Ridley Magnetite Project

Proposal Content Document

Table 1: General proposal content description

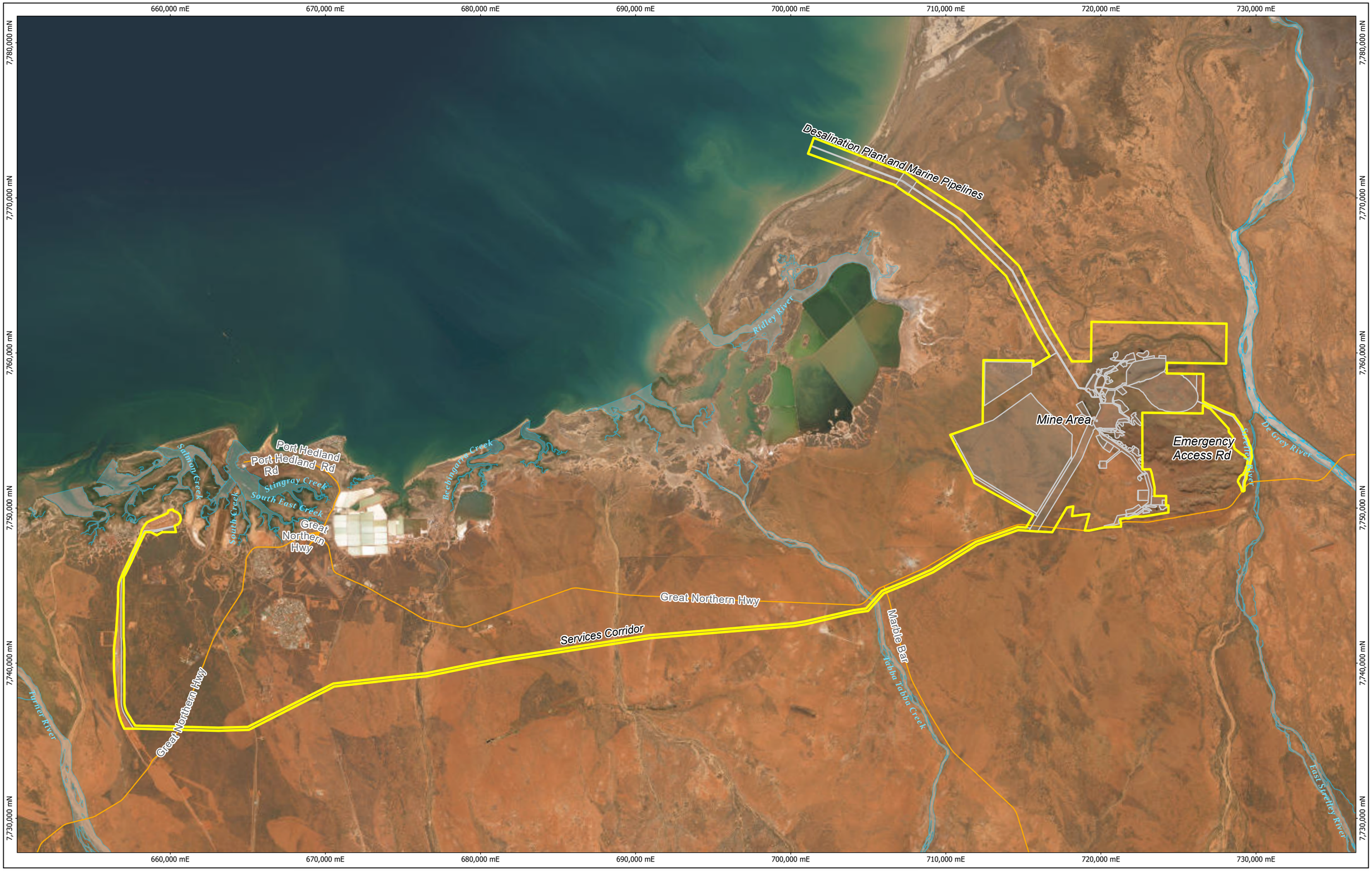
Proposal title	Ridley Magnetite Project
Proponent name	Atlas Iron Pty Ltd
Short description	The Ridley Magnetite Project (the Proposal) is located approximately 57 km east of Port Hedland. The Proposal is located within a 19,102 ha Development Envelope (DE) with an indicative disturbance footprint (IF) of 8,484 ha. The Proposal is for the mining and processing of iron ore to produce up to 16.5 million tonnes per annum (Mtpa) of magnetite concentrate. The Proposal includes a single pit (below water table), run-of-mine pad, concentrate stockpiles, laydown areas, waste dumps, desalination plant and pipelines (intake, outfall), processing plant, power infrastructure, tailings storage facility and supporting infrastructure including groundwater bores, process water storage ponds/tanks, roads, accommodation camp, administration buildings, communications infrastructure, borrow pits, explosives magazine, fuel storage and landfill. A services corridor will run from the site to a dewatering plant at Port Hedland. The Proposal will initially transport concentrate by truck to Port Hedland and will transition to a slurry pipeline on completion of construction of this element.

Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Mining elements, including: • Single open pit. • Haul and access roads. • Waste rock landform. • Explosives storage.	Figure 1 & Figure 2.	Disturbance of up to 8,484 ha within a Development Envelope of 19,102 ha.
Processing elements, including: • Processing plant. • Tailings dam. • Run of mine. • Stockpiles. • Process water storage tanks/ponds. • Reagent storage.		

Proposal element	Location / description	Maximum extent, capacity or range
Supporting infrastructure, including: • Workshops. • Fuel storage and refuelling. • Administration and offices. • Accommodation camp. • Wastewater treatment plants and sprayfields. • Dewatering infrastructure. • Landfill. • Desalination plant and associated infrastructure. • Dewatering plant and slurry/return water pipelines. • Power infrastructure. • Communications infrastructure. • Ancillary infrastructure.		
Construction elements		
Construction and earthworks for Proposal elements.	Figure 1 & Figure 2.	Disturbance of up to 8,484 ha within an 19,102 ha Development Envelope.
Operational elements		
Ore crushing and processing	Figure 1 & Figure 2.	Processing of ore to produce up to 16.5 Mtpa of magnetite concentrate.
Water desalination plant		Seawater intake to produce up to 28 GL/a of desalinated water.
Brine discharge		Brine discharge (ocean outfall) of up to 42 GL/a from the desalination plant, with a salinity of up to 80,000 mg/L.
Groundwater abstraction and mine pit dewatering		Groundwater abstraction and pit dewatering of up to 6.0 GL per annum.
Waste Rock Landform capacity		Approximately 635 Mt tonnes of waste rock will be mined during the life of mine to be used in construction and stored in the WRL. The WRL will be designed to integrate into the surrounding landforms where possible, with a maximum height defined by waste rock characterisation studies.

Proposal element	Location / description	Maximum extent, capacity or range
Tailings storage facility capacity		Up to 560 million cubic metres of tailings will be produced over the life of mine and stored in a tailings storage facility (TSF).
Proposal elements with greenhouse gas emissions		
Construction elements:		
Scope 1		Total scope 1: 388,206 tCO2-e
Scope 2		Construction electricity demand to be met by on-site generation and included in scope 1 emissions.
Operational elements:		
Scope 1	Average annual GHG emissions 168 kt CO_2-e	
Scope 2	Average annual GHG emissions 1,629 kt CO_2-e	
Commissioning		
Commissioning will be undertaken subject to the operational limits above.		
Decommissioning		
Decommissioning of the infrastructure and operational elements will be undertaken as it becomes obsolete or at the end of the life of mine.		
Rehabilitation		
Where practicable, progressive rehabilitation will be undertaken over the life of the mine. Pits will be designed to be safe and non-polluting. Waste landforms will be constructed to be safe and non-polluting, with the final shape and size to be comparable with the natural landforms in the region.		
Other elements which affect extent of effects on the environment		
Proposal time	Maximum project life	Approximately 33 years including construction and closure
	Construction phase	Approximately 2 years
	Operations phase	Approximately 28 years
	Decommissioning phase	Approximately 3 years



File Name: P526053_Ridley_PCD_ESD_Amendment.aprx	Projection: GDA2020 MGA Zone 50	Main Roads	Figure No:
Date: 27/11/2024	0 0.5 1 2 3 kilometres	Development Envelope	Development Envelope and Indicative Footprint
Drawn: Carmen.Liang		Indicative Footprint	1
Doc No:	Scale 1:220,000 Page size: A3	Watercourses	

710,000 mE

720,000 mE

730,000 mE

7,760,000 mN

7,750,000 mN

Ord City River

Strelley River

Great Northern Hwy

File Name: P526053_Ridley_PCD_ESD_Amendment.aprx	Projection: GDA2020 MGA Zone 50	Main Roads Development Envelope Indicative Footprint Watercourses	Development Envelope and Indicative Footprint - Mine Site Areas	Figure No: 2
Date: 27/11/2024	0 1 2 kilometres			
Drawn: Carmen.Liang				
Doc No:	Scale 1:70,000 Page size: A3			