Government of Western Australia
Department of Water and Environmental Regulation

Works Approval

Works approval number	W6713/2022/1
Works approval holder	Onslow Infraco Pty Ltd
ACN	612 668 201
Registered business address	20 Walter Drive OSBORNE PARK WA 6014
DWER file number	DER2022/000334
Duration	11/07/2023 to 10/07/2026
Date of issue	11/07/2023
Date of amendment	22/04/2024
Premises details	Ashburton Infrastructure Project – Port Landside and Nearshore TALANDJI WA 6710 Legal description - Part of Lot 555 on Deposited Plan 402556 Part of Lot 569 on Deposited Plan 71345 Part of Lot 570 on Deposited Plan 71345 As defined by the premises map in Schedule 1: Figure 1.

Prescribed premises category description (Schedule 1, *Environmental Protection Regulations 1987*)	Assessed production capacity
Category 58 Bulk material loading or unloading: premises on which clinker, coal, ore, ore concentrate or any other bulk granular material (other than salt) is loaded onto or unloaded from vessels by an open materials loading system.	No more than 40 million tonnes of iron ore per annum (Mtpa); and No more than 110,000 tonnes of iron ore per day.

This works approval is granted to the works approval holder, subject to the attached conditions, on 22 April 2024, by:

Timothy Moran

Digitally signed by Timothy Moran
Date: 2024.04.22 13:52:07 +08'00'

Timothy Moran
A/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
11/07/2023	W6713/2022/1	Works approval granted.
22/04/2024	W6713/2022/1	Amendment to prescribed premises boundary

Interpretation

In this works approval:

(a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this works approval:

(i) if dated, refers to that particular version; and

(ii) if not dated, refers to the latest version and therefore may be subject to change over time;

(e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(f) unless specified otherwise, all definitions are in accordance with the EP Act.

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

Works approval conditions

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

Construction phase

Infrastructure and equipment

1. The works approval holder must:

(a) construct and/or install the infrastructure and/or equipment;

(b) in accordance with the corresponding design and construction / installation requirements; and

(c) at the corresponding infrastructure location; and

(d) within the corresponding timeframe,

as set out in Table 1.

Table 1: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
1.	Stormwater infrastructure during premises construction phase	I. Sediment controls constructed prior to the clearing of any large areas at risk of generating runoff. II. Sediment controls installed downstream of any disturbed land, prior to that work being undertaken. III. Buffer zones that protect riparian zones of natural creeks are to be maintained. IV. Compaction of all placed fill prior to leaving the site during the wet season and when weather events are identified in advance of them impacting the works. V. Drains with sediment traps installed across the site to divert clean surface water to stable areas away from the work front. VI. Construction of temporary bunds and localised grading with appropriate side slopes and a longitudinal grade of 1:100 to direct and minimize the velocity of water flow. VII. Rock protection at all bends and around culverts to reduce scour. VIII. Installation of sediment traps, basins and spillways to avoid adverse flood risk to adjoining properties and the marine environment. IX. Construction of temporary clean	N/A – location not fixed due to staged site construction works.	Stormwater controls must remain in place until the disturbed area is stabilised.

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
		water diversion channels to direct clean stormwater to existing local sumps. X. Construction of temporary diversion channels and holding ponds from compacted soil to contain potentially contaminated stormwater. XI. Potentially contaminated compacted soil and stormwater must be appropriately disposed of off-site at an appropriately licensed facility. XII. Suitable impermeable storage onsite required for potentially contaminated waste material if offsite disposal is pending. XIII. Perimeter geotextile silt fences constructed parallel to the contours of the site in surface water flow areas and adjusted as site construction progresses.		
2.	Mobile machinery / vehicles	Mobile machinery operating at the premises during construction includes but is not limited to: • Front end loader • Haul trucks • Skid steer loader • Roller • Vibratory roller • Pavement machine • Excavator • Tracked mobile crane • Road sweeper I. Haul truck loads to be covered to minimise dust emissions. II. All mobile machinery to be fitted with appropriate mufflers or noise attenuating equipment to minimise noise emissions. III. Road sweeper to be available at all times at the premises during premises construction to minimise dust emissions and clean up spills. IV. Fuel storage and handling in accordance with AS 1940	Within premises boundary as per Schedule 1, Figure 1.	Prior to the submittal of the Environmental Compliance Report required by Condition 8(b).

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
3.	Major roads	I. Major roads within the premises to be sealed.	Within premises boundary as per Schedule 1, Figure 1.	Prior to the submittal of the Environmental Compliance Report required by Condition 8(b).
4.	Water carts	I. Water cart(s) fitted with misting sprays and an overspray prevention device. II. Water cart(s) to be available at all times during premises construction and operation to minimise visible dust lift off. III. Water cart(s) operated proactively based on predicted meteorological conditions.	Within premises boundary as per Schedule 1, Figure 1.	Prior to the submittal of the Environmental Compliance Report required by Condition 8(b).
5.	Truck unloading shed / tipping station	Semi-enclosed steel structure tipping station with fully automated materials handling system that consists of the following: I. Truck unloading loop with multi lane tipping station II. Receiving Hoppers (HOP01 – HOP04) III. Feeders (FE01 – FE05) IV. Sump pumps (SPO1 – SPO4) V. Vent fan VI. CV01 Inloading Conveyor including carry side covers VII. Inloading substation VIII. Enclosed CV01/CV02 transfer station IX. DC01 Dust Collector system X. Conveyors to include carry side covers, over material burden and idlers, to prevent generation of dust XI. Concrete slabs and kerbs constructed at areas such as transfer points, where spillage is likely XII. Water spray dust suppression systems implemented on the feeder head chute and conveyor dust hoods.	As per Schedule 1, Figure 2.	Prior to the submittal of the Environmental Compliance Report required by condition 8(b).
6.	Ore Storage and Reclaim Shed	I. Fully enclosed storage shed with a 300,000 tonne capacity for	As per Schedule 1, Figure 2.	Prior to the submittal of the

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
		stockpiling and blending. II. All building openings that are not required for ventilation purposes to be airtight sealed, as much as possible. III. Openings (roller doors) to be electrically actuated. Shed to contain the following infrastructure: IV. CV01 Inloading Conveyor. V. CV02 Tripper Conveyor (and Tail and Pulley) – conveyor to extend the full length of the storage shed and discharge ore from the tripper cart across the length of the stockpile. VI. CV01/CV02 transfer station to be enclosed. VII. 2 × Dust Collectors and fans (DC01 and DC02). VIII. RC01 Bridge mounted bi-directional travelling Bucket Wheel Reclaimer (and rail) which spans the entire stockpile width. IX. Hoppers (HOP01 and HOP02). X. Thru Loading Bin and Thru Load Feeder. XI. Storage and reclaim substation. XII. Maintenance platform. XIII. Drive in sump. XIV. Dust suppression sprays installed at Transfer stations.		Environmental Compliance Report required by condition 8(b).
7.	Outloading Facility	Outloading Facility to consist of the following infrastructure: I. CV03 Outload Conveyor to include carry side covers and extend the full length of the shed. II. Belt Conveyor cover. III. CV03 Head Pully with Scrapers fitted to limit material carry back and belt ploughs at the tail-end to prevent belt damage. IV. CV03 tower. V. CV03/CV04 Transfer Station to be enclosed. VI. Thru Load Feeder.	As per Schedule 1, Figure 2.	Prior to the submittal of the Environmental Compliance Report required by Condition 8(b).

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
		VII. CV04 Drive Pully. VIII. CV04 – M01 and CV04-M02 Conveyor Drives. IX. CV04 Wharf Conveyor take up. X. CV05 Sample Conveyor. XI. CV05 Head Pully. XII. CV06 Rejects Conveyor which discharges onto CV04. XIII. DC01 Dust Collector. XIV. Sample Cutter. XV. Belt Reeler. XVI. Belt Splice Station. XVII. Product Sampling Station. XVIII. Substation. XIX. Take up Tower and Take Up Pully. XX. Drive in sump. XXI. All external conveyors to be covered and transfer points enclosed.		
8.	Wharf conveyor and ship loader	Wharf conveyor and ship loader to consist of the following infrastructure: I. Swing arm ship loader. II. CV04 Wharf Conveyor to include carry side covers. III. A baghouse dust collector installed on CV04 leading skirt dust hoods. IV. CV04 Compression Truss. V. CV04 Head Chute. VI. SHL01 TSV Loader. VII. Boom slew. VIII. Wharf substation. IX. CV03/CV04 transfer station to be enclosed/clad. X. The TSV loader boom conveyor incudes covers on the carry side. XI. Dust suppression water sprays installed on the discharge of the TSV loader boom.	As per Schedule 1, Figure 2.	Prior to the submittal of the Environmental Compliance Report required by Condition 8(b).
9.	Trans-shipment Vessel (TSV)	I. Single point loading Hopper mounted on the TSV and hopper	As per Schedule 1, Figure 2.	Prior to the submittal of the

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
	At port berth	fitted with a tripper conveyor to ensure even product loading. II. TSV to have top hatch for product loading.		Environmental Compliance Report required by Condition 8(b).
10.	Stormwater infrastructure during premises operation	I. Series of drains and culverts constructed to collect stormwater runoff from the facility which drains to the sedimentation pond. II. Suitably sized sumps fitted with oily water separators constructed between the haul road turn around and the sediment basin. III. Oily water separators capable of <15mg/L total recoverable hydrocarbons (TRH) discharge installed at the fuel storage and power station drains to separate potentially contaminated from uncontaminated stormwater. IV. Containment bunds around vehicle servicing facilities, chemical / fuel storage areas and concrete batch plants designed to minimise flood water entry. V. Sedimentation basin sized to hold at minimum, the volume of a year average recurrence interval (ARI), 1 hour inflow volume, including a 300 mm freeboard. VI. Sediment pond designed with an outlet structure and two grated inlets at 1.3m and 1.5m above the base of the pond so excess water can be discharged to the tidal flats south of the site beyond the southern seawall of the premises in emergency situations. VII. Sediment pond outlet structure constructed with rock armour for energy dissipation to reduce erosion impacts. VIII. low flow pipe at the bottom of the basin level to allow drainage of the basin over an extended period of up to 96 hours depending on the storm event and tidal levels at the time. IX. Basin outflow culverts fitted with tide valves on the outlet end to control passive storage volume of the basin and act as a barrier to tidal/storm surge influences.	General layout of infrastructure as per Schedule 1, Figure 4. Sedimentation pond and outlet structure located as per Schedule 1, Figure 5.	Prior to the submittal of the Environmental Compliance Report required by Condition 8(b).

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
		X. Basin outflow culverts fitted with concrete pits that act as overflow weirs to control the passive storage volume available within the basin for sediment settlement. XI. Water level markers and sediment depth markers installed and maintained to determine available capacity of basin.		
11.	Air quality monitoring network	I. No less than three trailer mounted light scattering E-sampler nephelometer units considered federal equivalent methods (FEM) by the USEPA 9 Section 2.2.6 of USEPA 2027. II. Monitors capable of monitoring Particulate Matter (PM10) equivalent to reference methods in AS/NZS 3580.9.17:2018. III. Monitors must be solar powered or have a high-capacity battery system capable of providing continuous power.	N/A - To be advised in Environmental Compliance Report.	Prior to the submittal of the Environmental Compliance Report required by Condition 8(b).
12.	Groundwater monitoring bores network	I. Designed and constructed in accordance with ASTM D5092/D5092M-16: Standard practice for design and installation of groundwater monitoring bores. II. Bore locations located with regard to the Department's Water Quality Protection Note 30 Groundwater Monitoring Bores (DoW, 2006) recommendations. III. Three bores must be installed around the sedimentation pond (one up hydraulic gradient of the sedimentation pond and two down hydraulic gradient of the sedimentation pond). IV. Bores must be constructed with a screened interval within the shallow water table. V. Bore screens must target the part, or parts, of the aquifer most likely to be affected by contamination from the premises. Where temporary/seasonal perched features are present, wells must be nested, and the perched features individually screened.	N/A - Existing site bores located as per Schedule 1, Figure 7. New bore locations to be advised in bore construction report.	Must be constructed, developed (purged), and determined to be operational by no later than 30 calendar days prior to the commencement of environmental commissioning activities under condition 10.

	Infrastructure	Design and construction / installation requirements	Infrastructure location	Timeframe
		VI. Soil samples collected and logged during the installation of monitoring bores. VII. A record of the geology encountered during drilling must be described and classified in accordance with relevant Australian Standards. VIII. Construction logs to include elevations of the top of casing position to be used as the reference point for water-level measurements and the elevations of the ground surface protective installations.		
13.	12MW Gas fired Power station	I. 12 MW power station (peak load) utilising gas fired engines comprising of 7 Cummins reciprocating gas generators, each with a 2MW capacity.	As per Schedule 1, Figure 2.	N/A.

Note 1: Note 1: refer to Section 8 of Schedule B2 of the Assessment of Site Contamination NEPM for guidance on well screen depth and length.

2. During construction works weekly inspections of the stormwater management infrastructure must occur to ensure hydraulic integrity and erosion and pollution control effectiveness.

3. During construction activities clearing and earthworks activities are to be avoided during high winds when dust cannot be adequately managed via water cart application.

4. During construction works unused exposed areas of ground will be mulched or surfaces otherwise stabilised.

5. The works approval holder must, within 60 calendar days of the monitoring bores in Table 1 being constructed, submit to the CEO a bore construction report evidencing compliance with the requirements of Condition 1 and depicting the bore locations.

6. The works approval holder must within 60 days of the monitoring bores in Table 1 being constructed and prior to environmental commissioning conduct baseline sampling (at least once) on the new bores and existing site bores in accordance with the sampling requirements set out in Table 3.

7. Groundwater sample results from the baseline sampling round must be submitted to the department within 30 days of the laboratory results being received.

Compliance reporting after construction

8. The works approval holder must within 60 calendar days of an item of infrastructure or, associated required infrastructure, or equipment required by condition 1 being constructed and/or installed:

(a) undertake an audit of their compliance with the requirements of condition 1; and

(b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

9. The Environmental Compliance Report required by condition 8(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) evidence of certifying engineers' relevant qualifications and experience;

(c) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1;

(d) a groundwater monitoring bore location map (using aerial image overlay) which includes the location of all monitoring bores in the monitoring network (including existing constructed bores) and their respective identification numbers;

(e) an air quality monitoring station location map (using aerial image overlay) must be prepared and include the location of all air quality monitoring stations in the monitoring network and their respective identification numbers;

(f) labelled photographs of the constructed and/or installed infrastructure and equipment; and

(g) 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

Environmental commissioning requirements and emission limits

10. The works approval holder may only commence environmental commissioning of an item of infrastructure listed in condition 11 once the Environmental Compliance Report has been submitted for that item of infrastructure in accordance with condition 8(b) of this works approval.

11. Any environmental commissioning activities undertaken for an item of infrastructure specified in Table 2 may only be carried out:

(a) in accordance with the corresponding commissioning requirements; and

(b) for the corresponding authorised commissioning duration.

Table 2: Environmental commissioning requirements

	Infrastructure	Commissioning requirements	Authorised commissioning duration
1.	Mobile machinery	I. All mobile machinery to be operated in accordance with the manufacturer's specifications and instructions. II. Road sweeper available at all times during premises operation to minimise dust emissions and clean up spills. III. Water cart(s) available at all times at the premises to manage dust emissions. IV. Refuelling of light vehicles to only occur in dedicated areas installed with impermeable floors, bunds, and stormwater management systems. V. Fuel storage and handling in accordance with AS 1940.	12-month period.
2.	Semi enclosed truck unloading shed / tipping station	I. Ore is delivered to the Premises above the dust extinction moisture (DEM) level and DEM level is tested at the product sample station at the premises. II. Ore in-loading into hoppers to take place in the semi-enclosed tipping station. III. Material from the in-loading system to be feed onto a single belt conveyor. IV. Water dust suppression systems implemented within the tipping station. V. Equipment to be regularly hosed down. VI. Water spray dust suppression systems utilised on the feeder head chute and conveyor dust hood.	12-month period.
3.	Ore Storage and Reclaim Shed	I. The covered In-loading conveyor (CV01) from the Road Train Unloading Facility to transfer product onto the stockpile tripper conveyor within the fully enclosed storage shed. II. Tripper conveyor to extend the full length of the storage shed, discharging ore from the tripper cart across the length of the stockpile. III. Ore product to be reclaimed from the stockpile using the bucketwheel reclaimer (RC01) and then discharged from the bucketwheel onto the reclaim conveyor (CV02). IV. Reclaimer conveyor (CV02) then transfers material onto the out-loading conveyor (CV03).	12-month period.

	Infrastructure	Commissioning requirements	Authorised commissioning duration
		V. The out-loading conveyor which transfers product to the TSVs via wharf conveyors (CV04) across the jetty facility extends the full length of the shed. VI. Ore on the out-load conveyor (CV03) to be periodically tested to ensure grade control by redirecting samples to the product sample station. VII. Maintain product storage/reclaim building at negative internal pressure using baghouse dust collectors. VIII. The number of roller doors open at any time controlled through regular visual inspection.	
4.	Wharf conveyor and ship loader	I. Ore transferred from the out-load conveyor (CV03) to the wharf conveyor (CV04) via a transfer/feed chute, which feeds the swing-arm TSV loader (SHL01). II. TSV Loader (SHL01) to carefully direct the ore into the hold of the TSV to ensure event loading. III. Dust suppression water sprays are utilised on the discharge of the TSV loader boom. IV. The distance between the TSV loader boom and the TSV hopper to be kept to a minimum during loading operations to reduce fugitive dust emissions. V. CV06 Rejects Conveyor - discharges onto CV04.	12-month period.
5.	TSV at Port berth	I. Ore to be fed into the TSVs top hatches and distributed via a tripper conveyor within the TSV hopper to ensure even loading.	12-month period.
6.	Stormwater infrastructure	I. Oily water separators fitted to sumps within drainage network. II. Oily water separators at fuel storage and Power Station to separate potentially contaminated runoff from uncontaminated stormwater off. III. Sedimentation basin operated with a 300 mm freeboard at all times. IV. In emergency situations excess water within the sedimentation basin can be discharged to the tidal flats beyond the southern seawall of the premises. V. Sedimentation basin to be excavated of excess solid material when basin capacity is reduced by more than 30% and waste	12-month period.

	Infrastructure	Commissioning requirements	Authorised commissioning duration
		material disposed of at an appropriate offsite facility or returned to temporary on-site waste storage.	
7.	Air quality monitoring network	I. Calibrated in accordance with the manufacturer's specifications. II. Configured to include a telemetry system to allow for remote downloading of real-time monitoring data including PM10, wind speed, wind direction, relatively humidity, barometric pressure, temperature and precipitation. III. Operated in accordance with Table 3 monitoring requirements. IV. Able to activate alarms when local dust trigger exceedances (refer Table 3) occur. Detailed action measures to follow to prevent further exceedances.	12-month period.
8.	Groundwater monitoring bore network	I. Operated in accordance with Table 3 monitoring requirements.	12-month period.
9.	12 MW Gas fired power station	I. Commissioned in accordance with manufacturer's specifications.	12-month period.

Monitoring during environmental commissioning

12. The works approval holder must monitor emissions during environmental commissioning in accordance with Table 3.

Table 3: Emissions and discharge monitoring during environmental commissioning

Monitoring location	Parameter	Unit	Frequency	Trigger	Sampling Method
Sedimentation Basin - prior to discharge point	Total Recoverable Hydrocarbons (TRH)	Milligrams per litre (mg/L)	Once sedimentation basin contains water and prior to overflow events.	TRH > 15mg/L	Spot sampling in accordance with AS/NZS 5667.1 and AS/NZS 5667.10
	pH[1]	pH units		N/A	
Groundwater monitoring bore network	Standing water level (SWL)[1]	mAHD[2] and mBGL (metres below ground level)	Prior to commissioning to obtain baseline / background levels and during final stages of commissioning to detect if any changes.	TRH > 15mg/L	Spot sampling in accordance with AS/NZS 5667.1 and AS/NZS 5667.10 and AS/NZS 5667.11
	Turbidity[1]	Nephelometric Turbidity Unit (NTU)			
	pH[1]	pH Units			
	Temperature[1]	Degrees Celsius (°C)			
	EC at 25°C[1]	Microsiemens per centimeter			

Monitoring location	Parameter	Unit	Frequency	Trigger	Sampling Method
		(uS/cm)			
	Redox Potential[1]	millivolts (mV)			
	Dissolved Oxygen (DO)[1]	(mg/L)			
	TRH				
	Benzene				
	Toluene				
	Ethylbenzene and Xylene				
	aluminium				
	arsenic				
	cadmium				
	chromium (total Cr, Cr III and Cr IV)				
	cobalt				
	copper				
	iron				
	mercury				
	nickel				
	selenium				
	zinc				
Air quality monitoring network	Particles as PM10	Ug/m^3	Continuous – 10 minute average period	More than two occurrences >120 µg/m^3 during a ten-minute timeframe	Equivalent to AS/NZS3580.9.17:2018

Note 1: in-filed non-NATA accredited analysis permitted.
Note 2: means elevation in metres with respect to the Australian Height Datum

13. The works approval holder must record the results of all monitoring activity required by condition 12.

14. All water sample analysis must be undertaken by laboratories with current NATA accreditation for the relevant parameters, unless otherwise specified in Table 3.

15. Breaches of triggers set out in Table 3 must be reported to the department as soon as practicable but no later than 5pm of the next usual working day after laboratory results.

16. The works approval holder must submit to the CEO an Environmental Commissioning Report within 30 calendar days of the completion date of environmental commissioning for each item of infrastructure specified in Table 2.

17. The works approval holder must ensure the Environmental Commissioning Report required by condition 16 of this works approval includes the following:

(a) a summary of the environmental commissioning activities undertaken, including timeframes relevant to each specific item or item/s of infrastructure;

(b) the point-source emissions monitoring and/or ambient concentrations monitoring results recorded in accordance with conditions 12 and 13;

(c) a summary of the environmental performance of each item of infrastructure and / or equipment as constructed or installed (as applicable), which at minimum includes records detailing the environmental performance during:

(i) No Load Commissioning; and
(ii) Load Commissioning (inloading and outloading systems); and
(iii) Performance Testing

(d) a review of the works approval holder's performance and compliance against the conditions of this works approval; and

(e) where they have not been met, measures proposed to meet the manufacturer's design specifications and the conditions of this works approval, together with timeframes for implementing the proposed measures.

Time limited operations phase

Commencement and duration

18. 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 8(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 11, the Environmental Commissioning Report for that item of infrastructure as required by condition 16 has been submitted by the works approval holder.

19. The works approval holder may conduct time limited operations for an item of infrastructure specified in condition 20 (as applicable):

(a) for a period not exceeding 180 calendar days from the day the works approval holder meets the requirements of condition 18 for that item of infrastructure; or

(b) until such time as a licence for that item of infrastructure is granted in accordance with Part V of the *Environmental Protection Act 1986*, if one is granted before the end of the period specified in condition 19(a).

Time limited operations requirements and emission limits

20. During time limited operations, the works approval holder must ensure that the premises 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 during time limited operations

	Site infrastructure and equipment	Operational requirement	Infrastructure location
1.	Mobile machinery	I. All mobile machinery to be operated in accordance with the manufactures instructions. II. Road sweeper to be available at all times at the premises to minimise dust emissions and clean up spills. III. Water cart(s) available at all times at the premises to manage dust emissions. IV. Refuelling of light vehicles to only occur in dedicated areas installed with impenetrable floors, bunds, and stormwater management systems. V. Fuel storage and handling to be in accordance with Australian Standards (AS 1940).	Within premises boundary as per Schedule 1, Figure 1.
2.	Truck unloading shed	I. Ore is delivered to the Premises above the dust extinction moisture (DEM) level and DEM level tested at the product sample station within the premises. II. Ore in-loading into hoppers to occur in the semi-enclosed tipping station. III. Material from the in-loading system to be feed onto a single belt conveyor. IV. Water dust suppression systems implemented within the tipping station. V. Equipment to be regularly hosed down. VI. Water spray dust suppression systems utilised on the feeder head chute and conveyor dust hood.	As per Schedule 1, Figure 2.
3.	Ore Storage and Reclaim Shed	I. The covered In-loading conveyor (CV01) from the Road Train Unloading Facility to transfer product onto the stockpile tripper conveyor within the fully enclosed storage shed. The tripper conveyor extends the full length of the storage shed, discharging ore from the tripper cart across the length of the stockpile. II. Ore product to be reclaimed from the stockpile using the bucketwheel reclaimer (RC01) and then discharged from the bucketwheel onto the reclaim conveyor (CV02). III. Reclaimer conveyor (CV02) then transfers material onto the out-loading conveyor (CV03). IV. The out-loading conveyor which transfers product to the TSVs via wharf conveyors (CV04) across the jetty facility to extend the full length of the shed. V. Ore on the out-load conveyor (CV03) to be periodically tested to ensure grade control by	As per Schedule 1, Figure 2.

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		redirecting samples to the product sample station. I. Maintain product storage/reclaim building at negative internal pressure using baghouse dust collectors. II. Maintain baghouse filter system in good working order with maintenance records. III. The number of roller doors open at any time to be controlled through regular visual inspection.	
4.	Wharf conveyor and ship loader	I. Ore transferred from the out-load conveyor (CV03) to the wharf conveyor (CV04) via a transfer/feed chute, which feeds the swing-arm TSV loader (SHL01). II. TSV Loader (SHL01) to carefully direct the ore into the hold of the TSV to ensure event loading. III. Dust suppression water sprays utilised on the discharge of the TSV loader boom. IV. The distance between the TSV loader boom and the TSV hopper to be kept to a minimum during loading operations to reduce fugitive dust emissions.	As per Schedule 1, Figure 2.
5.	TSV	I. Ore to be fed into the TSVs top hatches and distributed via a tripper conveyor within the TSV hopper to ensure even loading.	Within premises boundary as per Schedule 1, Figure 1.
6.	Stormwater infrastructure	I. Oily water separators fitted to sumps within drainage network. II. Oily water separators at fuel storage and power station to separate potentially contaminated runoff from uncontaminated stormwater off. III. Sedimentation basin operated with a 300 mm freeboard at all times. IV. In emergency situations excess water within the sedimentation basin to be discharged to the tidal flats beyond the southern seawall of the premises. V. Sedimentation basin to be excavated of excess solid material when basin capacity is reduced by more than 30% and waste material disposed of at an appropriate offsite facility.	As per Schedule 1, Figure 2.
7.	Air quality monitoring network	I. Sited in fixed locations in accordance with AS/NZS 3580.1.1:2016. II. At least one monitor operated continuously at the Port boundary. III. At least one monitor operated continuously in the vicinity of Chevron Accommodation Camp. IV. At least one monitor operated continuously in the	At least one monitor sited at the premises boundary; and At least one monitor sited in the vicinity of Onslow Salt; and At least one monitor

	Site infrastructure and equipment	Operational requirement	Infrastructure location
		vicinity of Onslow Salt ponds. V. Monitors operated in accordance with the monitoring requirements set out in Table 6. VI. If the PM10 trigger in Table 6 is triggered, then the following contingency actions must be implemented: a. monitor to trigger alarm; and b. undertake critical review of recent weather conditions and premises construction or operating conditions to determine if the exceedance is attributable to construction or operations; and c. if investigation determines that the trigger was due to premises construction activities or operations, review and adjust implementation and dust management procedures.	sited in the vicinity of the Wheatstone Accommodation Village.
8.	Groundwater monitoring bore network	I. Quarterly spot samples must be taken in accordance with the requirements set out in Table 6.	N/A - Figure to be provided during construction compliance reporting.
9.	12MW gas fired power station	I. Operated and maintained in accordance with the manufacturer's specifications.	As per Schedule 1, Figure 2.

21. During time limited operations, the works approval holder must ensure that the emission(s) specified in Table 5, are discharged only from the corresponding discharge point(s) and only at the corresponding discharge point location(s).

Table 5: Authorised discharge points

	Emission	Discharge point	Discharge point location
1.	Potentially contaminated stormwater	Sedimentation pond outlet structure.	As per Schedule 1, Figure 6.
2.	Brine discharge from the Reverse Osmosis Plant	Reverse Osmosis Plant brine pipeline outlets.	As per Schedule 1, Figure 6
3.	Power station	9 stacks each 10.4m in height.	As per Schedule 1, Figure 6.

Monitoring during time limited operations

22. The works approval holder must monitor emissions during time limited operations in accordance with Table 6.

Table 6: Emissions and discharge monitoring during time limited operations

Monitoring location	Parameter	Unit	Frequency	Trigger	Sampling Method
Sedimentation Basin - Prior to discharge point	TRH	mg/L	quarterly and prior to overflow events	>15	Spot sampling in accordance with AS/NZS 5667.1 and AS/NZS5667.10
	pH	pH units		N/A	
Groundwater monitoring bore network	Standard water level[1]	SWL mBGL	Quarterly	N/A	Spot sampling in accordance with AS/NZS 5667.1, AS/NZS5667.10 and AS/NZS 5667.11
	Turbidity[1]	NTU			
	pH[1]				
	Temperature[1]	°C			
	EC at 25°C[1]	uS/cm			
	Redox Potential[1]	mV			
	Dissolved Oxygen (DO)[1]	mg/L			
	TRH			>15	
	Benzene			N/A	
	Toluene				
	Ethylbenzene and Xylene				
	aluminium				
	arsenic				
	cadmium				
	chromium (total Cr, Cr III and Cr IV)				
	cobalt				
	copper				
	iron				
	mercury				
	nickel				
	selenium				
	zinc				
Air quality monitoring network	Particles as PM10	Ug/m^3	Continuous – 10 minute average period	More than two occurrences >120 µg/m^3 during a ten-minute timeframe	Equivalent to AS/NZS3580.9.17:2018

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

23. The works approval holder must record the results of all monitoring activity required by condition 22.

24. All water sample analysis must be undertaken by laboratories with current NATA accreditation for the relevant parameters, unless otherwise specified in Table 6.

25. Breaches of triggers set out in Table 6 must be reported to the department as soon as practicable but no later than 5pm of the next usual working day after laboratory results have been received or results from the air quality monitoring station have been received.

26. Breaches of triggers set out in Table 6 must result in an internal investigation into the potential cause of the breach and management actions developed and implemented to avoid further trigger breaches.

Inspections and maintenance

27. The works approval holder must conduct visual inspections of the infrastructure during commissioning and time limited operations at the frequency specified in Table 7.

Table 7: Inspections of infrastructure

	Infrastructure	Type of inspection	Frequency
1.	Stormwater infrastructure and sedimentation basin / outlet structure	Integrity, freeboard and sediment build up check. Check structures free from sediment blockage and have adequate scour protection.	Weekly from October to April; Prior to rainfall events; and Following a rainfall event.

Compliance reporting during time limited operations

28. The works approval holder must submit to the CEO a report on the time limited operations within 60 calendar days of the completion date of time limited operations or 90 calendar days before the expiration date of the works approval, whichever is the sooner.

29. The works approval holder must ensure the report required by condition 28 includes the following:

(a) a summary of the time limited operations, including timeframes for when each item or items of infrastructure began operations and amount of ore processed;

(b) confirmation of the DEM level of the ore product as averaged across time limited operations;

(c) a summary of monitoring and inspection results obtained during time limited operations under conditions 22 and 27;

(d) a summary of the environmental performance of all infrastructure as constructed or installed (as applicable); which includes records detailing:

(i) a comparison of PM10 monitoring results to relevant air quality guidelines with any exceedances of criteria highlighted and investigation findings and actions summarised;

(ii) a comparison of groundwater monitoring results compared to relevant water quality guidelines and baseline sampling round results with any exceedances of criteria or triggers highlighted and investigation findings and actions summarised; and

(iii) number of times the sedimentation basin discharged to the tidal flats during commissioning and time limited operations.

(e) a review of performance and compliance against the conditions of the works approval and the Environmental Commissioning Report; and

(f) 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)

30. 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.

31. 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) monitoring programmes undertaken in accordance with conditions 12 and 22; and

(d) complaints received under condition 30.

32. The books specified under condition 31 must:

(a) be legible;

(b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

(c) be retained by the works approval holder for the duration of the works approval; and

(d) be available to be produced to an inspector or the CEO as required.

Definitions

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

Table 8: Definitions

Term	Definition
AS 1940	means the Australian Standard *AS 1940:2017 - The storage and handling of flammable and combustible liquids.*
AS/NZS 3580.1.1:2016	means the Australian Standard *AS/NZS 3580.1.1:2016 – Method for sampling and analysis of ambient air – Guide to siting air monitoring equipment.*
AS/NZS 5667.1	means the Australian Standard *AS/NZS 5667.1 Water Quality – Sampling – Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.*
AS/NZS 5667.10	means the Australian Standard *AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters.*
AS/NZS 5667.11	means the Australian Standard *AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters.*
AS/NZS 3580.9.17:2018	means the Australian Standard *AS/NZS 3580.9.17:2018 - Methods for sampling and analysis of ambient air Demonstration of equivalence for ambient particulate matter monitoring methods.*
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
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.
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 Commissioning Report	means a report on any commissioning activities that have taken place and a demonstration that they have concluded, with focus on emissions and discharges, waste containment, and other environmental factors.
Environmental	means a report to satisfy the CEO that the conditioned infrastructure

Term	Definition
Compliance Report	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).
N/A.	means not applicable.
premises	the premises to which this works approval applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this works approval.
prescribed premises	has the same meaning given to that term under the EP Act.
time limited operations	refers to the operation of the infrastructure and equipment identified under this works approval that is authorised for that purpose, subject to the relevant conditions.
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).

Figure 1: Map of the prescribed premises boundary

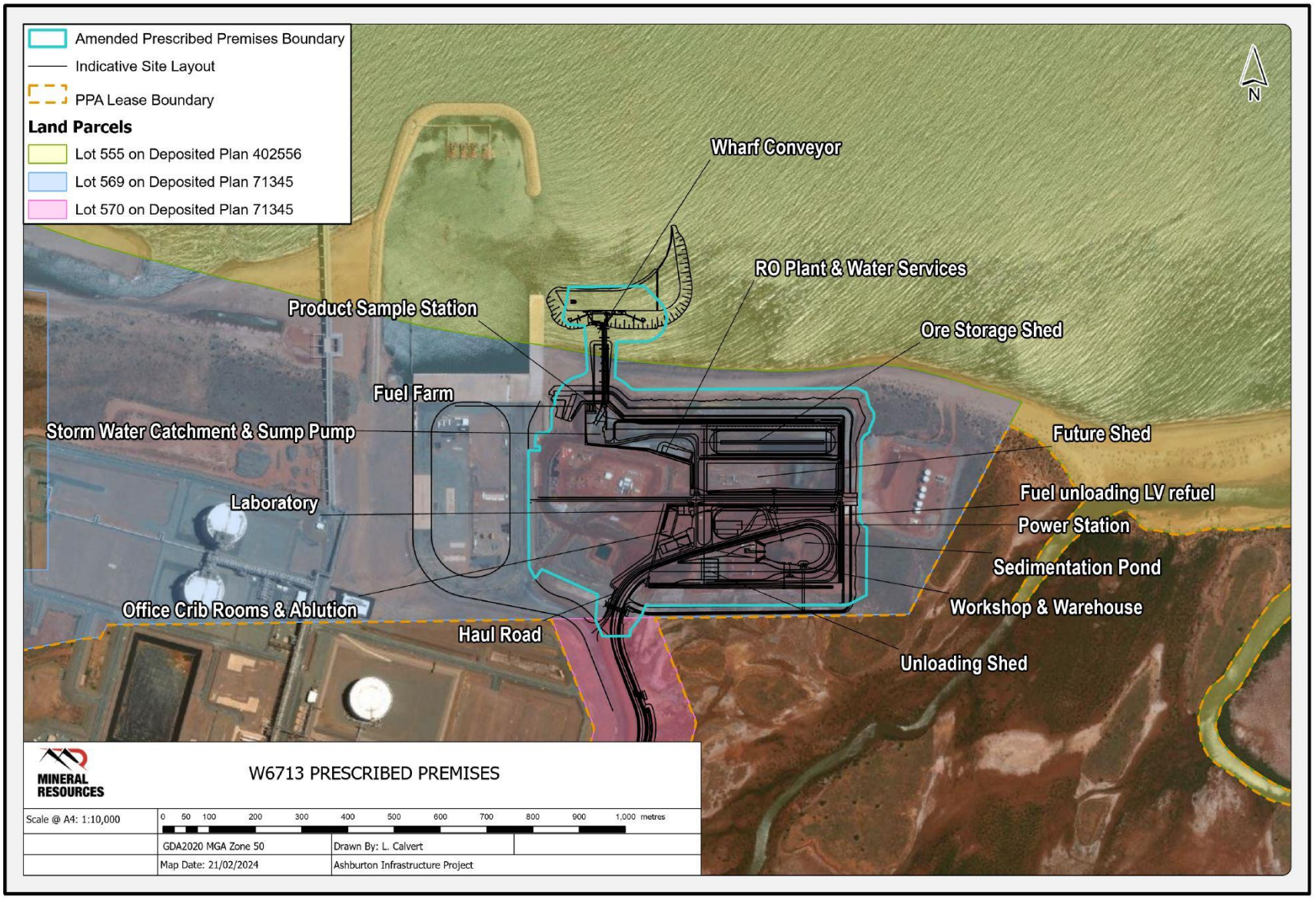

Figure 2: Site infrastructure layout.

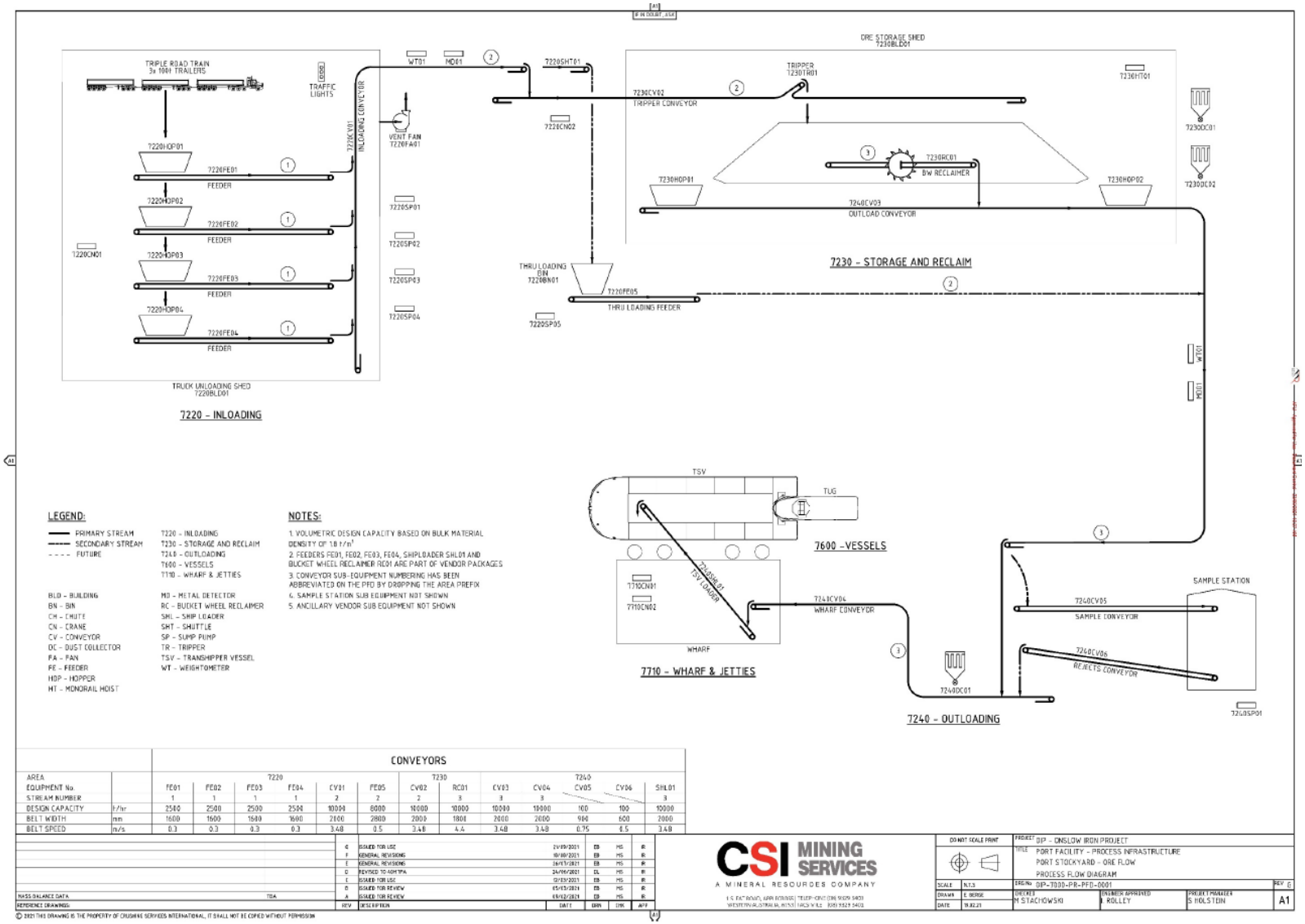

Figure 3: Loading infrastructure process flow diagram

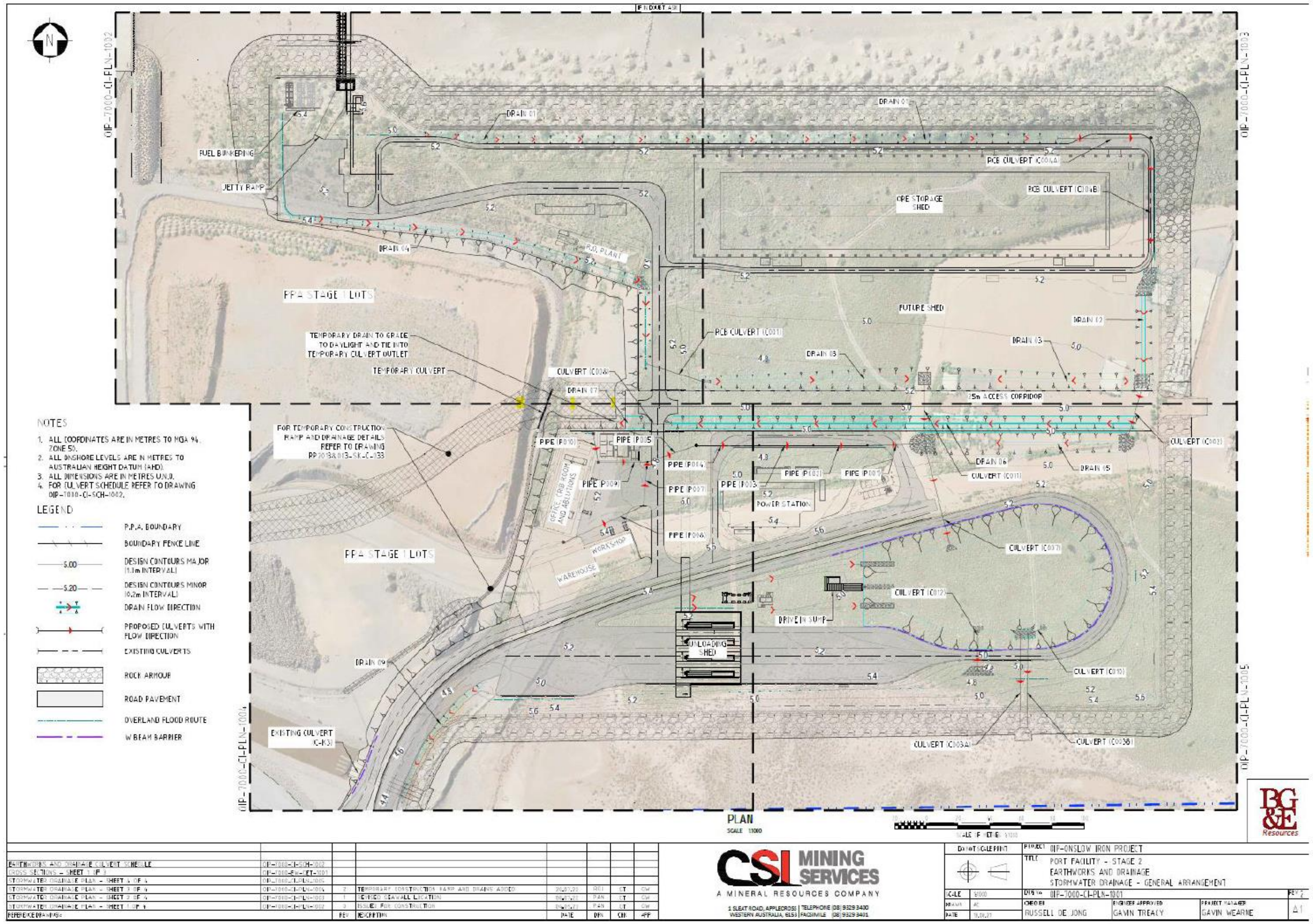

Figure 4: Stormwater infrastructure during premises operation

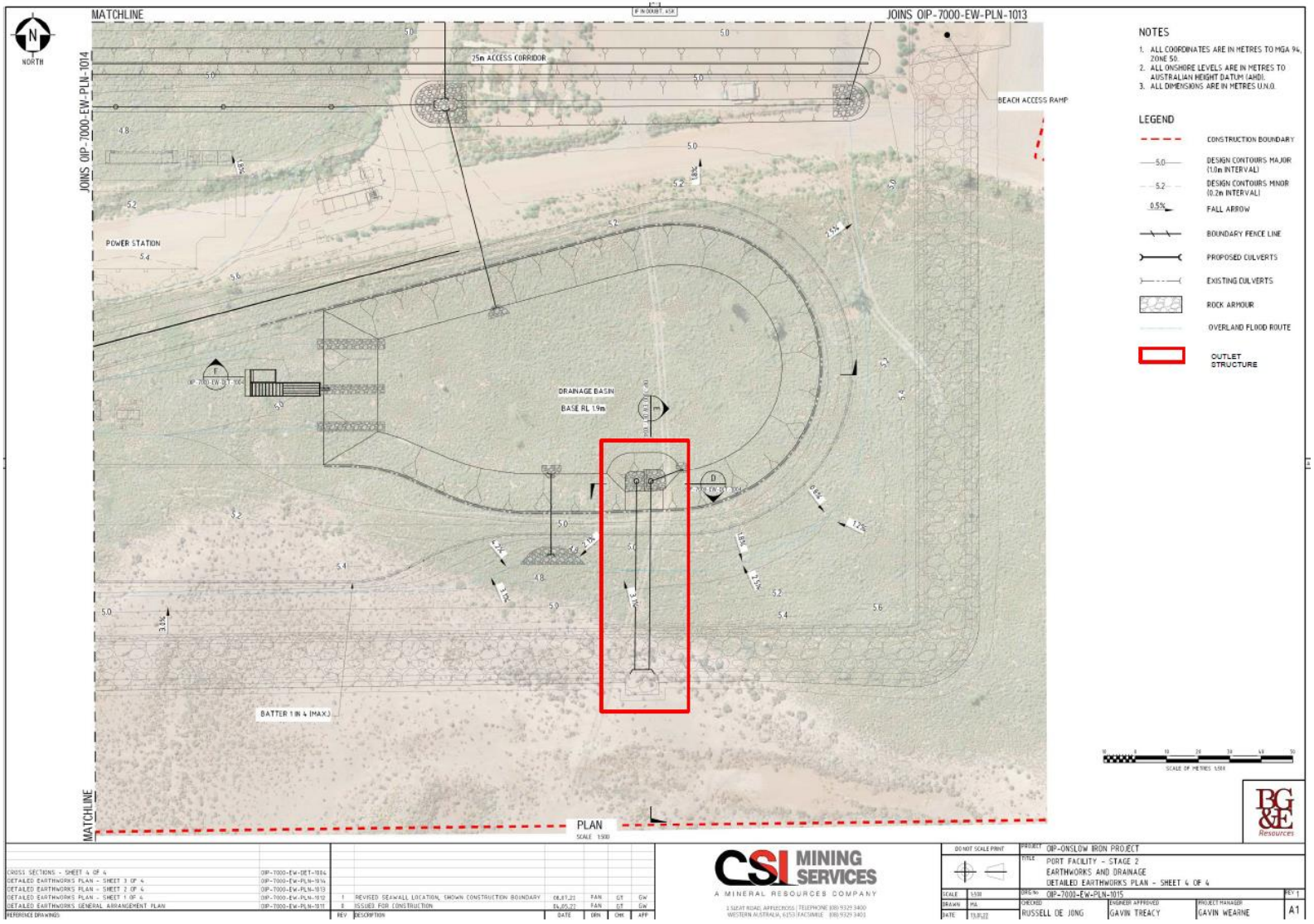

Figure 5: Sedimentation pond and outlet structure

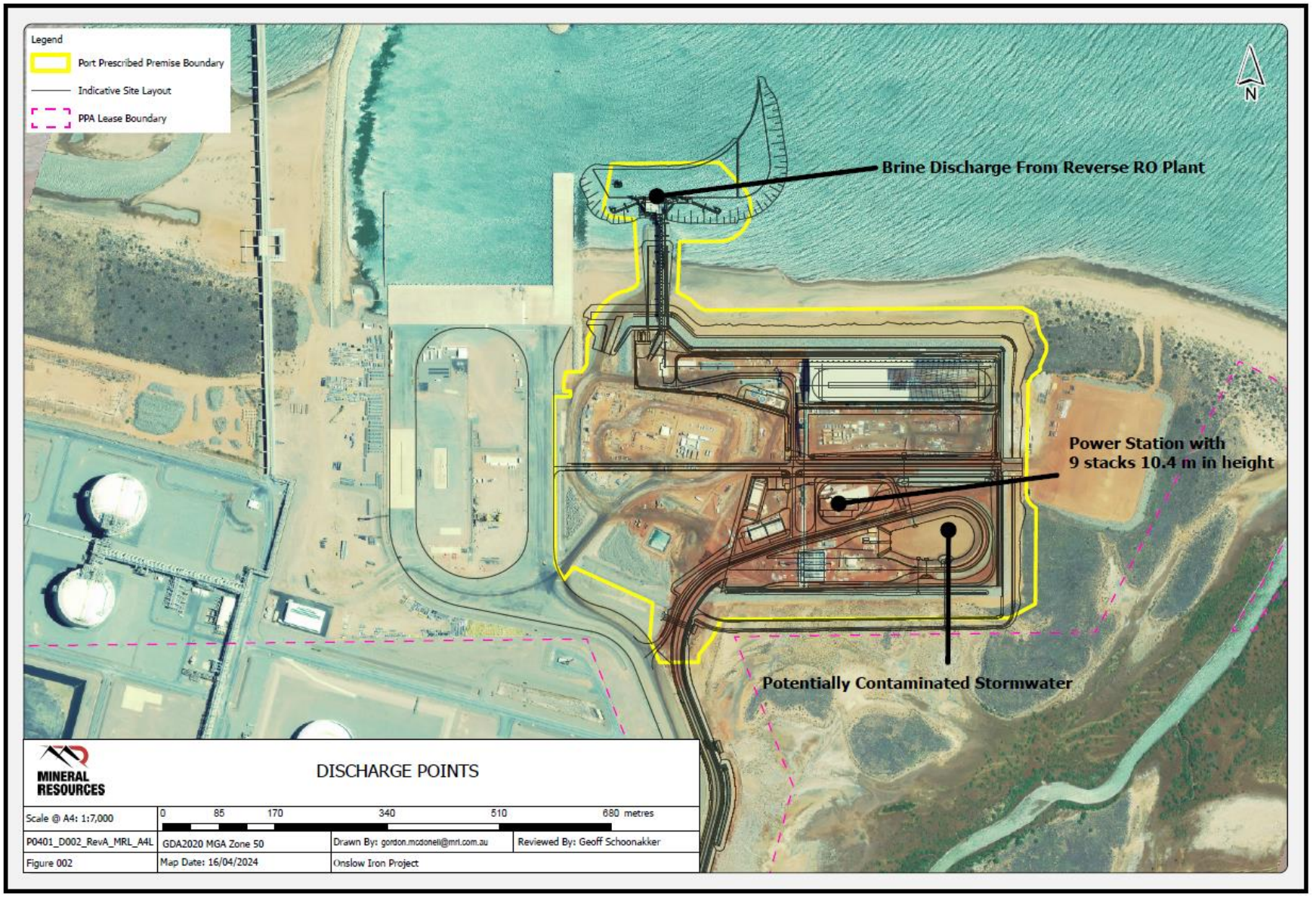

Figure 6: Authorised discharge locations

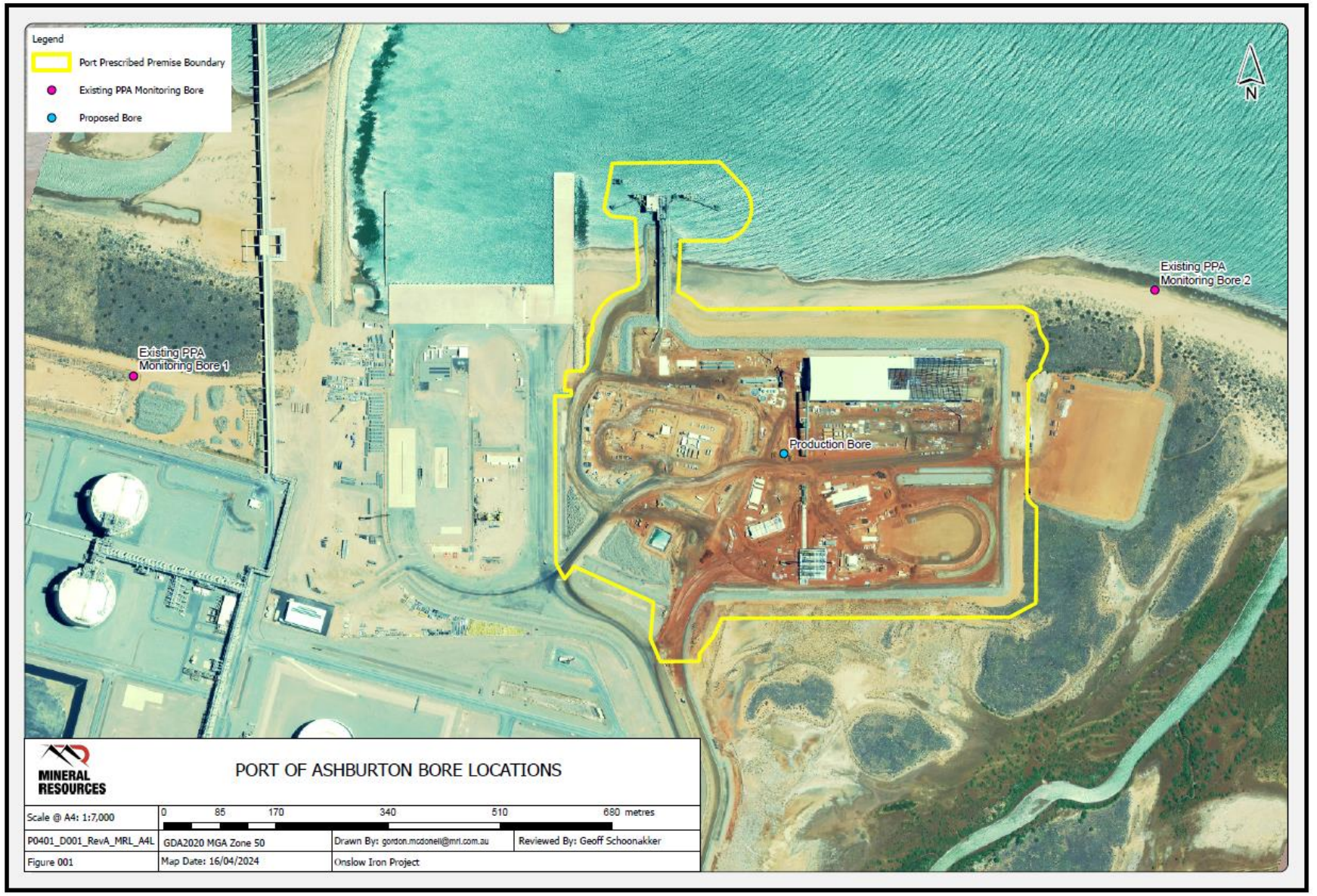

Figure 7: Existing and Proposed on-site bores