

Mindy South Iron Ore Mine

Proposal Content Document

Table 1: General proposal content description

Proposal title	Mindy South Iron Ore Mine
Proponent name	Chichester Metals Pty Ltd
Short description	<p>The proposal is to construct and operate an iron ore mine approximately 55 km north-west of Newman in the Pilbara Region of Western Australia (Figure 1). The Proposal includes:</p> <ul style="list-style-type: none">• The development of above and below water table Open Cut Pits.• Processing of ore from sources within the Mine Development Envelope and from other mining projects.• Groundwater abstraction for water supply and to facilitate mining below the water table.• Aquifer supplementation, for the purpose of mitigating impacts to environmental receptors.• Surplus water management, including but not limited to, aquifer supplementation, mine water use, aquifer re-injection, infiltration using in-pit disposal or ponds.• Water supply sourced from third-party supplier and from other Fortescue sites.• Supply of water to third party receiver and other mining operations.• Mine waste management including, but not limited to, waste rock landforms, in-pit storage, waste fines and low-grade ore stockpiles.• Storage of process waste (tailings) in an above ground Tailings Storage Facility, integrated waste landform and / or in-pit disposal.• Ore, topsoil and subsoil stockpiles.• Surface water management infrastructure and groundwater management infrastructure.• Linear and ancillary infrastructure to support mining, including but not limited to accommodation camp, aerodrome, solar farm and power reticulation, access roads, water pipelines, offices and workshops. <p>The proposal requires a disturbance footprint of 12,487 hectare (ha) and is located within a 42,331 ha Mine Development Envelope.</p>

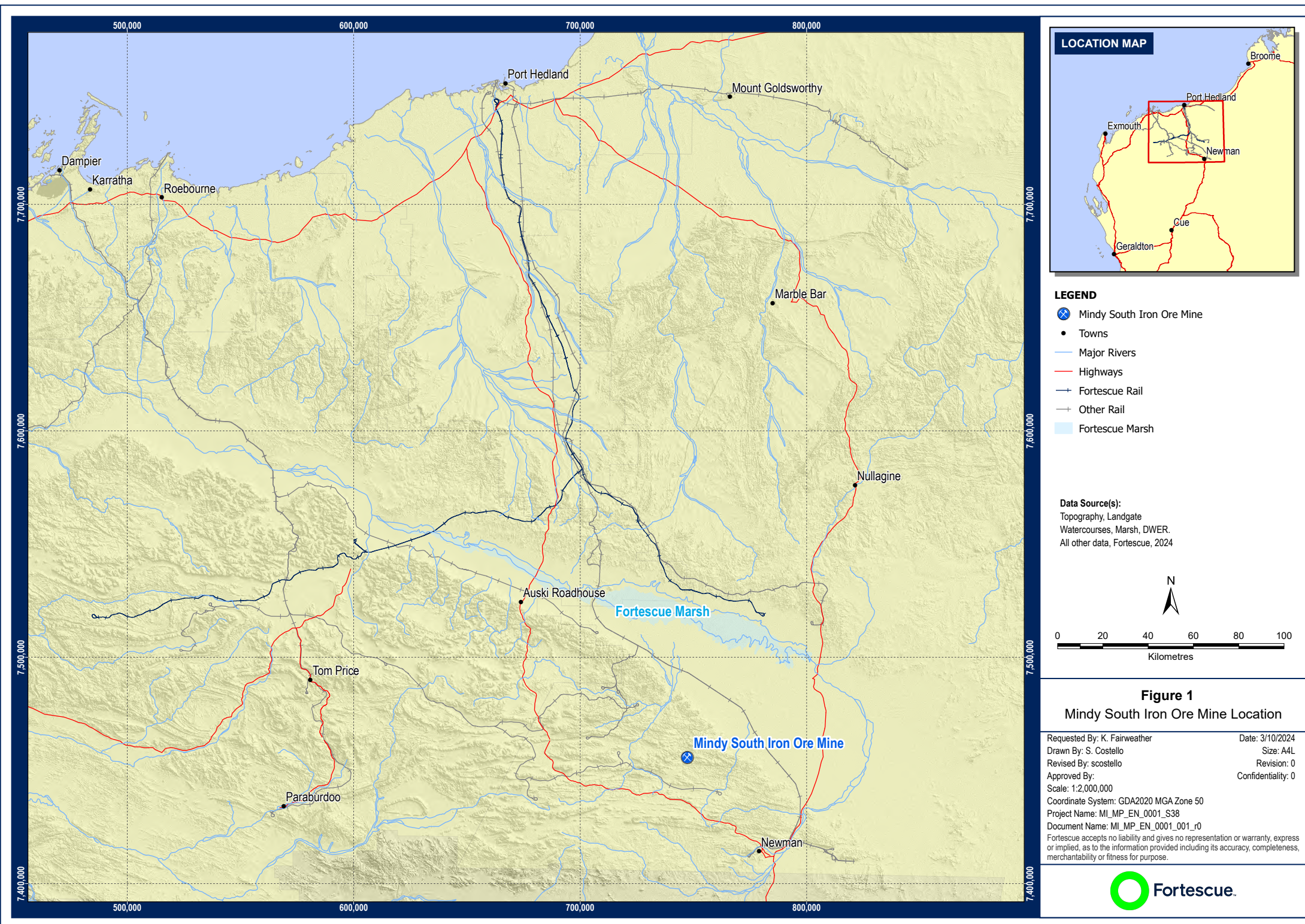
Table 2: Proposal content elements

Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
<p>Mine, processing and associated infrastructure elements, including but not limited to:</p> <ul style="list-style-type: none"> - Open Cut Pits, above and below water table. - Groundwater management borefields including water supply, dewatering and reinjection. - Water management infrastructure including but not limited to abstraction, conveyance, reinjection (including aquifer supplementation), water treatment and storage. - Surface water management infrastructure including but not limited to levees, diversions, culverts, drains, floodways, sediment control and other water quality management structures. - Access and haul roads that may include culverts, drains, floodway and bridge infrastructure, including land bridges. - Pipelines and pipeline corridors. - Waste rock landforms and low-grade stockpiles. - Topsoil and subsoil stockpiles. - Ore stockpiles. - Ore Processing Facility (wet and dry) and associated infrastructure. - Storage of mineral processing waste (tailings and fines). - Borrow pits and laydowns. - Ancillary buildings and support infrastructure including, but not limited to, offices, workshops, hydrocarbon/chemical storage, laydown areas, and explosive storage / handling facilities. - Accommodation Camp and ancillary infrastructure. - Aerodrome. - Power generation and distribution infrastructure, including renewables and battery storage. - Landfill and waste management facilities. 	Figure 2	Up to 12,487 ha of disturbance, within a 42,331 ha mine development envelope.

Construction elements		
<p>Key construction elements will include, but not be limited to, the following physical and operational elements:</p> <ul style="list-style-type: none"> - Construction camp. - Aerodrome. - Water supply borefield and water supply and management infrastructure, including but not limited to, abstraction, conveyance, reinjection (including aquifer supplementation), water treatment and storage. - Water management infrastructure. - Surface water management infrastructure including but not limited to flood protection and sediment controls. - Temporary offices / ablutions. - Access roads and bridges. - Borrow pits and laydowns. - Pipelines and pipeline corridors. - Movement of topsoil, and bulk earthworks. - Landfill and waste management facilities. 		Disturbance required for construction elements is included within the indicative disturbance footprint.
Operational elements		
Mining	Figure 2	Up to 65 million tonnes per annum (mtpa) of mined ore.
Ore Processing Facility	Figure 2	Up to 40 million tonnes per annum (mtpa) of processed ore.
Tailings Storage Facility	Figure 2	Maximum of 110 million tonnes over the life of the mine, to be stored in a Tailings Storage Facility, integrated waste landform and / or in-pit.
Groundwater Abstraction	Figure 2	Abstraction of up to 57 GL per annum (GL/a) for dewatering and water supply.
Surplus Water Management	Figure 2	<p>Up to 35 GL/a surplus water will be managed through a variety of methods, including:</p> <ul style="list-style-type: none"> - aquifer reinjection via reinjection borefield(s). - Infiltration using ponds or in-pit disposal. - Mine water use. - Emergency surface discharge of excess storm water from pits.

Aquifer Supplementation	Figure 2	Aquifer supplementation, for the purpose of mitigating impacts to environmental receptors.
Power Supply	Figure 2	Post-construction, power will predominantly be supplied by a solar and renewable mix via Fortescue’s Pilbara Energy Connect (PEC) network.
Proposal elements with greenhouse gas emissions		
Operational elements:		
Mining and operations (includes 2 year construction period which is diesel-powered). Scope 1 and 2 emissions <100,000 tonnes from FY2031, post-construction phase.	Scope 1 – approximately 286,556 t CO ₂ -e per annum	
	Scope 2 – approximately 20,890 t CO ₂ -e per annum	
	Scope 3 – approximately 48,760,000 t CO ₂ -e per annum	
Rehabilitation		
Progressive rehabilitation will be undertaken over the life of the mine where practicable. At the cessation of mining, the site will be rehabilitated in accordance with the Mindy South Iron Ore Mine Closure Plan. The Mine Closure Plan will ensure that any landforms that remain in-situ (such as WRLs and the TSF) will be designed to be safe, stable, non-polluting, whilst meeting overarching objectives for closure in consultation with key stakeholders.		
Commissioning		
Commissioning of the OPF/TSF/water and ancillary infrastructure to be undertaken in accordance with approval issued under the <i>Environmental Protection Act 1986</i> .		
Decommissioning		
The Mine Closure Plan will provide a plan for decommissioning of the mine and post-closure land use.		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	Approximately 20 years
	Construction phase	Approximately 2 years
	Operations phase	Approximately 13 years
	Decommissioning phase	Approximately 5 years

* Proponents should only provide realistic timeframes to avoid unnecessary change to proposal applications at referral (section 38C), assessment (section 43A) or post assessment (section 45C).



- LEGEND**
- Mindy South Iron Ore Mine
 - Towns
 - Major Rivers
 - Highways
 - Fortescue Rail
 - Other Rail
 - Fortescue Marsh

Data Source(s):
Topography, Landgate
Watercourses, Marsh, DWER.
All other data, Fortescue, 2024

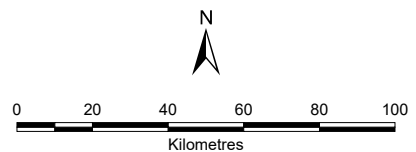
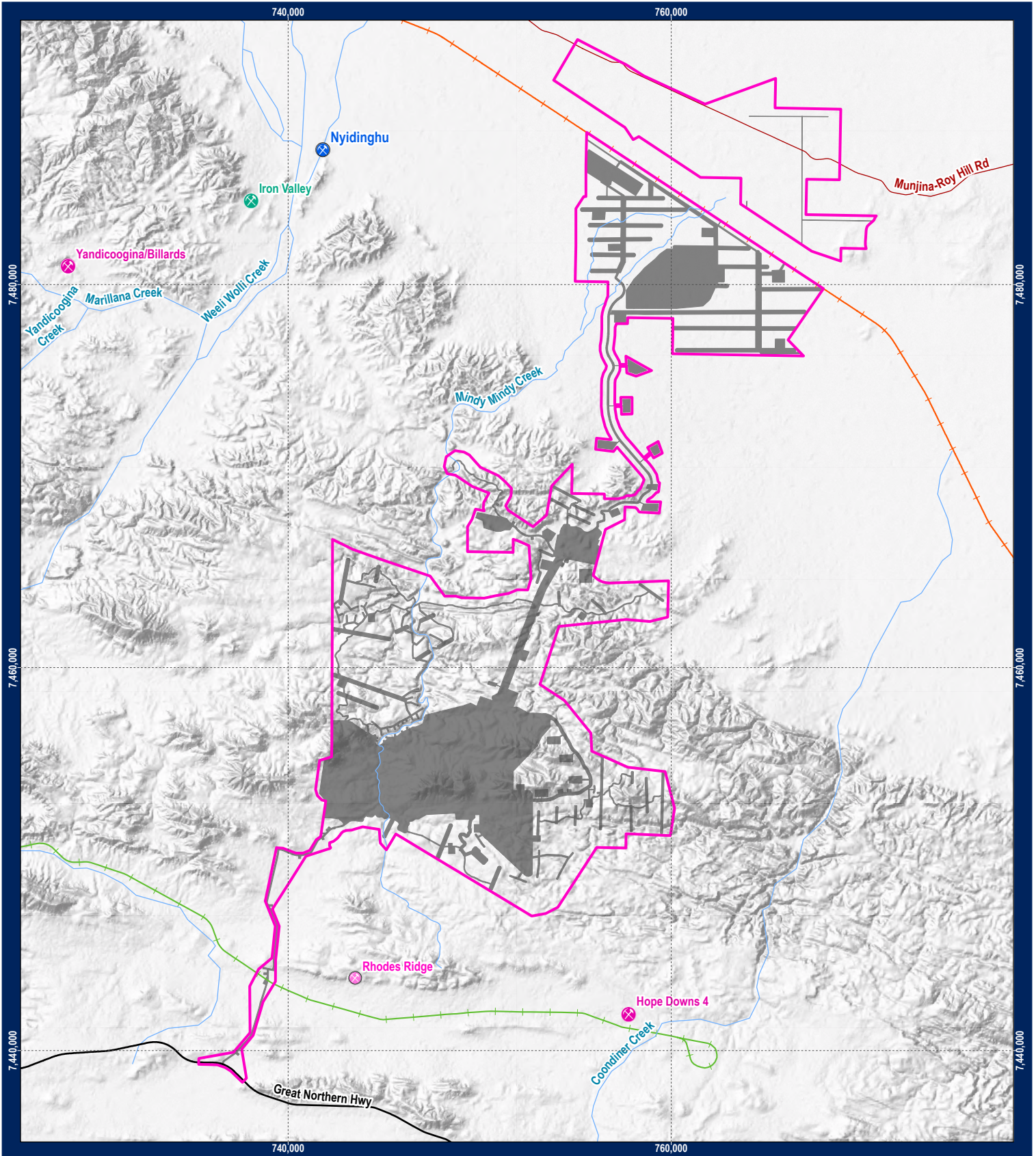


Figure 1
Mindy South Iron Ore Mine Location

Requested By: K. Fairweather
Drawn By: S. Costello
Revised By: scostello
Approved By:
Scale: 1:2,000,000
Coordinate System: GDA2020 MGA Zone 50
Project Name: MI_MP_EN_0001_S38
Document Name: MI_MP_EN_0001_001_r0
Date: 3/10/2024
Size: A4L
Revision: 0
Confidentiality: 0

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- Legend**
- ⊗ Fortescue Mines
 - ⊗ Mineral Resources Mine
 - ⊗ Rio Tinto Mine
 - ⊗ Rio Tinto Mine (Proposed)
 - Highway
 - Road
 - Watercourses
 - BHP Rail
 - Rio Tinto Rail
 - Mindy South Iron Ore Mine Development Envelope
 - Mindy South Iron Ore Mine Indicative Disturbance Footprint

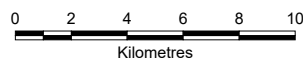


Figure 2
Mine Development Envelope and
Indicative Disturbance Footprint

Requested By: K. Fairweather

Date: 17/12/2024

Drawn By: S. Costello

Size: A4P

Revised By: scostello

Revision: 1

Approved By:

Confidentiality: 1

Scale: 1:270,000

Coordinate System: GDA 1994 MGA Zone 50

Project Name: MI_MP_EN_0001_S38_r1

Document Name: MI_MP_EN_0001_002_r1

Data Sources:

Topography, Landgate.

Watercourses, Marsh, DWER.

All other data, Fortescue, 2024

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