



| | |
|------------------------------------|--|
| Licence number | L5258/1991/11 |
| Licence holder | Pilbara Iron Company (Services) Pty Ltd |
| ACN | 35 107 210 248 |
| Registered business address | Level 18, Central Park 152-158 St Georges Terrace PERTH WA 6000 |
| DWER file number | INS-0001191 |
| Duration | 26/05/2011 to 25/05/2030 |
| Date of issue | 26/05/2011 |
| Date of amendment | 29/06/2026 |
| Premises details | Mt Brockman, Nammuldi and Silvergrass Iron Ore Mines AML70/4, ALM70/272, G47/01242, G47/01243, G47/1269, L47/139, L47/140, L47/141, L47/152, L47/160, L47/647, L47/786, LG848907 and LPL N050438 MT SHEILA WA 6751 As defined by the coordinates 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 | 68,000,000 tonnes per annual period |
| Category 6: Mine dewatering | 42,300,000 tonnes per annual period |
| Category 12: Screening, etc. of material | 10,000,000 tonnes per annual period |
| Category 54: Sewage facility | 526 cubic metres per day |
| Category 57: Used tyre storage (general) | 5,000 tyres |
| Category 64: Class II putrescible landfill site | 7,634 tonnes per annual period |
| Category 73: Bulk storage of chemicals, etc | 20,260 cubic metres |

This licence is granted to the licence holder, subject to the attached conditions, on 29 June 2026, by:

SENIOR MANAGER, RESOURCE INDUSTRIES

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

Licence history

| Date | Reference number | Summary of changes |
|------------|------------------|--|
| 26/05/2011 | L5258/1991/11 | Licence reissue. |
| 26/05/2016 | L5258/1991/11 | Amendment to expand the prescribed premises boundary to include new activities associated with Nammuldi; increase the design capacity for Category 5, 12, 54, 64 and 73; include the Brockman waste water treatment plant and fuel hub; include the Nammuldi landfill and remove the Pit 5 dewatering discharge point. |
| 17/10/2016 | L5258/1991/11 | Amendment Notice 1 Including SGE project crusher, conveyor and fuel storage facilities. |
| 01/06/2017 | L5258/1991/11 | Amendment Notice 2 Construction and operation of Brockman 2 Mine (B2) new putrescible landfill. |
| 24/01/2019 | L5258/1991/11 | Amendment Notice 3 Construction of a new crushing and screening plant and replacement of the Nammuldi Fixed Plant WWTP. |
| 15/05/2020 | L5258/1991/11 | This amendment for the extension of the expiry date and amalgamation of Amendment Notices 1 – 3. |
| 06/12/2023 | L5258/1991/11 | DWER initiated amendment to fix the typological error in the production capacity table for category 6 assessed production/design capacity from 42,300,00 tonnes per annual period to 42,300,000 tonnes per annual period. |
| 19/02/2026 | L5258/1991/11 | Amendment to include Category 57: Used tyre storage, update premises details, update premises figures and authorisation of a Managed Aquifer Recharge (MAR) scheme. |
| 16/03/2026 | L5258/1991/11 | DWER initiated amendment to fix the typological error in condition 15 to reference condition 36 rather than 'condition 0'. |
| 29/06/2026 | L5258/1991/11 | Amendment to add the following three (3) discharge points to manage and retain surplus groundwater abstracted from below-water-table mining operations: <ul style="list-style-type: none"> • Nammuldi Lens A. • Nammuldi Lens B; and • SGE Pit 2. |

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:

General

Mobile Crushing and Screening Plant

1. The licence holder must only operate the Mobile Crushing and Screening Plant in accordance with the Iron Ore (WA) Mobile Crushing and Screening Management Plan (RTIO-HSE-0235877).

Stormwater management

2. The licence holder must install and maintain mechanisms and facilities detailed in condition 6 to ensure that stormwater from the following areas, is diverted for treatment and disposal or reuse:
 - (a) Process plants;
 - (b) Washdown bays;
 - (c) Refuelling areas;
 - (d) Mechanical workshops;
 - (e) Primary crushing plant shown in Schedule 1, Figure 5; and
 - (f) Fuel Storage Facility shown in Schedule 1, Figure 6.

Surface water discharge outfall

3. The licence holder must ensure that the concentration of Total Recoverable Hydrocarbons in waters discharged from the premises does not exceed 30 mg/L.

Waste management from ancillary operations

4. The licence holder must as soon as practicable, 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.
5. The licence holder must 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 approximately authorised facility.
6. The licence holder must have in place, utilise and maintain protective bunding, skimmers, silt traps, neutralisation pits, fuel and oil traps, drains and sealed collection sumps to enable recovery of spillage and protection of surrounding soils and groundwater around the facilities below:
 - (a) Process plants;
 - (b) Maintenance workshops;
 - (c) Laboratory;
 - (d) Primary crushing plant shown in Schedule 1, Figure 5;
 - (e) Fuel storage facility shown in Schedule 1, Figure 6; and
 - (f) Power generation areas.
7. The licence holder must utilise measures or agents such as quick break detergents, to prevent oil-water emulsions from passing through the separator systems.

SGE Conveyor, Primary Crusher and fuel storage facilities

- 8. The licence holder must ensure that all hydrocarbon impacted waters are treated via an oily water separator prior to discharge onsite.

Used tyre storage

- 9. The licence holder must ensure that used tyres are stored in accordance with the following requirements:
 - (a) No more than 5,000 tyres must be stored at the premises at any one time;
 - (b) Storage areas must be level, clear of vegetation and other combustible material;
 - (c) A firebreak of at least 3 m in width must be maintained around the boundary of the tyre storage areas;
 - (d) Storage areas must include bunding and sumps sufficient to contain any water resulting from the fighting of tyre fires, and following the extinguishing of a fire, firewater must be contained to avoid discharges to the environment; and
 - (e) Used tyres must be stacked on their side walls or if stored on their treads, must be secured with non-combustible material to prevent rolling.

Wastewater treatment plants

Discharge to land

- 10. The licence holder must ensure that all effluent discharged consists only of treated sewage and is discharged to the irrigation sprayfield areas depicted in Schedule 1, Figure 2 and Figure 3.

Wastewater treatment plants monitoring

- 11. The licence holder must record the monthly cumulative volume of treated wastewater being discharged from each WWTP for the purpose of irrigation and this data shall be included in the Annual Environmental Report.
- 12. The licence holder must for each of the WWTPs collect and have analysed, representative effluent discharge samples for each location listed in Table 1, for the corresponding parameter, in the corresponding unit, and at the corresponding frequency as set out in Table 1. The results must be presented in the Annual Environmental Report, including a comparison against the NWQMS 1997 and previous monitoring results.

Table 1: Water quality monitoring requirements for the Mt Brockman, Nammuldi and Silvergrass Fixed Plant WWTPs

| Sampling location (Schedule 1, Figure 2) | Parameter | Unit | Frequency |
|---|---------------------------|-----------|-----------|
| B2 Village WWTP B2 Mine Admin WWTP Jerriwah Village WWTP Nammuldi Fixed Plant WWTP | Biochemical Oxygen Demand | mg/L | Quarterly |
| | Total Suspended Solids | mg/L | |
| | pH ¹ | pH units | |
| | Total Nitrogen | mg/L | |
| | Total Phosphorus | mg/L | |
| | <i>E.coli</i> | cfu/100mL | |

Note 1: In-field non-NATA accredited analysis permitted.

Waste fines storage facility

Waste fines storage facility groundwater monitoring

13. The licence holder must collect and have analysed representative water samples from the sampling locations listed in Table 2, for the corresponding parameter, in the corresponding unit, and at the corresponding frequency as set out in Table 2.

Table 2: WFSF groundwater monitoring schedule

| Sampling location (Schedule 1, Figure 4) | Parameter | Unit | Frequency |
|--|---|------------------|-----------|
| MB13NAM001 | Depth to water | mbgl and mAHD | Quarterly |
| | pH ¹ | pH units | |
| MB13NAM002 | Total Dissolved Solids | mg/L | Annually |
| MB13NAM003 | Electrical Conductivity ¹ | µS/cm | |
| MB12NAM011 | Total Hardness (CaCO ₃) | mg/L | |
| MB12NAM012 | Major Ions (Sodium, Potassium, Calcium, Chloride, Magnesium and Sulfate) | mg/L | |
| MB12NAM014 | Metals (Copper, Iron, Manganese, Arsenic, Cadmium and Chromium) | mg/L | |

Note 1: In-field non-NATA accredited analysis permitted.

Waste fines storage facility freeboard

14. The licence holder must ensure that at least 300 mm of freeboard is maintained at the main embankment at all times.

Dewatering

15. The licence holder must only discharge dewatering water, unless otherwise specified in condition 42, from the discharge points as depicted in Schedule 1, Figure 7.
16. The licence holder must, on a monthly basis, measure and record in cubic metres, the cumulative volumes of mine dewatering waters discharged from the discharge points and must publish the results in the Annual Environmental Report.
17. The licence holder must ensure that all dewatering discharge flows through a gabion outlet at the Duck Creek dewatering discharge point.

Construction requirements

18. The licence holder must construct and/or install the infrastructure and/or equipment listed in Table 3, in accordance with;
- the corresponding design and construction / installation requirements; and
 - at the corresponding infrastructure location, as set out in Table 3.

Table 3: Design and construction / installation requirements

| Infrastructure | Design and construction / installation requirements | Infrastructure location |
|--|--|-----------------------------------|
| Dewatering discharge pipeline to Lens A | <ul style="list-style-type: none"> Water trucks are to be used to suppress dust where applicable during construction activities. Vehicle movements are to be controlled where necessary including reduced vehicle speeds during construction operations. Activities that have the potential to generate high dust levels (i.e. construction and earthworks) are to be restricted where there is risk of windy conditions. | As shown in Schedule 1, Figure 18 |
| Dewatering discharge pipeline to Lens B | | |
| Dewatering discharge pipeline to SGE Pit 2 | | As shown in Schedule 1, Figure 19 |

- 19.** The licence holder must within 30 calendar days of all items of infrastructure and equipment required by condition 18 being constructed and/or installed:
- undertake an audit of their compliance with the requirements of conditions 18; and
 - prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- 20.** The Environmental Compliance Report required by condition 19, must include as a minimum the following:
- certification by a suitably qualified engineer that the items of infrastructure or component(s) thereof, as specified in condition 18, have been constructed in accordance with the relevant requirements specified in condition 18;
 - as constructed plans and a detailed site plan for the items of infrastructure or component of infrastructure specified in condition 18; and
 - be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.
- 21.** The licence holder may only commence commissioning and operation of the items of infrastructure identified in condition 22 where the Environmental Compliance Report as required by condition 19 has been submitted by the licence holder.

Operational requirements

- 22.** The licence holder must ensure that the site infrastructure and equipment listed in Table 4 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 4.

Table 4: Infrastructure and equipment requirements

| Site infrastructure and equipment | Operational requirement | Infrastructure location |
|-----------------------------------|---|----------------------------------|
| Lens A discharge point | <ul style="list-style-type: none"> Pits are to maintain sufficient excess storage capacity to contain baseline discharge volumes and runoff from a Probable Maximum Precipitation (PMP) event. Discharge volumes are to be monitored via flow meters. | As shown in Schedule 1, Figure 7 |
| Lens B discharge point | | As shown in Schedule 1, Figure 7 |

| Site infrastructure and equipment | Operational requirement | Infrastructure location |
|-----------------------------------|---|----------------------------------|
| | <ul style="list-style-type: none"> Monthly monitoring of cumulative discharge volumes is to be undertaken to ensure there is sufficient volume remaining in the pit. | |
| SGE Pit 2 discharge point | <ul style="list-style-type: none"> Discharge volumes are to be monitored via flow meters. Monthly monitoring of cumulative discharge volumes is to be undertaken to ensure there is sufficient volume remaining in the pit. | As shown in Schedule 1, Figure 7 |

Monitoring requirements

23. The licence holder must monitor emissions in accordance with the requirements specified in Table 5 and record the results of all such monitoring.

Table 5: Groundwater emissions monitoring

| Discharge point | Groundwater monitoring location | Parameter | Frequency | Unit | |
|------------------------------|---|--------------------------------------|--|----------|------|
| Lens A, Lens B and SGE Pit 2 | Lens A and Lens B MB12NAM006 MB15NAM004 MB19NAM0016 MB20NAM0008 MB24NAM0003 MB24NAM0010 MB24NAM0019 MB25NAM0005 MB16BS20001 MB17BS20006 | Groundwater level | Monthly | mRL | |
| | | Temperature | Quarterly | °C | |
| | | pH ¹ | | pH units | |
| | | Electrical conductivity ¹ | | µS/cm | |
| | | WB24NAM0002 | Total Dissolved Solids (TDS) | Annually | mg/L |
| | | WB24NAM0003 | Total suspended solids ¹ | | mg/L |
| | | WB24NAM0010 | Total hardness (as CaCO ₃) | | mg/L |
| | | WB25NAM0002 | Carbonate | | mg/L |
| | | RC17SILV0161 | Bicarbonate | | mg/L |
| | | MB14SILV0001 | Calcium | | mg/L |
| | MB20SILV0001 | Sodium | mg/L | | |
| | MB20SILV0003 | Potassium | mg/L | | |
| | MB09SILV025 | Magnesium | mg/L | | |
| | | Sulfate | mg/L | | |
| | | Silicon | mg/L | | |
| | | Fluorine | mg/L | | |
| | | Iron | mg/L | | |
| | | Chlorine | mg/L | | |
| | | Aluminium | mg/L | | |
| | | Silver | mg/L | | |
| | | Arsenic | mg/L | | |
| | | Boron | mg/L | | |
| | | Barium | mg/L | | |
| | Cadmium | mg/L | | | |

| Discharge point | Groundwater monitoring location | Parameter | Frequency | Unit |
|-------------------|---------------------------------|-------------------------------------|-----------|------|
| | | Cobalt | | mg/L |
| | | Chromium | | mg/L |
| | | Copper | | mg/L |
| | | Mercury | | mg/L |
| | | Manganese | | mg/L |
| | | Molybdenum | | mg/L |
| | | Nickel | | mg/L |
| | | Lead | | mg/L |
| | | Antimony | | mg/L |
| | | Selenium | | mg/L |
| | | Tin | | mg/L |
| | | Uranium | | mg/L |
| | | Zinc | | mg/L |
| | | Total Phosphorus (TP) as P | | mg/L |
| | | Total Nitrogen (TN) as N | | mg/L |
| | | Nitrite (NO ₂) as N | | mg/L |
| | | Nitrate (NO ₃) as N | | mg/L |
| | | Ammonium (NH ₄) as N | | mg/L |
| Pit lake (Lens A) | Pit water level | Weekly (pit water level via survey) | mRL | |
| Pit lake (Lens B) | | | | |

Note 1: In-field non-NATA accredited analysis permitted.

Note 2: Where a monitoring bore is damaged, destroyed or rendered inaccessible for monitoring purposes, a representative monitoring bore can be used in the interim while a replacement monitoring bore is installed.

Note 3: Monitoring locations as per Schedule 1, Figure 18 and Figure 19.

Landfilling activities

Management of putrescible landfill (Schedule 1, Figure 8)

24. The licence holder must bury only the following types of waste within the putrescible landfills:
 - (a) Inert Waste Type 1;
 - (b) Special Waste Type 1;
 - (c) Putrescible waste; and
 - (d) Special Waste Type 2
 as defined in the Landfill Definitions.

25. The licence holder must ensure that the tipping area of the putrescible landfills is not greater than:
 - (a) 30 m in length; and
 - (b) 2 m above ground level in height.

Department of Water and Environmental Regulation

- 26. The licence holder must ensure that waste in the tipping area of the putrescible landfills is covered:
 - (a) at least weekly;
 - (b) with a dense (at least 200 mm), inert and incombustible material; and
 - (c) totally, so that no waste is left exposed.
- 27. The licence holder must ensure that there is no waste within:
 - (a) 100 m of any surface water body at the site; and
 - (b) 3 m of the highest level of the water table aquifer at the putrescible landfill sites.
- 28. The licence holder must manage stormwater on the putrescible landfill sites so that:
 - (a) it is diverted from areas of the site where there is waste; and
 - (b) water that has come into contact with waste is to be diverted into a sump on the site, or otherwise retained on the site.

Management of waste dump landfill (Schedule 1, Figure 9)

- 29. The licence holder must only bury the following types of waste within the waste dump landfill facility:
 - (a) Clean Fill as defined in the Landfill Definitions;
 - (b) Inert Waste Type 1 as defined in the Landfill Definitions;
 - (c) Inert Waste Type 2 (tyres only) as defined in the Landfill Definitions; and
 - (d) Wooden pallets.
- 30. The licence holder must ensure that waste in the tipping area of the waste dump landfill is covered with a dense (at least 200 mm), inert and incombustible material at final landform design.
- 31. The licence holder must ensure that there is no waste within:
 - (a) 100 m of any surface water body at the site; and
 - (b) 3 m of the highest level of the water table aquifer at the waste dump landfill site.
- 32. The licence holder must manage stormwater on the waste dump landfill site so that water that has come into contact with waste is to be retained on the site.

Management of Special Waste Type 1 and Special Waste Type 2

- 33. The licence holder must dispose of the waste types listed in Table 6 in accordance with the requirements as set out in Table 6.

Table 6: Special Waste Type 2 Disposal Requirements

| Waste Type | Disposal Requirements |
|--|---|
| Special Waste Type 1 Special Waste Type 2 | To be disposed of in sealed bags and within a dedicated trench. The location of disposed wastes to be recorded. Immediately cover the waste with a minimum depth of 300 mm of inert and incombustible material. |

Construction Nammuldi Brockman Incremental Tonnes Plant (Crushing and Screening Plant)

34. The licence holder must ensure that each item of infrastructure specified in Table 7 is designed and constructed in accordance with the requirements specified.

Table 7: Nammuldi Brockman Incremental Tonnes Plant infrastructures requirements

| Infrastructure | Requirements (design, construction and location) |
|---|---|
| Nammuldi Brockman Incremental Tonnes Plant - crushing and screening plant | Located as indicated in Schedule 1, Figure 3. |
| | Designed and constructed for processing of 12 million tonnes ore per annum. |
| | The plant is comprised of: <ul style="list-style-type: none"> • Primary crushing module • Screening Module • Secondary Crushing Module • Materials handling module. |
| | Diversion bunds and culverts constructed so that stormwater is diverted and prevented from entering the plant area. |

35. Subject to condition 34, within 28 days of the completion of the works specified in Table 7, the licence holder must submit to the CEO a Compliance Report certified by a suitably qualified professional engineer that:
- (a) lists and describes the completed works and any associated items of infrastructure and equipment listed in Table 7;
 - (b) certifies whether or not each item of infrastructure or component of infrastructure specified in Table 7 has been constructed with no material defects and to the requirements specified in Table 7;
 - (c) contains 'as constructed' plans for each item of infrastructure or component of infrastructure specified in Table 7; and
 - (d) is signed by a person authorised by the licence holder and contains the printed name and position of that person within the company.
36. Where an item of infrastructure or component of infrastructure has been certified as not being constructed, or does not comply with the corresponding requirements, or contains material defects, the licence holder must:
- (a) correct the non-compliant or defective works, prior to re-certifying; or
 - (b) provide to the CEO a description of, and explanation for, any departures from the requirements specified in Table 7 that do not require rectification and do not constitute a material defect along with the Compliance Report.

Managed Aquifer Recharge Scheme

Construction requirements

37. The licence holder must construct and/or install the infrastructure and/or equipment listed in Table 8, in accordance with;
- (a) the corresponding design and construction / installation requirements; and
 - (b) at the corresponding infrastructure location, as set out in Table 8.

Table 8: Design and construction / installation requirements

| Infrastructure | Design and construction / installation requirements | Infrastructure location |
|---------------------------------------|--|-------------------------|
| Header pipeline | <p>Must be constructed with:</p> <ul style="list-style-type: none"> • Automatic cut-outs in the event of a pipe failure; OR • Secondary containment sufficient to contain any spill for a period equal to the time between routine inspections; OR • Telemetry systems and pressure sensors along pipelines to allow detection of leaks and failures. | N/A |
| Water filtration and treatment system | <ul style="list-style-type: none"> • Must consist of a primary filtration system, chlorination system and sedimentation pond; • Must contain concrete bunded areas for the storage of chemicals and waste; and • Bunded areas must be capable of containing 110% of the volume of the largest container stored within. | N/A |

- 38.** The licence holder must within 30 calendar days of all items of infrastructure and equipment required by condition 37 being constructed and/or installed:
- undertake an audit of their compliance with the requirements of conditions 37; and
 - prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- 39.** The Environmental Compliance Report required by condition 38, must include as a minimum the following:
- certification by a suitably qualified engineer that the items of infrastructure or component(s) thereof, as specified in condition 37, have been constructed in accordance with the relevant requirements specified in condition 37;
 - as constructed plans and a detailed site plan for the items of infrastructure or component of infrastructure specified in condition 37;
 - a set of background data for the MAR scheme including background groundwater quality data, surface water quality data, a vegetation health report and stygofauna population health data; and
 - be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.
- 40.** The licence holder may only commence commissioning and operation of the items of infrastructure identified in condition 41 where the Environmental Compliance Report as required by condition 38 has been submitted by the licence holder.

Operational requirements

- 41.** The licence holder must ensure that the site infrastructure and equipment listed in Table 9 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 9.

Table 9: Infrastructure and equipment requirements

| Site infrastructure and equipment | Operational requirement | Infrastructure location |
|--|---|-----------------------------------|
| Header pipeline | Must have: <ul style="list-style-type: none"> • Telemetry systems which are actively monitored and flow deviation to detect leaks or failures. • Automatic shut-off mechanisms which are maintained to ensure functionality. • Routine inspections must be conducted daily to verify the integrity of the pipeline and containment systems. | N/A |
| Water filtration and treatment system | <ul style="list-style-type: none"> • All chemicals must be stored within bunded areas capable of containing 110% of the volume of the largest container stored within; • Backflush waste from the screen filter system must be contained within the sedimentation pond; and • Sedimentation pond must maintain a minimum freeboard of 500 mm at all times. | N/A |
| MAR scheme bores and recharge pads | <ul style="list-style-type: none"> • Each recharge pad to accommodate four recharge bores and a monitoring bore with a vibrating wire piezometer (VWP); • Pumps must be able to be switched off remotely if required; and • Must have installed a telemetry system. | As shown in Schedule 1, Figure 10 |
| Deep pressurised reinjection bore backflush system | <ul style="list-style-type: none"> • Must direct backflush to one of three infiltration basins. | N/A |
| Infiltration basins | <ul style="list-style-type: none"> • Must maintain a minimum freeboard of 500 mm at all times. | As shown in Schedule 1, Figure 16 |

Department of Water and Environmental Regulation

42. The licence holder must ensure that only the emissions specified in Table 10, are discharged only from the corresponding discharge point and only at the corresponding discharge point location as part of the MAR scheme.

Table 10: Authorised discharge points for MAR scheme

| Emission | Discharge point | Discharge point location |
|--|--|--|
| Groundwater (sourced from the Silvergrass East dewatering bores) | MAR scheme injection bores - Valley fill aquifer (shallow) | As shown in Schedule 1, Figure 12, Figure 13 and Figure 14 |
| | MAR scheme injection bores - Fractured rock aquifer (deep) | |
| Backflush water | Infiltration basins | As shown in Schedule 1, Figure 16 |
| | Sedimentation pond | As shown in Schedule 1, Figure 17 |

Monitoring requirements

43. The licence holder must monitor emissions in accordance with the requirements specified in Table 11 and record the results of all such monitoring.

Table 11: Emissions and discharge monitoring

| Discharge point | Monitoring location | Parameter | Frequency | Averaging period | Unit |
|---|----------------------------------|--------------------------------------|-------------------------|------------------|----------|
| MAR scheme injection bores (deep and shallow) | Process measurement station | Reinjection volume | Continuous ² | Daily | kL |
| | | Temperature | | | °C |
| | | pH ¹ | | | pH units |
| | | Electrical conductivity ¹ | | | µS/cm |
| | | Turbidity ¹ | | | NTU |
| | | Total suspended solids ¹ | | | mg/L |
| | | Residual chlorine ¹ | | | mg/L |
| | Nitrate (as N) | Monthly | - | mg/L | |
| | Total recoverable hydrocarbons | Quarterly | - | mg/L | |
| | PFOS | Quarterly | - | mg/L | |
| | Reinjection pad monitoring bores | Surface water level | Continuous | Daily | mbgl |

Note 1: In-field non-NATA accredited analysis permitted.

Note 2: Where equipment or communication failures occur for a period of less than two weeks, continuous monitoring data to be calculated by averaging the preceding monitoring period.

44. The licence holder must monitor groundwater concentrations of the identified parameter(s) in accordance with Table 12.

Table 12: Groundwater monitoring of ambient concentrations

| Monitoring well location ² | Parameter | Unit | Trigger value | Frequency | Method |
|--|--|---------------|---------------|-----------------------|--|
| Field measurements | | | | | |
| MB10SILV007 MB10SILV008 MB11SILV016 MB11SILV017 MB11SILV021 MB11SILV023 MB11SILV024 MB11SILV025 MB11SILV027 MB11SILV028 WB24HSTD0001 WB17SILV0003 | Standing water level ¹ | mbgl and mAHD | - | Each quarterly period | Spot sample, in accordance with AS/NZS 5667.11 |
| | Temperature | °C | - | | |
| | Electrical conductivity (at 25°C) ¹ | µS/cm | 2,238 | | |
| | pH ¹ | pH units | - | | |
| | Redox potential ¹ | mV | - | | |
| | Dissolved oxygen ¹ | mg/L | 7.84 | | |
| Reference bores ³ MB11SILV018 MB11SILV019 | | | | | |
| Water quality parameters | | | | | |
| MB10SILV007 MB10SILV008 MB11SILV016 MB11SILV017 MB11SILV021 MB11SILV023 MB11SILV024 MB11SILV025 MB11SILV027 MB11SILV028 WB24HSTD0001 WB17SILV0003 Reference bores ³ MB11SILV018 MB11SILV019 | Total Dissolved Solids (TDS) | mg/L | - | Each quarterly period | Spot sample, in accordance with AS/NZS 5667.11 |
| | Total alkalinity (as CaCO ₃) | mg/L | 449 | | |
| | Total hardness (as CaCO ₃) | mg/L | - | | |
| | Calcium | mg/L | - | | |
| | Magnesium | mg/L | - | | |
| | Sodium | mg/L | - | | |
| | Potassium | mg/L | - | | |
| | Carbonate | mg/L | - | | |
| | Bicarbonate | mg/L | - | | |
| | Chloride | mg/L | - | | |
| | Sulfate | mg/L | 222 | | |
| | Silica | mg/L | - | | |
| | Bromide | mg/L | - | | |
| | Total organic carbon | mg/L | - | | |
| | Residual chlorine | mg/L | - | | |
| Total | mg/L | - | | | |

| Monitoring well location ² | Parameter | Unit | Trigger value | Frequency | Method |
|--|------------------------------------|-------|---------------|-----------------------|--|
| | Nitrogen (TN) as N | | | | |
| | Nitrate (NO ₃) as N | mg/L | - | | |
| | Nitrite (NO ₂) as N | mg/L | - | | |
| | Total Kjeldahl Nitrogen (TKN) as N | mg/L | - | | |
| | Ammonia (NH ₃) as N | mg/L | - | | |
| | Total Phosphorus (TP) as P | mg/L | 0.44 | | |
| Metals (dissolved) | | | | | |
| MB10SILV007 MB10SILV008 MB11SILV016 MB11SILV017 MB11SILV021 MB11SILV023 MB11SILV024 MB11SILV025 MB11SILV027 MB11SILV028 WB24HSTD0001 WB17SILV0003 Reference bores ³ MB11SILV018 MB11SILV019 | Arsenic | mg/L | 0.1 | Each quarterly period | Spot sample, in accordance with AS/NZS 5667.11 |
| | Boron | mg/L | - | | |
| | Cadmium | mg/L | 0.001 | | |
| | Chromium (unspeciated) | mg/L | - | | |
| | Cobalt | mg/L | 0.23 | | |
| | Copper | mg/L | 0.009 | | |
| | Iron | mg/L | 0.84 | | |
| | Ferrous Iron | mg/L | - | | |
| | Lead | mg/L | - | | |
| | Manganese | mg/L | 1.9 | | |
| | Mercury | mg/L | - | | |
| | Molybdenum | mg/L | 0.034 | | |
| | Nickel | mg/L | 0.018 | | |
| | Selenium | mg/L | 0.01 | | |
| | Uranium | mg/L | 0.004 | | |
| Zinc | mg/L | 0.086 | | | |
| Organics | | | | | |
| MB10SILV007 MB10SILV008 MB11SILV016 MB11SILV017 MB11SILV021 MB11SILV023 MB11SILV024 MB11SILV025 MB11SILV027 MB11SILV028 WB24HSTD0001 | Total recoverable hydrocarbons | mg/L | 0.15 | Each quarterly period | Spot sample, in accordance with AS/NZS 5667.11 |
| | Methane (CH ₄) | mg/L | - | | |

| Monitoring well location ² | Parameter | Unit | Trigger value | Frequency | Method |
|--|-----------------------|------|---------------|-----------------------|--|
| WB17SILV0003 Reference bores ³ MB11SILV018 MB11SILV019 | | | | | |
| PFAS | | | | | |
| MB10SILV007 MB10SILV008 MB11SILV016 MB11SILV017 MB11SILV021 MB11SILV023 MB11SILV024 MB11SILV025 MB11SILV027 MB11SILV028 WB24HSTD0001 WB17SILV0003 | PFOA | µg/L | - | Each quarterly period | Spot sample, in accordance with AS/NZS 5667.11 |
| | PFOS | µg/L | 0.31 | | |
| | Sum of PFOS and PFHxS | µg/L | - | | |
| Reference bores ³ MB11SILV018 MB11SILV019 | Total PFAS | µg/L | - | | |

Note 1: In-field non-NATA accredited analysis permitted.

Note 2: Where a monitoring bore is damaged, destroyed or rendered inaccessible for monitoring purposes, a representative monitoring bore can be used in the interim while a replacement monitoring bore is installed.

Note 3: Trigger values do not apply to reference bores.

Discharge limits and trigger values

45. The licence holder must ensure that emissions from the discharge point listed in Table 13, when monitored at the corresponding monitoring location, for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 43.

Table 13: Emission and discharge limits

| Discharge point | Monitoring location | Parameter | Limit |
|---|-----------------------------|--------------------------------|------------------------------|
| MAR scheme injection bores (deep and shallow) | Process measurement station | Temperature ¹ | 35.7°C |
| | | pH ¹ | pH must be between 6.5 – 8.7 |
| | | Residual chlorine ¹ | 1 mg/L |
| | | Nitrate (as N) | 7.6 mg/L |
| | | Total recoverable hydrocarbons | 0.15 mg/L |
| | | PFOS | 0.31 µg/L |

Note 1: The discharge limit is calculated as a 24-hr average period for parameters monitored continuously.

46. In the case of the occurrence of an event as specified in Table 14, the licence holder must take the relevant management action specified in that table.

Table 14: Management actions

| Event | Management action |
|---|---|
| A discharge limit specified within Table 13 is exceeded | (a) The licence holder must begin to investigate the cause of the exceedance within 24 hours of becoming aware of the exceedance; (b) Where the investigation identifies injection water quality has been potentially contaminated, immediately cease discharging via injection or infiltration unless evidence can demonstrate that the contamination ¹ has been resolved; and (c) The licence holder must report the investigation to the CEO including proposed resolutions within 30 days. |
| A trigger value as specified within Table 12 is exceeded for three consecutive monitoring events | (a) The licence holder must investigate the cause of the exceedance; (b) If the cause of the exceedance is determined to be the MAR scheme, the licence holder must determine environmental impact by conducting appropriate assessments ² (where applicable); and (c) Report the findings of the investigation and any proposed assessments to the CEO within 30 days of becoming aware of the exceedance. |
| A surface expression of groundwater is found or artesian conditions form within any monitoring or injection bore listed in Table 12 or shown in Schedule 1, Figure 10 | (a) The licence holder must cease discharge within 24 hours of being identified; (b) The licence holder must investigate the cause of the event; and (c) The licence holder must report the findings of the investigation to the CEO including proposed mitigation measures within 30 days. |

Note 1: Contaminated, means having a substance present in the MAR scheme reinjection water (regulated under conditions of this licence) at concentrations that present, or have the potential to present, a risk of harm to human health, the environment or any environmental value.

Note 2: The licence holder's assessment must be based on the nature and confirmed cause of the trigger value exceedance. Appropriate assessments (if applicable) may include but not be limited to a stygofauna assessment, vegetation health assessment, surface water assessment and fish assemblage assessment.

Records and reporting

47. The licence holder must ensure that:
- all water samples are collected and preserved in accordance with AS/NZS 5667.1, unless indicated otherwise in the relevant table;
 - all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
 - all groundwater sampling is conducted in accordance with AS/NZS 5667.11; and
 - all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.
48. The licence holder must ensure that:
- monthly monitoring is undertaken at least 15 days apart;
 - quarterly monitoring is undertaken at least 45 days apart; and
 - six monthly monitoring is undertaken at least 4 months apart.

Department of Water and Environmental Regulation

- 49.** 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.
- 50.** The licence holder must:
- (a) prepare an Environmental Report that provides information in accordance with Table 15 for the preceding annual period, and
 - (b) submit that Environmental Report to the CEO by 30 April each year.

Table 15: Environmental reporting requirements

| Condition | Requirement |
|-----------|---|
| - | A tabulated data summary of monitoring results and data collected as a requirement of any condition of this licence. |
| 41 | A summary of inspections, maintenance and audits performed to address the requirements of Table 9. |
| 43 | (a) A tabulated data summary of monitoring results including cumulative reinjection volumes; (b) An interpretation of monitoring data results including comparison to historical trends; and (c) An update on the performance of the MAR scheme and validation of the hydrogeological and geochemical models. |
| 44 | (a) A tabulated data summary of monitoring results; and (b) An interpretation of monitoring data results including comparison to historical trends. |
| 45 and 46 | A summary of any exceedance of discharge limits or trigger values and a summary of any actions taken as a result. |

- 51.** 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 April each year, after the end of that annual period, an Annual Audit Compliance Report in the approved form.
- 52.** 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 conditions 34 and 37 of this licence;
 - (c) any maintenance of infrastructure that is performed in the course of complying with condition 41 of this licence;
 - (d) monitoring programmes undertaken in accordance with conditions 18, 19, 22, 43 and 44 of this licence; and

Department of Water and Environmental Regulation

(e) complaints received under condition 49 of this licence.

53. The books specified under condition 52 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 16 have the meanings defined.

Table 16: Definitions

| Term | Definition |
|---------------------------------------|---|
| ACN | Australian Company Number |
| 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 January until 31 December in the same year |
| AS/NZS 5667.1 | means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i> |
| AS/NZS 5667.10 | means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i> |
| AS/NZS 5667.11 | means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i> |
| 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: <p style="margin-left: 40px;">Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919</p> or: info@dwer.wa.gov.au |
| cfu/100mL | means colony-forming unit per 100 millilitres |
| Clean Fill | has the meaning defined in Landfill Definitions |
| 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) |
| freeboard | means the vertical height between the maximum water surface elevations and the top of retaining banks or structures at their lowest point |
| Inert Waste Type 1 | has the meaning defined in Landfill Definitions |
| Inert Waste Type 2 | has the meaning defined in Landfill Definitions |
| 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 |

Department of Water and Environmental Regulation

| Term | Definition |
|----------------------|---|
| 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 |
| MAR | means Managed Aquifer Recharge |
| mAHD | means metres Australian Height Datum |
| mbgl | means metres below ground level |
| µg/L | means micrograms per litre |
| µS/cm | means micro Siemens per centimetre |
| mg/L | means milligrams per litre |
| mV | means millivolts |
| monthly period | means a one-month period commencing from the first calendar day of a month until the final calendar day of the same month |
| NATA | means National Association of Testing Authorities, Australia |
| NTU | means Nephelometric Turbidity Units |
| NWQMS 1997' | means the most recent version and relevant parts of the "National Water Quality Management Strategy, Australian Guidelines for Sewerage Systems - Effluent Management" as published by the Agriculture and Resource Management Council of Australia and New Zealand and Australian and New Zealand Environment and Conservation Council, 1997 |
| 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 |
| prescribed premises | has the same meaning given to that term under the EP Act |
| Putrescible Waste | has the meaning defined in Landfill Definitions |
| quarterly | means the 4 inclusive periods from 1 January to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October to 31 December in the same year |
| Special Waste Type 1 | has the meaning defined in Landfill Definitions |
| Special Waste Type 2 | has the meaning defined in Landfill Definitions |
| tipping area | means the area of a landfill where waste is currently being disposed |
| TRH | Total Recoverable Hydrocarbons |
| waste | has the same meaning given to that term under the EP Act |
| WFSF | means waste fines storage facility |
| WWTPs | means the B2 Mine Admin, B2 Village, Jerriwah Village and Nammuldi Fixed Plant wastewater treatment plants |

END OF CONDITIONS

Schedule 1: Maps

Premises map

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

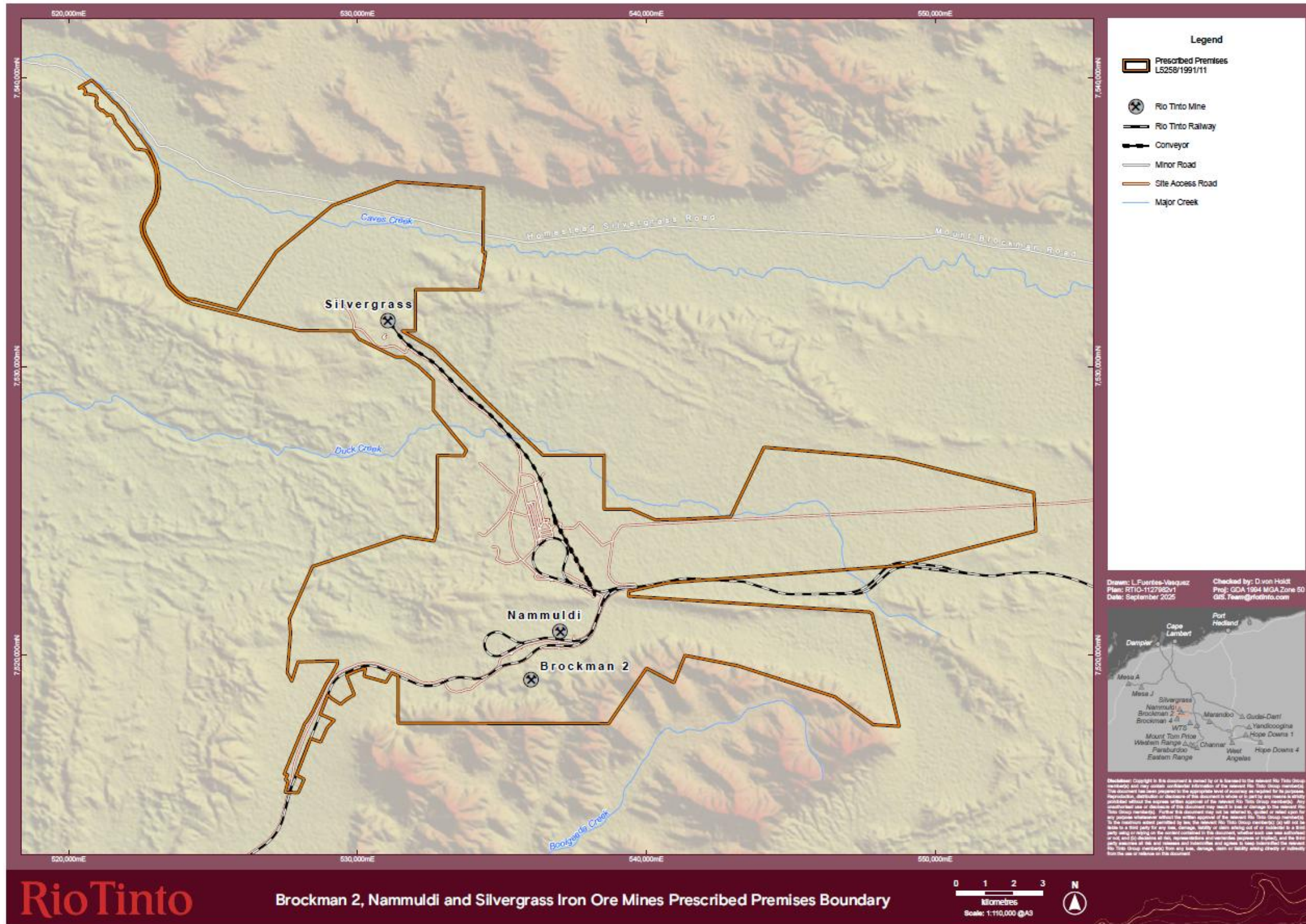


Figure 1: Map of prescribed premises boundary

L5258/1991/11 (date of latest update: 29/06/2026)

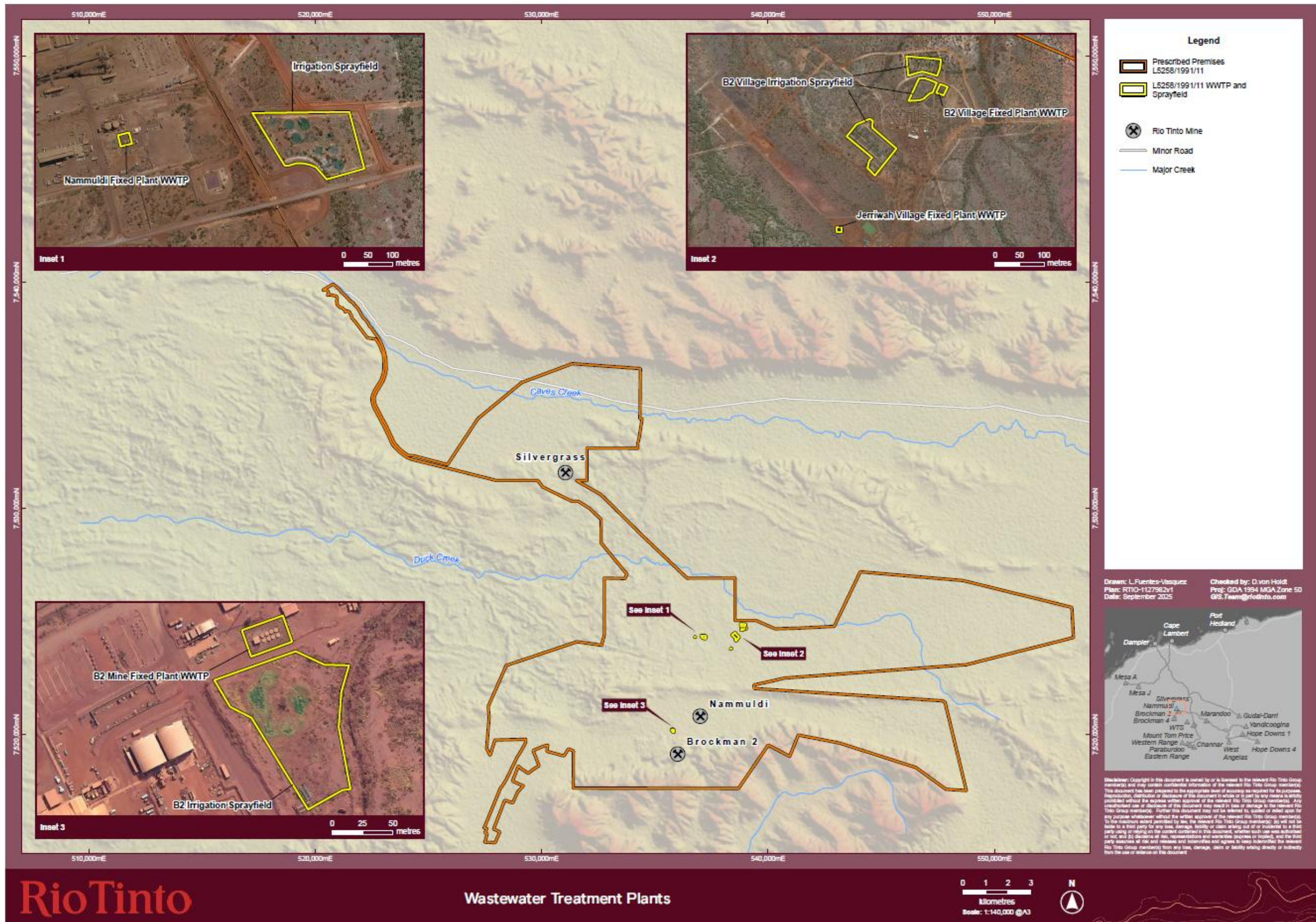


Figure 2: WWTPs and associated irrigation sprayfields

L5258/1991/11 (date of latest update: 29/06/2026)

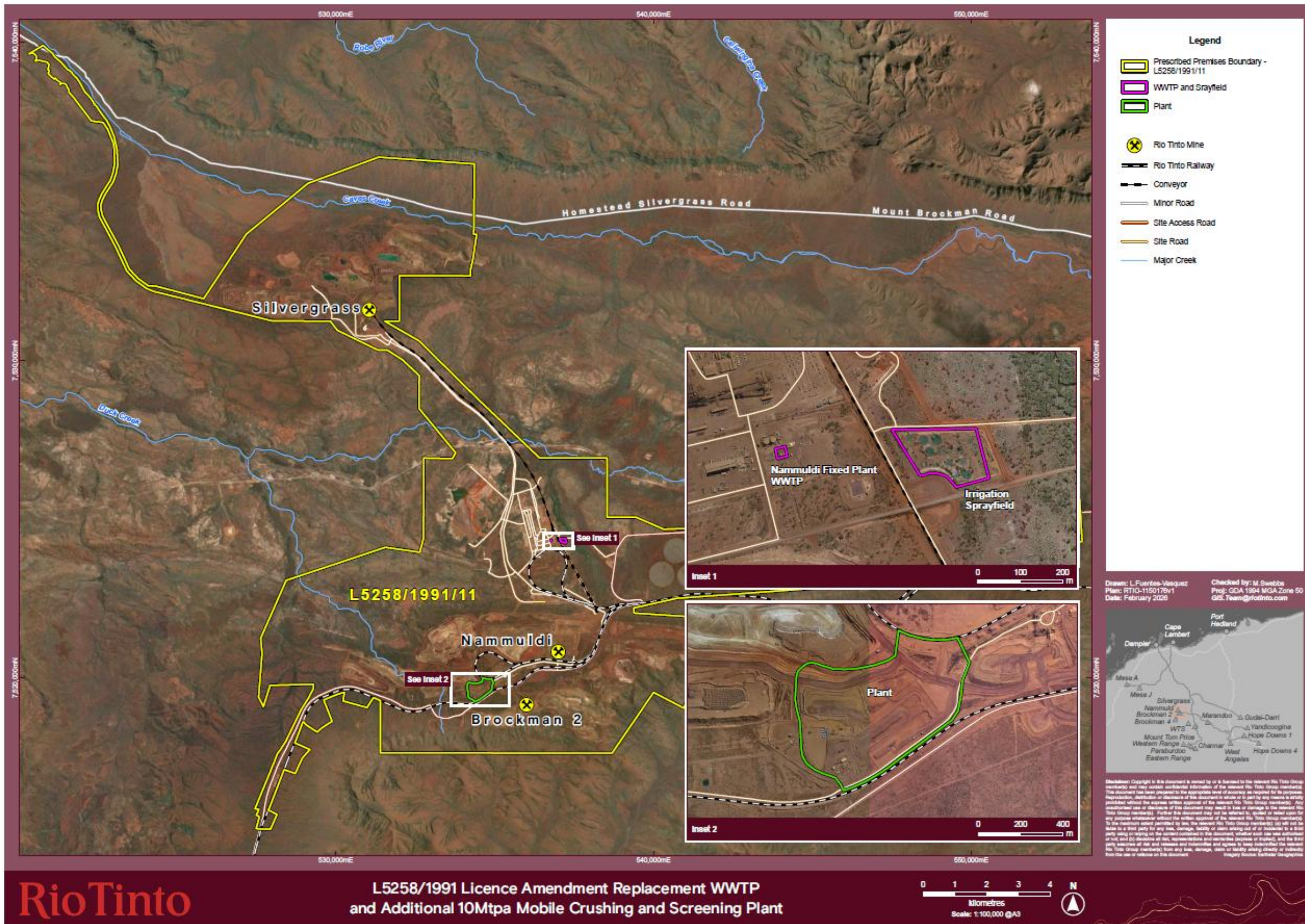


Figure 3: Nammuldi Brockman Incremental Tonnes Plant (named “Plant”) and Nammuldi Fixed Plant WWTP

L5258/1991/11 (date of latest update: 29/06/2026)

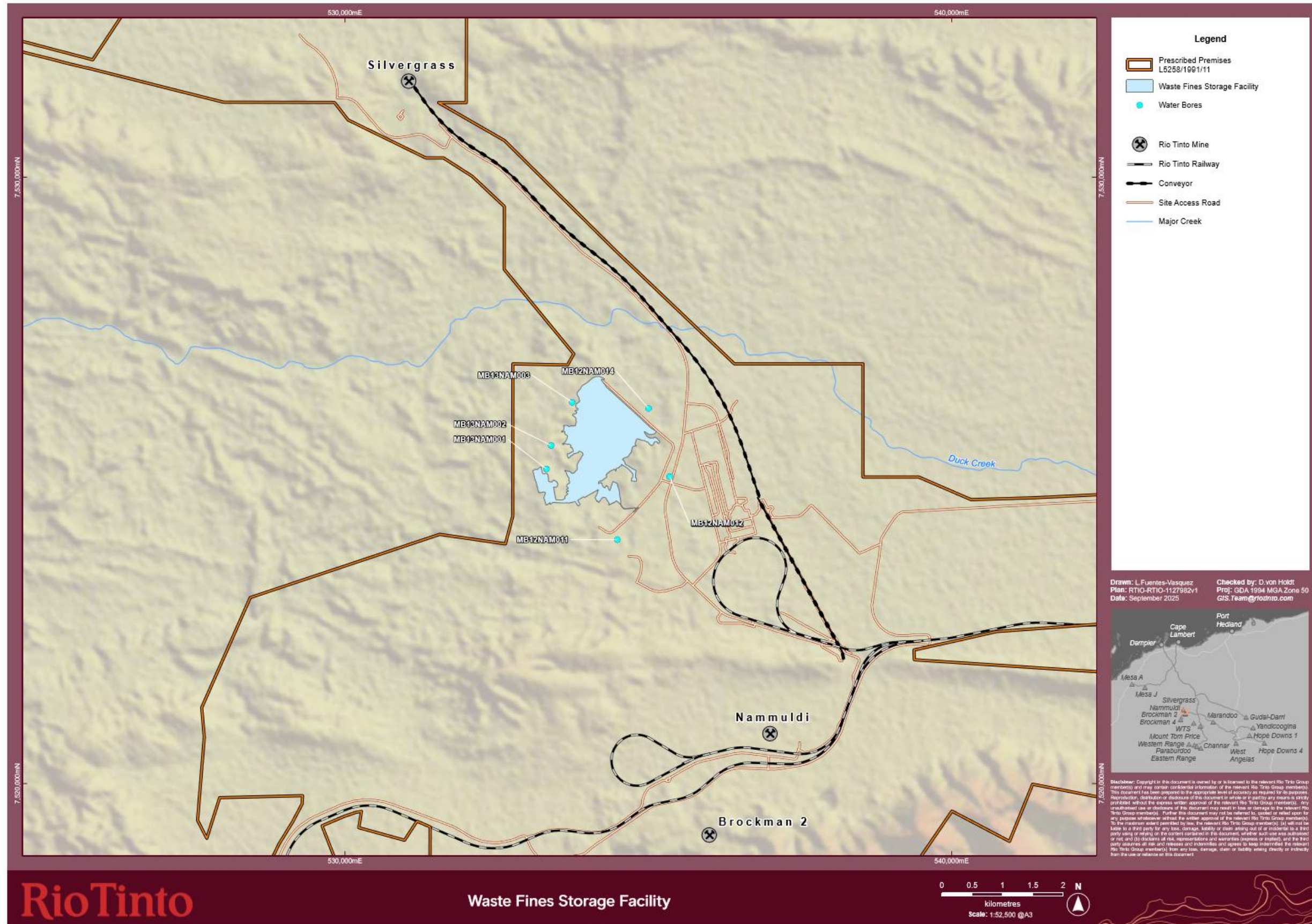


Figure 4: WFSF groundwater monitoring locations

L5258/1991/11 (date of latest update: 29/06/2026)

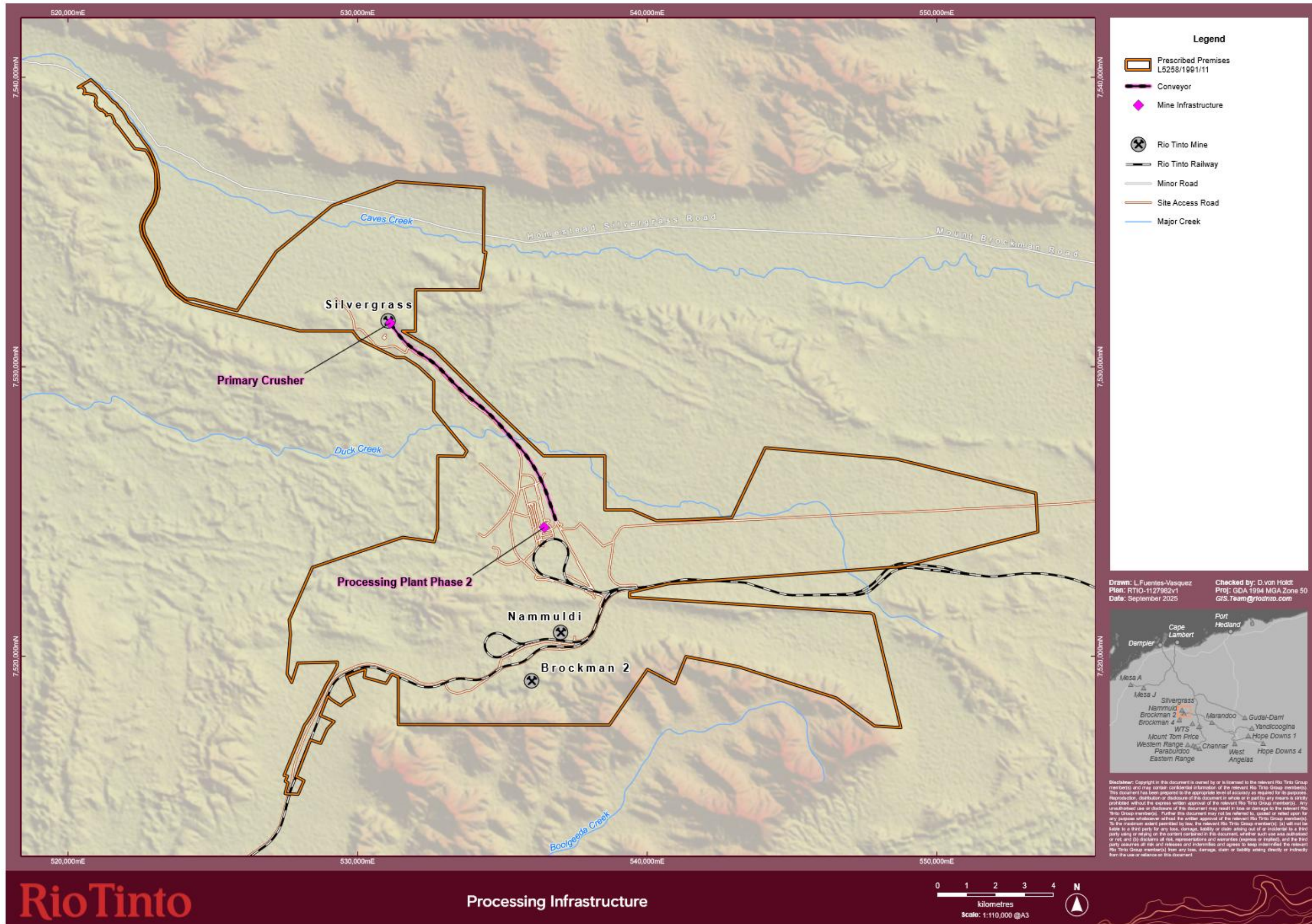


Figure 5: Primary crusher and conveyor
L5258/1991/11 (date of latest update: 29/06/2026)

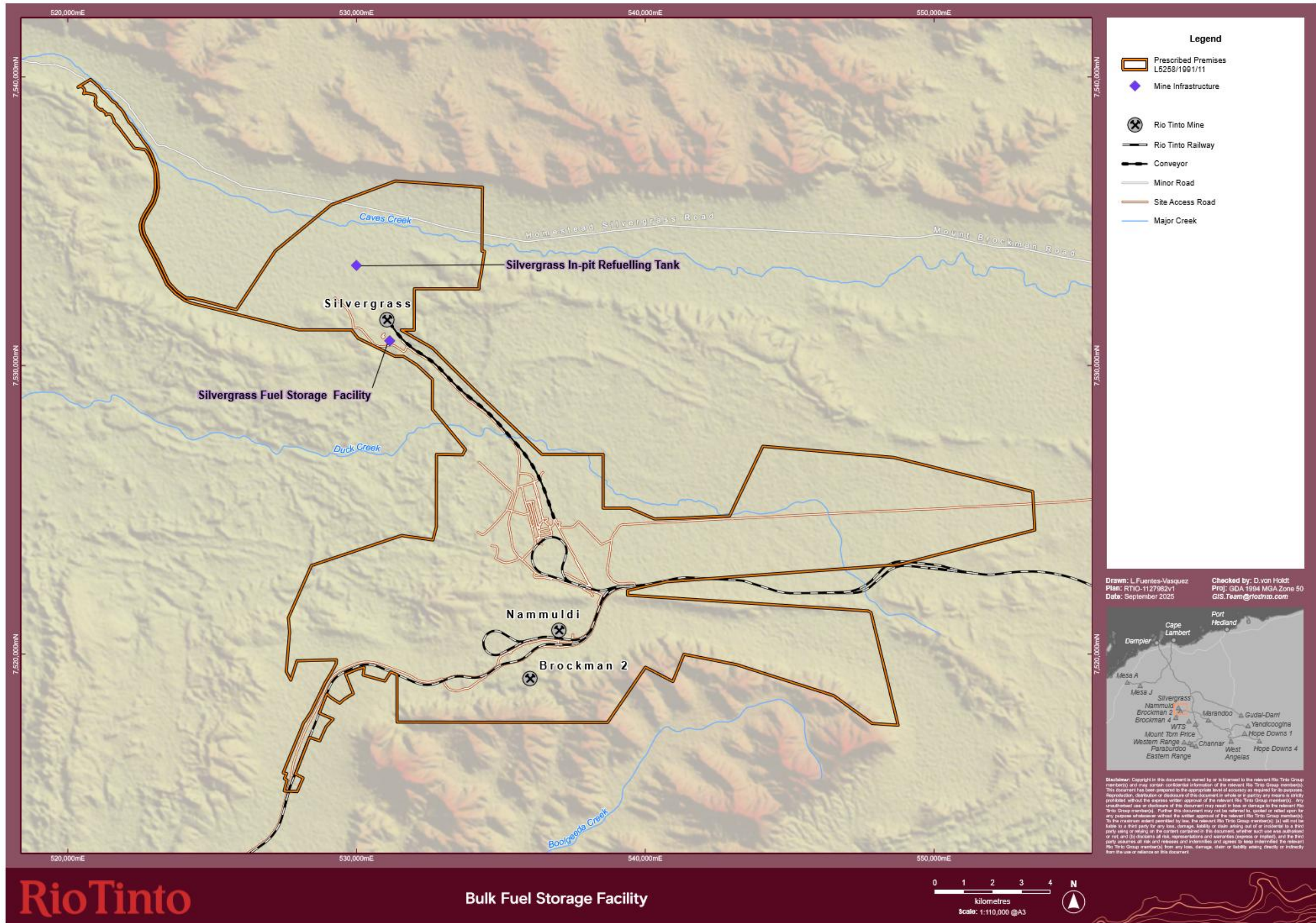


Figure 6: Fuel storage facility

L5258/1991/11 (date of latest update: 29/06/2026)

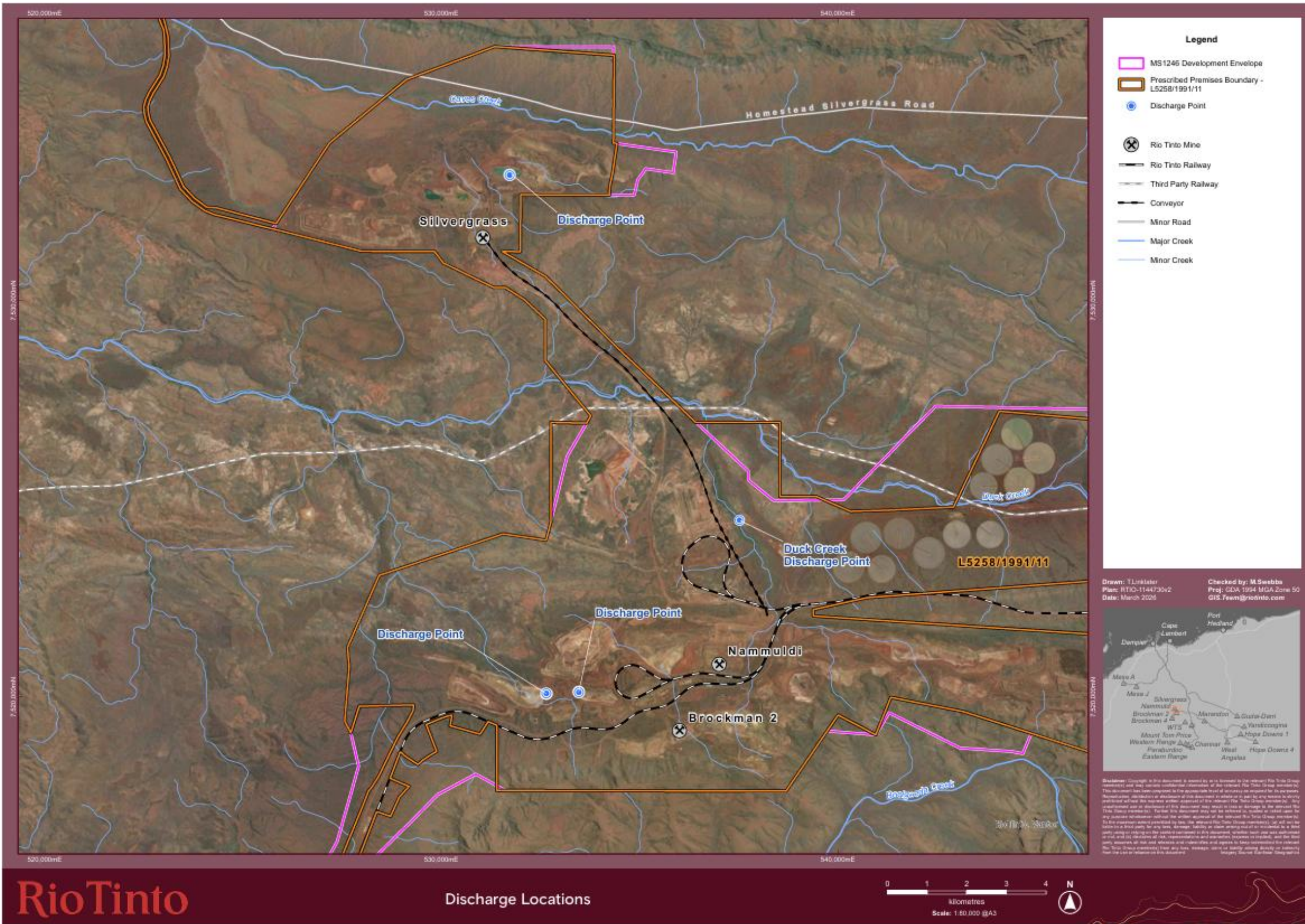


Figure 7: Dewatering discharge points
L5258/1991/11 (date of latest update: 29/06/2026)

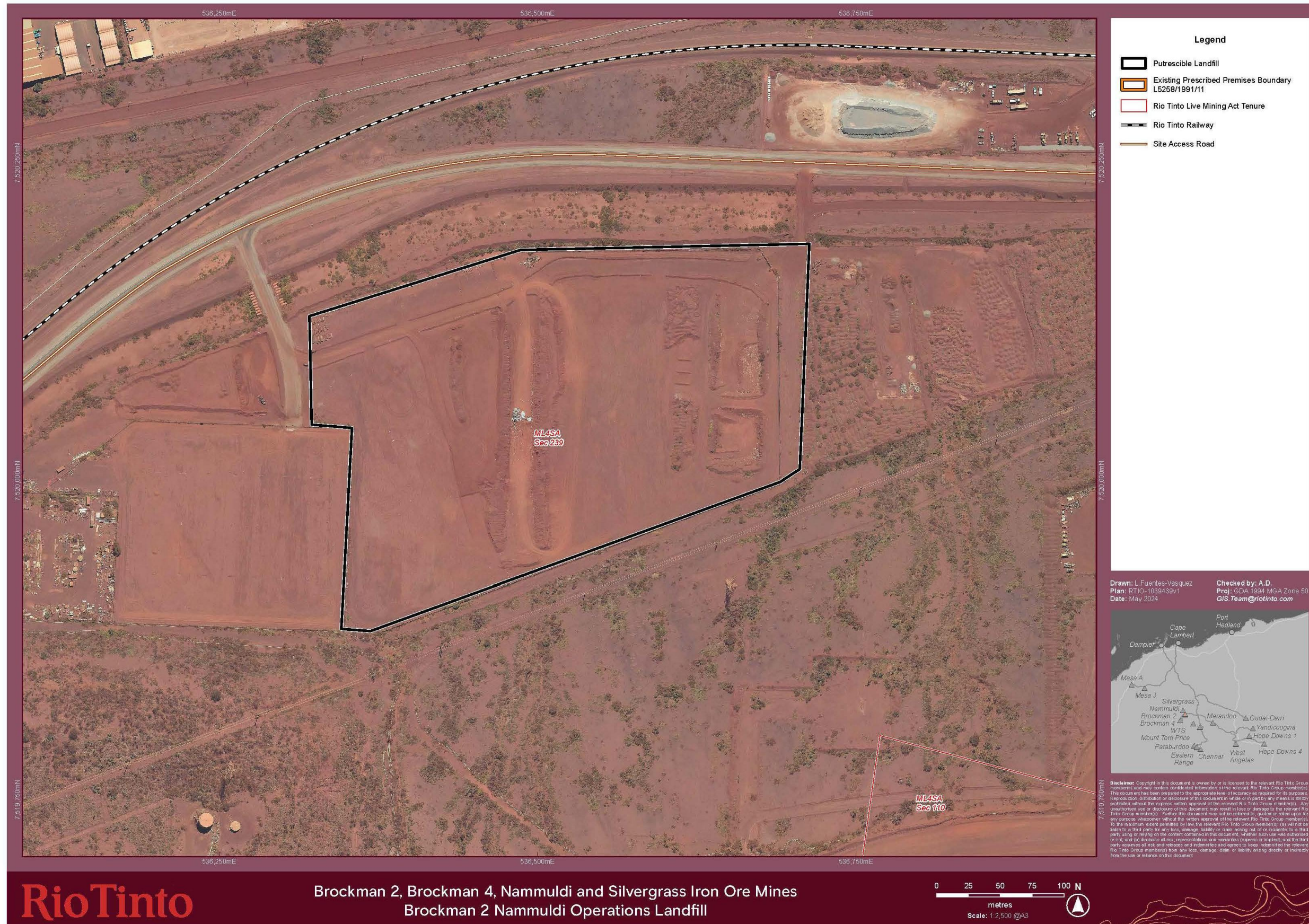


Figure 8: Landfill location

L5258/1991/11 (date of latest update: 29/06/2026)



Figure 9: Silvergrass East Waste Dump Landfill

L5258/1991/11 (date of latest update: 29/06/2026)

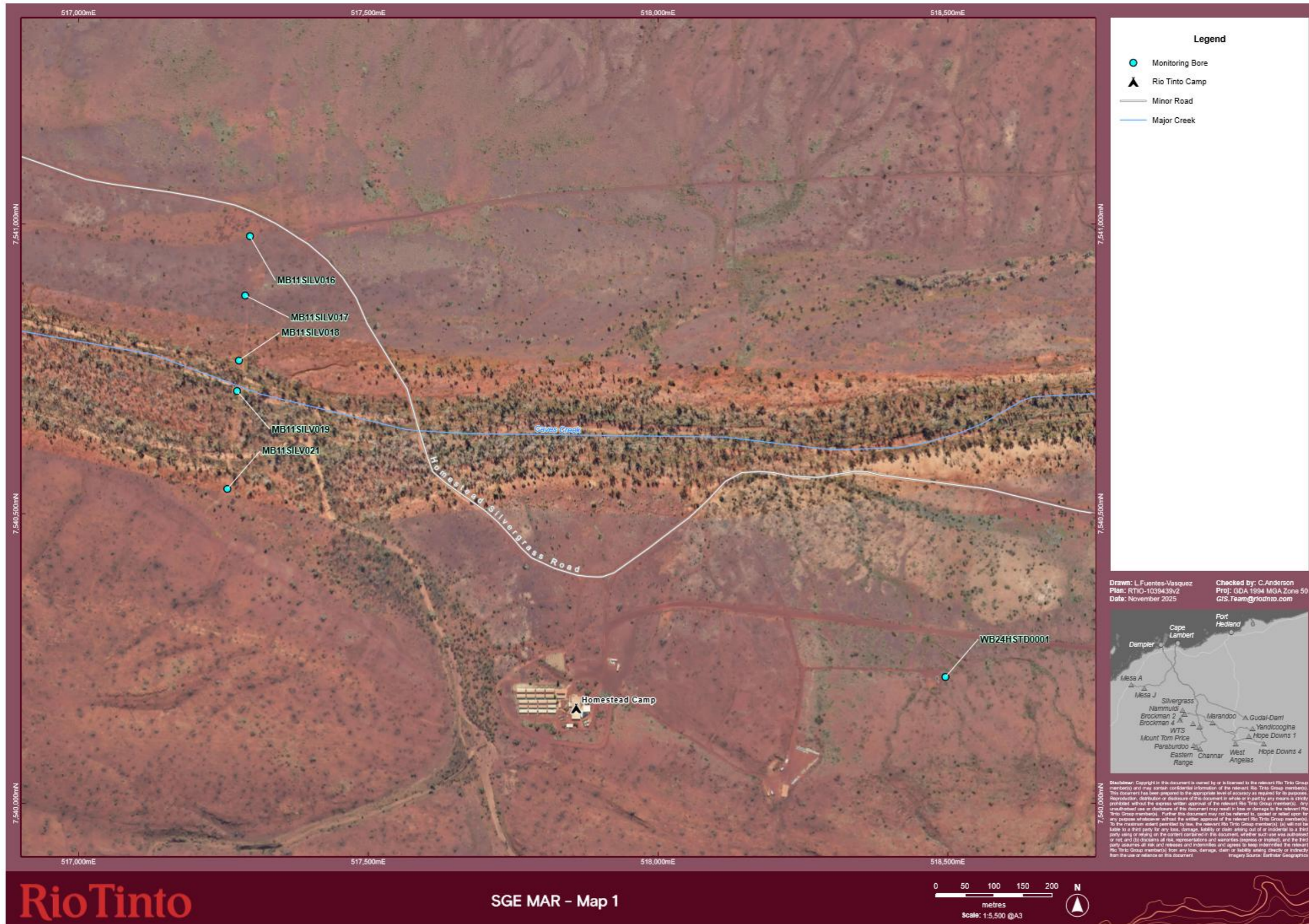


Figure 11: MAR scheme monitoring bores (Map 1)

L5258/1991/11 (date of latest update: 29/06/2026)

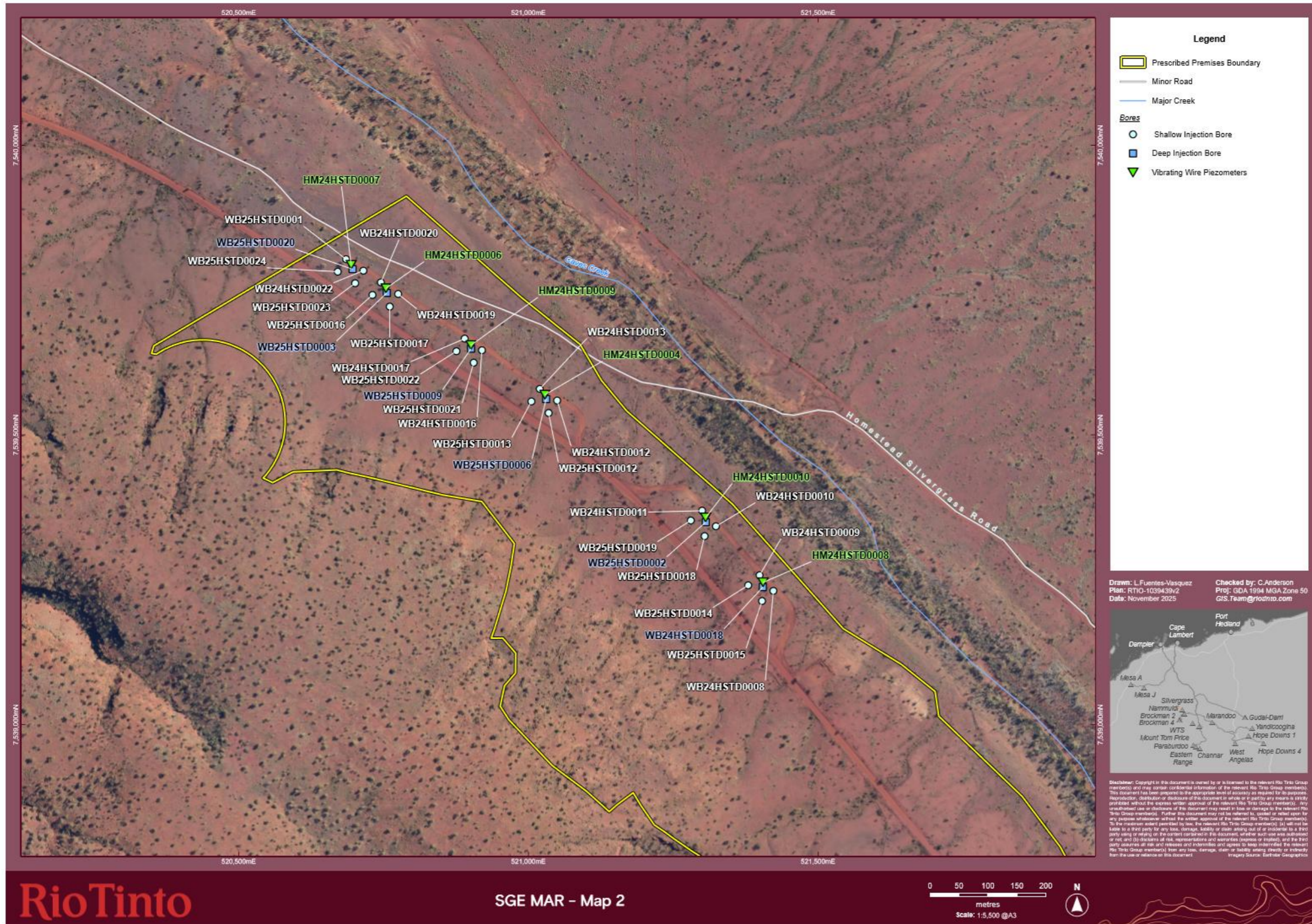


Figure 12: MAR scheme monitoring bores (Map 2)

L5258/1991/11 (date of latest update: 29/06/2026)

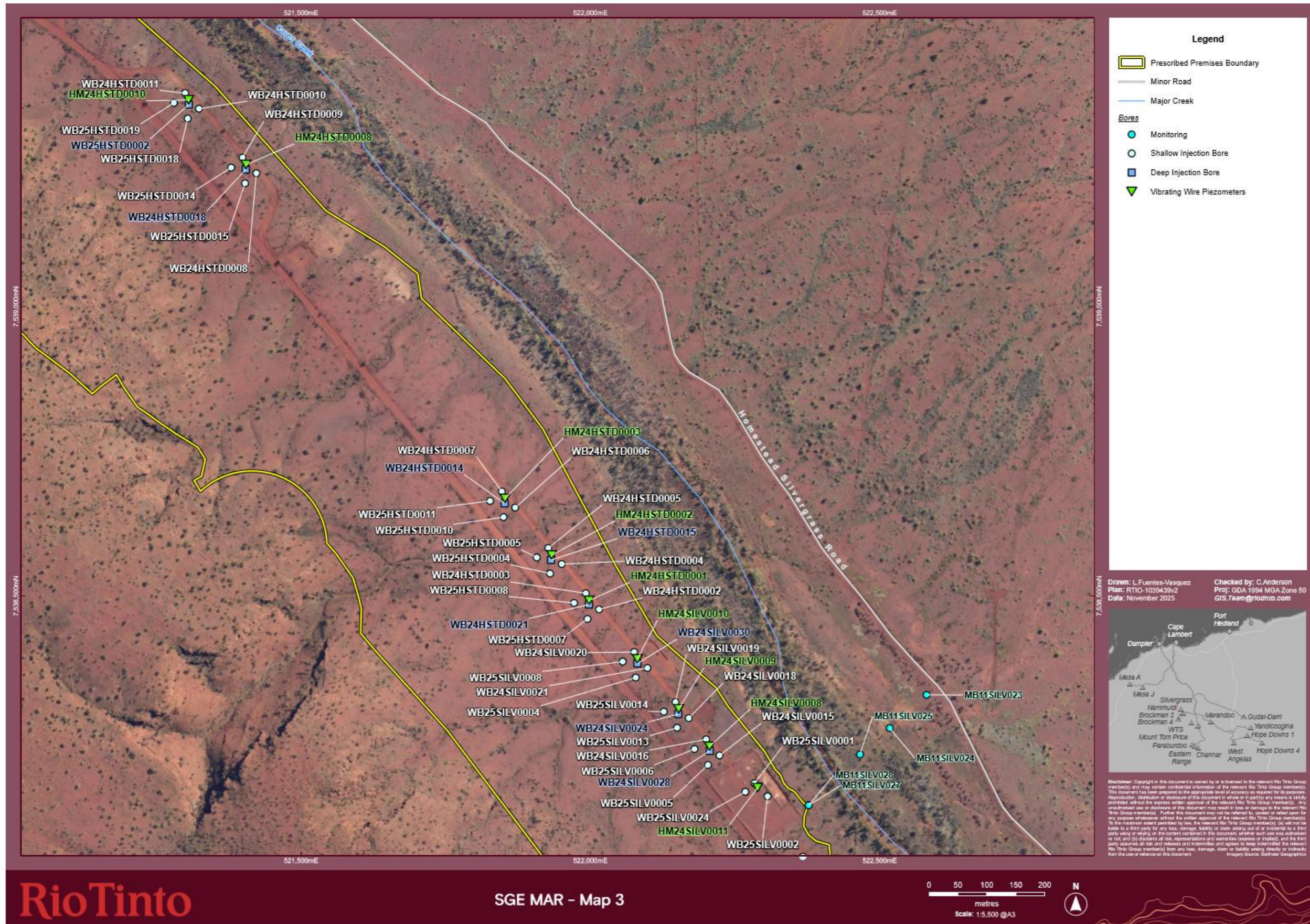


Figure 13: MAR scheme monitoring bores (Map 3)

L5258/1991/11 (date of latest update: 29/06/2026)

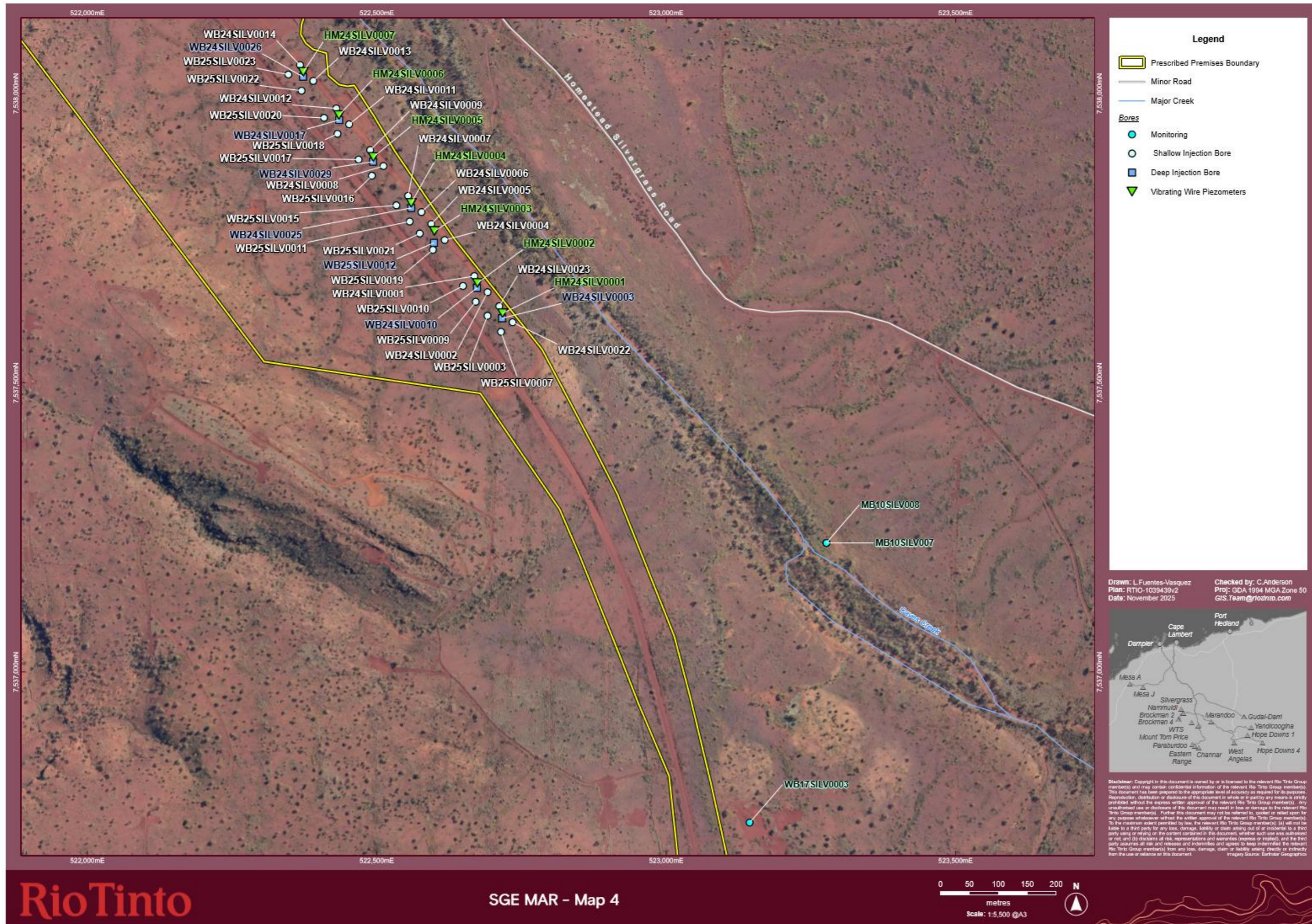


Figure 14: MAR scheme monitoring bores (Map 4)

L5258/1991/11 (date of latest update: 29/06/2026)

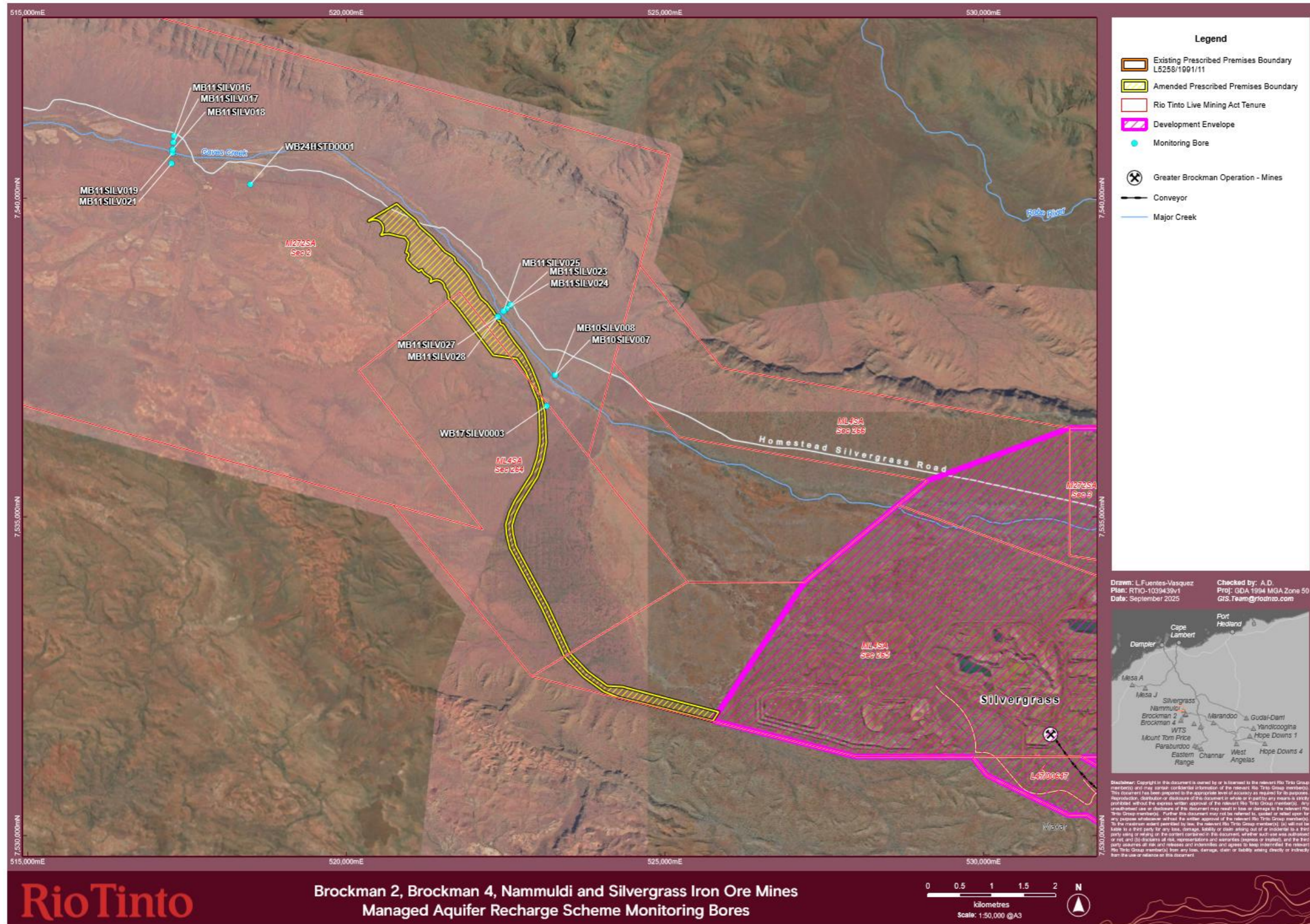


Figure 15: MAR scheme monitoring bore network

L5258/1991/11 (date of latest update: 29/06/2026)

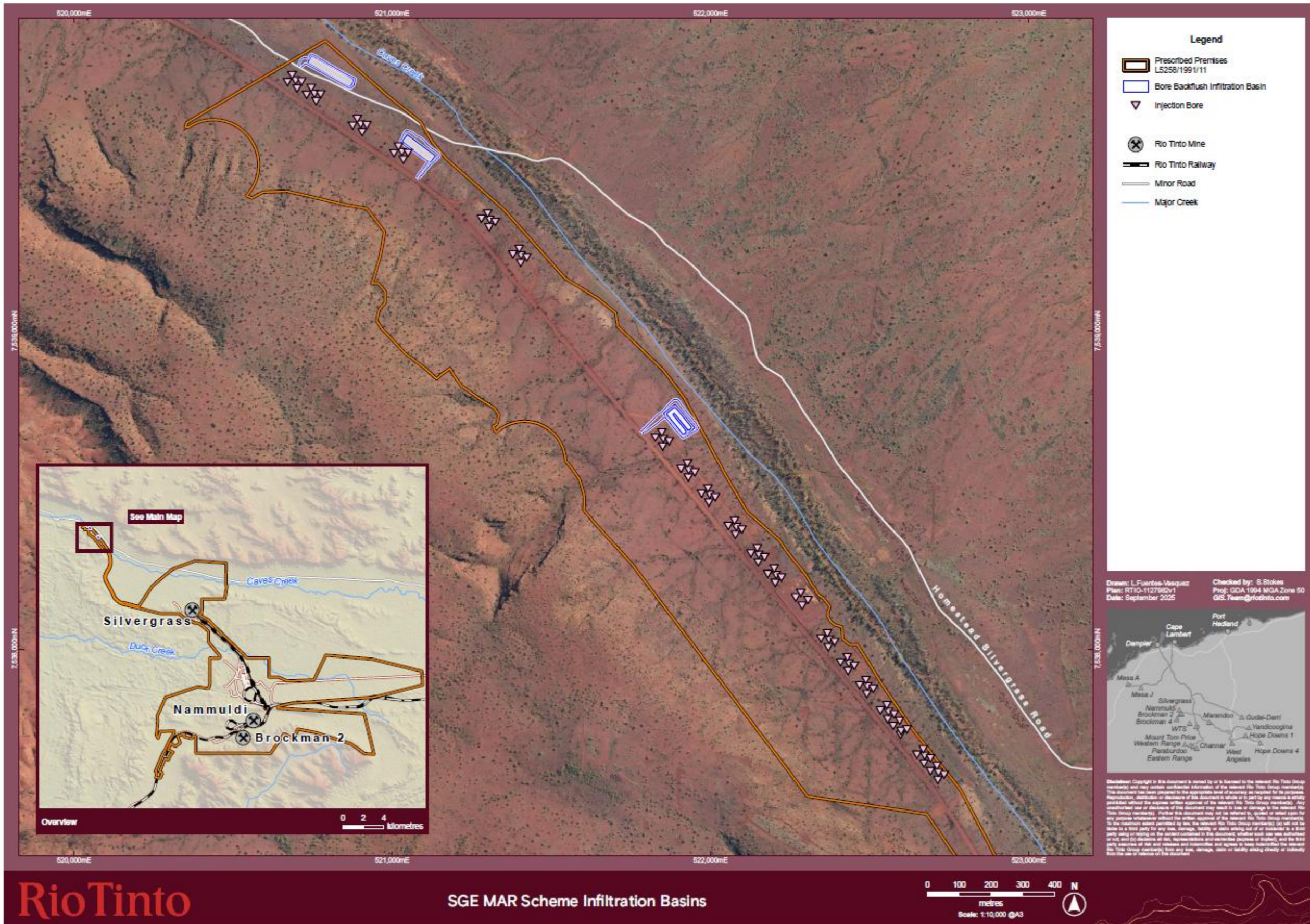


Figure 16: MAR scheme infiltration basins

L5258/1991/11 (date of latest update: 29/06/2026)

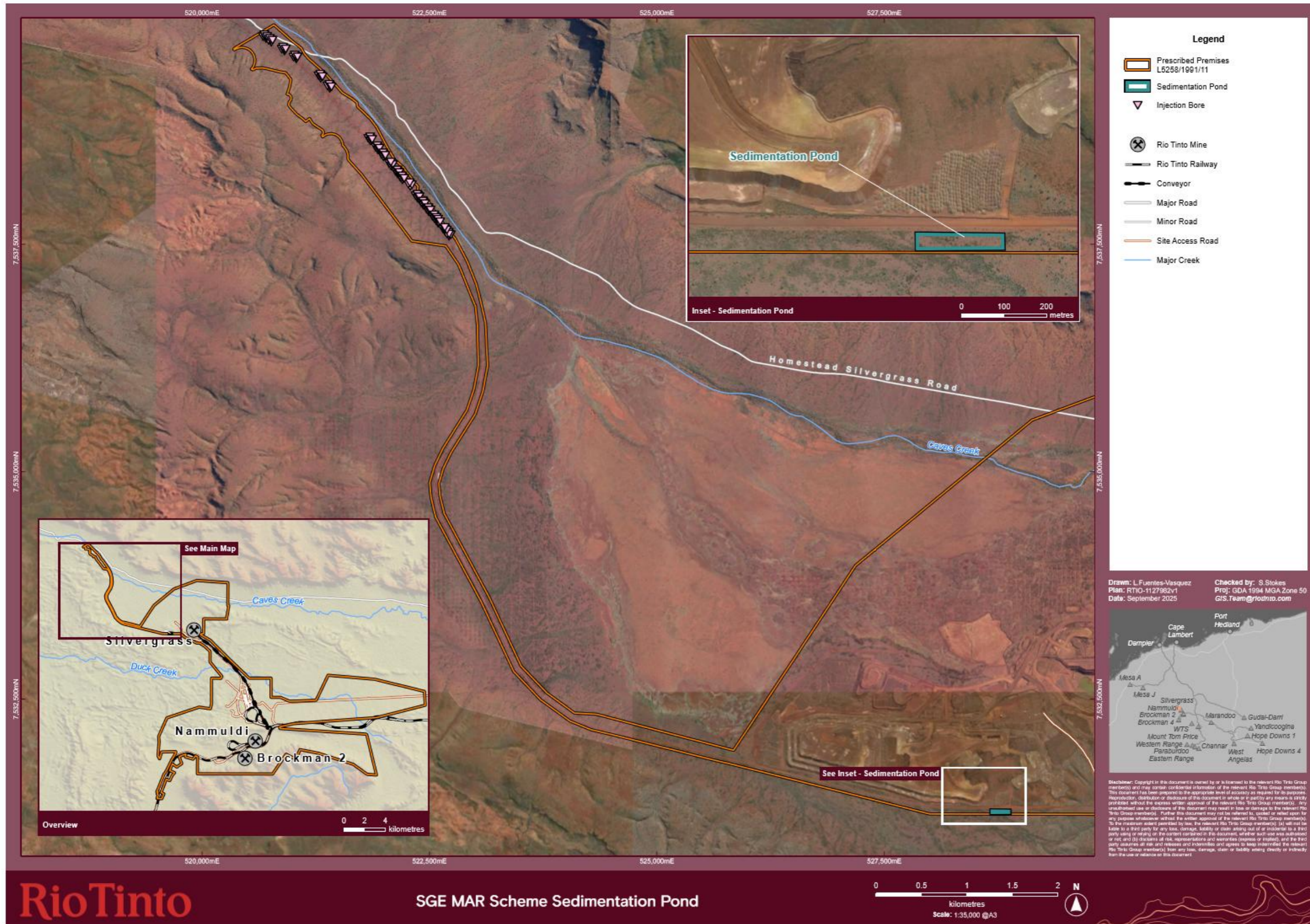


Figure 17: MAR scheme sedimentation pond

L5258/1991/11 (date of latest update: 29/06/2026)

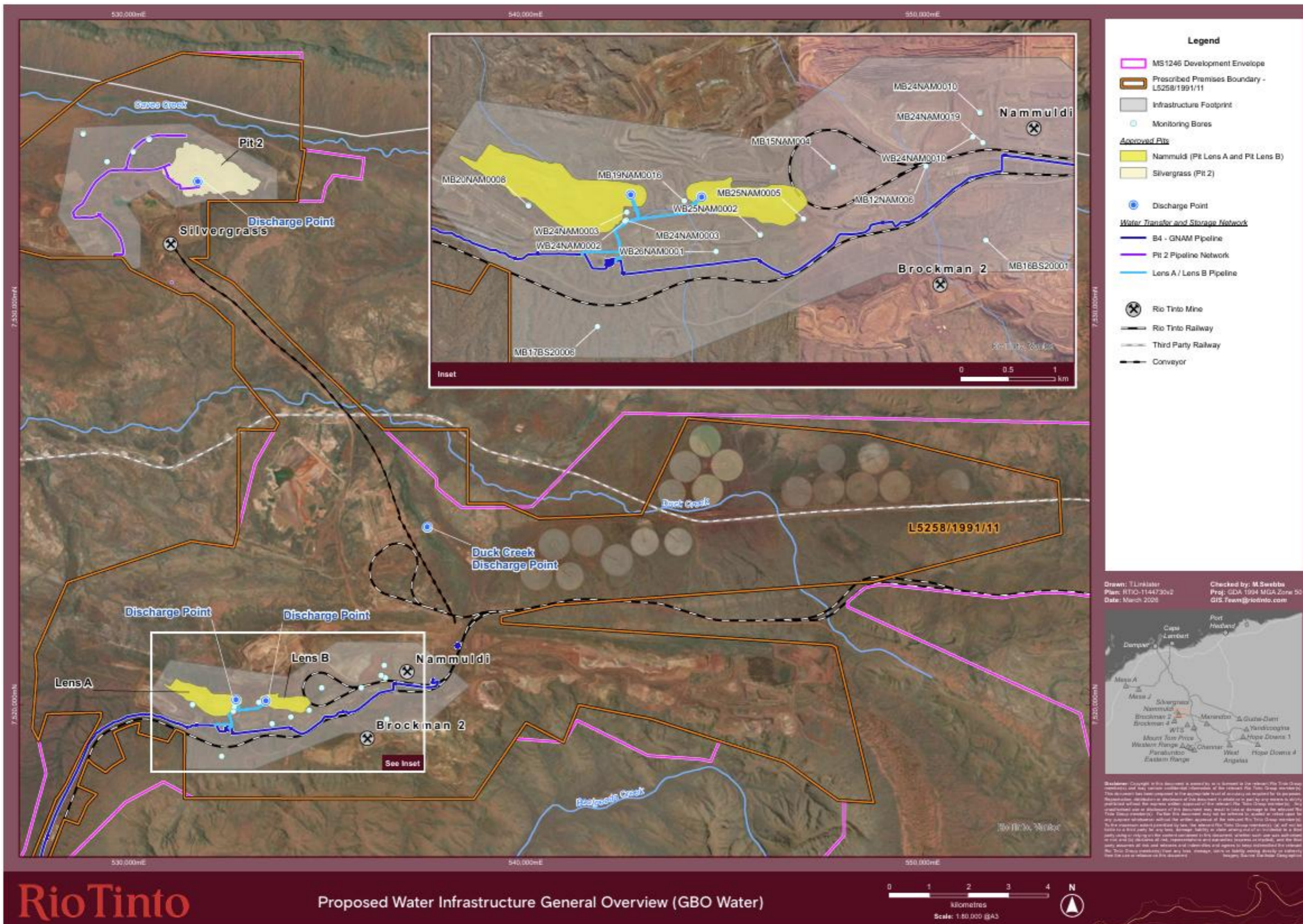


Figure 18: Lens A and Lens B dewatering discharge pipeline and monitoring bore locations

L5258/1991/11 (date of latest update: 29/06/2026)

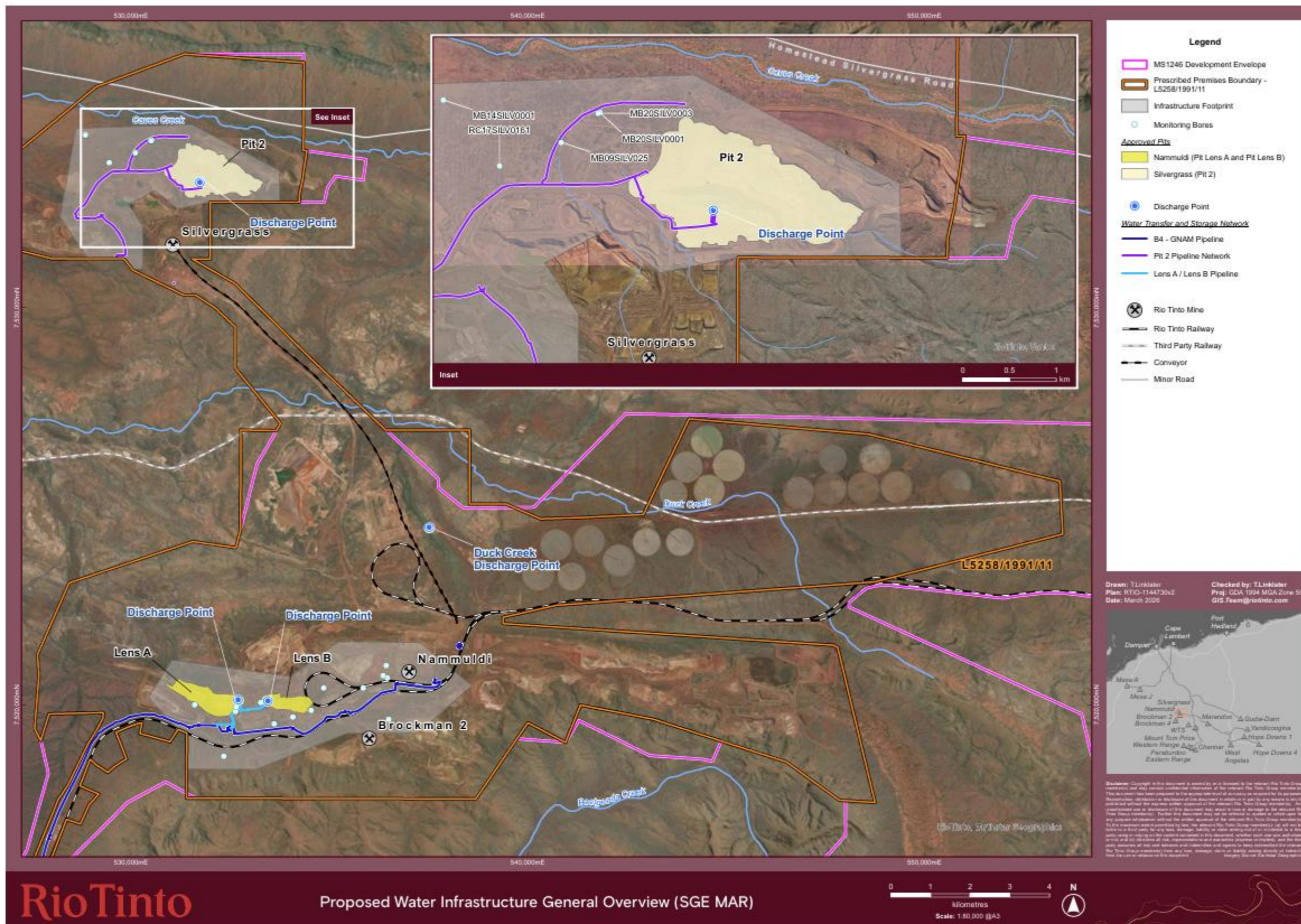


Figure 19: SGE Pit 2 dewatering discharge pipeline and monitoring bore locations

Schedule 2: Premises boundary

| Point | mE_GDA2020 | mN_GDA2020 | | | |
|-------|-------------|-------------|----|-------------|-------------|
| 0 | 520790.4946 | 7539913.551 | 43 | 541335.9473 | 7519990.823 |
| 1 | 522786.8957 | 7537558.479 | 44 | 540955.451 | 7519048.165 |
| 2 | 523115.371 | 7536638.865 | 45 | 540005.9585 | 7519545.434 |
| 3 | 523139.9542 | 7536171.472 | 46 | 538693.8714 | 7517628.824 |
| 4 | 523002.8206 | 7535633.953 | 47 | 531401.4117 | 7517645.531 |
| 5 | 522604.4251 | 7534873.337 | 48 | 531404.7595 | 7519287.166 |
| 6 | 523508.846 | 7532864.063 | 49 | 531170.9816 | 7519354.613 |
| 7 | 524336.941 | 7532334.162 | 50 | 530982.5145 | 7519066.201 |
| 8 | 525843.2599 | 7531938.53 | 51 | 530228.6547 | 7519274.659 |
| 9 | 525752.209 | 7531800.794 | 52 | 530274.3532 | 7519542.254 |
| 10 | 524278.4464 | 7532164.611 | 53 | 529623.3355 | 7519304.573 |
| 11 | 523425.1342 | 7532806.969 | 54 | 529887.5983 | 7518631.34 |
| 12 | 522503.1644 | 7534883.552 | 55 | 529418.7231 | 7518297.908 |
| 13 | 522911.8692 | 7535677.175 | 56 | 528967.2797 | 7518614.823 |
| 14 | 523038.0755 | 7536170.077 | 57 | 528710.6607 | 7517954.588 |
| 15 | 523006.0026 | 7536821.921 | 58 | 529189.0846 | 7517745.46 |
| 16 | 522679.7279 | 7537483.048 | 59 | 528724.5055 | 7516993.083 |
| 17 | 522306.0671 | 7537537.963 | 60 | 528373.9829 | 7517107.59 |
| 18 | 520350.4356 | 7539642.256 | 61 | 527876.5689 | 7515837.099 |
| 19 | 527184.6849 | 7533969.508 | 62 | 528149.8361 | 7515704.526 |
| 20 | 529125.4846 | 7535568.802 | 63 | 527946.3699 | 7515236.931 |
| 21 | 531351.0298 | 7536395.774 | 64 | 527494.0359 | 7515259.586 |
| 22 | 534364.5643 | 7536178.838 | 65 | 527595.5505 | 7515630.191 |
| 23 | 534242.7649 | 7532659.584 | 66 | 527498.9257 | 7515686.279 |
| 24 | 532002.6906 | 7532664.463 | 67 | 527579.4051 | 7515860.284 |
| 25 | 531999.755 | 7531230.325 | 68 | 527459.6755 | 7515883.209 |
| 26 | 531544.873 | 7531231.205 | 69 | 528166.2206 | 7517620.716 |
| 27 | 532630.1333 | 7530606.172 | 70 | 529302.2259 | 7519801.122 |
| 28 | 536420.3521 | 7526922.182 | 71 | 527935.6833 | 7519767.539 |
| 29 | 538539.1465 | 7526922.712 | 72 | 527723.5672 | 7519098.055 |
| 30 | 538539.1465 | 7525055.292 | 73 | 527639.5586 | 7521254.656 |
| 31 | 540321.2219 | 7524683.048 | 74 | 528439.5539 | 7523068.537 |
| 32 | 542919.339 | 7524789.156 | 75 | 531562.5603 | 7524110.695 |
| 33 | 544071.7618 | 7527203.765 | 76 | 532646.6085 | 7523954.626 |
| 34 | 553417.5853 | 7525630.705 | 77 | 532768.1275 | 7526922.712 |
| 35 | 553491.6329 | 7524298.226 | 78 | 533670.899 | 7526904.626 |
| 36 | 548753.9335 | 7523095.301 | 79 | 533772.8919 | 7527088.798 |
| 37 | 539380.9978 | 7522203.603 | 80 | 532625.6475 | 7528483.055 |
| 38 | 539385.6319 | 7522043.305 | 81 | 532627.8327 | 7529519.624 |
| 39 | 547708.6161 | 7521499.466 | 82 | 531623.3157 | 7530320.011 |
| 40 | 548758.3121 | 7517536.982 | 83 | 531333.6309 | 7530319.491 |
| 41 | 547856.8764 | 7517593.431 | 84 | 530053.6698 | 7530945.773 |
| 42 | 546523.5811 | 7518559.284 | 85 | 529826.3236 | 7531234.565 |
| | | | 86 | 528001.3121 | 7531238.044 |