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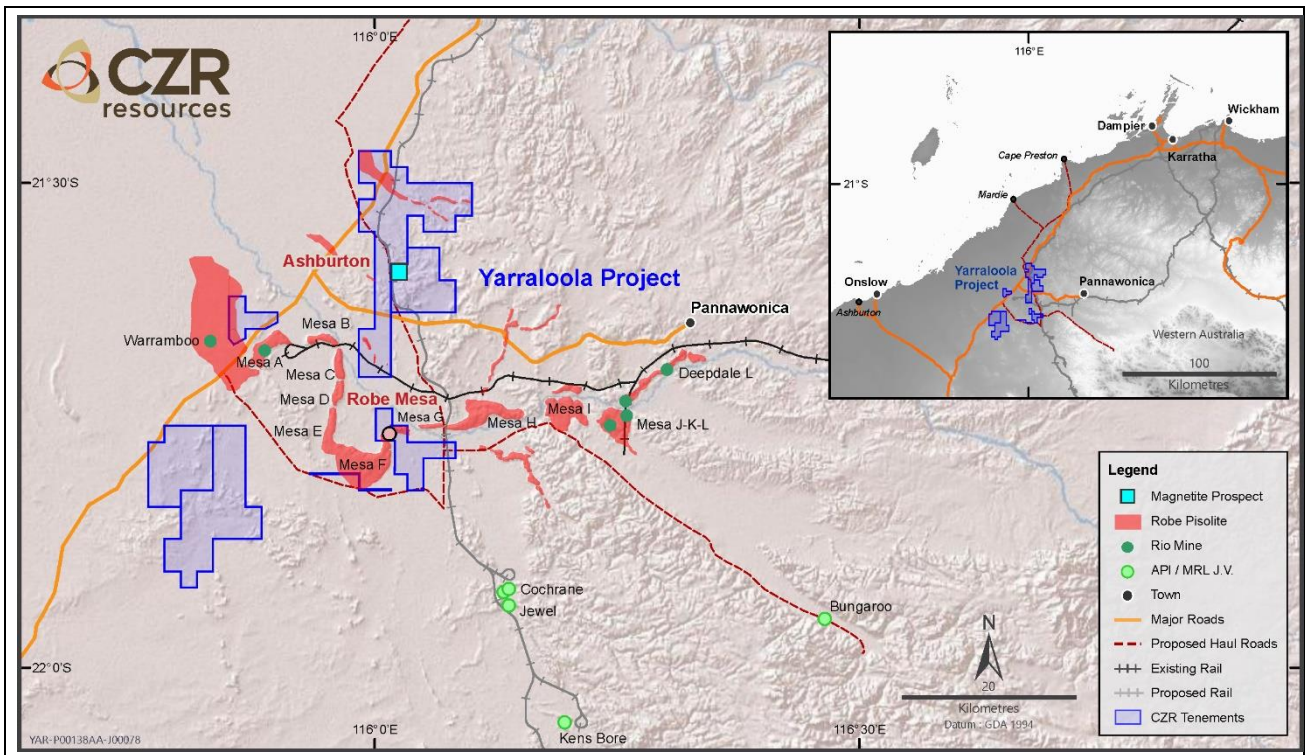
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1. Introduction

1.1 Project Description

The Robe Mesa Iron Ore project (hereafter 'the project') is located within the Robe River valley channel iron deposits (CID), adjoining Rio Tinto's Mesa F deposit, in the west Pilbara region of Western Australia, within the Shire of Ashburton, approximately 200 km by road from the City of Karratha and 180 km by road from the town of Onslow.

Figure 1.1.1: Project location.



The project is part of a larger Yarraloola Iron Ore Project, whose ownership is a joint venture between Zanthus Resources Ltd (Zanthus), a wholly owned subsidiary of CZR Resources Ltd (CZR), which holds 85%, and ZanF Pty Ltd (ZanF) which holds 15%. Zanthus is the operator of the Robe Mesa Project.

CZR recognises the Robe River Kuruma (RRK) People as the traditional owners of the land that Robe Mesa is located on, and the importance to the RRK People of leaving country as close as possible to the way that it was found. Working collaboratively, CZR and RRK signed the Robe Mesa Native Title Agreement on 21 December 2022 which includes a 'live' Cultural Heritage Management Plan to ensure the parties continue to work together to develop appropriate protection and management actions for the places it contains.

CZR acknowledges that within the vicinity of the project tenements there are many significant cultural places of great importance to RRK People. CZR and RRK have agreed the Productive Mining area boundaries and identified No-Go-Areas which must not be entered or impacted by CZR. The area of the Robe Mesa that has been identified for Productive Mining provides for a set back from the mesa edge or buffer that must not be entered or impacted. Additionally, northern aspects of the Robe Mesa and other selected areas off the mesa, also contain No-Go-Areas.

Mining of the Robe Mesa is all above the water table. CZR will not conduct any mining below the water table. Mine waste will remain on top of the Mesa. No external waste dumps will be left upon closure, with the pit progressively backfilled with waste.

These commitments of:

- maintaining a mesa edge buffer zone (Figure 1.2.1);
- enforcing No-Go-Areas (Figure 1.2.1);
- backfilling of pits with waste material;
- only undertaking mining above the water table; and
- on-going collaborative engagement with the RRK people,

will ensure that the project proactively manages environmental and cultural priorities, through an avoidance approach, consistent with best practice impact mitigation (Government of Western Australia 2014).

Mining will occur on top of the mesa only, utilising conventional drill and blast, truck, and shovel (excavator) open pit mining practises, with the mesa edge buffer zone being undisturbed. Mining will be focused on a low strip ratio, 24 hour – 7 days a week operation. The ROM pad will be off the mesa, feeding a dry processing plant (crush, screen and stack) that produces fines only product. No wet processing will occur and no tailings storage facility is required. Product will be stacked in a post-crusher stockyard with stockpiles built to product specification at the mine to minimise blending required at the port.

CZR personnel will provide overall supervision and management of a predominantly contractor operation. Contracts will be in place for mining, process plant, laboratory, haulage, power supply, village management and people logistics. Mine infrastructure will include offices, administration, workshops, laydown areas, roads, bore field, communication tower, ANFO storage facilities, power generation, a 180-person village and a general waste facility (Figure 1.2.1). A mine site laboratory will analyse grade control, process plant and TSV shipment samples.

Final product will be hauled by road trains to a Pre-shipment Stockyard (PSS) along Onslow Road, and also directly hauled to the road train unloading facility and storage shed at the Port of Ashburton. A 12 kt Transshipment Vessel (TSV) will be directly loaded, via covered conveyors, from the road train unloading facility and by front end loaders (FELs) from within the storage shed. The TSV will travel ~18 nautical miles west of Thevenard Island, to load a 180 kt Ocean Going Vessel (OGV) bulk ore carrier, cycling around 15 times over and approximately 10-day period, prior to the OGV departing for export to international markets. When the TSV is not at berth, road trains will deliver product into the Port shed in preparation for the next berthing.

With a relatively simple mine site operation, the main early works include development of the mine access road, and construction of the village and port unloading facility. Regulatory approvals will determine start dates for these tasks but, with an overall construction period of less than 12 months, an early works target of Q3 2023 would enable mine operations to commence in Q3 2024, with first shipment approximately 1-2 months later.

1.2 Purpose of this Environmental Management Plan

This Environmental Management Plan (EMP) documents environmental outcomes and management actions to be implemented to achieve these during the construction and operation of the project. This includes:

- management actions to avoid, reduce and minimise any potential environmental impacts of the project on key environmental values;
- specifying timing for implementation of these management actions; and
- specifying monitoring and reporting procedures to provide for continuous improvement, consistent with an adaptive management approach.

This EMP has been prepared to support the project's Mining Proposal, which will be submitted to the Department of Mines, Industry Regulation and Safety (DMIRS) in accordance with the *Mining Act 1978*. The structure of this EMP, while not fully conforming with the templated format, has been prepared in consideration of the Environmental Protection Authority's (EPA) guidance on preparing EMPs (EPA 2021), particularly in regard to setting environmental outcomes to be achieved through the implementation of management actions.

Figure 1.2.1: Project indicative footprint (light blue) and development envelope (yellow).

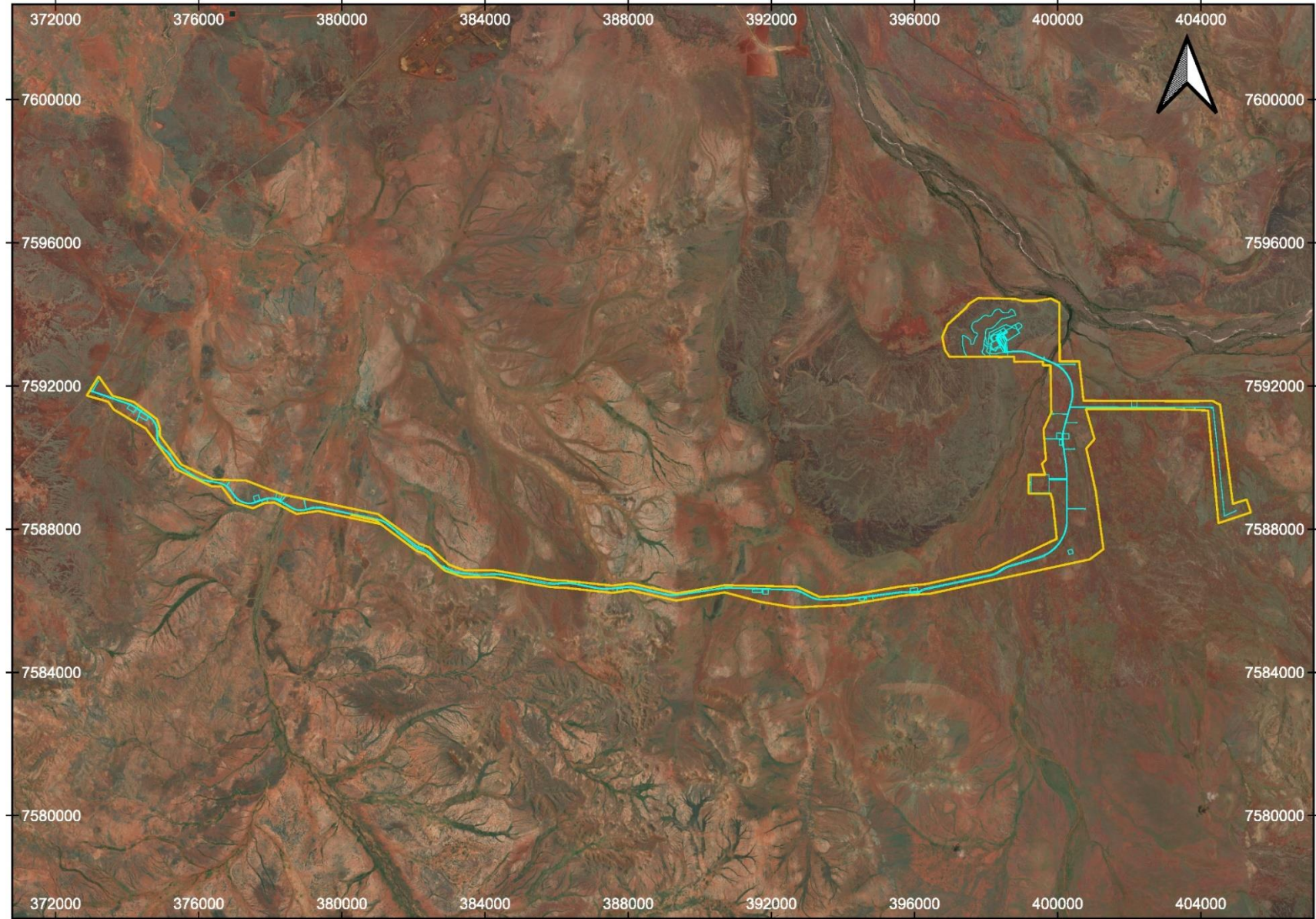
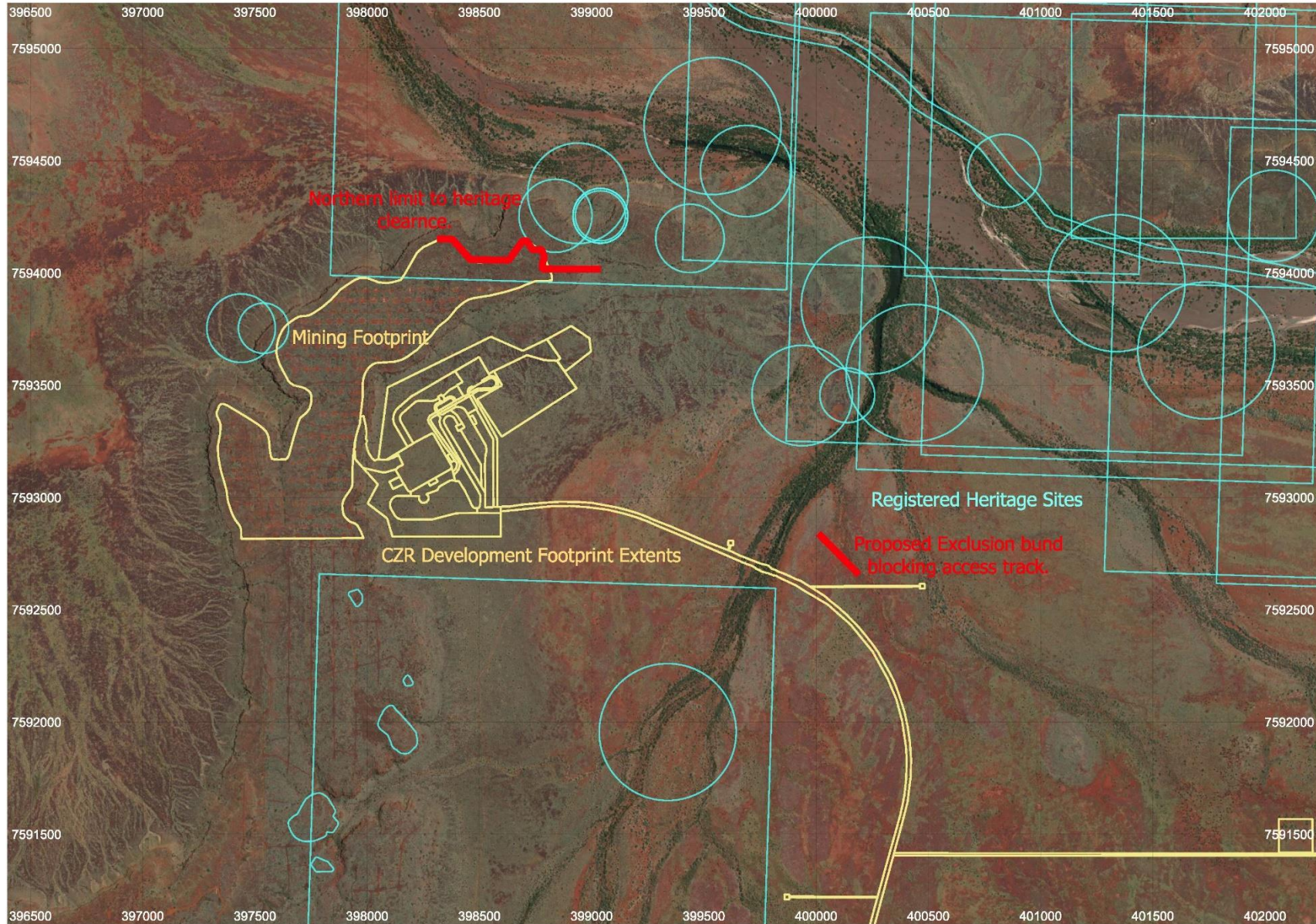


Figure 1.2.2: Mine and Infrastructure footprint (yellow) with 'no go' areas (red) and associated Registered Heritage Sites (light blue)



1.3 Relationship of this Environmental Management Plan to other Plans

While this EMP is the primary document setting out environmental outcomes for the project, and how these will be achieved, two related matters are addressed in other CZR documents:

1. Cultural heritage protection - Cultural Heritage Management Plan (RRKAC and CZR Resources 2023).
2. Project closure and rehabilitation – Mine Closure Plan (CZR Resources 2023b).

1.4 Key Environmental Values

CZR has conducted various studies extending over a period of approximately two years with the objective of providing sufficient data to obtain statutory approval to mine. The studies includes infill drilling and a variety of resource delineation studies, as well as environmental surveys (flora and vegetation, terrestrial fauna and subterranean fauna), surface and groundwater studies for environmental assessment and process water supply, together with consultation with relevant stakeholders, and discussions with the Local, State and Commonwealth Government authorities to obtain the needed licences and permits to operate a mine.

Given the volume and scope of work complete, CZR has identified the key environmental values present in the project area and the potential impact pathways of the planned operation. The key environmental values of the project area comprise:

- Subterranean Fauna – a Priority Ecological Community (PEC) of troglofauna (air-breathing animals occurring between the water table and ground surface), with at least 10 individual troglofauna species recorded;
- Significant terrestrial fauna – the Threatened species the Northern Quoll, Ghost Bat and Pilbara Leaf-nosed Bat, in addition to two Priority fauna species (Western Pebble-mound Mouse and Gane’s Blind Snake);
- Priority flora – three species, all of which are widespread in the region; and
- Sites of cultural heritage importance – primarily associated with the mesa edge and the adjacent Robe River.

While the above values represent the key potential impact receptors that this EMP has been prepared to address, the management actions committed to will also serve to mitigate potential impacts on all ecological and cultural values of the project area and adjoining landscape.

1.5 Potential Impact Sources and Pathways

The potential impact sources and pathways associated with the elements of the project are typical of above water table iron ore mining operations, as summarised in Table 1.5.1.

Impact Pathway	Impact Source:	Mine pit	Stockpiles	Haul Road	Processing	Other Infrastructure
Ground disturbance		✓	✓	✓	✓	✓
Noise		✓	✓	-	✓	✓
Vibration		✓	✓	-	✓	-
Dust		✓	✓	✓	✓	-
Light spill		✓	✓	-	✓	✓
Linear infrastructure		-	-	✓	-	✓
Human habitation		-	-	-	-	✓
Changed fire regimes		-	-	✓	-	✓
Increase in introduced fauna		-	-	-	-	✓
Increase in environmental weeds		-	-	✓	-	✓

2. Receiving Environment and Potential Impacts

2.1 Terrestrial Fauna

2.1.1 Overview of Receiving Environment

An overall total of 147 vertebrate fauna species were recorded in the project area across all field surveys (May and October 2021, and July and September 2022) (Bamford Consulting Ecologists 2022).

Two species of frog are present, largely confined to low points in the landscape, with breeding taking place in pools and claypans. Adults will disperse widely and individuals are likely to move across the project area. At least one species may be moderately abundant in the project area, particularly along the mesa edge, and may breed in ephemeral pools adjoining the mesa.

The reptile assemblage of the project area comprises 43 species spread across the landscape, with differing suites of species and abundance in different habitats (Bamford Consulting Ecologists 2022). The mesa top supports a limited number of species at low levels of abundance due to shallow soils and few microhabitats compared with the mesa edge and slopes. It is unlikely that any species are locally-confined to the mesa top, whereas there are very likely to be species limited to the other habitats present (mesa edge, sandy flats and forests along drainage lines; Bamford Consulting Ecologists 2022).

The avifauna of the project area is rich at 80 species, but again; the mesa top supports a very limited number of species at low levels of abundance due to a lack of habitat structural complexity (Bamford Consulting Ecologists 2022). No bird species are likely to be confined to the mesa top, but the tall, thick spinifex and woodlands on the lower slopes and outwash of the mesa may be locally important with higher levels of abundance of many species (Bamford Consulting Ecologists 2022).

The mammal fauna of the project area comprises 13 native species. The mesa edge is notable for a rich assemblage including several species of conservation significance (Section 2.1.2). Mammal diversity and abundance on the mesa top is much lower due to the structural simplicity of the habitat. Some mesa edge species may forage across the mesa top, but rely more heavily on dense vegetation of lower slopes for foraging (Bamford Consulting Ecologists 2022).

2.1.2 Significant Terrestrial Fauna

Three species listed as Threatened under both the State *Biodiversity Conservation Act 2016* (BC Act) and the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) occur in the project area:

- Northern Quoll (*Dasyurus hallucatus*);
- Pilbara Leaf-nosed Bat (*Rhinonictis aurantia*); and
- Ghost Bat (*Macroderma gigas*) (Bamford Consulting Ecologists 2022).

All three species are strongly associated with the mesa edge as core habitat, both for denning and roosting opportunities, and foraging resources. None of the species are restricted to the project area and all three are routinely recorded in the Robe River valley. No known maternity roosts for either bat species are present in the project area, and the Northern Quoll is present in relatively small numbers, typical of similar habitat in the locality (Bamford Consulting Ecologists 2022). The temporary bat roosts that are present are associated with the mesa edge and are located within the project No-Go-Areas.

2.1.3 Potentials Impact on Terrestrial Fauna

The project's impact pathways relevant to terrestrial fauna, and the ultimate potential impacts on receptor species and communities, are summarised in Table 2.1.1.

Table 2.1.1: Potential impacts on terrestrial fauna.	
Impact Pathway (Source)	Potential Impacts
Ground disturbance (Mine pit, stockpiles, haul road, processing, infrastructure)	<ul style="list-style-type: none"> • Direct impacts on individuals (plant and equipment) • Habitat loss beyond approved limit • Habitat degradation (altered surface hydrology)
Noise and Vibration (Mine pit, stockpiles, haul road, processing, infrastructure)	<ul style="list-style-type: none"> • Behavioural changes (disturbance response) • Habitat degradation (structurally altered)
Light spill (Mine pit, stockpiles, processing, infrastructure)	<ul style="list-style-type: none"> • Behavioural changes (altered foraging)
Linear infrastructure (Haul road, infrastructure)	<ul style="list-style-type: none"> • Individual mortality (vehicle interaction) • Habitat degradation (altered surface hydrology)
Human habitation (Infrastructure)	<ul style="list-style-type: none"> • Behavioural changes (altered foraging) • Individual mortality (human interaction)
Changed fire regimes (Haul road, infrastructure)	<ul style="list-style-type: none"> • Individual mortality (increased fire frequency) • Habitat degradation (increased fire frequency)
Increase in introduced fauna (Infrastructure)	<ul style="list-style-type: none"> • Increased predation and/or competition
Increase in environmental weeds (Haul road, infrastructure)	<ul style="list-style-type: none"> • Habitat degradation (altered vegetation structure)

2.1.4 Environmental Outcomes

Through implementation of this EMP, CZR will ensure the following outcomes are achieved for terrestrial fauna:

1. Project ground disturbance will not exceed 277 ha.
2. No loss of habitat critical to significant fauna species due to the project.
3. No loss of fauna habitat outside of the project development envelope.
4. No introduction or spread of introduced fauna due to the project.
5. No introduction or spread of environmental weeds due to the project.
6. No significant decline in habitat condition outside of the project development envelope.

Management actions that will be implemented to achieve these objectives are detailed in Section 3.

2.2 Subterranean Fauna

2.2.1 Overview of Receiving Environment

Three phases of sampling for troglofauna have been completed in the CID mesa landform of the project area, with at least 13 species from seven orders recorded (Biota 2023a). All species recorded are endemic to the mesa and do not occur in other mesa landforms in the Robe River locality or wider west Pilbara. None of the species present are formally listed as significant under either the BC Act or the EPBC Act, but all are of conservation significance due to their extreme short-range endemism, significance as relictual fauna and as they form part of a PEC (Section 2.2.2).

Eight of the 13 species have thus far only been recorded within the project mine pit (Biota 2023a). However, both geological modelling (CZR Resources 2023a) and extensive subterranean fauna research completed elsewhere in the locality (Biota 2023a), indicate that it is highly likely the CID troglofauna habitat is connected across the extent of the mesa landform and the species are similarly distributed.

2.2.2 Priority Ecological Community

The project area mesa forms part of the State-listed ‘Subterranean invertebrate communities of mesas in the Robe Valley region’ PEC.

The PEC is categorised by the Department of Biodiversity, Conservation and Attractions (DBCA) as Priority One: “Poorly-known ecological communities, which are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤ 100 ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within active mineral leases) or for which current threats exist. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range”.

2.2.3 Potentials Impact on Subterranean Fauna

The project’s impact pathways relevant to subterranean fauna, and the ultimate potential impacts on receptor species and communities, are summarised in Table 2.2.1.

Impact Pathway (Source)	Potential Impacts
Ground disturbance (Mine pit, stockpiles)	<ul style="list-style-type: none"> • Loss of subterranean fauna habitat beyond approved limit • Habitat degradation (altered surface hydrology)
Vibration (Mine pit, infrastructure)	<ul style="list-style-type: none"> • Habitat degradation

2.2.4 Environmental Outcomes

Through implementation of this EMP, CZR will ensure the following outcomes are achieved for subterranean fauna:

1. Mine pit ground disturbance will not exceed 68 ha.
2. Mine pit depth to target the Upper CID unit, and limit access to the lower unit to small pockets.
3. No significant decline in subterranean fauna habitat condition outside of the mine pit.
4. No loss of subterranean fauna habitat outside of the project development envelope.

Management actions that will be implemented to achieve these objectives are detailed in Section 3.

2.3 Flora and Vegetation

2.3.1 Overview of Receiving Environment

Flora and vegetation surveys of the project area (Biota 2023b) have delineated four broad vegetation types:

- Mesa tops - *Acacia arida* Mid Sparse Shrubland over *Triodia wiseana* Hummock Grassland;
- Mesa breakaways and gorges - *Eucalyptus leucophloia* Low Isolated Clumps of Trees over *Acacia arida* Isolated Clumps of Shrubs over *Triodia wiseana* and *T. pisolitica* Sparse Hummock Grassland;

- Mesa footslopes - *Corymbia hamersleyana* Low Isolated Trees over *Acacia inaequilatera* Mid to Tall Sparse Shrubland over *Triodia epactia* Hummock Grassland; and
- *Triodia epactia* hummock grasslands (sparse shrub steppe over hard spinifex).

All of the vegetation types are widespread in the project area locality and the wider west Pilbara (Biota 2023b).

2.3.2 Significant Flora

Three state-listed Priority flora species have been recorded from the project area:

- *Eragrostis crateriformis* (P3) – recorded from 73 locations along the haul road (Biota 2023b) and also within the mine infrastructure area (RPS 2021);
- *Triodia pisolitica* (P3) – recorded from 412 locations along the mesa edge (RPS 2021);
- *Goodenia nuda* (P4) – recorded from 26 locations near the village and the mine infrastructure areas (RPS 2021).

All three species are widespread in the west Pilbara (RPS 2021, Biota 2023b).

2.3.3 Potentials Impact on Flora and vegetation

The project’s impact pathways relevant to flora and vegetation, and the ultimate potential impacts on receptor species and communities, are summarised in Table 2.3.1.

Impact Pathway (Source)	Potential Impacts
Ground disturbance (Mine pit, stockpiles, haul road, infrastructure)	<ul style="list-style-type: none"> • Direct impacts on individuals (plant and equipment) • Loss of vegetation types beyond approved limit
Dust (Mine pit, haul roads, infrastructure)	<ul style="list-style-type: none"> • Vegetation degradation (shading, altered transpiration)
Linear infrastructure (Haul road, infrastructure)	<ul style="list-style-type: none"> • Vegetation degradation (altered surface hydrology)
Changed fire regimes (Haul road, infrastructure)	<ul style="list-style-type: none"> • Vegetation degradation (increased fire frequency)
Increase in environmental weeds (Haul road, infrastructure)	<ul style="list-style-type: none"> • Vegetation degradation

2.3.4 Environmental Outcomes

Through implementation of this EMP, CZR will ensure the following outcomes are achieved for flora and vegetation:

1. Project ground disturbance will not exceed 277 ha.
2. No loss of significant flora species due to the project.
3. No loss of flora and vegetation outside of the project development envelope.
4. No introduction or spread of environmental weeds due to the project.
5. No significant decline in vegetation condition outside of the project development envelope.

Management actions that will be implemented to achieve these objectives are detailed in Section 3.

2.4 Cultural Heritage Values

2.4.1 Overview of Receiving Environment

CZR has undertaken extensive consultation with the RRK People, who have identified areas of cultural significance within the project area. This is documented in the project's Cultural Heritage Management Plan (RRKAC and CZR Resources 2023).

2.4.2 Potentials Impact on Cultural Heritage Values

The project's impact pathways relevant to cultural heritage, and the ultimate potential impacts on sites of significance, are summarised in Table 2.4.1.

Impact Pathway (Source)	Potential Impacts
Ground disturbance (Mine pit, stockpiles, haul road, infrastructure)	<ul style="list-style-type: none">• Direct disturbance
Noise and Vibration (Mine pit, stockpiles, haul roads, infrastructure)	<ul style="list-style-type: none">• Site degradation (structurally altered)• Reduced amenity
Access to sensitive areas (river pools) (Mine pit, stockpiles, haul road, infrastructure)	<ul style="list-style-type: none">• Site disturbance and cultural insensitivity at heritage sites

2.4.3 Environmental Outcomes

Through implementation of this EMP, and the project Cultural Heritage Management Plan, CZR will ensure the following outcomes are achieved for cultural heritage values:

1. No direct disturbance of sites of cultural heritage significance.
2. No degradation or reduction in amenity of sites of cultural heritage significance.
3. Access to sites of cultural heritage significance is prohibited by all CZR employees and contractors, unless approval has been sought (monitoring etc.)

Management actions that will be implemented to achieve these objectives are detailed in Section 3 and the project Cultural Heritage Management Plan.

3. Management Actions

3.1 Management Framework

The project management actions that CZR will implement throughout the life of the project are set out in Table 3.2.1, along with risk-based prioritisation and timing.

Note that Table 3.2.1, treats the likelihood of a potential impact occurring as the unmitigated probability; i.e. the likelihood if no management actions were taken. This best informs the management prioritisation, to clearly identify the most important management actions that need to be central to project implementation (Table 3.2.1).

As some impact pathways, particularly ground disturbance, could affect more than one of the environmental receptors discussed in Section 2, the potential impacts in Table 3.2.1 have been consolidated into a single item where the same management actions will avoid or mitigate more than one potential impact.

3.2 Implementation Responsibility

While CZR has ultimate responsibility for project implementation, much of the day-to-day delivery and operation of the project will be undertaken by contractors.

CZR will ensure that all services contracts for the project are binding on all contractors in regard to implementing the content of this EMP as relevant to their activities onsite. Compliance reporting will also be contractually required, to enable CZR to consolidate environmental management data into annual reporting (see Section 5).

Table 3.2.1 : Risk-based prioritisation of management actions.

Potential Impact	Unmitigated Likelihood	Management Priority	Management Actions	Project Timing
Loss of fauna habitat, vegetation or sites of cultural significance beyond approved ground disturbance limits	Very likely	High	1. Final mine pit design to be spatially limited to observe the mesa edge buffer and No-Go Areas.	Pre-construction
			2. Final design of project footprint to reduce extent of habitat cleared, including utilising existing tracks and co-locating infrastructure, where feasible.	Pre-construction
			3. Develop and implement ground disturbance approval procedures, requiring supervisor approval prior to proceeding.	Construction
			4. Approved clearing limits to be delineated on ground and spatially managed via GPS technology.	Construction
			5. Implement rehabilitation procedures for decommissioned areas of the project footprint, in accordance with the project's Mine Closure Plan (CZR Resources 2023b).	Post-operations
Loss of subterranean fauna habitat beyond approved limits	Very likely	High	1. Final mine pit design to be spatially limited to observe the mesa edge buffer and No-Go Areas, and pit depth to be limited to the upper CID unit.	Pre-construction, Operations
Direct impacts on significant terrestrial fauna and flora	Very likely	High	1. Final design of mine pit and associated infrastructure footprint to observe mesa edge buffer and No-Go Areas.	Pre-construction
			2. Final alignment of project haul road and any associated materials sourcing areas to avoid known locations of Priority fauna and flora.	Pre-construction
			3. Drill and blast activities to be constrained to the approved mine pit boundaries.	Operations
Altered surface hydrology, degrading fauna habitat and vegetation	Very likely	High	1. Incorporate culverting or other appropriate drainage treatments into the final design of the haul road at locations where it crosses significant drainage lines, to ensure no backwater upstream of the crossing point or reduction in natural hydrology downstream.	Pre-construction
			2. Ensure run-off from active mining areas, including the mine pit and any temporary stockpiles, is managed by bunding, diversion drains, or other appropriate drainage treatments to minimise sediment transport from areas of ground disturbance.	Operations
Increased feral fauna distribution and abundance,	Very likely	High	1. Best practice waste management procedures and facilities, particularly for food waste.	Construction, Operations
			2. Prohibiting all personnel from feeding of fauna or disposal of food outside of allocated disposal points.	Construction, Operations

Potential Impact	Unmitigated Likelihood	Management Priority	Management Actions	Project Timing
increasing predation pressure			3. Implementation of targeted feral fauna control in areas of higher risk, principally around the camp mess and crib rooms.	Construction, Operations
Altered surface hydrology, degrading subterranean fauna habitat	Likely	Moderate	1. Direct return of waste material in-pit, minimising any temporary stockpiling time, with materials strategically deployed directly against undisturbed subterranean fauna habitat within the mesa edge buffer.	Operations
Weed introduction and spread, degrading fauna habitat and vegetation	Likely	Moderate	1. Weed hygiene and topsoil management plan, including creation of formalised clean down points prior to plant and vehicles entering site.	Construction, Operations
			2. Monitoring and control program to eliminate any weed recruits	Operations
Light spill, changing fauna foraging behaviour	Possible	Low	1. Design of site lighting to incorporate light sources with little or no short wavelength (blue and ultraviolet) light and motion-sensitive activation and deactivation where safety considerations permit.	Pre-construction
			2. Lighting to be directed to required areas only and incorporate shielding to reduce unneeded light spill.	Construction, Operations
Changed fire regimes, degrading fauna habitats and vegetation	Possible	Low	1. Implementation of a hot works permitting system to control any works where sparks or other potential ignition sources are generated, such that there is no risk of adjacent intact vegetation being ignited.	Construction, Operations
			2. Development and readiness resourcing for fire emergency response procedures.	Construction, Operations
Other general construction and operations impacts	Possible	Low	1. Site induction for all personnel to specify environmental management requirements including: <ul style="list-style-type: none"> a. Ground disturbance approval procedure. b. Fire prevention and emergency response procedures. c. Onsite speed limits and response and reporting protocols for any fauna roadkill. d. Prohibition of off-road driving over uncleared fauna habitat and vegetation. 	Construction, Operations

4. Monitoring

CZR will implement monitoring to measure the effectiveness of the management actions in achieving the project's environmental outcomes, and to identify when additional mitigation or contingency responses may be needed.

Table 3.2.1 sets out the monitoring needed to measure the effectiveness of the management actions in meeting their related targets.

5. Reporting

An Annual Environmental Report (AER) will be prepared and submitted to DMIRS. The AER will be structured and include required content as defined in DMIRS (2022).

In relation to this EMP, the AER will contain:

- Information demonstrating compliance with the content of this EMP;
- Results of monitoring and performance reviews associated with the implementation of the EMP; and
- Any improvements to management actions and planned revisions to this EMP (Section 6).

Table 3.2.1 : Monitoring frequency and reporting.

Environmental Outcomes	Monitoring	Timing/Frequency	Reporting
<ul style="list-style-type: none"> Project ground disturbance will not exceed 277 ha. No loss of fauna habitat outside of the project development envelope. No loss of flora and vegetation outside of the project development envelope. No loss of habitat critical to significant fauna species due to the project. No loss of significant flora species due to the project. No direct disturbance of sites of cultural heritage significance. 	<ol style="list-style-type: none"> Cumulative ground disturbance extents captured and tracked via GPS technology or regular aerial imagery and GIS capture. Verification of onsite ground disturbance against final project design. 	<ul style="list-style-type: none"> Quarterly during construction and operations. 	<ul style="list-style-type: none"> Annual environmental reporting. Review management actions (and revise if required). Reporting on the review and revision of management actions.
<ul style="list-style-type: none"> Mine pit ground disturbance will not exceed 68 ha. No loss of subterranean fauna habitat outside of the project development envelope. 	<ol style="list-style-type: none"> Pit shell extent monitoring and volume tracking during active mining. 	<ul style="list-style-type: none"> Monthly during operations. 	<ul style="list-style-type: none"> Annual environmental reporting. Review management actions (and revise if required). Reporting on the review and revision of management actions.
<ul style="list-style-type: none"> No significant decline in habitat condition outside of the project development envelope. No significant decline in vegetation condition outside of the project development envelope. 	<ol style="list-style-type: none"> Establish and monitor representative vegetation condition sites around the periphery of the mesa footslopes. 	<ul style="list-style-type: none"> Annually during operations 	<ul style="list-style-type: none"> Annual environmental reporting. Review management actions (and revise if required). Reporting on the review and revision of management actions.
<ul style="list-style-type: none"> No significant decline in subterranean fauna habitat condition outside of the mine pit. 	<ol style="list-style-type: none"> Monitor microclimate within the mesa edge buffer. 	<ul style="list-style-type: none"> Ongoing during operations. 	<ul style="list-style-type: none"> Annual environmental reporting. Review management actions (and revise if required). Reporting on the review and revision of management actions.
<ul style="list-style-type: none"> No introduction or spread of introduced fauna due to the project. 	<ol style="list-style-type: none"> Waste management procedure compliance records. Records of engaging appropriately licensed feral fauna control contractor and scope of activities. Monitor/inspect for the presence of feral fauna at higher risk areas. 	<ul style="list-style-type: none"> Quarterly during construction and operations. 	<ul style="list-style-type: none"> Annual environmental reporting. Review management actions (and revise if required). Reporting on the review and revision of management actions.

Environmental Outcomes	Monitoring	Timing/Frequency	Reporting
<ul style="list-style-type: none"> No introduction or spread of environmental weeds due to the project. 	<ol style="list-style-type: none"> Inspection and auditing of clean down point facilities and cleaned equipment. Targeted weed monitoring at higher risk locations and current earthworks areas. Targeted weed monitoring on completion of works. 	<ul style="list-style-type: none"> Quarterly review of clean down records. Quarterly weed monitoring during construction and annual weed monitoring during operation. 	<ul style="list-style-type: none"> Annual environmental reporting. Review management actions (and revise if required). Reporting on the review and revision of management actions.

6. Adaptive Management and Review

CZR recognises that incremental knowledge gain over time, and the evolving nature of project implementation, may lead to varying risk profiles for potential impacts over the duration of the project.

An adaptive management approach will therefore be adopted for the implementation of this EMP, involving:

- Developing and implementing additional mitigation actions (should these become necessary);
- Monitoring and evaluating data in comparison to management targets and environmental criteria, noting that these targets and criteria will be developed based on future monitoring data specific to the development envelope; and
- Systematically adapting, as necessary, management and mitigation actions and monitoring to meet the environmental objectives.

This will be supported by the implementation of an Environmental Management System (EMS) for the project and associated procedures, to ensure that management actions contained in this EMP are embedded in all work practices.

Revision of this EMP will be undertaken on an as-needs basis following annual review and reporting of relevant monitoring data and the adequacy with which existing management actions are achieving the intended environmental outcomes.

7. References

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- Biota (2023b). Robe Mesa Project Detailed Flora and Vegetation Survey. Unpublished report for CZR Resources, Biota Environmental Sciences, Western Australia.
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- CZR Resources (2023b). Robe Mesa Iron Ore Mine Closure Plan. Tenements - M08/519, M08/533, L08/281, L08/295, L08/296, L08/297, L08/298, L08/299, L08/302, L08/303, L08/304, L08/317, L08/318, L08/323, L08/324, L08/319, L08/320, L08/321, L08/322. April 2023.
- Department of Mines, Industry Regulation and Safety (2022). Annual Environmental Report Guideline. Perth Western Australia.
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