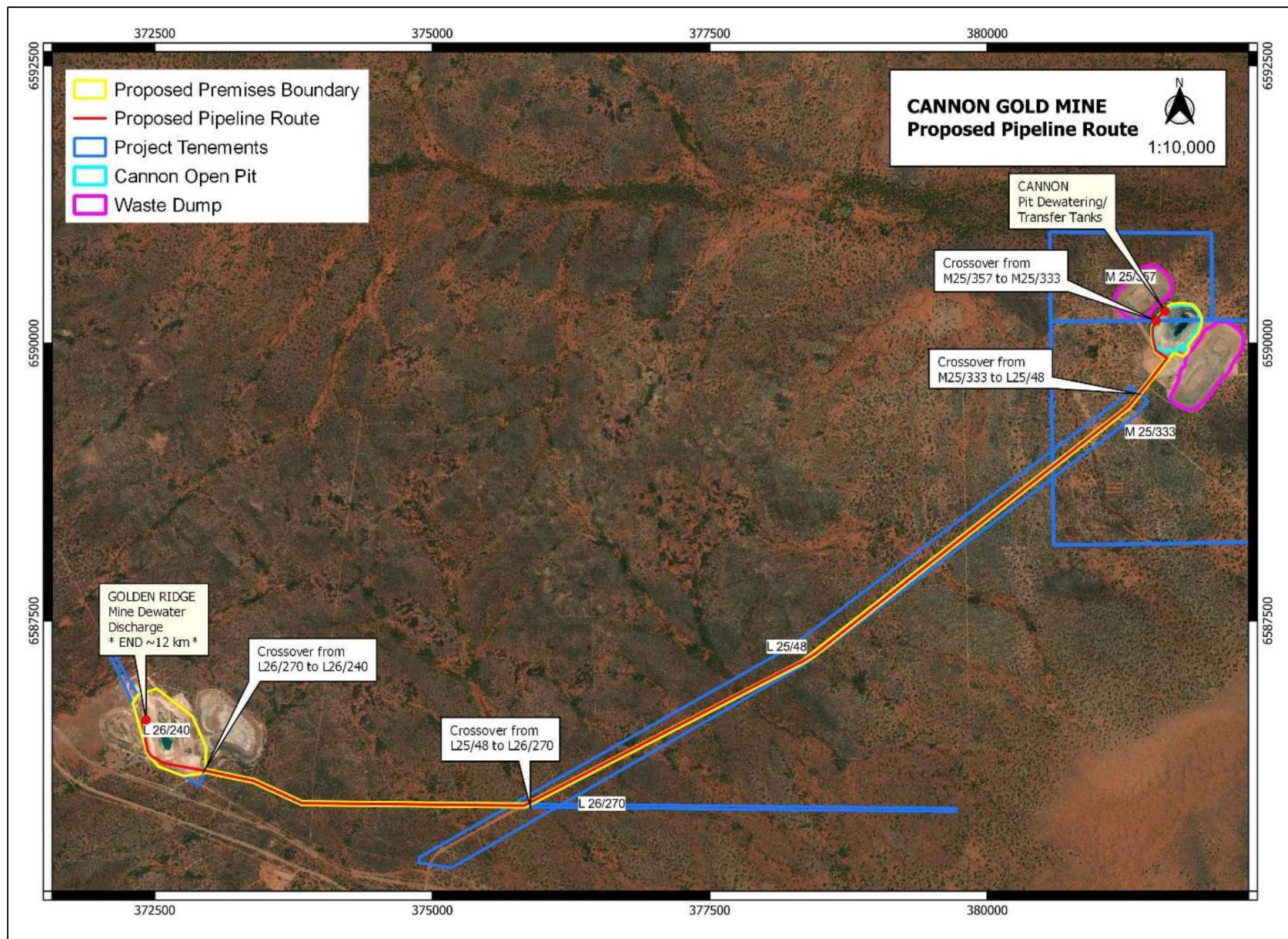


Figure 2: Cannon Gold Project site layout

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 5.

Table 5: Premises boundary coordinates (GDA2020)

Zone	x (Easting)	y (Northing)
51J	373385.1	6586043
51J	372954.6	6586134
51J	372759.9	6586101
51J	372531.7	6586188
51J	372431.5	6586302
51J	372302.4	6586759
51J	372345.6	6586830
51J	372517.4	6586887
51J	372839	6586640
51J	372963.2	6586358
51J	372957.4	6586164
51J	373394.5	6586072
51J	373830.5	6585871
51J	374623.8	6585863
51J	375839.6	6585851
51J	375839.6	6585851
51J	378332.3	6587139
51J	381267.6	6589436
51J	381363.4	6589553
51J	381606.1	6589864
51J	381510.9	6589928
51J	381483.4	6590047
51J	381481.9	6590141
51J	381526.2	6590228
51J	381591.7	6590302
51J	381650.9	6590349

51J	381699.7	6590358
51J	381743	6590361
51J	381783.6	6590359
51J	381845.4	6590349
51J	381857.9	6590341
51J	381881.8	6590319
51J	381907.2	6590288
51J	381932	6590231
51J	381932.2	6590186
51J	381928.6	6590171
51J	381902.9	6590097
51J	381843.6	6590021
51J	381810	6589977
51J	381815.9	6589939
51J	381807.2	6589919
51J	381775.8	6589889
51J	381768.8	6589878
51J	381691.7	6589909
51J	381674.4	6589903
51J	381642.1	6589865
51J	381382.4	6589537
51J	381286	6589420
51J	381270.2	6589404
51J	378356.1	6587125
51J	375839.9	6585821
51J	374633.3	6585833
51J	373823.8	6585841
51J	373385.1	6586043