



Licence number	L9229/2019/1
Licence holder	BHP Billiton Nickel West Pty Ltd
ACN	004 184 598
Registered business address	Nickel West Land Services PO Box 8301 Perth Business Centre WA 6849
DWER file number	DER2019/000640
Duration	17/08/2020 to 16/08/2040
Date of amendment	27/06/2023
Premises details	Cliffs Mine Site M36/9, M36/618, M36/676 and M53/489 SHIRE OF LEONORA SHIRE OF WILUNA as defined in Schedule 2.

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	260,000 tonnes per annual period
Category 12: Screening etc. of material	1.5 million tonnes per annual period
Category 57: Used tyre storage	150 tyres
Category 64: Class II or III putrescible landfill site	3,200 tonnes per annual period
Assessed activities directly related to the above categories	
Remediation through a bioremediation facility of hydrocarbon contaminated soil generated within the premises.	

This amended licence is granted to the licence holder, subject to the attached conditions, on 27 June 2023, by:

A/MANAGER, RESOURCE INDUSTRIES
REGULATORY SERVICES

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

L9229/2019/1 Date of amendment: 27/06/2023

IR-T06 Licence template (v8.0) (September 2022)

Licence history

Date	Reference number	Summary of changes
17/08/2020	L9229/2019/1	Licence granted.
27/06/2023	L9229/2019/1	Amended to include categories 57 (tyre storage) and 64 (landfill facility) and also the inclusion of a bioremediation facility.

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
Mobile screening plant	<ul style="list-style-type: none"> • Located on bunded area; • Fitted with spray nozzles on head drum, discharge point of main conveyor, feed point; • Watercarts for dust suppression of stockpiles and handling; • Stockpiles located within the hard stand area; and • Crusher speed 672RPM or similar. 	Schedule 1: Figure 2
Class II putrescible landfill (WRL landfill cells)	<ul style="list-style-type: none"> • Cells to be located at least 50 meters from the edge of the existing waste rock landform; • Landfill cells are to be bunded to ensure all potentially contaminated surface water run-off is contained within the cell and that clean surface water run-off is prevented from entering the cell; and • The separation distance between the base of each cell within the landfill area and the highest groundwater level shall not be less than 2 meters. 	Schedule 1: Figure 1
Used tyre storage facility	<ul style="list-style-type: none"> • Used tyre storage area limited to no more than 150 tyres at any one time. 	Schedule 1: Figure 1
Bioremediation facility	<ul style="list-style-type: none"> • Bioremediation facility is to be within a hardstand and bunded area; • Clean stormwater runoff is to be diverted away from bioremediation cells; and • Contaminated / potentially contaminated stormwater is to be contained within the bioremediation cell perimeter. 	Schedule 1: Figure 1

Paste plant	<ul style="list-style-type: none"> Throughput approximately between 70m³/hr to 130m³/hr Water trucks utilised for dust suppression Binder silo equipped with pulse dust collector Process water added to paste mix at the chute where binder is added, to reduce dust Tailings/sand mix stored in plant feed stockpiles on bunded hardstand Process water pumped from dewatering dam to process water tank, excess pumped to sedimentation pond In accordance to Figure 4, Figure 5 and Figure 6 Paste plant, binder silo and paste mixer located on 700 mm concrete hardstand with internal interceptors capturing spills Hardstand bunded to have a minimum of 25 cm bund wall Stockpile located on min 700 mm compacted and bunded oxide pad Spills are diverted to spillage settling sumps Spillage settling sumps have minimum capacity of 45m³ Spillage settling sumps are concrete lined and bunded with concrete walls Excess water from sumps is pumped to sedimentation pond Sumps are routinely excavated and potentially contaminated sediment disposed of at licensed offsite facility Sedimentation pond HDPE lined and has minimum capacity of 840 m³ Sedimentation pond equipped with pump and water captured returned to process if required (Figure 7) Sedimentation pond is required to have sufficient freeboard to accommodate the volume of water from 1:100 year 72 hour Average Recurrence Interval (ARI) rainfall event Stormwater channeled to stormwater collection sump Process flow in accordance to Figure 8 	<p>Dewatering dam: Schedule 1: Figure 1</p> <p>Process water tank, sedimentation pond, sumps, plant feed stockpiles, stormwater collection sump: Schedule 1: Figure 3</p> <p>Hardstand: Schedule 1: Figure 6</p>
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Emissions and discharges

- The Licence Holder shall ensure that where wastes produced on the Premises are not taken off-site for lawful use or disposal, they are managed in accordance with the requirements in Table 2.

Table 2: Management of waste

Waste type ¹	Management Strategy	Requirements ^{2,3}
Inert waste type 1	Receipt, handling, and disposal of waste by landfilling	No more than 3,200 tonnes per year of all waste types cumulatively shall be disposed of by landfilling.
Inert waste type 2 (tyres only)		Disposal of waste by landfilling shall only take place within the area shown in Figure 1, Schedule 1 (within waste rock landform).
Putrescible waste		Waste at the landfill area shall be placed in a defined trench enclosed by earthen bunds.
Clean Fill		The Licence Holder shall ensure that the tipping area at the landfill area is less than 30 metres in length. Ensure that no wind-blown waste escapes from the Premises and that wind-blown waste is collected on at least a fortnightly basis and returned to the tipping area.
Inert Waste type 2 (tyres)	Storage	Used tyres are to be stored within the area shown in Figure 1, Schedule 1 with no more than 150 used tyres to be stored on any one time. Used tyres are to be stored: <ul style="list-style-type: none"> in stacks that do not exceed 3.7m in height, 60m² in area and 12.5 tonnes in weight. A maximum of four individual stacks are to be grouped together (a pile) with not less than 2.5 m separation distance between each stack. 18 m of separation distance to be maintained between piles (a group of 4 individual stacks). Tyre stacks are to be a minimum of 18 m from any building of equal or greater height to the tyre stack (3.7m).
Hydrocarbon contaminated waste	Bioremediation	Only hydrocarbon contaminated material generated from within the premises is to be treated within the bioremediation facility. Treatment of hydrocarbon-contaminated waste shall only take place within the bioremediation area shown in Figure 1, Schedule 1 Volume of waste deposited within the facility is to be recorded. Hydrocarbon contaminated material shall be placed at a maximum thickness of 0.5 meters. An appropriate moisture content and nutrient level within the soil which sustains biological activity is to be maintained. Mechanical mixing and turning of material shall occur at a minimum of one per month. Material treated within the bioremediation facility must meet the Uncontaminated Fill Criteria of the <i>Landfill Waste Classification and Waste Definitions 2019</i> ⁴ prior to disposal within the premises.

Note 1: Types of waste as defined in the Landfill Waste Classification and Waste Definitions 1996 - as amended from time to time and published on the Department's website

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 and landfilling of controlled waste (including asbestos and tyres) are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

Note 4: Uncontaminated Fill Criteria outlined within Table 6 of the Department's Landfill Waste Classification and Waste Definitions 2019 (as amended from time to time- as amended from time to time)

3. The Licence Holder shall ensure that cover is applied and maintained on landfilled wastes in accordance with Table 3 and that sufficient stockpiles of cover are maintained on site at all times.

Table 3: Cover requirements

Waste Type	Cover requirements
Putrescible wastes	To be covered weekly, if waste is deposited during that week, with sufficient quantities of Type 1 inert waste, clean fill or other appropriate cover material to prevent the spread of windblown waste and harbouring of disease vectors.
Inert Waste Type 1	No cover required
Inert Waste Type 2 (Tyres ¹)	To be covered after each disposal with sufficient quantities of Type 1 inert waste or clean fill to prevent the spread of fire.

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

4. The Licence Holder shall:
- (a) undertake inspections as detailed in Table 4.
 - (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 4: Inspection of infrastructure

Scope of inspection	Type of inspection	Frequency of inspection
Bunding and stormwater management controls for the bioremediation facility and landfill cells	Visual check of physical integrity	Following a significant rainfall event (a 20% AEP event over 24 hours)
Landfill cells – windblown waste	Visual check for containment of windblown waste within landfill trench	Weekly

Records and reporting

5. 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.

- 6.** 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 30 September in the same year, an Annual Audit Compliance Report in the approved form.
- 7.** 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) the works conducted in accordance with condition 1 of this licence; and
 - (c) any maintenance of infrastructure that is performed in the course of complying with conditions 1, 2 and 3 of this licence.
- 8.** The books specified under condition 7 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.

Definitions

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

Table 5: Definitions

Term	Definition
ACN	Australian Company Number
AEP	Annual Exceedance Probability
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 July until 30 June in the following year
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (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.
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
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.
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.

Term	Definition
prescribed premises	has the same meaning given to that term under the EP Act.
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

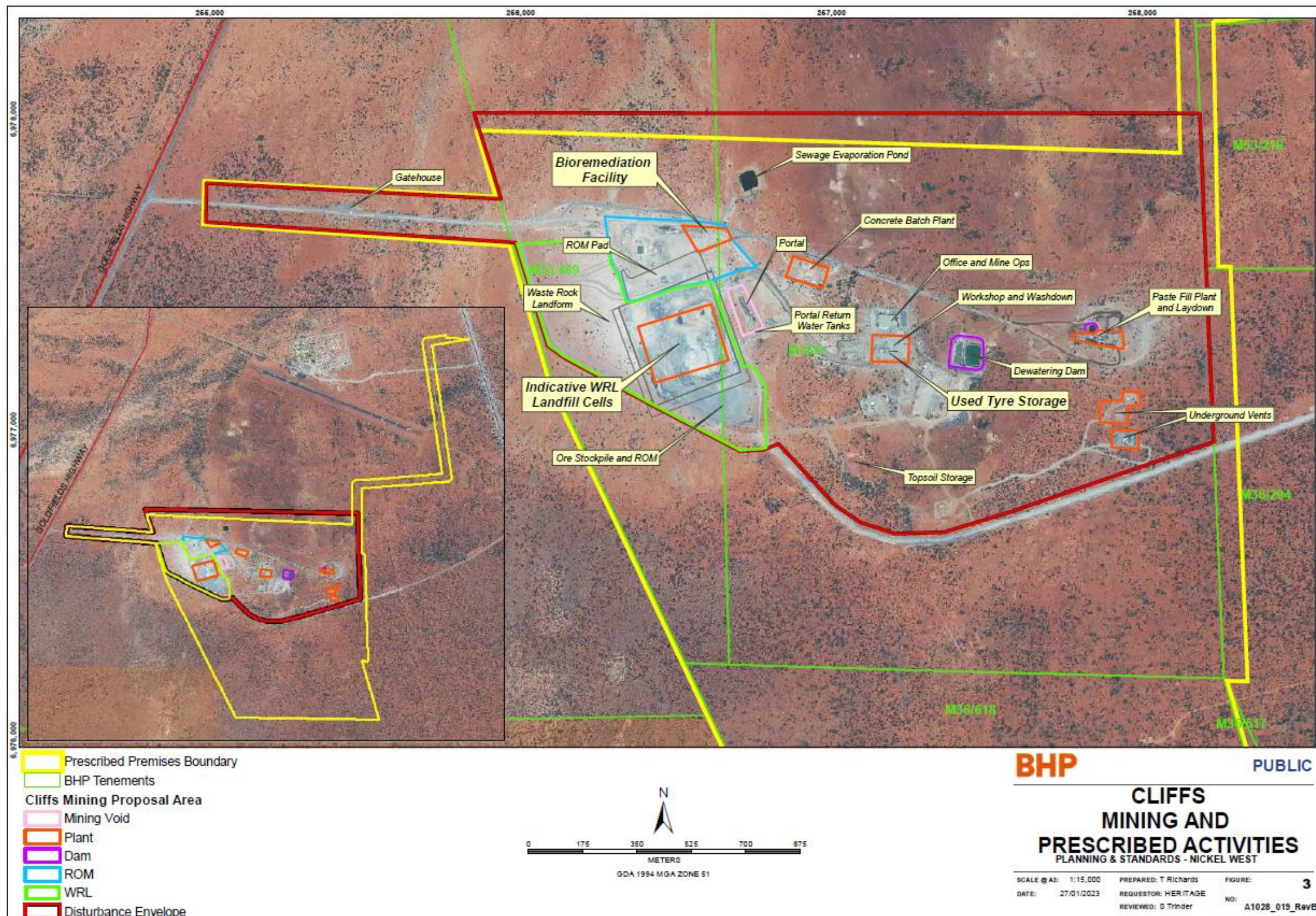


Figure 1: Map of the boundary of the prescribed premises

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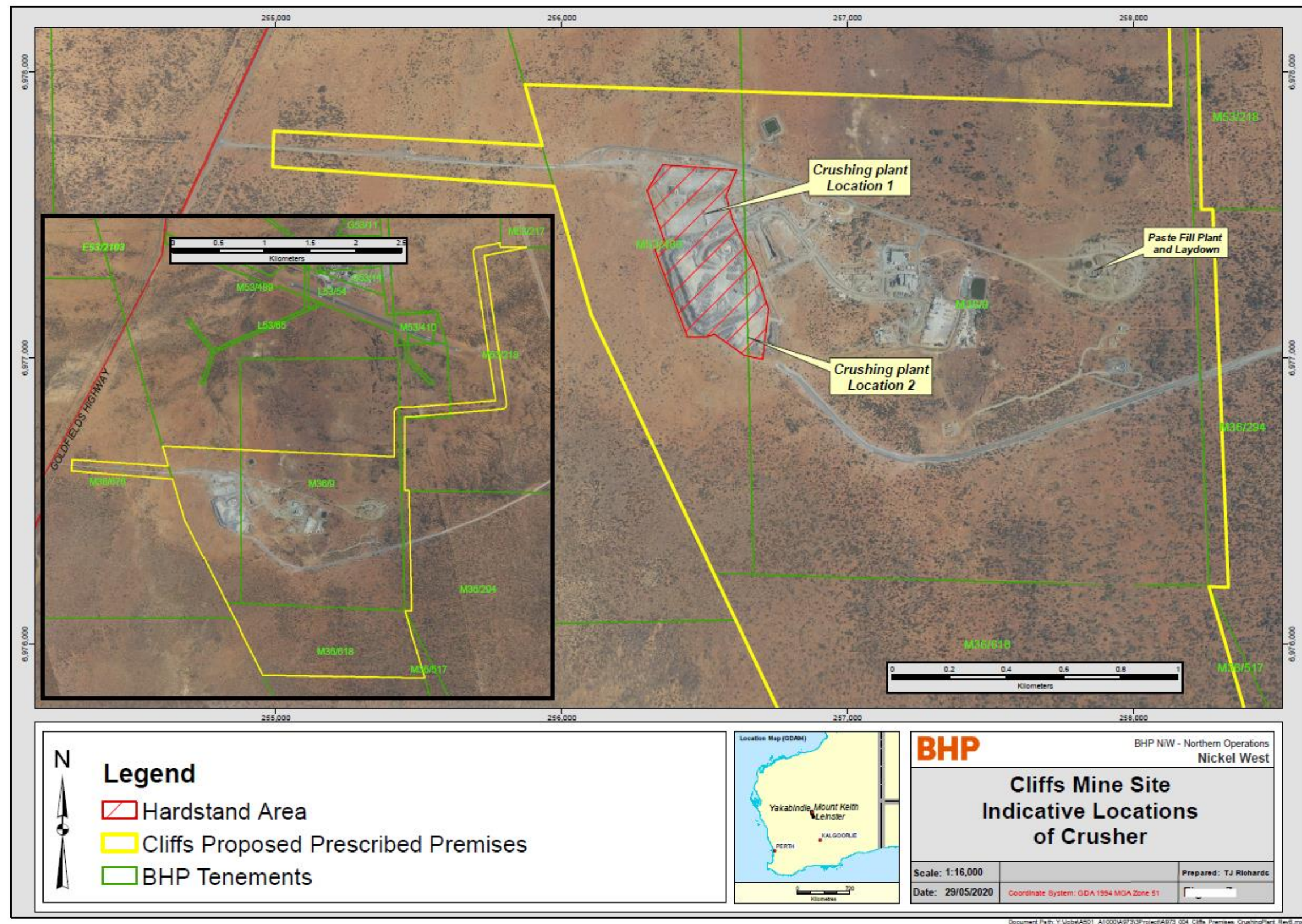


Figure 2: Crushing plant locations

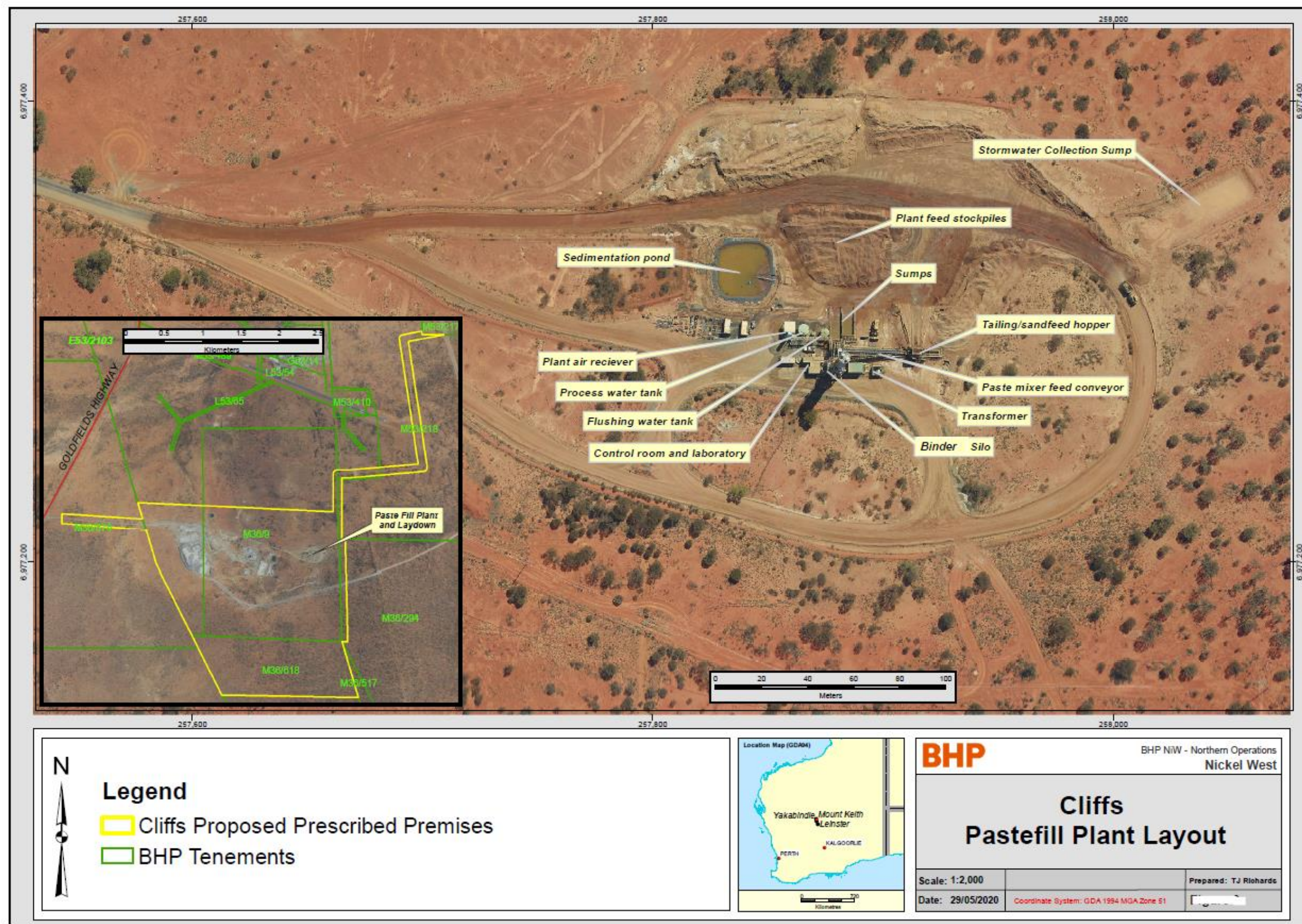


Figure 3: Paste fill plant layout



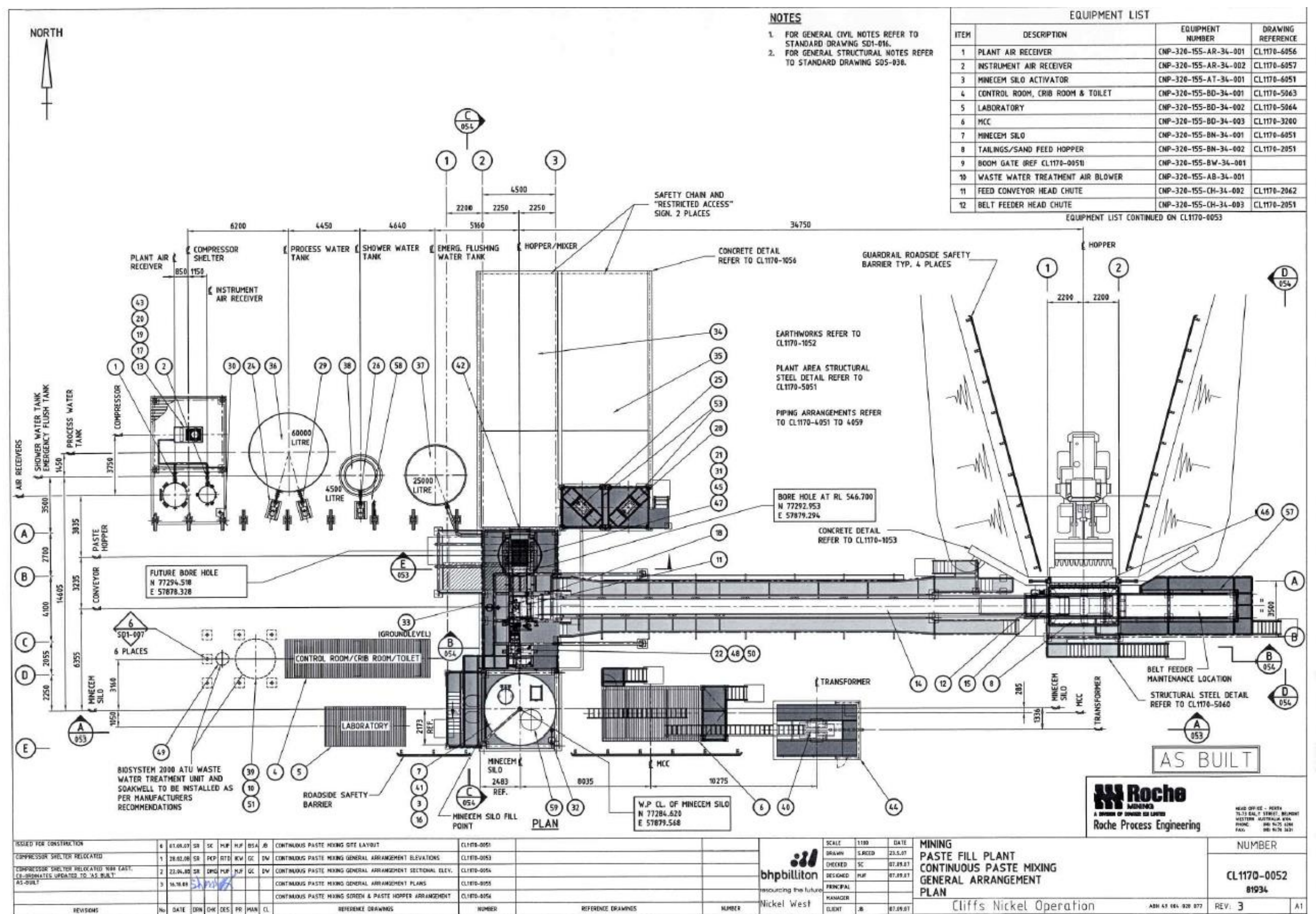


Figure 5: Paste fill plant general arrangement

CL1170-0053

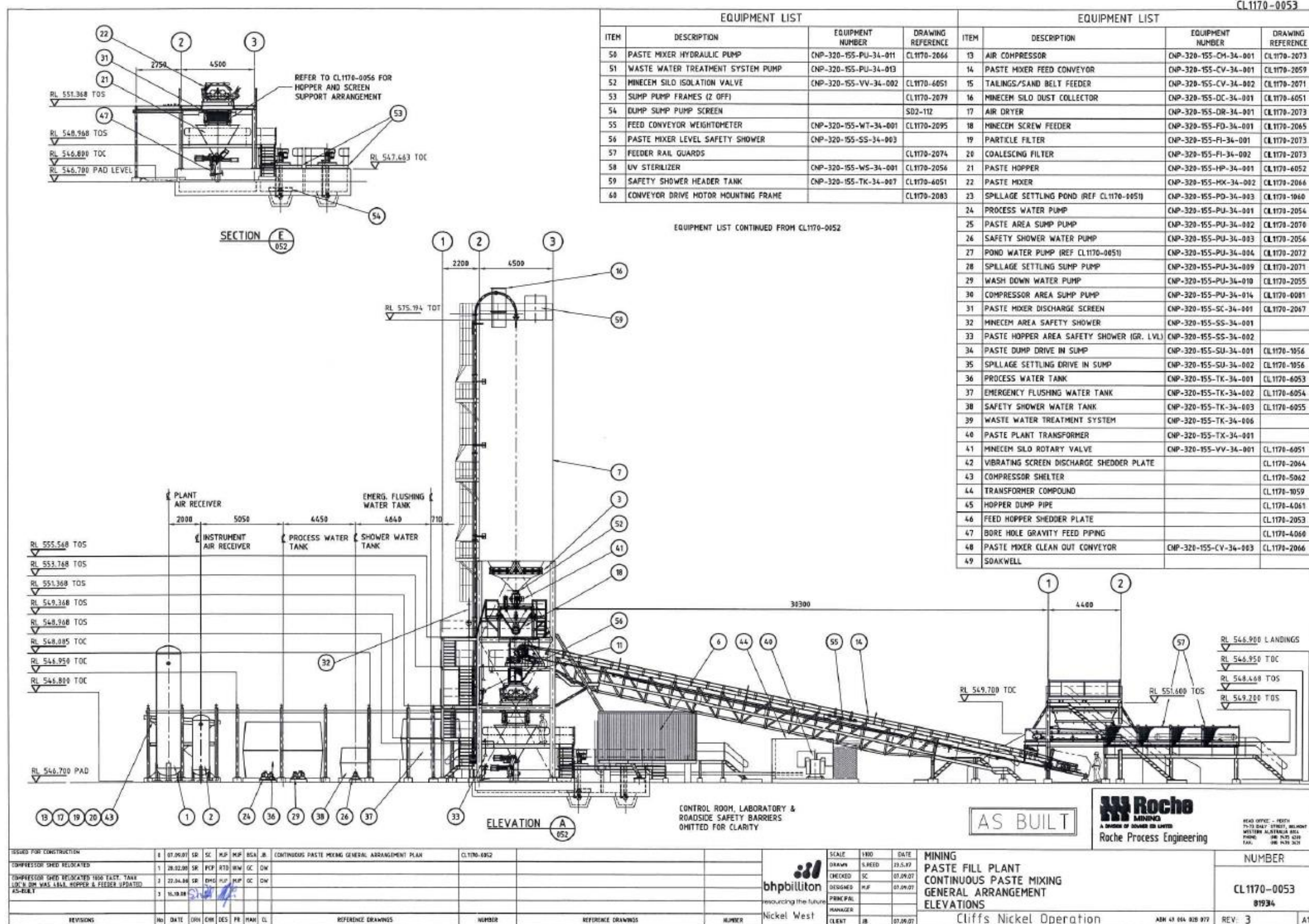


Figure 6: Paste fill plant elevations

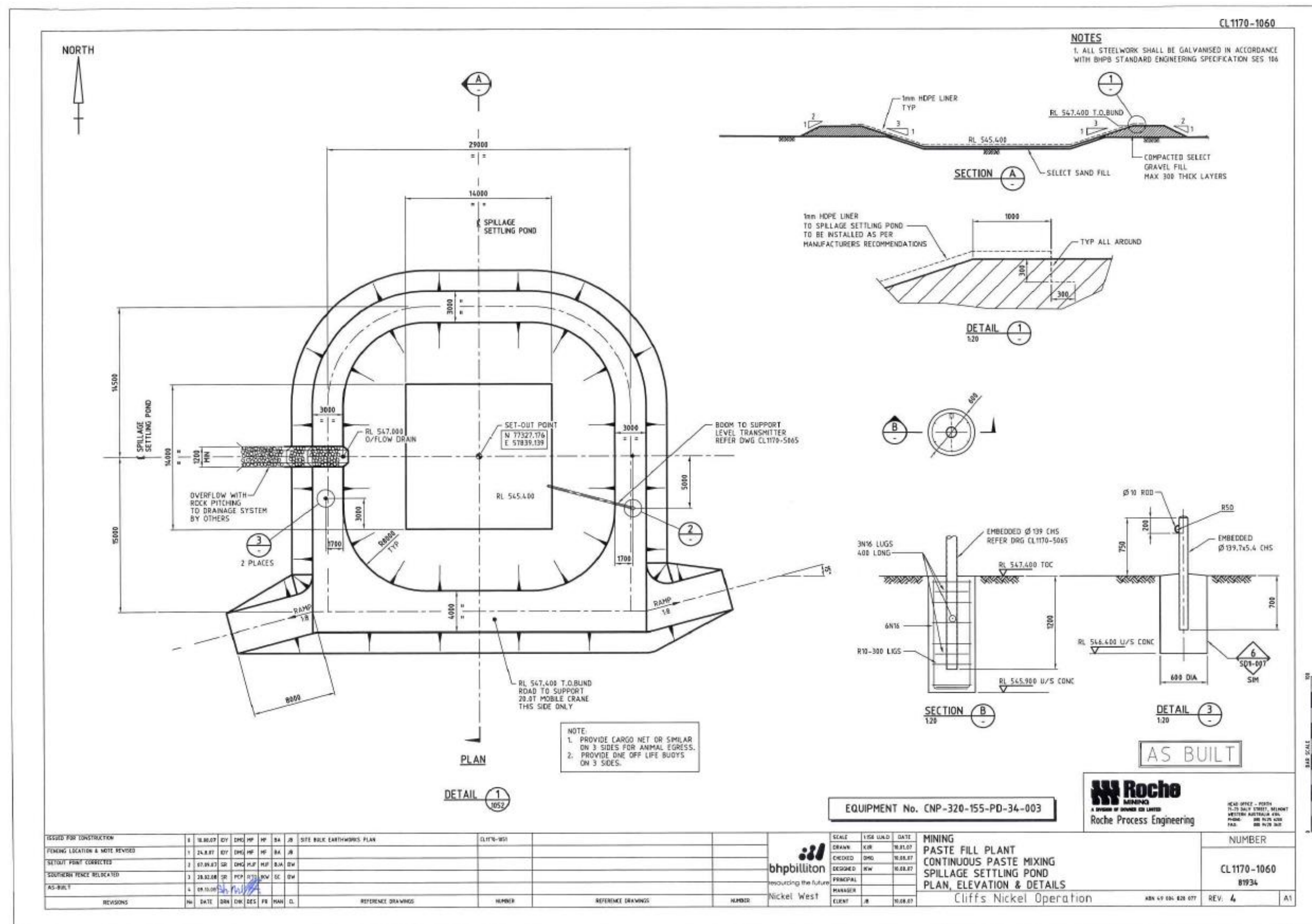


Figure 7: Sedimentation pond layout

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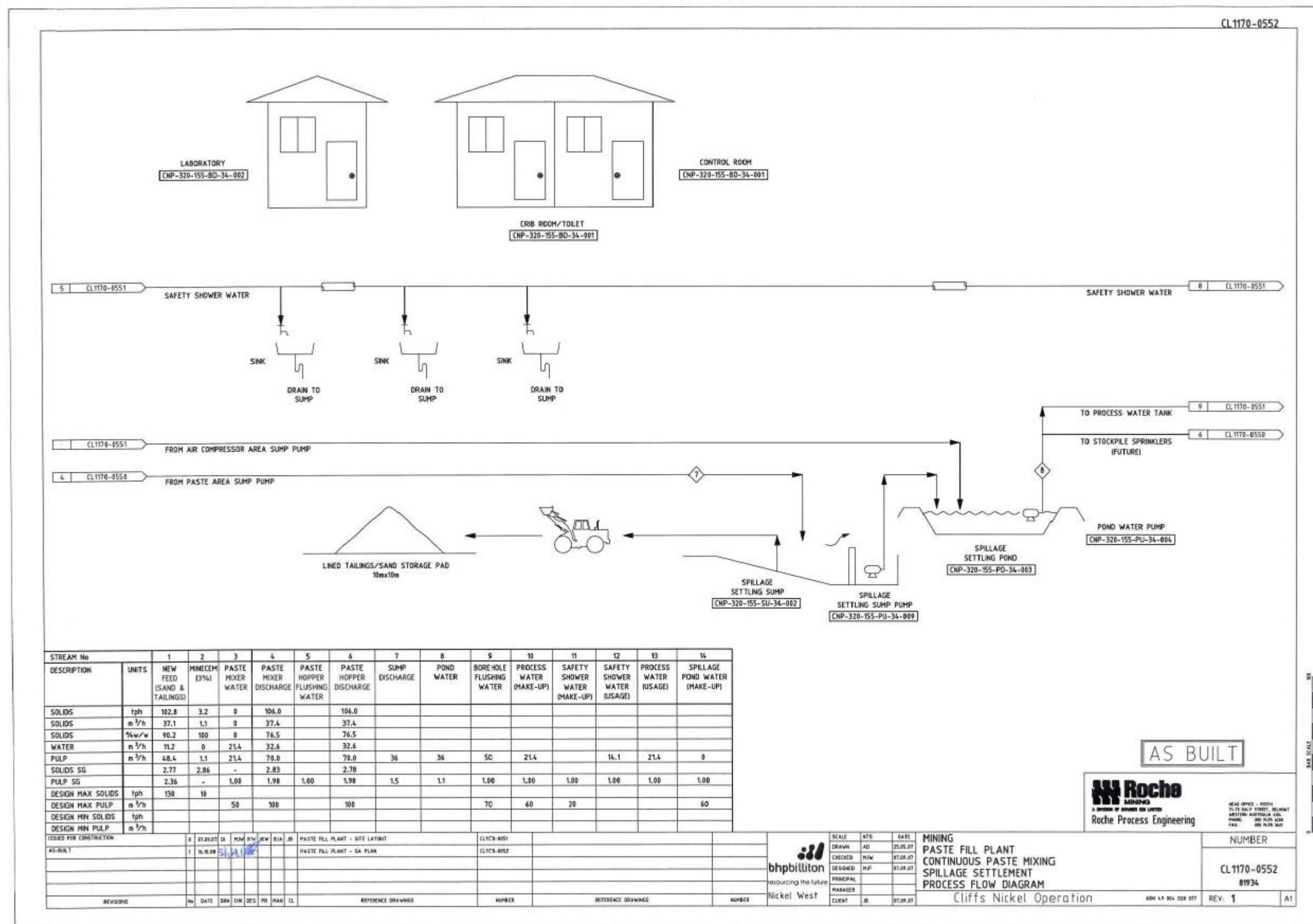


Figure 8: Process flow diagram for the paste fill plant

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Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table 6 and Figure 9.

Table 6: Premises boundary coordinates (GDA94)

Point Figure 9	Lat °S	Lon °E
1	27.30103	120.52436
2	27.30166	120.53384
3	27.29972	120.53326
4	27.30099	120.55585
5	27.29611	120.55616
6	27.29522	120.56605
7	27.28053	120.56385
8	27.2798	120.5668
9	27.2802	120.5665
10	27.28021	120.56912
11	27.28099	120.56490
12	27.29593	120.56699
13	27.30678	120.46749
14	27.30406	120.55709
15	27.30409	120.55749
16	27.31602	120.55777
17	27.31598	120.55709
18	27.32251	120.55905
19	27.32223	120.54310
20	27.30701	120.53544
21	27.30295	120.53422
22	27.30216	120.52430

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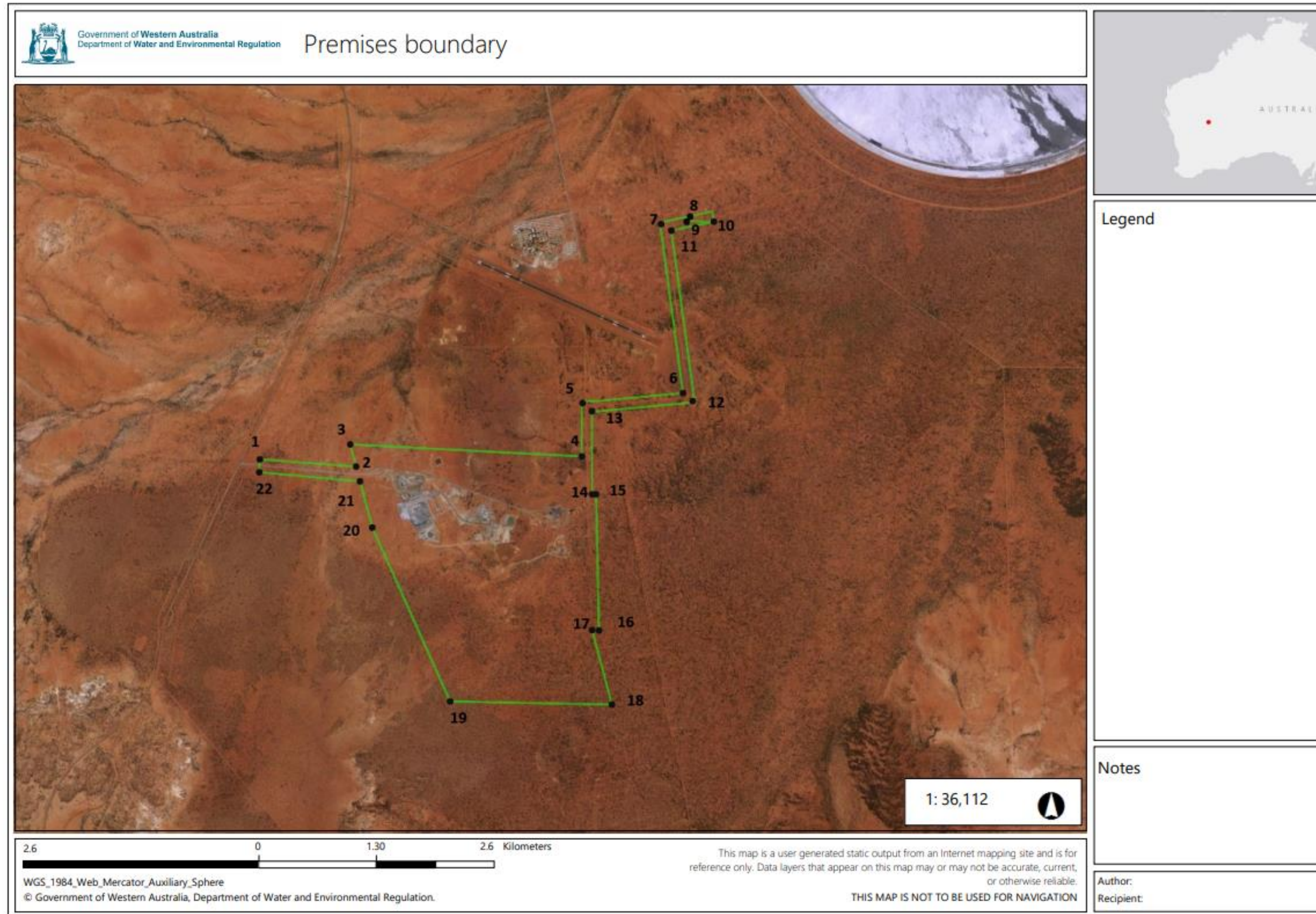


Figure 9: Premises boundary

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