Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6221/2019/1
Works approval holder	Pilbara Iron Company (Services) Pty Ltd
ACN	107 210 248
Registered business address	Level 18, Central Park 152-158 St Georges Terrace Perth WA 6000
DWER file number	DER2019/000003
Duration	13/06/2019 to 12/06/2023
Date of issue	13 June 2019
Date of last amendment	7 June 2022
Premises details	Gudai-Darri Iron Ore Mine Legal description - AML70/252 (Mineral Lease S.A. 70/252), L47/701 and Miscellaneous Licence 7SA (Special Rail Licence), Miscellaneous Licence L47/849 - as defined by the coordinates in Schedule 2

Prescribed premises category description **(Schedule 1, *Environmental Protection Regulations 1987*)**	**Assessed production capacity**
Category 5: Processing or beneficiation of metallic or non-metallic ore.	43 million tonnes per year
Category 12: Screening etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated.	10 million tonnes per year

This works approval is granted to the works approval holder, subject to the attached conditions, on 7 June 2022, by:

Alana Kidd
Manager, Resource Industries
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Works approval history

Date	Reference number	Summary of changes
13/06/ 2019	W6221/2019/1	Works approval granted.
06/12/2019	W6221/2019/1	Works approval amended to change the prescribed premises boundary to include miscellaneous licence L47/849 to allow the mobile crusher and screener to be used for construction of the mine airstrip. Condition 4 amended to require that crusher and screener are located not less than 100 metres from major drainage line.
07/06/2022	W6221/2019/1	Works approval updated to current works approval template (2020). Works approval amended to extend duration of the works approval by a year to 12/06/2023. Time Limited operations phase added to category 5 (processing facility) infrastructure. Design requirements of the Category 12 primary crushing and screening plants amended. Addition of two mobile secondary cone crushers (one per circuit), two recirculating conveyors (one per circuit), and four stacking conveyors (two per circuit), to category 12 operations.

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 construct and/or install the infrastructure and equipment in accordance with the corresponding design and installation requirements and at the corresponding infrastructure location as set out in Table 1.

Table 1: Design and construction/installation requirements

Infrastructure/equipment	Design and construction / installation requirements	Infrastructure location
CATEGORY 5 PROCESSING FACILITY		
Concrete hardstand	Constructed beneath the primary and secondary crushing plant and conveyor transfer points	Schedule 1: Maps: Infrastructure layout
Primary crusher apron, sized for up to 300 tonne class haul trucks **Dual truck tipping points and ROM dump hopper** of 600 tonne live capacity and discharge surge bin of 600 tonne	Drive in sumps and silt traps to capture wash down water and sediment High pressure water fogging and water spray curtain system	Schedule 1: Maps: Infrastructure layout
Direct feed crushing facility - complete with dump hopper, gyratory crusher, service crane, rock breaker and discharge apron feeder onto the overland conveyor	Concrete sumps to capture wash down water from conveyors Drive in sumps and silt traps to capture wash down water and sediment High pressure water fogging and water spray curtain system	Schedule 1: Maps: Infrastructure layout
Conveyors feeding a coarse ore fixed stacker	Concrete sumps to capture wash down water from conveyors Drive in sumps and silt traps to capture wash down water and sediment High pressure water fogging and water spray curtain system at the coarse ore stockpile Conveyors are covered and fitted with spray booths for dust suppression at transfer points	Schedule 1: Maps: Infrastructure layout

Infrastructure/equipment	Design and construction / installation requirements	Infrastructure location
7-bay screening plant with shuttle fed, bins, feeders and screens	Drive in sumps and silt traps to capture wash down water and sediment Dust collector system	Schedule 1: Maps: Infrastructure layout
Two bay secondary crusher facility with bins, belt feeders and MP1250 type secondary crushers	Drive in sumps and silt traps to capture wash down water and sediment	Schedule 1: Maps: Infrastructure layout
Dry screen feed conveyor, lump stacking conveyor and fines stacking conveyor	Concrete sumps to capture wash down water from conveyors Drive in sumps and silt traps to capture wash down water and sediment Conveyors are covered (except in the stockyard area), and fitted spray booths at transfer points for dust suppression	Schedule 1: Maps: Infrastructure layout
Sample plants – cutters, conveyors and equipment for sampling lump and fines	Concrete sumps to capture wash down water from conveyors Drive in sumps and silt traps to capture wash down water and sediment Conveyors are covered and fitted with spray booths for dust suppression at transfer points	Schedule 1: Maps: Infrastructure layout
Stockyard with two slewing and luffing stackers and a rotary reclaimer **Volumetric train load out**	Drive in sumps and silt traps to capture wash down water and sediment Stacker boom conveyors fitted with head end sprays and dust shrouds Stockyard serviced by automatic water cannons on either side of stockpiles. Water cannons triggered by site weather monitoring system. Reclaimer bucket wheel and conveyor fitted with dust suppression sprays	Schedule 1: Maps: Infrastructure layout
STORMWATER INFRASTRUCTURE		
Site stormwater diversion levees and drains	Designed and constructed to prevent ingress of stormwater runoff into the processing facility areas	Schedule 1: Maps: Infrastructure layout

Infrastructure/equipment	Design and construction / installation requirements	Infrastructure location
Processing plant stormwater drain system and sedimentation ponds	Designed and constructed to capture stormwater from the processing facility areas. Sedimentation ponds designed and constructed to treat a peak 1:10 year rainfall event.	Schedule 1: Maps: Infrastructure layout
FUEL/OIL SPILL CONTAINMENT INFRASTRUCTURE		
Bunded concrete hardstand (or bunded lined earthen pad) at vehicle refuelling points.	Designed and constructed to contain fuel/oil in the event of a spill	Schedule 1: Maps: Infrastructure layout
Oily water collection pumps, collection tanks and oily water separation systems at refuelling points	Installed to service vehicle refuelling points. Oily water separation system designed to achieve a maximum hydrocarbon concentration of 15mg/L in treated water.	Schedule 1: Maps: Infrastructure layout
CATEGORY 12 MOBILE CRUSHING AND SCREENING PLANTS		
2 x mobile primary jaw crusher (one per circuit)	diesel-electric or diesel-hydraulic powered with a maximum design capacity not exceeding 750tph and dust suppression spray system. Located not less than 100 metres from major drainage channels	Within the premises boundary as shown in Schedule 1: premises map
2 x mobile screen (one per circuit)	diesel-hydraulic powered with a maximum design capacity not exceeding 500tph in an iron ore lump/fines screening configuration. Fitted with dust suppression spray system. Located not less than 100 metres from major drainage channels	Within the premises boundary as shown in Schedule 1: premises map
2 x mobile secondary cone crushers (one per circuit)	diesel-electric and/or diesel-hydraulic powered with a maximum design capacity not exceeding 500tph. Located not less than 100 metres from major drainage channels	Within the premises boundary as shown in Schedule 1: premises map
2 x mobile recirculating conveyor (one per circuit)	Mobile conveyor to convey secondary crushed material back onto mobile screen with dust suppression sprays at head end. Diesel-hydraulic powered , 50ft long with adjustable luff and head end spray bar for dust suppression with a maximum design capacity not exceeding 500tph.	Within the premises boundary as shown in Schedule 1: premises map

Infrastructure/equipment	Design and construction / installation requirements	Infrastructure location
	Located not less than 100 metres from major drainage channels	
4 x stacking adjustable luff conveyor (two per circuit)	80ft, diesel-hydraulic with a max capacity not exceeding 600tph Located not less than 100 metres from major drainage channels	Within the premises boundary as shown in Schedule 1: premises map

Compliance reporting

2. The Works Approval Holder must not depart from the requirements specified in Table 1 except:

(a) where such departure does not increase risks to public health, public amenity or the environment; and

(b) all other Conditions in this Works Approval are still satisfied.

3. The works approval holder must within 30 calendar days of an item of infrastructure or equipment required by condition 1 being constructed and/or installed or transported to the premises:

(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.

(c) Where a departure from the requirements specified in Table 1 occurs and is of a type allowed by Condition 2, the Works Approval Holder must provide to the CEO a description of, and explanation for, the departure.

4. The Environmental Compliance Report required by condition 3(b), must include as a minimum the following:

(a) certification by a suitably 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 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.

Environmental commissioning phase for Category 5

Environmental commissioning requirements

5. The Works Approval Holder may only commence environmental commissioning of the category 5 processing facility infrastructure listed in Table 1, once the Environmental Compliance Report has been submitted for that infrastructure and equipment in accordance with Condition 3(b) of this works approval.

6. The Works Approval Holder may only undertake environmental commissioning of the category 5 processing facility infrastructure listed in Table 1, within the premises

boundary, for a period not exceeding 180 days from the date Environmental Compliance Report(s) for all items of category 5 processing facility infrastructure listed in Table 1 have been submitted .

Time limited operations phase

Commencement and duration

7. 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 3(b) has been submitted by the works approval holder for that item of infrastructure; and

(b) where the item of infrastructure is authorised to undertake environmental commissioning under condition 5, the Works Approval holder may only commence time limited operations following the conclusion of the environmental commissioning phase as required by condition 6.

8. The works approval holder may conduct time limited operations for an item of infrastructure specified in Table 1 in accordance with conditions 7(a) and 7(b) and;

(a) for a period not exceeding 180 calendar days; 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 8(a).

Time limited operations requirements and emission limits

9. During time limited operations, the works approval holder must ensure that the premises infrastructure and equipment listed in Table 1 is maintained and operated in accordance with the corresponding operational requirements set out in Table 2.

Table 2: infrastructure and equipment requirements during time limited operations

Infrastructure/equipment	Operational requirement	Infrastructure location
Category 5 processing facility plant	No more than 43 million tonnes per year	Schedule 1: Maps: Infrastructure layout
Category 12 mobile crushing and screening plant	No more than 10 million tonnes per year.	Schedule 1: Maps: Infrastructure layout

Time Limited Operations Compliance reporting

10. 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.

11. 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 and amount of material processed;

(b) a review of performance and compliance against the conditions of the works approval; and

(c) 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)

12. 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.

13. 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 1;

(c) complaints received under condition 12.

14. 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 have the meanings defined.

Table 3: Definitions

Term	Definition
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 *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 info@dwer.wa.gov.au
Condition	means a condition to which this Works Approval is subject under s.62 of the EP Act.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* 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.
DWER	Department of Water and Environmental Regulation
emission	has the same meaning given to that term under the EP Act.
environmental commissioning	means the sequence of activities to be undertaken to test equipment integrity and operation, or to determine the environmental performance, of equipment and infrastructure to establish or test a steady state operation and confirm design specifications.
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	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
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.

Term	Definition
Time Limited Operational Phase	relates to prescribed premises operations permitted under this Works Approval, subject to Conditions, whilst an application for a licence is being assessed.
tph	tonnes per hour
waste	has the same meaning given to that term under the EP Act.
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). The yellow polygon depicts the premises boundary.

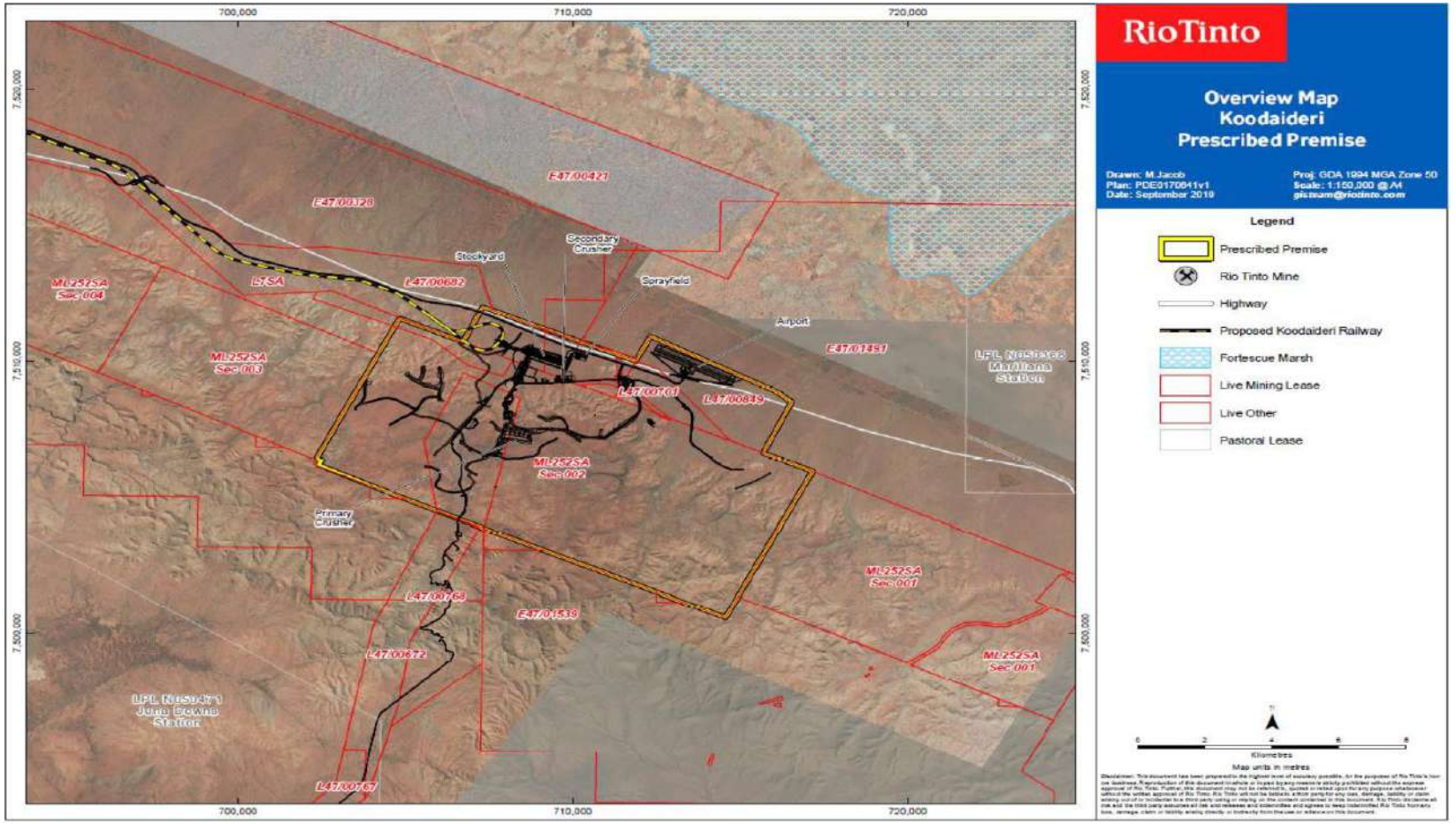

Figure 1: Map of the boundary of the prescribed premises

Infrastructure layout

The processing facility layout is shown in the maps below.

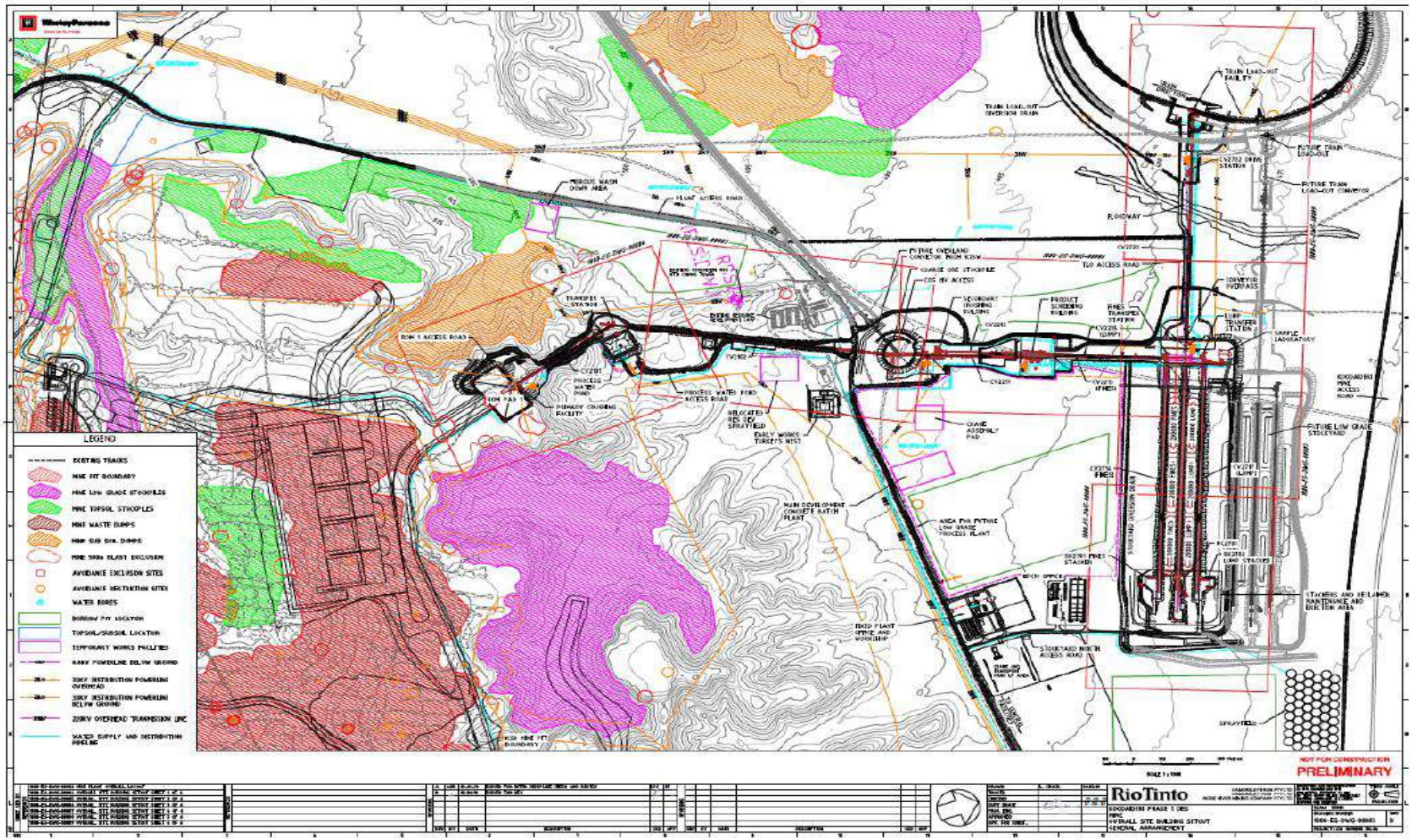

Figure 2: Processing facility layout (indicative only)

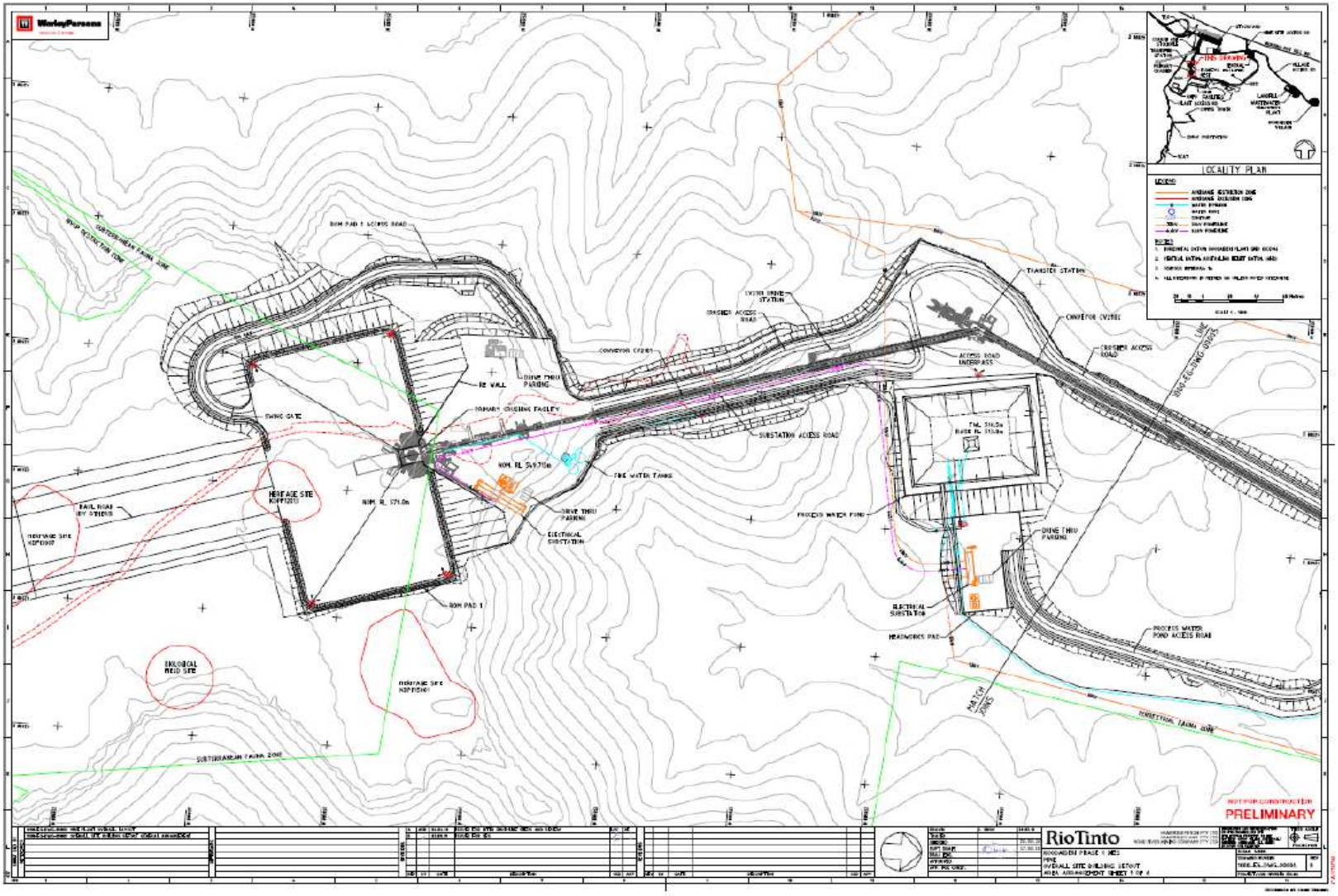

Figure 3: Processing facility layout (indicative only)

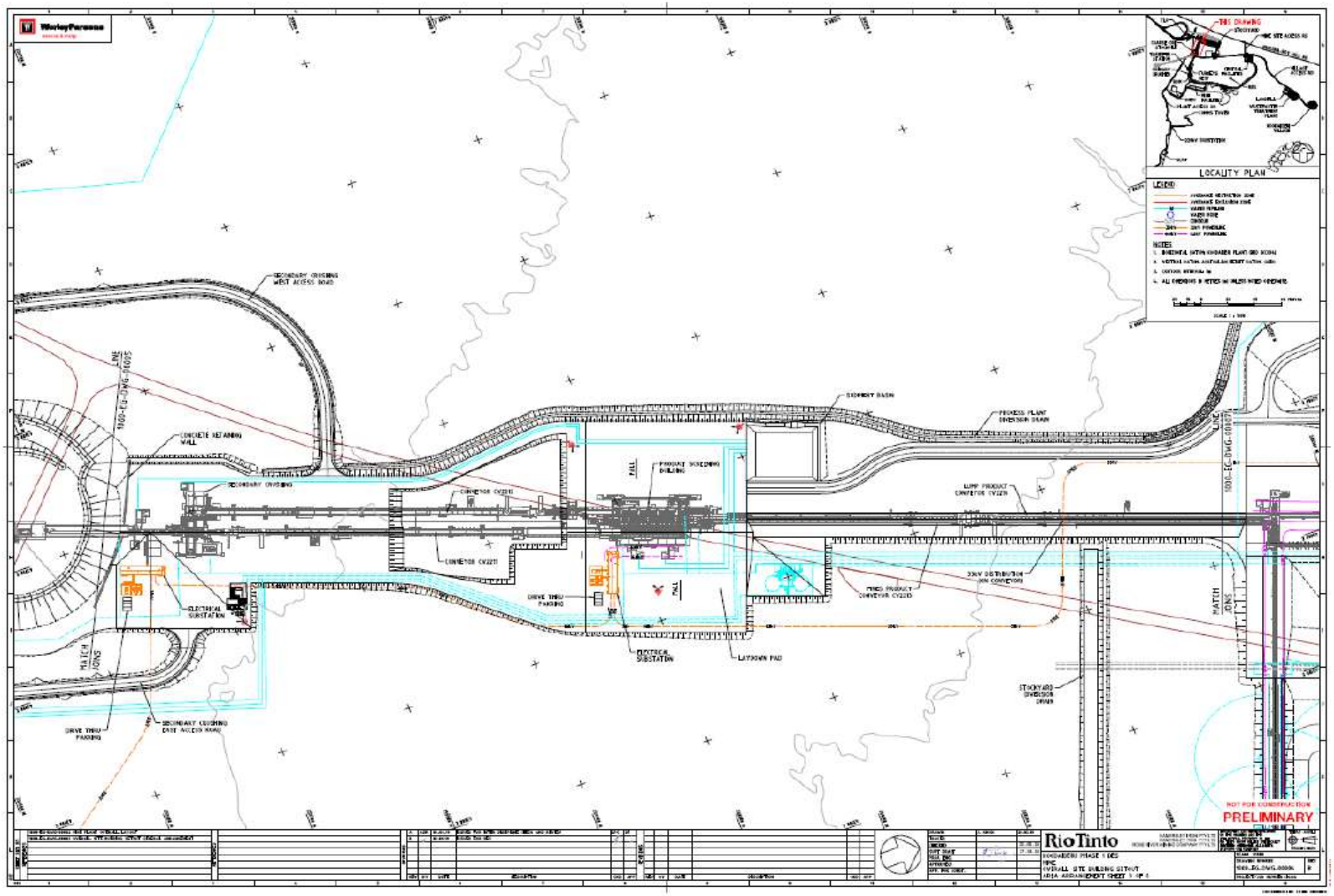

Figure 4: Processing facility layout (indicative only)

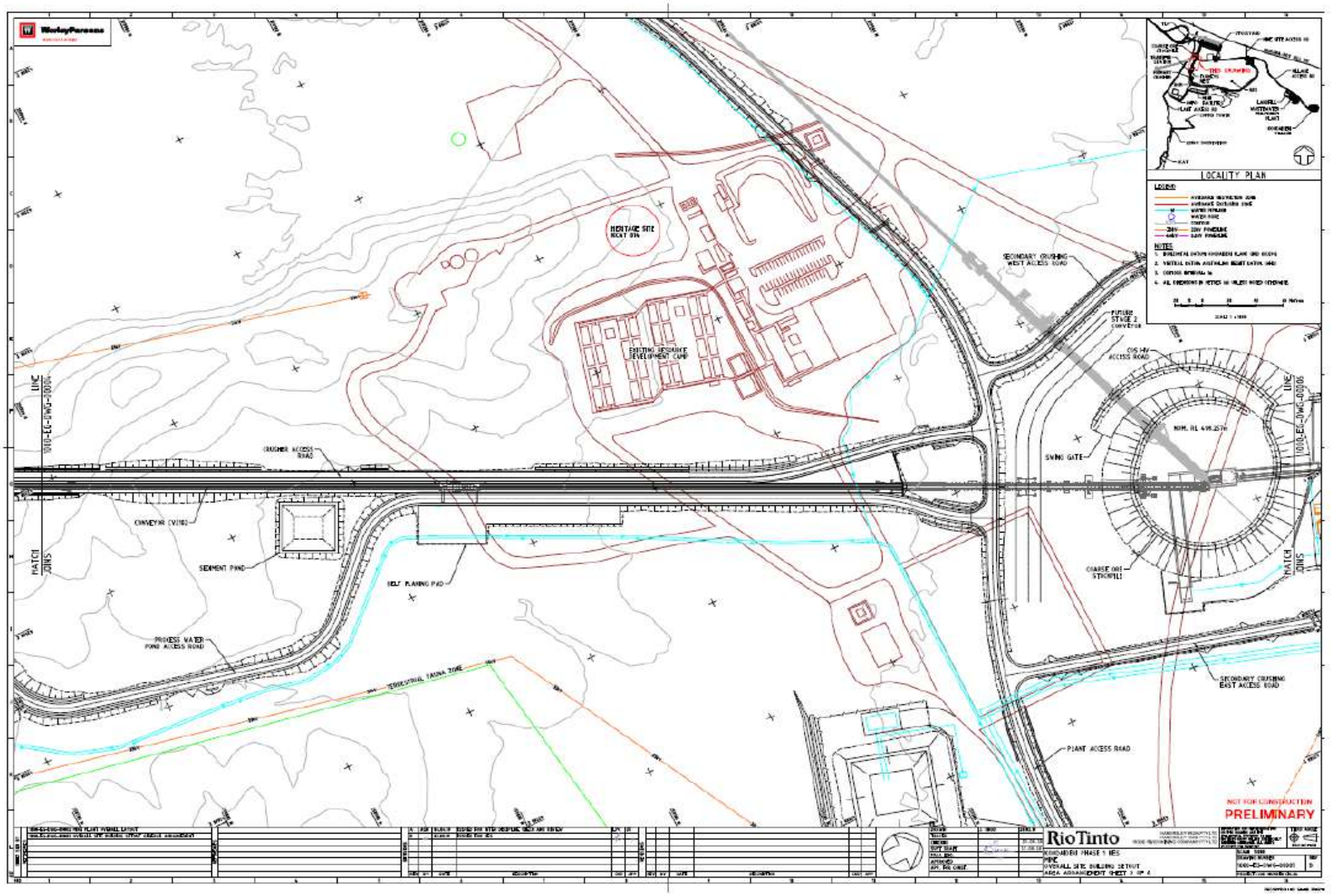

Figure 5: Processing facility layout (indicative only)

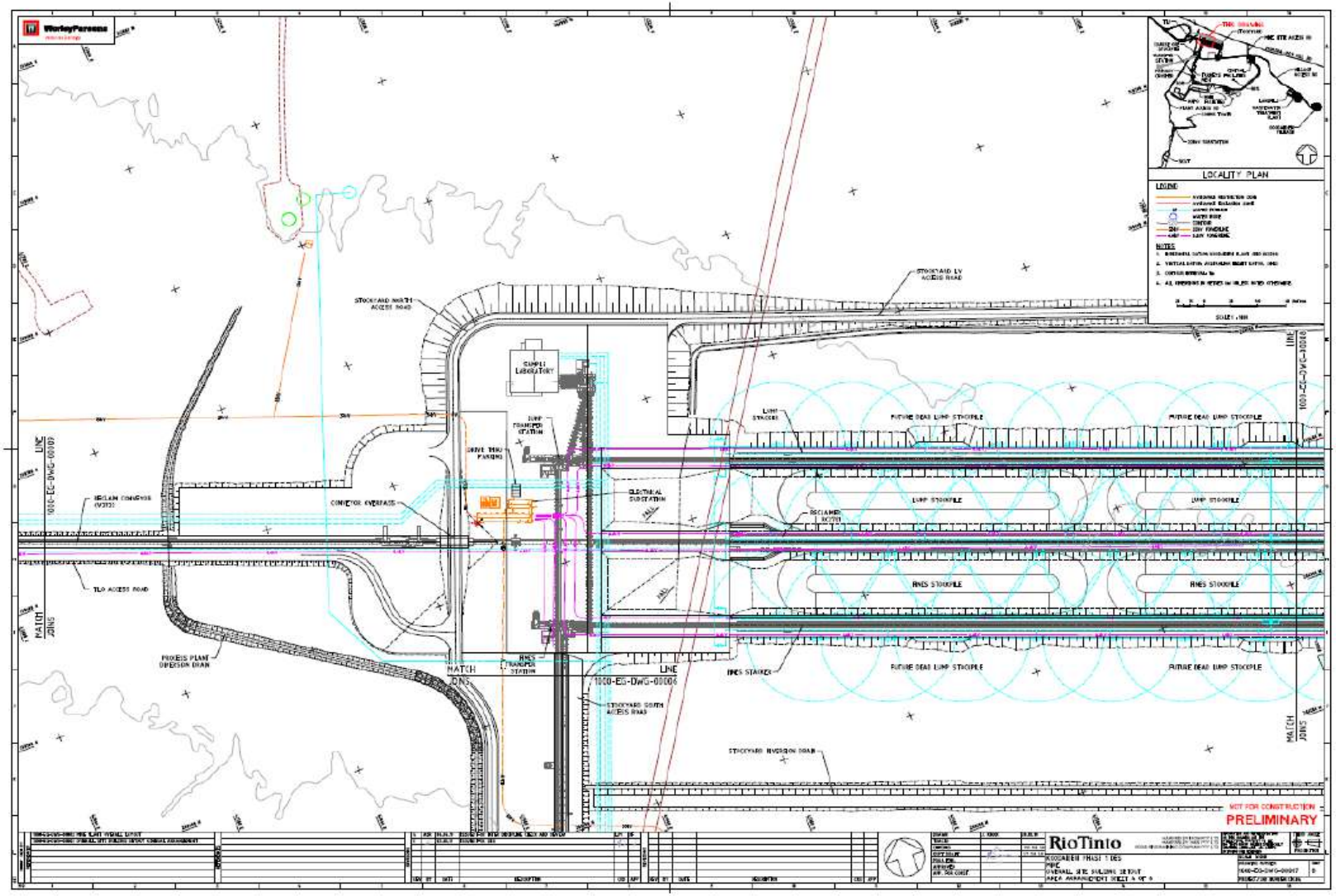

Figure 6: Processing facility layout (indicative only)

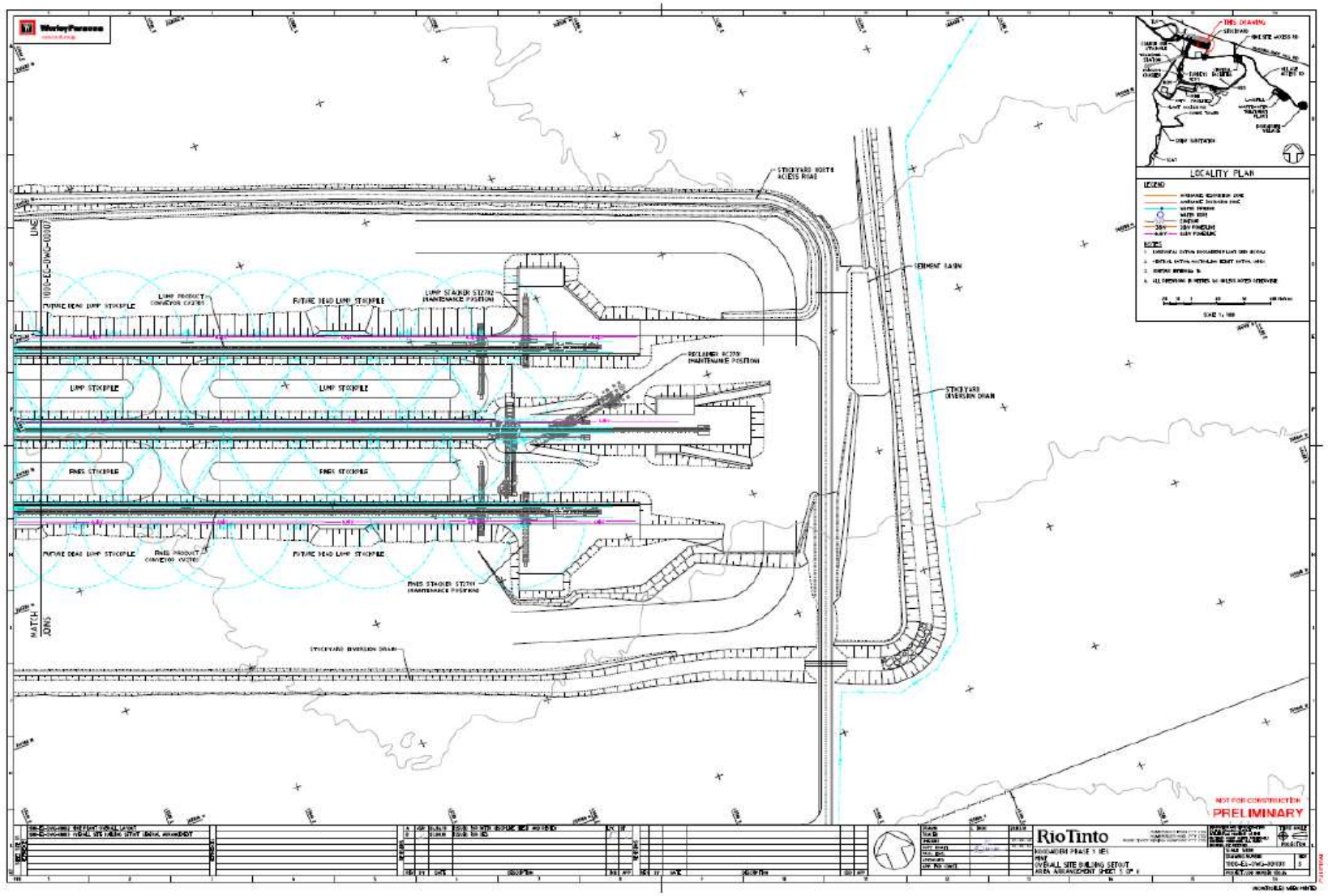

Figure 7: Processing facility layout (indicative only)

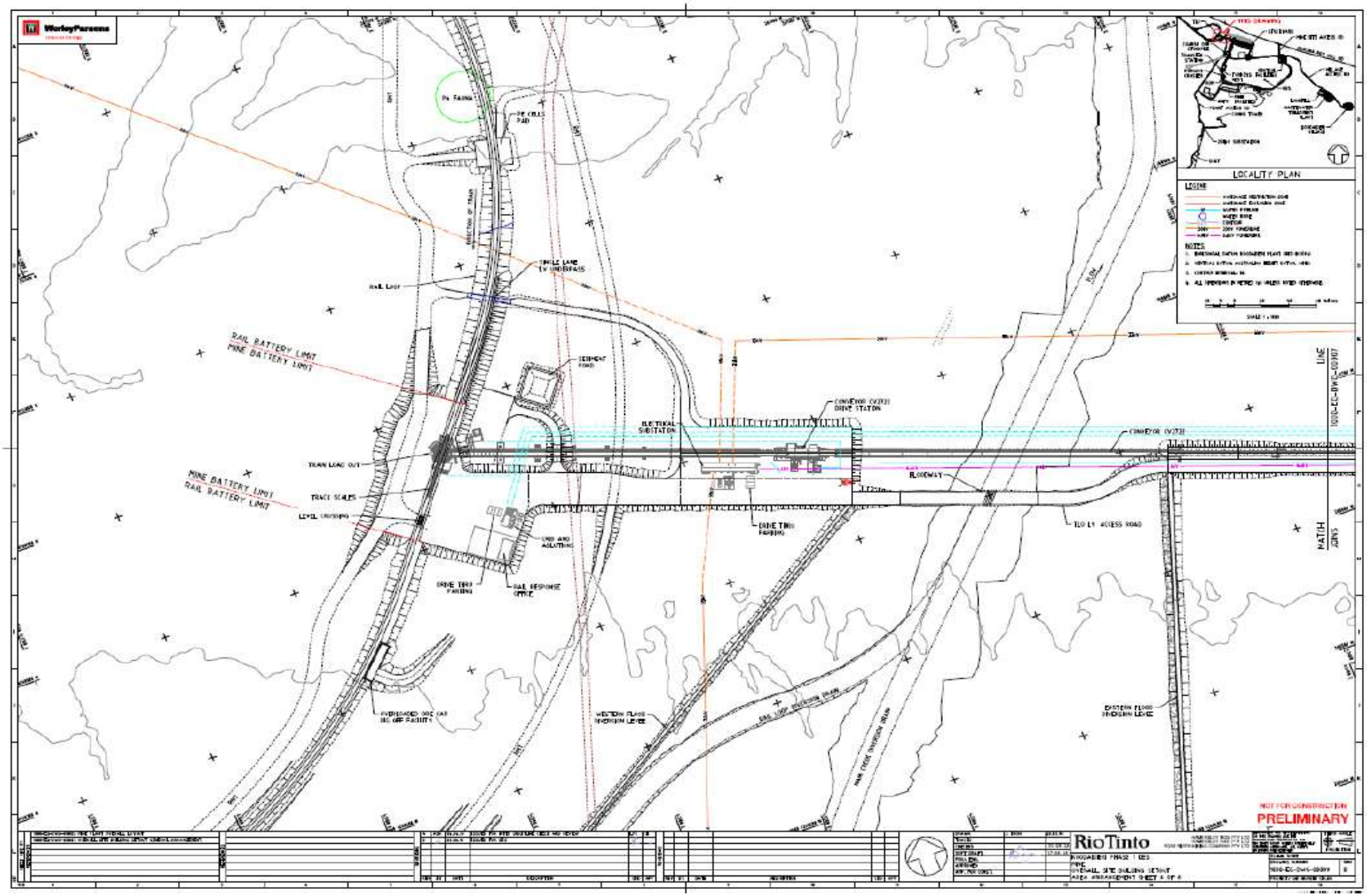

Figure 8: Processing facility layout (indicative only)

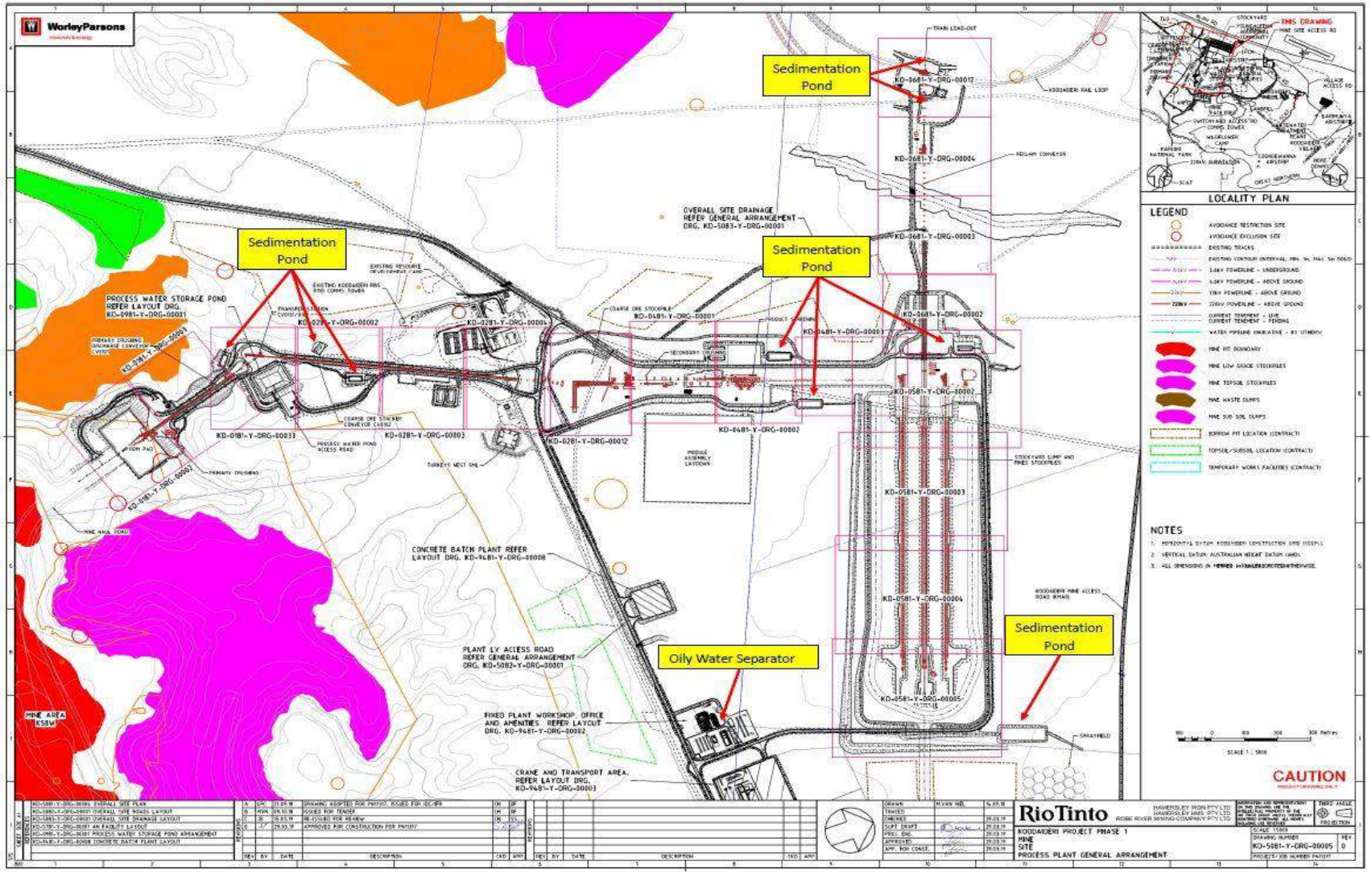

Figure 9: Processing facility layout (indicative only)

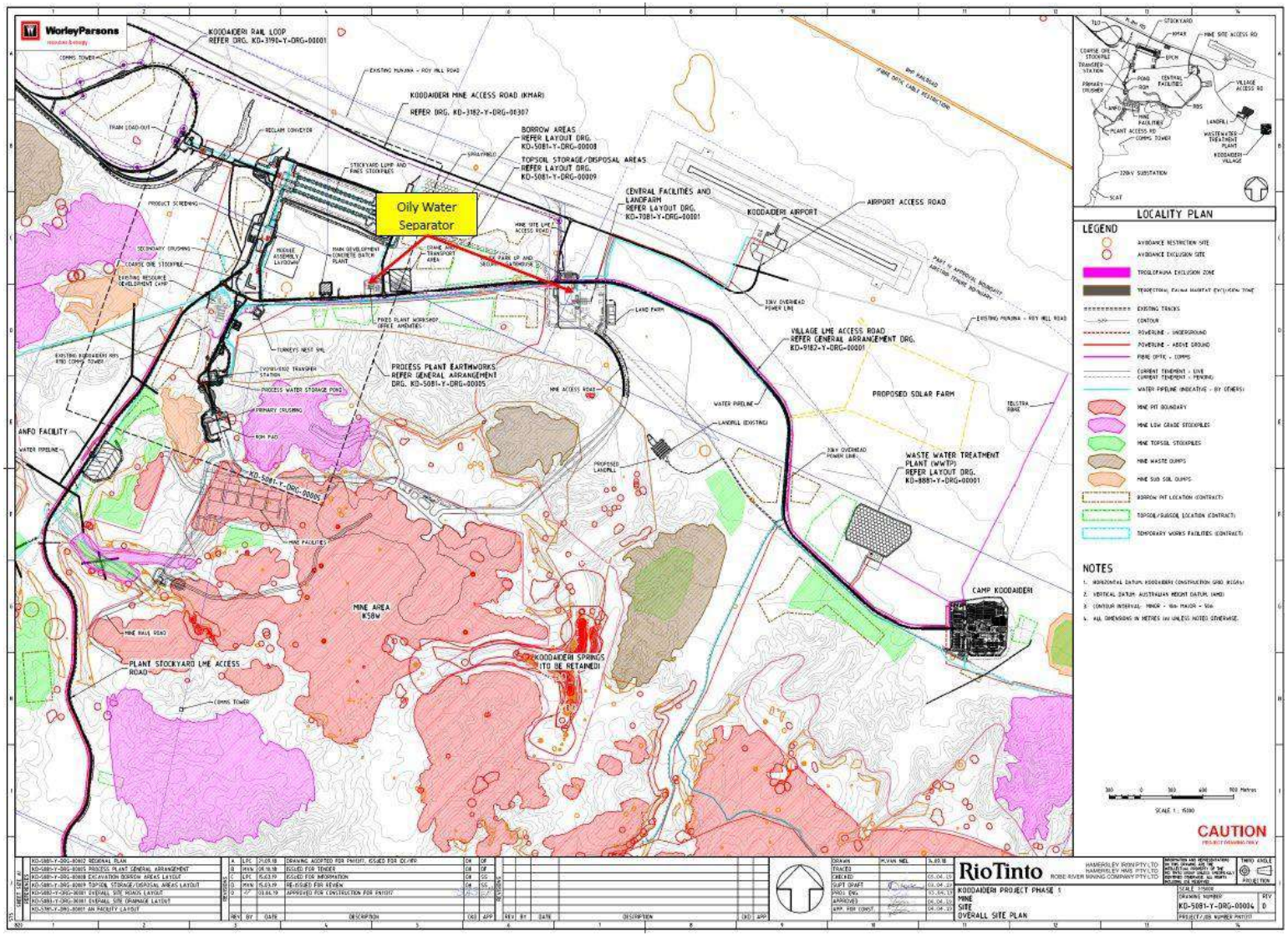

Figure 10: Processing facility layout (indicative only)

Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table 4.

Table 4: Premises boundary coordinates (GDA 1994 MGA Zone 50)

Easting	Northing
707332	7511974
706744	7510695
704841	7511566
702359	7506423
702521	7506347
702434	7506168
714549	7500559
717148	7505934
714713	7507048
712570	7509684
707332	7511974