Environmental Protection Act 1986

Section 43A

NOTICE OF DECISION TO CONSENT TO AMEND A REFERRED PROPOSAL DURING ASSESSMENT

PERSON TO WHOM THIS NOTICE IS GIVEN

(a) Hancock Prospecting Pty ltd (ABN: 69 008 676 417)
28-42 Ventnor Avenue
West Perth WA 6005

PROPOSAL TO WHICH THIS NOTICE RELATES

Mulga Downs Iron Ore Mine
Assessment No. 2326

DECISION

Pursuant to s. 43A of the *Environmental Protection Act 1986* (EP Act), the Environmental Protection Authority (EPA) gives approval to the assessment of the proposal being completed in respect of the proposal as amended in accordance with the proponent's request:

- An overall reduction in the total area of the development envelope (DE) by 2,375.16 hectares (ha) to 38,277.84 ha (5.8% reduction). This reduction includes a 1,455.67 ha portion of the DE that was located within the Wittenoom Asbestos Management Area.
- Overall reduction of the indicative disturbance footprint by 869.15 ha to 8,758.85 ha (9.0% reduction). This net reduction includes removing the Mulga West Pit (902.75 ha) and moving the evaporation pond(s) into pit void(s) (354.62 ha), as well as several minor additions to the disturbance footprint.
- Reduction in waste rock extracted by 1,755.5 million tonnes (Mt) to 800 Mt (54.4% reduction).
- Surface water discharge will not be used, and surplus water will be managed through managed aquifer reinjection.
- Increase the abstraction of groundwater from 25 gigalitres per annum (GL/a) to 36.5 GL/a.

- Realigning the pipeline route to follow existing roads.
- Addition of a solar farm, an access road, and associated ancillary infrastructure.
- Excision of 791.91 ha from the DE for a Fauna Habitat Exclusion Zone.

The amended proposal content document and figures are attached.

SUMMARY OF REASONS

- The amended proposal will be substantially the same character as the existing referred proposal.
- The changes to the DE and indicative disturbance footprint, including the inclusion of a Fauna Exclusion Zone, are likely to decrease impacts to flora and vegetation, and terrestrial fauna.
- Greenhouse gas emissions are likely to decrease with the addition of the solar farm and associated ancillary infrastructure.
- Decreasing the amount of waste rock extracted and stored is likely to decrease impacts to social surroundings and terrestrial environmental quality.
- The removal of surface water discharge is likely to decrease impacts to flora and vegetation and inland waters.
- Additional potential impacts to inland waters, subterranean fauna and terrestrial environmental quality are likely due to the increased groundwater abstraction and relocation of the evaporation pond(s).
- The realignment of the pipeline route may result in potential impacts to air quality.
- All of these impacts will be detailed in the environmental review document, which has a 6-week public review period, and will be addressed during the assessment process.

EFFECT OF THIS NOTICE:

1. The assessment of the proposal is to be completed in respect of the proposal as amended in accordance with the decision set out in this notice.

2. The proposal as amended in accordance with this notice is taken to have been referred to the EPA under s. 38 of the EP Act.

RIGHTS OF APPEAL:

There are no rights of appeal under the EP Act in respect of this decision.

Prof Matthew Tonts
Delegate of the Environmental Protection Authority
CHAIR

26 May 2023

Attachments

Attachment 1 – Mulga Downs Iron Ore Mine Proposal Content Document
Attachment 2 – Mulga Downs Iron Ore Mine Figures 1, 2 & 3

Attachment 1

Mulga Downs Iron Ore Mine

Proposal Content Document

Table 1: General proposal content description

Proposal title	Mulga Downs Iron Ore Mine
Proponent name	Hancock Prospecting Pty Ltd (HPPL)
Short description	The Proposal is for the development of the Mulga Downs Iron Ore Mine located 210 km south of Port Hedland and 180 km north west of Newman in the Pilbara Region of Western Australia (refer to Figure 1 – regional context map). The proposal includes and is not limited to the following: - The development of a series of above and below water table mine pits; - Ore processing facility; - Groundwater abstraction for water supply (for the mine and all associated infrastructure) and for the dewatering to facilitate the recovery of ore below water table in the mine pits; - Surplus water management with discharge of excess water via managed aquifer recharge (MAR); - Mineral waste management (waste rock dumps (WRD), and tailings storage facilities (TSFs)); - Infrastructure to manage surface water (diversion of creeks and surface water flows); - Linear infrastructure (haul roads, powerlines, pipelines and conveyor corridors); - Mine associated infrastructure and support facilities (including, but not limited to accommodation camp, energy supply infrastructure, airstrip; wastewater treatment plant; landfill, offices, workshops, laydown areas, etc.); and - Transport of the ore via the Great Northern Highway to Port Hedland for export. The Great Northern Highway transport option will enable commencement of the Mulga Downs Iron Ore Mine. Future transport options (e.g. rail) will be subject to a separate referral. The Proposal is located within a 38,277.84 ha Development Envelope and will require the clearing of up to 8,758.85 ha of native vegetation.

Table 2: Proposal content elements

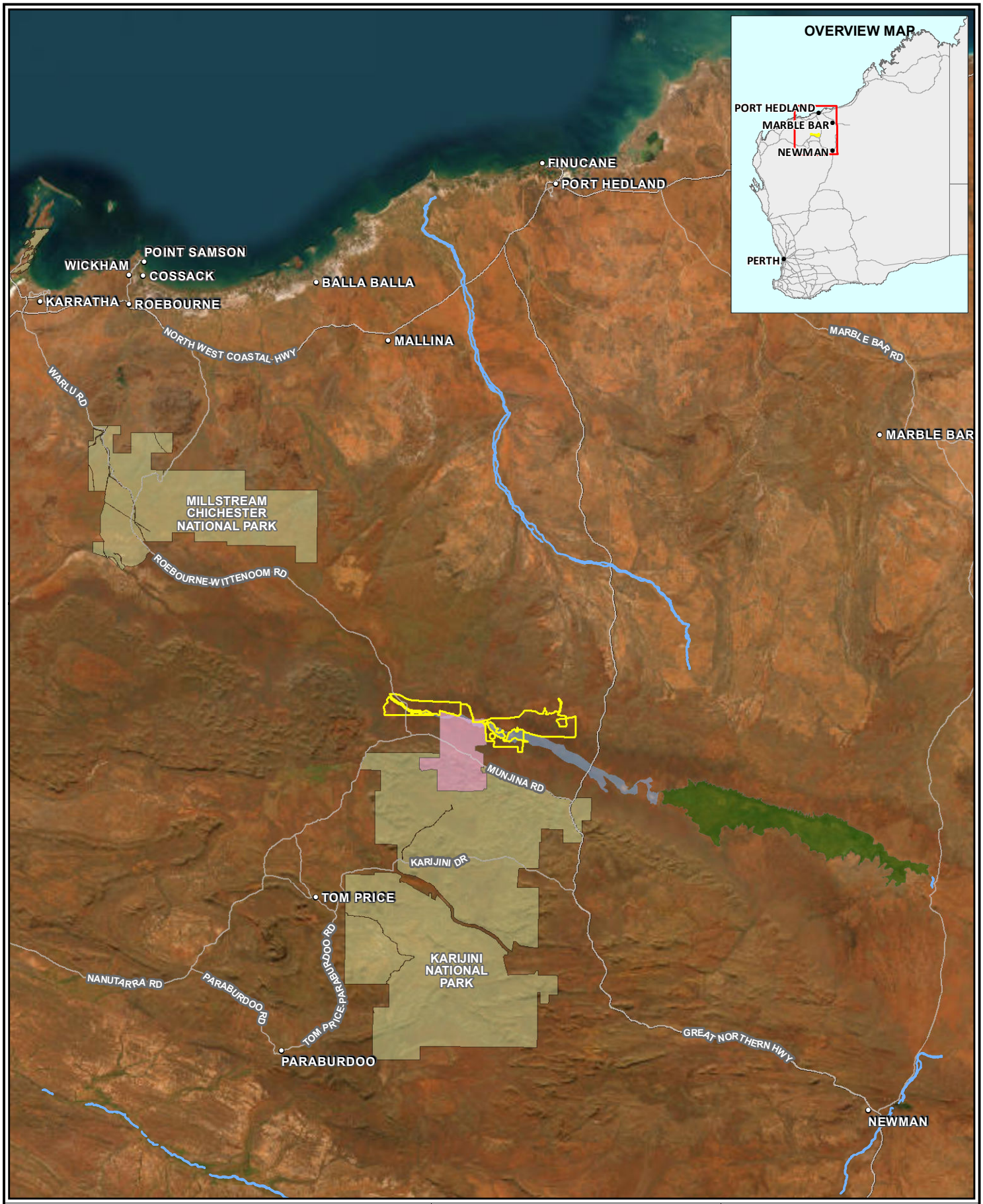
Proposal element	Location / description	Maximum extent, capacity or range
Physical elements		
Mine elements, including: - Series of open pits (above and below water table); - WRDs; - Topsoil stockpiles;	Figure 2	Clearing of up to 8,758.85 ha of native vegetation for the conceptual footprint within the 38,277.84 ha Mulga Down Iron Ore Mine Development Envelope.

Proposal element	Location / description	Maximum extent, capacity or range
- Dewatering. Processing elements, including: - Ore stockpiles; - Crushing and screening plant; - Processing plant (wet); - Tailings storage facility (TSF) (above ground and in-pit tailings storage above and below the water table); and - Process water dams/ponds. Infrastructure elements, including: - Solar farm; - Accommodation camp; - Energy supply infrastructure; - Conveyors for the transportation of ore; - Bore fields/water reinjection infrastructure; - Mine workshops & infrastructure; - Pipelines; - Haul and light vehicle roads; - Ancillary buildings (e.g. workshops, telecommunications, offices); - WWTPs; - Landfill; - Hydrocarbon storage; - Explosive mixing and storage facility; - Laydown areas; - Evaporative ponds; - Water diversion channels and catchment ponds; and - Above ground water storage dams to manage supply or disposal of clean or mine water.		
Operational elements		
Groundwater abstraction for water supply and mine dewatering	Figure 2	Over the life of the mine it is anticipated the water abstraction requirements may reach up to 36.5 gigalitres per annum (GL/a), which will be supplied from a combination of mine dewatering and water supply borefields to provide the required water quality.

Proposal element	Location / description	Maximum extent, capacity or range
		Consideration may be given to the use of a water treatment facility (i.e. reverse osmosis desalination) should it be required to provide the necessary water quality.
Management of surplus water	Figure 2	Surplus water will be managed through managed aquifer recharge. Temporary water storage may be required to assist in the management of water quality for supply or prior to discharge.
Pit lakes	Figure 2	Where possible, opportunities to backfill the pit voids to above surrounding groundwater level, will be pursued.
TSF capacity	Figure 2	Tailings or wet waste product will be produced and stored initially in an above ground tailings storage facility (TSF). It is anticipated that the TSF will initially be designed to provide a minimum capacity of approximately seven years of storage and in a location where it may be developed to provide storage for the Life of Mine (LOM), and developed in a series of successive stages to manage costs and ground disturbance. As an alternative to above ground structures, where possible mining will be scheduled to transition towards in-pit tailings disposal (below and above water table storage) to provide the preferred longer term solution.
Evaporation pond capacity	Figure 2	May be required to assist in the management of surplus water and discharge. These will preferentially be located in disturbed areas such as pit voids, however some ex-pit structures may be required within the WRDs.
Crushing plant and wet processing limit	Figure 2	Wet processing of ore to produce 20 Million tonnes (Mt) per annum (dry) of iron ore product received from the Proposal and possible third party iron ore mines.
WRD height	Figure 2	Approximately 800 Mt of waste rock will be mined throughout the life of the Proposal. WRDs will be designed to integrate into the surrounding landforms where possible, with a maximum height defined by waste rock characterisation studies.
Proposal elements with greenhouse gas emissions		
Operation elements- Peak annual average		
Scope 1	Plant and equipment: greater than 100,000 t CO_2-e	
Scope 2	Electricity use: To be calculated to address requirements of the Greenhouse Gas Management Plan.	

Proposal element	Location / description	Maximum extent, capacity or range
Operation elements- Annual average life of mine		
Scope 1	Plant and equipment: greater than 100,000 t CO_2-e	
Scope 2	Electricity use: To be calculated to address requirements of the Greenhouse Gas Management Plan.	
Commissioning		
Commissioning of the processing facility will be undertaken subject to the operational limits above.		
Rehabilitation		
Where practicable, progressive rehabilitation will be undertaken over the life of the mine. Areas disturbed through the implementation of the Proposal will be designed to be safe and non-polluting and will be constructed so the final shape, size, stability, are comparable with the natural landforms in the area.		
Other elements which affect extent of effects on the environment		
Proposal time*	Maximum project life	30 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

- Development envelope
- National Park
- Lower Fortescue River
- Upper Fortescue River including the Fortescue Marsh
- Wittenoom Asbestos Management Area (WAMA)
- Watercourses
- Highways
- Main road

Scale 1:1,800,000 at A4

0 15 30
Kilometres

Coord. Sys. GDA 1994 MGA Zone 50

Job No: 54533

Client: Hancock Prospecting Pty Ltd

Version: A | Date: 21-Feb-2023

Drawn By: jcrute | Checked By: AM

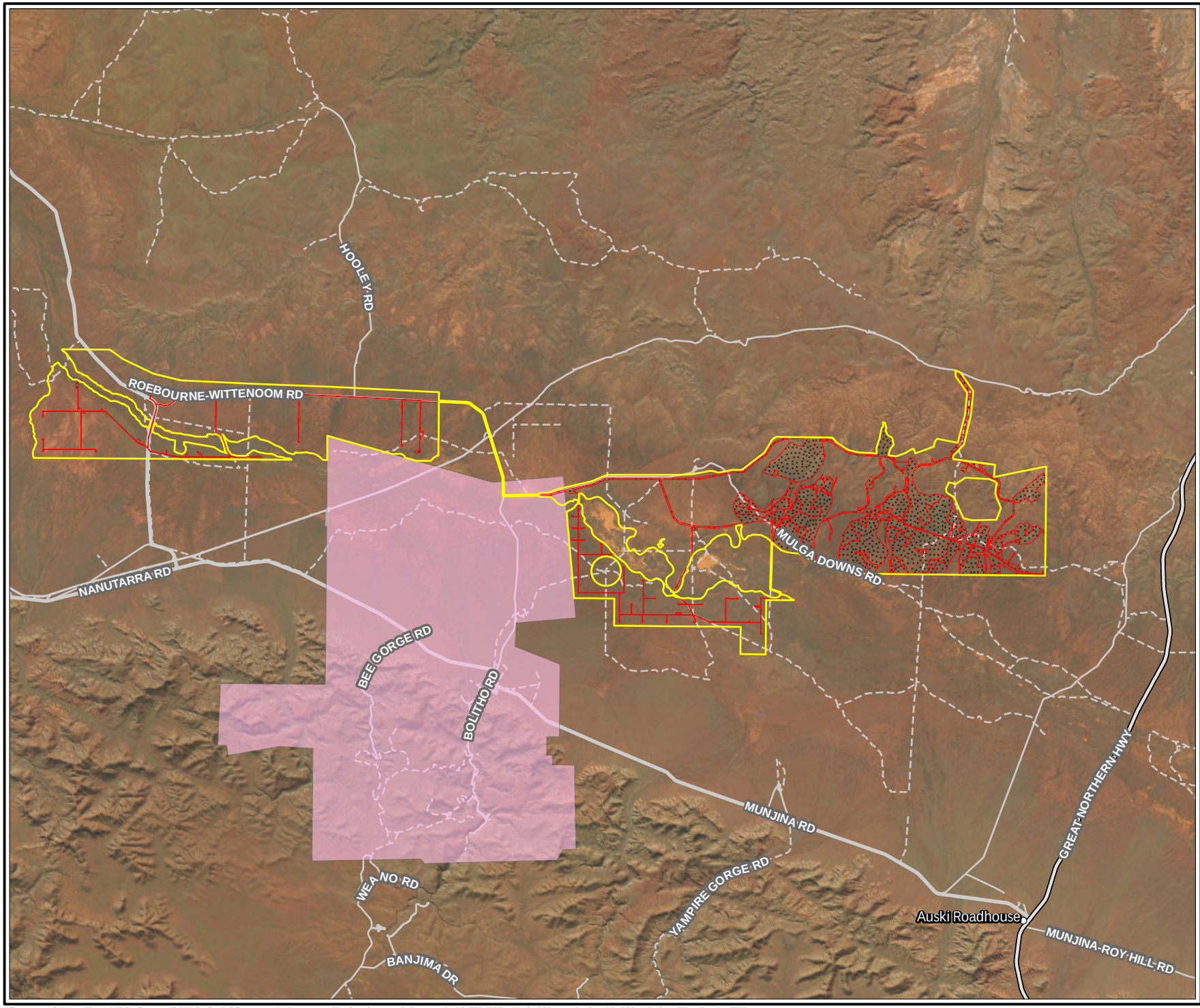
Mulga Downs Iron Ore Mine
Central Pilbara, Western Australia

REGIONAL LOCATION

FIGURE 1

JBS&G

File Name: W:\Projects\1)Open\Hancock Prospecting\54533 Hancock Prospecting - EIA, Mulga Downs\ArcGIS\Stage 1\Maps\05 HPPL\26_EPBC_43a\HMCO_HPPL_04_RegLocn.mxd
Image Reference: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



Legend

- Development Envelope
- Conceptual footprint
- Wittenoom Asbestos Management Area (WAMA)
- Highway
- Main road
- Minor road
- Track

JBS&G

Job No: 54533

Client: Hancock Prospecting Pty Ltd

Version: A	Date 13/04/2023
Drawn By: jcrute	Checked By: AM

Scale 1:350,000 at A4

0 5 10
Kilometres

Coord. Sys. GDA2020 MGA Zone 50

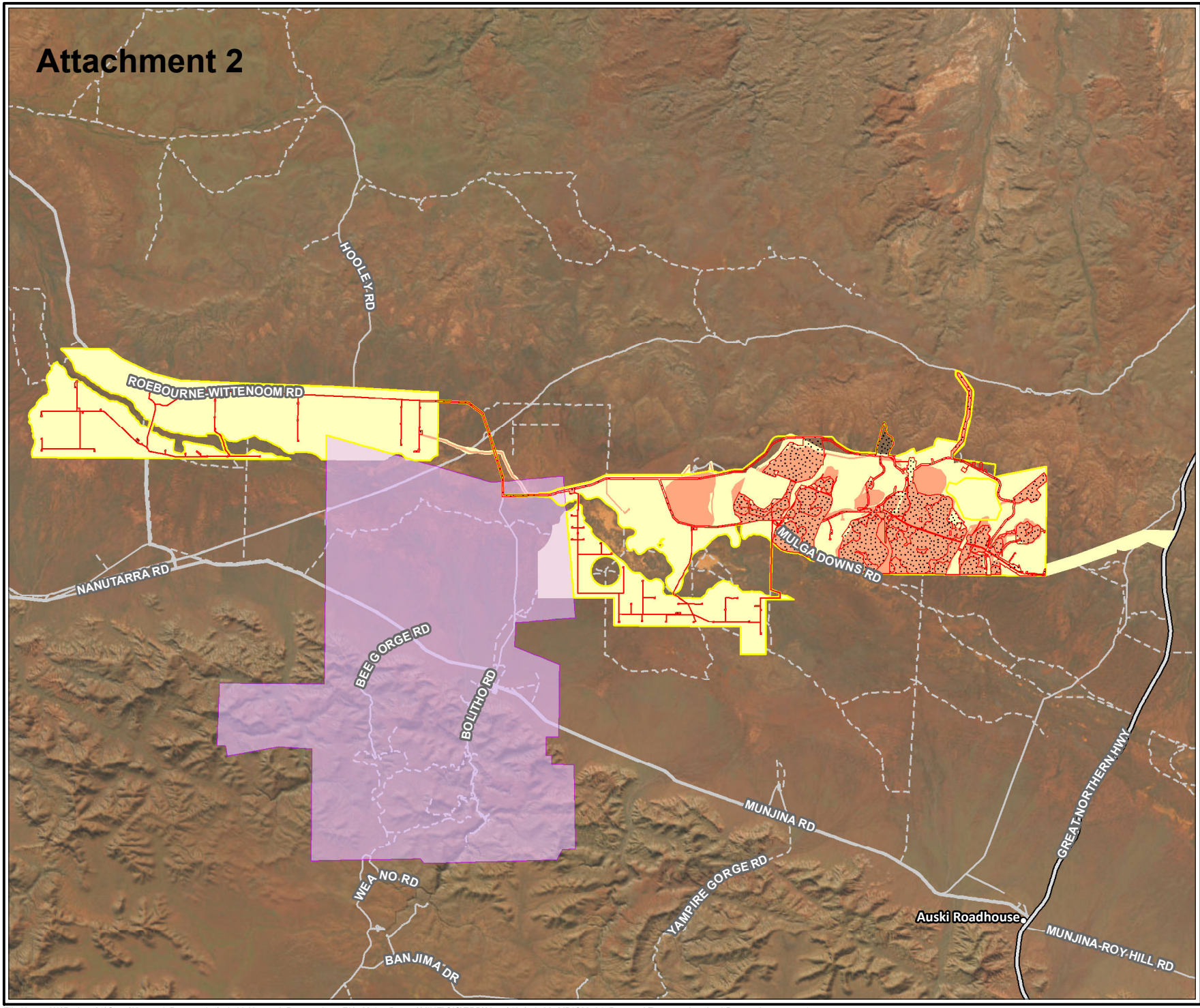
Mulga Downs Iron Ore Mine
Central Pilbara, Western Australia

PROPOSAL LOCATION, DEVELOPMENT ENVELOPE AND CONCEPTUAL FOOTPRINT

FIGURE 2

File Name: C:\Users\jcrute\JBS&G Australia\JBS&G - DCS - Internal - Documents\Projects\Hancock Prospecting\GIS\54533_MDIOM\02_MapProjects\54533_MDIOM_EPA_PartIV_ERD.aprx
Image Reference: World Imagery: Earthstar Geographics

Attachment 2



Legend

Revised proposal extent
- Development Envelope
- Conceptual footprint

Original proposal extent
- Development Envelope
- Conceptual footprint

- Wittenoom Asbestos Management Area (WAMA)
- Highway
- Main road
- Minor road
- Track

JBS&G

Job No: 54533	
Client: Hancock Prospecting Pty Ltd	
Version: A	Date 18/04/2023
Drawn By: jcrute	Checked By: AM

Scale 1:350,000 at A4

0 5 10
Kilometres

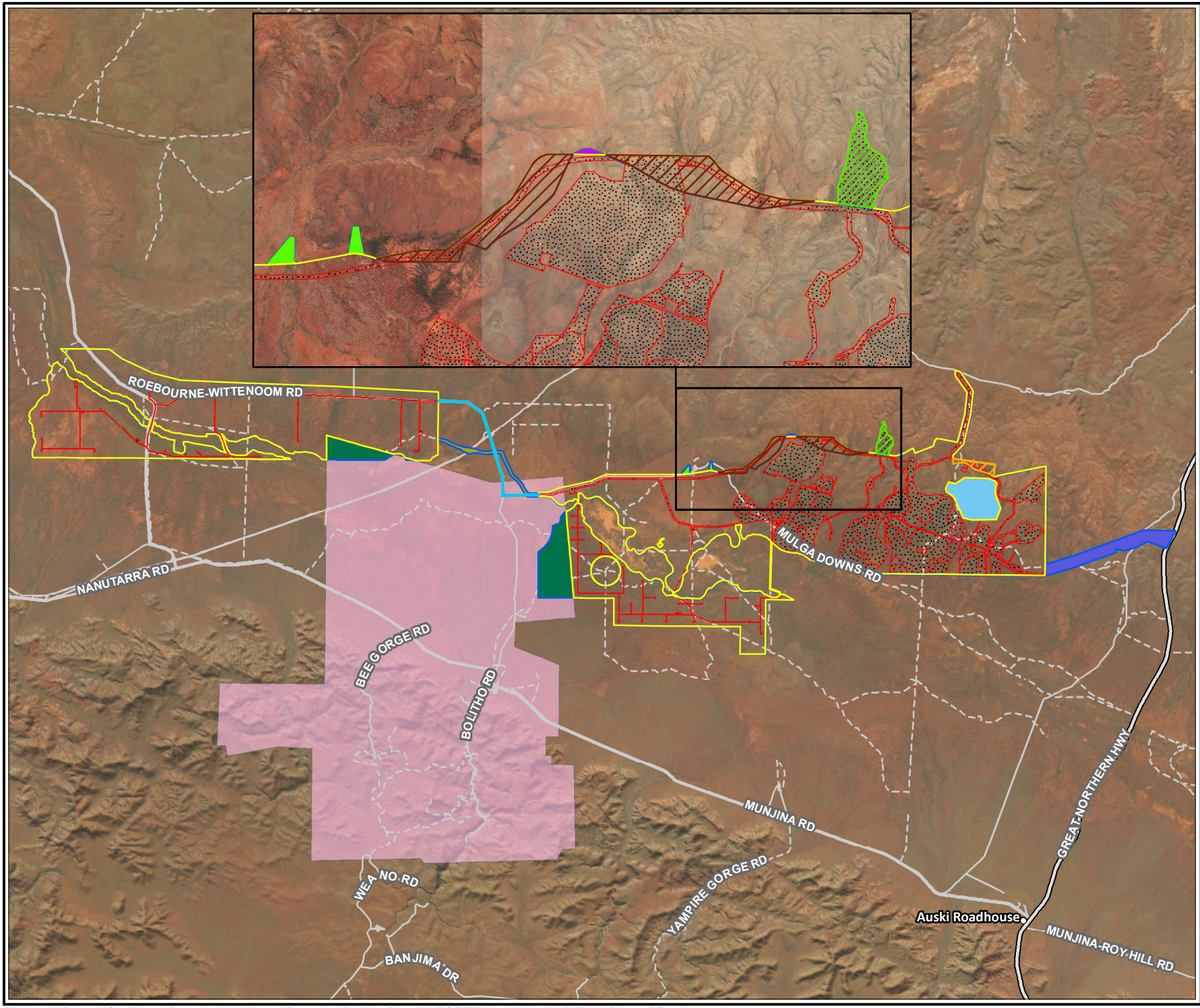
Coord. Sys. GDA2020 MGA Zone 50

Mulga Downs Iron Ore Mine
Central Pilbara, Western Australia

PROPOSAL EXTENT AND REVISED PROPOSAL EXTENT

FIGURE 1

File Name: W:\Projects\1)Open\Hancock Prospecting\54533 Hancock Prospecting - EIA, Mulga Downs\MINE\GIS\ERD\Maps\43a\54533_MDIOM_04_Proposal Extent and revised Proposal extent.mxd
Image Reference: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Legend

- Referred Development Envelope
- Revised Development Envelope
- Conceptual footprint
- Wittenoom Asbestos Management Area (WAMA)

Amended Development Envelope

- Development Envelope Amendment
- Northern Access Rd
- Pipeline Road
- Solar Farm

Removed from the Development Envelope

- Fauna Exclusion
- Fenceline Rd
- Refinement of the Development Envelope based on design
- Northern Access Rd
- Pipeline Road
- WAMA
- Highway
- Main road
- Minor road
- Track

JBS&G

Job No: 54533

Client: Hancock Prospecting Pty Ltd

Version: A	Date 18/04/2023
Drawn By: jcrute	Checked By: AM

Scale 1:350,000 at A4

0 5 10
Kilometres

Coord. Sys. GDA2020 MGA Zone 50

Mulga Downs Iron Ore Mine
Central Pilbara, Western Australia

CHANGES BETWEEN REFERRED AND REVISED DEVELOPMENT ENVELOPE

FIGURE 2

File Name: W:\Projects\1)Open\Hancock Prospecting\54533 Hancock Prospecting - EIA, Mulga Downs\MINE\GIS\ERD\Maps\43a\54533_MDIOM_02_Changes_DE.mxd
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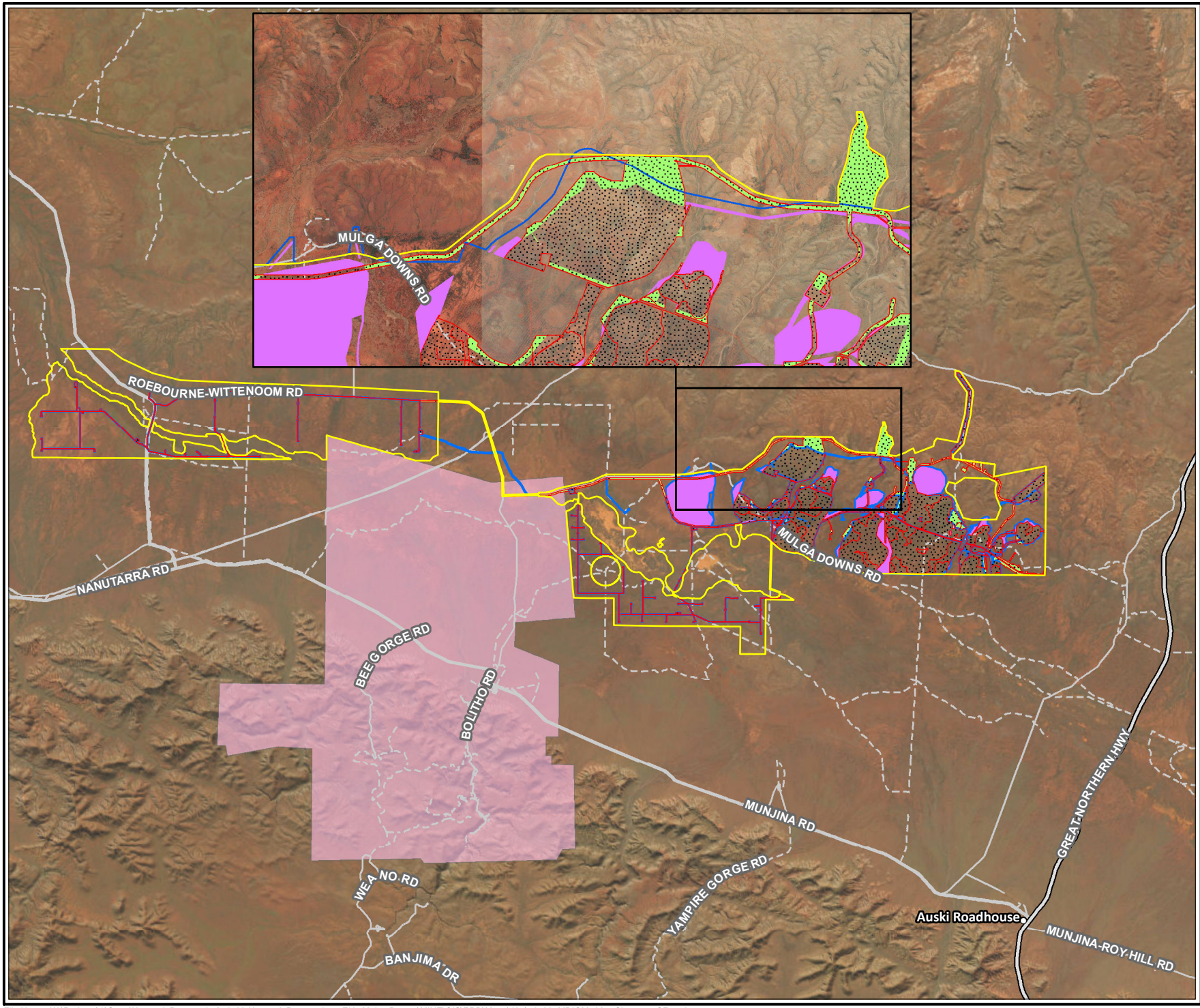

Legend

- Referred conceptual footprint
- Revised Development Envelope
- Revised conceptual footprint
- Added to the footprint
- Removed from the footprint
- Wittenoom Asbestos Management Area (WAMA)
- Highway
- Main road
- Minor road
- Track

JBS&G

Job No: 54533

Client: Hancock Prospecting Pty Ltd

Version: A	Date 18/04/2023
Drawn By: jcrute	Checked By: AM

Scale 1:350,000 at A4

0 5 10
Kilometres

Coord. Sys. GDA2020 MGA Zone 50

Mulga Downs Iron Ore Mine
Central Pilbara, Western Australia

CHANGES BETWEEN REFERRED AND REVISED CONCEPTUAL FOOTPRINT

FIGURE 3

File Name: W:\Projects\1)Open\Hancock Prospecting\54533 Hancock Prospecting - EIA, Mulga Downs\MINE\GIS\ERD\Maps\43a\54533_MDIOM_02a_Changes_CF.mxd
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