Application to Amend NVCP CPS 7647 Jimblebar Creek Access Track

Native Vegetation Clearing Permit Amendment Application Supporting Document

April 2026

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1 INTRODUCTION

BHP Iron Ore Pty Ltd (BHP) operates multiple iron ore mines and associated rail and port infrastructure within the Pilbara region of Western Australia (WA). Current mining operations include the:

- Newman Operations, comprising:
  - Mount Whaleback mine (including Orebodies 29, 30 and 35) located approximately two kilometres (km) west of Newman
  - Eastern Ridge mine (Consisting of Orebodies 23, 24, 25 25 West and 32) located approximately 5 km east of Newman
  - Western Ridge mine (consisting of Silver Knight, Mount Helen, Bill's Hill and Eastern Syncline) located approximately 2 km south-west of Newman
- Mining Area C / South Flank located approximately 90 km northwest of Newman
- Jimblebar Mine located approximately 35 km east of Newman
- Yandi Mine located approximately 100 km northwest of Newman

Ore from these operations is transported to Port Hedland via the BHP Newman to Port Hedland Mainline (and associated spur lines), and exported through BHP facilities at Nelson Point and Finucane Island.

BHP currently holds Native Vegetation Clearing Permit (NVCP) CPS 7647/1 for the construction and maintenance of an access track, hydrological investigations and associated infrastructure at Jimblebar Creek, approximately 4.5 km to the north of BHP's Jimblebar hub. Although the access track has been constructed, ongoing access is required for maintenance activities and hydrological investigations/monitoring and associated infrastructure. BHP is therefore seeking to amend the permit to:

- Extend the permit duration to 30 November 2036
- Extend the clearing period to 30 November 2031
- Extend the final reporting date to 30 November 2036
- Update the Permit Holder's name by removing the word "Billiton".

No other changes to the NVCP are required.

In accordance with Part V Division 2 of the *Environmental Protection Act 1986* (EP Act), BHP submits this application to amend NVCP CPS 7647/1 to the Department of Mines, Petroleum and Exploration (DMPE).

BHP considers that the proposed Amendment Application will not result in significant environmental or social impacts and that the activity continues to comply with the 'Ten Clearing Principles', as defined in Schedule 5 of the EP Act.

1.1 LOCATION

The Amendment Application Area is located in BHP's Jimblebar hub, 43 km east of Newman Pilbara region of Western Australia (Figure 1).

1.2 TENURE

The Amendment Application Area is located on Miscellaneous Licence 46/124.

1.3 LOCAL GOVERNMENT JURISDICTION

The Amendment Application Area is located within the Shire of East Pilbara.

1.4 PROPONENT

The Application Area is managed and operated by BHP on behalf of the owners Mount Newman Joint Venture.

The key contact for this proposal is:

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1.5 PROJECT DESCRIPTION

The proposed works will involve the construction and maintenance of the Jimblebar Creek Access Track, hydrological investigations/monitoring, and associated infrastructure.

1.6 PROJECT CHARACTERISTICS AND COMMITMENTS.

BHP commits to undertake the Project in accordance with the details set out in Table 1.

Table 1: Project Characteristics and Commitments

Permit Characteristics	
Authorising Agency	Department of Mines, Petroleum and Exploration (DMPE)
Permit Title	Jimblebar Creek Access Track NVCP
Area to be cleared	23 ha
Amendment Application Area	807.16 ha
Purpose of the permit	Clearing for the purposes of the construction and maintenance of an access track, hydrological investigations/monitoring and associated infrastructure.
Tenure	Miscellaneous Licence 46/124
Clearing Duration	Until 30 November 2031
Permit Duration	Until 30 November 2036
Proposed Annual Reporting Date	01 October for the previous Financial Year
Proposed Final Reporting Date	30 November 2036
Application boundary	Map Reference: • A954_NVCP7647_001_RevA • A954_NVCP7647_002_RevA • A954_NVCP7647_003_RevA

Application Commitments	**Section**
In the event that a record of Priority flora is identified it will be avoided using a 10 m buffer, where practicable.	3.4.2 6.1
Control of established weed populations will be carried out according to BHP's standard weed control and management practices	3.4.3 6.7.4
Where it is necessary for new crossings or access points to be installed clearing will be kept to a minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow.	3.6
BHP will undertake supporting flora and vertebrate fauna surveys within two years of the NVCP amendment taking effect.	3.4

1.7 MITIGATION HIERARCHY

1.7.1 Avoid

BHP will implement its internal land disturbance permitting process to avoid clearing outside of approved disturbance areas. This process ensures total clearing is minimised and clearing remains compliant with regulatory requirements and within approved boundaries.

1.7.2 Minimise

Where practicable, new ground disturbance for access track maintenance will be confined to previously disturbed areas to minimise additional clearing.

BHP will implement standard fire management practices whilst undertaking clearing activities associated with the Jimblebar Creek Access Track.

1.7.3 Mitigate

BHP will implement the BHP Environmental Weed Management in Western Australia Procedure for the duration of the activity.

BHP will implement standard BHP WAIO Dust Monitoring and Management practices during clearing activities associated with the Jimblebar Creek Access Track.

1.7.4 Offset

Based on the low level of potential environmental impacts associated with this Amendment Application, no offsets are proposed.

1.8 NVCP RECORDS

BHP reports on each NVCP in accordance with the specific reporting conditions of the permit. For most NVCPs, this reporting is incorporated into BHP Iron Ore's Annual Environmental Report (AER), which is submitted to government prior to 1 October each year and satisfies the annual reporting obligations for this NVCP.

Clearing under this NVCP commenced in 2017, with a total of 8.55 ha cleared as at the end of FY25 (BHP 2025). All areas cleared remain necessary to support ongoing access, monitoring and maintenance activities, consistent with the approved purpose of the permit.

Clearing has been minimised by restricting activities to the smallest area required for safety and equipment access. Where practicable, previously cleared areas have been utilised instead of disturbing new areas. No additional clearing beyond that required for operational access is proposed.

Significant environmental features have been avoided and BHP's internal land disturbance permitting process ensures that all ground-disturbing activities are appropriately assessed, comply with environmental and heritage requirements, and avoid sensitive areas wherever practicable.

These controls are underpinned by BHP's Environmental Management System, which supports continual improvement and ensures compliance with regulatory obligations.

No environmental offsets are required for this NVCP.

2 ASSOCIATED APPROVALS

If additional environmental approvals are required to support the Jimblebar Creek Access Track, they will be sought as required.

3 EXISTING ENVIRONMENT

3.1 CLIMATE

The Amendment Application Area is located approximately 43 km east of Newman in the Pilbara region of Western Australia. The area experiences a semi-arid climate characterised by two distinct seasons: a hot summer from October to April and a mild winter from May to September. Rainfall is low and highly variable, with most precipitation occurring between December and March, typically associated with tropical cyclones and intense summer storm events (Commonwealth of Australia 2009). Average annual evaporation is approximately 2,500 millimetres (mm), which exceeds average annual rainfall (Commonwealth of Australia 2009).

The Newman Aero meteorological site (Bureau of Meteorology (BoM) Station 007176) is the closest BoM station to the Amendment Application Area. The station records an average annual rainfall of 316.8 mm (BoM 2026a), predominantly derived from tropical storms and cyclones during summer. Mean monthly rainfall ranges from 5.4 mm in September to 70.2 mm in February, and daily rainfall is highly variable; ranging from 34.8 mm in October to 305.6 mm in February (BoM 2026a). Mean maximum temperatures vary from 35.3°C to 39.4°C during the summer months (October to April), and from 23.1°C to 32.1°C during winter (May to September) (BoM 2026a).

The Wittenoom meteorological station (005026), located approximately 120 km north-west of the Amendment Application Area, provides evaporation records for the region. Mean daily evaporation at Wittenoom is 8.6 mm/day, equating to 3.1 m per year (BoM 2026b), demonstrating that evaporation greatly exceeds rainfall in the region throughout the year at both annual and monthly timescales.

3.2 BIOREGION, LANDFORMS AND LAND SYSTEMS

The Amendment Application Area is located within the Fortescue subregion of the Pilbara bioregion, as defined in the Interim Biogeographic Regionalisation for Australia (IBRA).

The Fortescue (Pilbara) subregion (PIL2) is characterised by Alluvial plains and river frontage, with extensive salt marshes, mulga-bunch grass communities, and short grass vegetation across eastern alluvial plains. The western portion contains deeply incised gorge systems, and river gum woodlands fringe the major drainage lines. The subregion represents the northern limit of Mulga (*Acacia aneura*). A major calcrete aquifer associated with a palaeo-drainage valley supports numerous permanent springs in the central Fortescue, hosting large permanent wetlands dominated by river gum and Cadjeput Melaleuca woodlands.

The Amendment Application Area intersects the following land systems, as mapped by van Vreeswyk et al. (2004):

Boolgeeda	“Stony lower slopes, level stony plains and narrow sub-parallel drainage floors, relief up to 20 m. A common system in shallow valleys below hill systems such as Newman and Rocklea.”
Divide	“Level to gently undulating sandplains and occasional small dunes.”
Fortescue	“Flood plains, alluvial plains and river channels, non-saline clay and duplex soils.”
Newman	Rugged high mountains, ridges and plateaux with near vertical escarpments of jaspilite, chert and shale, the second largest system in the survey area and prominent in southern parts (e.g. Ophthalmia Range, Hamersley Range), relief of up to 450 m.”
River:	“Narrow floodplains and major channels.”

These Land Systems are well represented within their respective bioregions.

3.3 GEOLOGY AND SOILS

Soils of the Pilbara region have been defined and mapped at a scale of 1:2,000,000 by Bettenay *et al*. (1967). The following soil unit occurs within the Application Area, based on mapping by Bettenay *et al*. (1967):

MM16: Alluvial plains dominated by deep cracking clays (Ug5.38) along with some areas of (Uf6.71) soils, and minor areas of (Dr2.33) soils.

Mz25: Plains associated with the Fortescue valley; there is a surface cover of stony gravels close to the ranges and hills: chief soils are acid red earths (Gn2.11) with some neutral red earths (Gn2.12); red-brown hardpan is absent. Associated are areas of calcareous earths (Gc) and loams (Um1) on calcrete (kunkar) and some hard red (Dr) soils around creek lines.

3.4 FLORA, VEGETATION AND FAUNA

A total of six biodiversity surveys (flora, vegetation and/or fauna) have been completed which either encompass or intersect the Amendment Application Area, detailed in Table 2 below.

The primary biological surveys informing the Amendment Application are:

- Jimblebar Creek Riparian Flora and Vegetation Baseline *Survey* (Onshore Environmental 2015a) (Appendix 2)
- *OB31 Jimblebar Access Track VCP Level 1 Flora & Vegetation Survey and Vertebrate Fauna Assessment* (Onshore Environmental 2015b) (Appendix 3)

Additional biodiversity surveys to support this Amendment Application are planned and will be completed within 24 months of submission.

Table 2: Biodiversity surveys intersecting the Amendment Application Area

Title and Consultant	Survey type and dates	Survey summary and findings
North Jimblebar: Targeted Northern Quoll Assessment Biologic 2022 IBSA-2023-0565	Targeted Northern Quoll fauna survey 21 – 27 January 2022 9 – 13 June 2022 Intersects the southern-most 1 km of the Amendment Application Area and extends to the east, south and west	The field survey included 15 habitat assessments, 23 targeted searches at 15 sites, five camera trap transects for 104 - 110 nights. Northern Quoll was not recorded during the targeted searches or camera trapping, including no detections at the OB18 waste dump 2021 scat location. The previous scat recording was considered to be likely attributed to a transient or relocated individual. No Northern Quoll population was considered likely to occur nearby the survey area. **Species of significance**: no species of significance were recorded within the Amendment Application Area
BHP WAIO Jimblebar Eremophila Capricornica Targeted Flora Survey Biologic 2020 IBSA-2022-0317	Targeted flora survey 9 – 15 July 2020 Study area encompasses the Amendment Application Area and extends in all directions (species distribution modelling)	Targeted flora survey across suitable habitat within survey area. Field methods included GPS logging of individuals and populations, abundance estimates, collection of specimens (flowering and sterile) and field data recording (habitat, landform, soil type, vegetation condition, plant health and reproductive status). The targeted survey recorded 1,047 *E. capricornica* locations, recorded in five broad vegetation communities including *Acacia*/mulga shrubland and woodland, *Triodia* hummock grassland, *Eremophila* low shrublands, *Eucalyptus/Corymbia* low woodlands, and *Frankenia* low shrublands **Species of significance**: no species of significance were recorded within the Amendment Application Area
Jimblebar Creek to Jinerabar Pool Vegetation Survey and Monitoring Program Spectrum Ecology 2019	Level 2 Flora and Vegetation Survey 3 – 19 May 2019 Intersects the northern-most 2.3 km of the Amendment Application Area and extends to the north	Riparian flora and vegetation survey comprising 19 floristic quadrats and monitoring of eight riparian sites. The Level 2 survey recorded 137 vascular plant taxa, five introduced species and nine vegetation units across the survey area. no Threatened or Priority flora taxa and no Threatened or Priority Ecological Communities were recorded in the Amendment Application Area **Species of significance**: no species of significance were recorded within the Amendment Application Area
Jimblebar Creek Riparian Flora and Vegetation Baseline *Survey*	Level 2 Flora and Vegetation baseline survey	The field survey effort comprised 13 quadrats, 81 relevés (opportunistic), targeted searches and vegetation association mapping,

Title and Consultant	Survey type and dates	Survey summary and findings
Onshore Environmental 2015a	8 – 12 September 2014 Encompasses all of the Amendment Application Area with the exception of 1.7 km of the northern extent	and establishment of riparian tree monitoring sites. A total of 167 plant taxa were recorded including three introduced species. Nineteen vegetation associations were mapped. **Species of significance**: no species of significance were recorded within the Amendment Application Area
OB31 Jimblebar Access Track VCP Level 1 Flora & Vegetation Survey and Vertebrate Fauna Assessment Onshore Environmental 2015b	*Level 1 Flora & Vegetation Survey and Vertebrate Fauna Assessment* 15 – 16 July 2015 Encompasses the southern extent of the Amendment Application Area	The Level 1 field survey comprised 56 relevés along 6.5 km tracked corridor, targeted searches for Threatened and Priority flora, specimen collection and vegetation condition assessment. No Threatened or Priority flora taxa, and no Threatened or Priority Ecological Communities were recorded in the Amendment Application Area. Six vegetation associations were identified across four broad floristic formations. Sixteen fauna species were recorded during the field component of the assessment, including one species of significance. Two fauna habitat types were recorded: Sand Plain (49 ha) and Stony Plain (14 ha). **Species of significance**: • No fauna species of significance were recorded within the Amendment Application Area[1] • No Threatened or Priority flora taxa, and no Threatened or Priority Ecological Communities were recorded in the Amendment Application Area.
Consolidation of Regional Vegetation Mapping BHP Billiton Iron Ore Pilbara Tenure Onshore Environmental 2014 IBSA-2020-0309	Desktop assessment and consolidation January 2014 Encompasses the entirety of the Amendment Application Area with the exception of the northernmost 1.7 km, extends across BHP's Pilbara operations	Consolidation of BHP Pilbara-based biological surveys to produce a consolidated vegetation map. Desktop review of 162 baseline flora and vegetation surveys ranging in date from 2004 to 2013.

1. Rainbow Bee-eater (*Merops ornatus*) was recorded in the OB31 Jimblebar Access Track VCPO Level 1 Flora & Vegetation Survey and Vertebrate Fauna Assessment (Onshore 2015). Rainbow Bee-eater was classified as Migratory/Marine under the EPBC Act at the time of reporting and the submission of the original supporting document to CPS 7647/1, however has since been re-classified as Marine only. The species is therefore, no longer considered a species of significance within the context of this Amendment Application.

3.4.1 Vegetation Communities

The Amendment Application Area is located within the Fortescue subregion of the Interim Biogeographic Regionalisation for Australia (IBRA). According to the Government of Western Australia (2019), this bioregion remains more than 99.9% vegetated (Table 3). Within the Amendment Application Area, the following vegetation associations (Beard, 1975) occur:

- 82 - Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*
- 111 - Hummock grasslands, shrub steppe; *Eucalyptus gamophylla* over hard spinifex
- 166 - Low woodland; mulga & Acacia victoriae
- 216 - Low woodland; mulga (with spinifex) on rises.

More than 99% of the pre-European extent of these vegetation associations remain (Table 3). The Amendment Application Area is not considered part of any regionally significant remnant.

Table 3: Pre European extent of vegetation associations occurring within the Amendment Application Area (Government of Western Australia 2019)

Vegetation Association	Pre-European Extent (ha)	Current Extent (ha)	% Remaining	Pre-European % in IUCN Class I-IV Reserves
Pilbara IBRA Bioregion	17,808,657	17,731,765	99.57	6.36
Vegetation association 82 within Western Australia	2,565,901	2,553,206	99.51	10.25
Vegetation association 82 within the Pilbara Bioregion	2,563,583	2,550,888	99.50	10.26
Vegetation association 111 within Western Australia	762,964	762,326	99.92	5.46
Vegetation association 111 within the Pilbara IBRA	550,287	550,232	99.99	1.29
Vegetation association 166 within Western Australia	387,531	387,511	100.00	0.00
Vegetation association 166 within the Pilbara IBRA	25,542	25,542	99.99	0.00
Vegetation association 216 within Western Australia	280,760	279,237	99.46	0.00
Vegetation association 216 within the Pilbara IBRA	26,670	26,373	98.89	0.00

Previous surveys by Onshore Environmental (2014, 2015a and 2015b) identified eight broad floristic communities and 22 vegetation associations within the Application Area (Table 4; Figure 2). None of these vegetation associations represent, or are associated with a Threatened Ecological Community (TEC) listed under the EPBC Act or the BC Act, an Environmentally Sensitive Area (ESA) under the EP Act, or listed as a Priority Ecological Community (PEC) by the Department of Biodiversity, Conservation and Attractions (DBCA).

Vegetation condition within the Amendment Application Area ranges from Excellent to Degraded with the majority assessed as being in Very Good to Excellent condition.

Table 4: Vegetation associations of the Amendment Application Area (Onshore 2015)

Broad Floristic Formation	Vegetation Association Description	
**Cenchrus* Tussock Grassland	MA CcTtEua ChCa AbAtpAss	Tussock Grassland of **Cenchrus ciliaris*, *Themeda triandra* and *Eulalia aurea* with Low Open Woodland of *Corymbia hamersleyana* and *Corymbia aspera* over High Open Shrubland of *Acacia bivenosa*, *Acacia tumida* var. *pilbarensis* and *Acacia sclerosperma* subsp. *sclerosperma* on brown loamy sand on levee banks of major drainage lines.

Broad Floristic Formation	Vegetation Association Description	
	MA CcCs EvAciAthe	Tussock Grassland **Cenchrus ciliaris* and **Cenchrus setiger* with Low Woodland of *Eucalyptus victrix*, *Acacia citrinoviridis* and *Atalaya hemiglauca* on brown sandy loam on major drainage lines and adjacent flood plains.
Acacia High Open Shrubland	FP ApaAa Efr TsTp	High Open Shrubland of *Acacia paranerua* and *Acacia aptaneura* over Open Shrubland of *Eremophila fraseri* over Very Open Hummock Grassland of *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) and *Triodia pungens* on red clay loam on floodplains and stony plains.
Acacia Low Open Forest	2b	Low Open Forest of *Acacia aptaneura* and *Acacia paraneura* over Open Shrubland of *Acacia wanyu*, *Eremophila fraseri* and *Senna glutinosa* subsp. *luerssenii* over Very Open Hummock Grassland of *Triodia pungens* and *Triodia* sp. Shovelanna Hill (S. Van Leeuwen 3835) on floodplains.
Acacia Low Open Woodland	ME EvAci AmApyp	Low Open Woodland of *Eucalyptus victrix* and *Acacia citrinoviridis* over High Open Shubland of *Acacia monticola* and *Acacia pyrifolia* var. *pyrifolia* on brown loamy sand on medium drainage lines.
	1	Low Open Woodland of *Acacia pruinocarpa*, *Acacia paraneura* and *Acacia macraneura* over High Open Shrubland of *Acacia sclerosperma*, *Acacia subcontorta* and *Acacia wanyu* over Open Shrubland of *Eremophila fraseri* on raised stony plains.
	3a	Low Open Woodland of *Acacia aptaneura*, *Acacia pruinocarpa* and *Acacia paraneura* over Open Shrubland of *Eremophila fraseri*, *Acacia tetragonophylla* and *Acacia wanyu* over Low Open Shrubland of *Ptilotus obovatus* and *Solanum lasiophyllum* on raised stony plains.
Acacia Open Scrub	2	Open Scrub of *Acacia ancistrocarpa*, *Acacia adsurgens* and *Acacia wanyu* over Hummock Grassland of *Trioida basedowii* and Very Open Tussock Grassland of *Cymbopogon obtectus* and *Chrysopogon fallax* on minor drainage lines through stony plains.
Eucalyptus Woodland	MA EvAciEcr TercCocrA pyp CcEuaTt	Woodland of *Eucalyptus victrix*, *Acacia citrinoviridis* and *Eucalyptus camaldulensis* subsp. *refulgens* over Low Open Shrubland of *Tephrosia rosea* var. *clementii*, *Corchorus crozophorifolius* and *Acacia pyrifolia* var. *pyrifolia* over Very Open Tussock Grassland.
	MA EcrEv AciApypMg CcEuaTt	Woodland of *Eucalyptus camaldulensis* subsp. *refulgens* and *Eucalyptus victrix* over High Open Shrubland of *Acacia citrinoviridis*, *Acacia pyrifolia* var. *pyrifolia* and *Melaleuca glomerata* over Tussock Grassland of **Cenchrus ciliaris*, *Eulalia aurea* and *Themeda triandra* on brown clay loam on banks of major drainage lines.
Triodia Hummock Grassland	SP TbTp HlAancAi Ch	Hummock Grassland of *Triodia basedowii* and *Triodia pungens* with High Open Shrubland of *Hakea lorea* subsp. *lorea*, *Acacia ancistrocarpa* and *Acacia inaequilatera* and Scattered Low Trees of *Corymbia hamersleyana* on red brown loamy sand on stony plains.
	SP Tb AaApr AwAancAi	Hummock Grassland of *Triodia basedowii* with Low Open Woodland of *Acacia aptaneura* and *Acacia pruinocarpa* over Open Shrubland of *Acacia wanyu*, *Acacia ancistrocarpa* and *Acacia inaequilatera* on red brown silty loam on stony plains.
	ME TpTlo ExAciCh PlApypGor o	Hummock Grassland of *Triodia pungens* and *Triodia longiceps* with Low Woodland of *Eucalyptus xerothermica*, *Acacia citrinoviridis* and *Corymbia hamerselyana* over High Shrubland of *Petalostylis labicheoides*, *Acacia pyrifolia* var. *pyrifolia* and *Gossypium robin*.
	FP Tp EtEg AbAancPl	Hummock Grassland of *Triodia pungens* with Very Open Mallee of *Eucalyptus trivalva* and *Eucalyptus gamophylla* over Shrubland of *Acacia bivenosa*, *Acacia ancistrocarpa* and *Petalostylis labicheoides* on red brown loam on uninsised drainage tracts on floodplain.
	FP Tp ChApr GrwhApyp Ab	Hummock Grassland of *Triodia pungens* with Scattered Low Trees of *Corymbia hamersleyana* and *Acacia pruinocarpa* over Open Shrubland of *Grevillea wickhamii* subsp. *hispidula*, *Acacia pyrifolia* var. *pyrifolia* and *Acacia bivenosa* on brown loamy sand on floodplains.
	5f	Hummock Grassland of *Triodia basedowii* with High Shrubland of *Acacia ancistrocarpa*, *Acacia wanyu* and *Acacia kempeana* and Scattered Low Trees of *Corymbia hamersleyana*.

Broad Floristic Formation	Vegetation Association Description	
	3b	Hummock Grassland of *Triodia basedowii* with High Open Shrubland of *Acacia pachyacra* and *Acacia ancistrocarpa* and Scattered Low Trees of *Corymbia hamersleyana* and *Hakea lorea* subsp. *lorea* on stony sandplains.
	3c	Hummock Grassland of *Triodia basedowii* with High Shrubland of *Acacia ancistrocarpa*, *Acacia wanyu* and *Acacia kempeana* and Scattered Low Trees of *Corymbia hamersleyana* on sandplains.
Triodia Open Hummock Grassland	HS TpTb EllAaAcao SesSeglErcu	Open Hummock Grassland of *Triodia pungens* and *Triodia basedowii* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia*, *Acacia aptaneura* and *Acacia catenulata* subsp. occidentalis over Open Shrubland of *Senna stricta*, *Senna glutinosa* subsp. x *luerssenii* and *Eremophila cuneifolia* on orange sandy loam on hill slopes.
	SP TbTs AaAprCh ErplAwAsy	Open Hummock Grassland of *Triodia basedowii* and *Triodia* sp. Shovelanna Hill (S. van Leeuwen 3835) with Low Open Woodland of *Acacia aptaneura*, *Acacia pruinocarpa* and *Corymbia hamersleyana* and High Open Shrubland of *Eremophila platycalyx*, *Acacia wanyu*.
	SP Tl AancApa ApAprCh	Open Hummock Grassland of *Triodia lanigera* with Open Shrubland of *Acacia ancistrocarpa* and *Acacia pachyacra* and Scattered Low Trees of *Acacia paraneura*, *Acacia pruinocapra* and *Corymbia hamerselyana* on red sandy loam on stony plains.
	4	Open Hummock Grassland of *Triodia basedowii*, *Trioida pungens* and *Trioida* sp. Shovelanna Hill with Low Open Woodland of *Acacia macraneura* and *Acacia pruinocarpa* and High Open Shrubland of *Acacia wanyu* and *Acacia* 'kempeana' on eroded plains and slopes.

3.4.2 Significant Flora

No flora species listed under the EPBC Act or gazetted as Threatened Flora species under the BC Act or listed as Priority flora by DBCA have been recorded within the Amendment Application Area.

3.4.3 Weeds

Two introduced flora species (weeds) have been recorded within the Amendment Application Area (Table 5). Management of established weed populations will be undertaken in accordance with BHP's Environmental Weed Management in Western Australia Procedure, which aim to prevent the spread of weeds and minimise potential environmental impacts.

Table 5: Introduced Flora of the Amendment Application Area

Species	Common Name	DPAW Rating (DPAW 2016)	Declared Pest[1]
**Bidens bipinnata*	Bipinnate Beggartick	Unknown and Rapid	No
**Cenchrus ciliaris*	Buffel Grass	High and Rapid	No

3.4.4 Fauna Habitats

Seven fauna habitats occur within the Amendment Application Area (Figure 3):

1. **Drainage Area/Floodplain:** Characterised by *Eucalyptus xerothermica* and *Corymbia hamersleyana* woodland over broad-leafed *Acacia* shrubland on sandy loam soils, sometimes with exposed rocky areas. These habitats often exhibit high vegetation density, structural complexity and diversity due to their position on accretional or depositional surfaces with deeper, nutrient-richer soils. Groundcover is typically dominated by tussock grasses rather than spinifex, with *Cenchrus ciliaris* (Buffel Grass) sometimes present.

   Approximately 26.8 ha of Flood Plain habitat occurs in the southern portion of the Amendment Application Area.
2. **Hillcrest/Hillslope:** Open and structurally simple habitats associated with recent depositional surfaces. They feature rocky substrates with exposed bedrock and skeletal red soils.

[1] *Biosecurity and Agriculture Management Act*, 2007 (BAM Act) s22

Vegetation typically comprises *Eucalyptus* woodland, *Acacia* and *Grevillea* scrublands, and *Triodia* spp. low hummock grassland.

Approximately 12.7 ha of Hill Slope / Crest habitat occurs within the southernmost extent of the Amendment Application Area.

3. **Major Drainage Line:** Comprised of mature River Red Gums, Coolibahs and Silver Cadjeput along river pools. These areas feature open sandy or gravelly riverbeds. Vegetation adjacent to the main channels is often denser, taller, and more diverse than surrounding terrain, and may include reedbeds around pools.

   Approximately 437.6 ha of Major Drainage Line habitat occurs along the riparian corridor within the Amendment Application Area.

4. **Medium Drainage Line:** Low-lying, linear, gently sloping areas that support less dense eucalypt vegetation compared to Major Drainage Lines. These habitats are generally not associated with ridgelines or hills.

   Approximately 91.9 ha of Medium Drainage Line habitat occurs within the Amendment Application Area, interspersed with Major Drainage Line habitat.

5. **Mulga Woodland**: Woodlands and shrublands dominated by mulga (*Acacia aptaneura*) as the principal *Acacia* species or in combination with related taxa. This habitat typically consists of disintegrating groves on stony soils with spinifex groundcover.

   Approximately 22.2 ha of Mulga Woodland habitat occurs in the northernmost extent of the Amendment Application Area.

6. **Sand Plain:** Characterised by deep sandy soils supporting dense spinifex grasslands and sparse shrubs, with transitions to mulga patches in some areas. These habitats commonly occur as terraces along Major Drainage Lines.

   Approximately 190.9 ha of Sand Plain habitat occurs adjacent to Major Drainage Line habitat along the full length of the Amendment Application Area.

7. **Stony Plain:** Erosional surfaces consisting of gently undulating plains, ridges, and associated footslopes. These habitats predominantly support hard spinifex (and occasionally soft spinifex) growing over a mantle of gravel and pebbles.

   Approximately 22.5 ha of Stony Plain habitat occurs in the south-western portion of the Amendment Application Area.

3.4.5 Significant fauna species

No fauna species of significance have been recorded within the Amendment Application Area. Although the Rainbow Bee-eater (*Merops ornatus*) was previously identified as a species of significance (Migratory) in the original NVCP Application submitted for CPS 7647/1, it has since been reclassified as Marine only under both the *EPBC Act* and the *BC Act*. As a result, the species is not considered relevant to this Amendment Application given the absence of marine habitat within the Amendment Application Area.

A Protected Matters Search Tool (PMST) assessment undertaken on 5 February 2026 identified species known or with potential to occur within the Amendment Application Area or a 2 km buffer. These results were cross-referenced with BHP's survey and monitoring data and identified 13 species of significance considered 'likely' or 'possible' to occur within the Amendment Application Area:

- Brush-tailed Mulgara (*Dasycercus blythi*) (DBCA Priority 4)
- Gane's Blind Snake (*Anelios ganei*) (DBCA Priority 1)
- Ghost Bat (*Macroderma gigas*) (EPBC Act Vulnerable and BC Act Vulnerable)
- Greater Bilby (*Macrotis lagotis*) (EPBC Act Vulnerable and BC Act Vulnerable)
- Fork-tailed Swift (*Apus pacificus*) (EPBC Act Migratory and BC Act Migratory)
- Grey Falcon (*Falco hypoleucos)* (EPBC Act Vulnerable and BC Act Vulnerable)
- Northern Quoll (*Dasyurus hallucatus*) (EPBC Act and BC Act Endangered)
- Peregrine Falcon (*Falco peregrinus*) (BC Act Other Specially Protected Species)
- Pilbara Leaf-nosed Bat (*Rhinonicteris aurantia*) (EPBC Act and BC Act Vulnerable)
- Pilbara Olive Python (*Liasis olivaceus supsp. Barroni*) (EPBC Act and BC Act Vulnerable)

- Southern Whiteface (*Aphelocephala leucopsis*) (EPBC Act Vulnerable)
- Spotted Ctenotus (*Ctenotus uber supsp. Johnstonei*) (DBCA Priority 2)
- Western Pebble-mound Mouse (*Pseudomys chapmani*) (DBCA Priority 4)

An assessment of the potential impact of the proposed clearing on the species of significant fauna that 'likely' or 'possible' to occur in the Application Amendment Area is provided in Table 6.

Table 6: Significant Fauna Potentially Occurring within the Amendment Application Area

Significant Species	Conservation Status	Distribution and Ecology	Habitat Relevance	Likelihood	Potential Impact on Species
Mammals					
Brush-tailed Mulgara *(Dascycercus blythi)*	Priority 4 DBCA	Brush-tailed Mulgara occur in a range of vegetation types; however, prefer spinifex Triodia spp. grasslands on sand plains and the swales between low dunes (Pavey *et al*. 2012; Woolley 2006). Mature spinifex hummocks appear to be important for protection from introduced predators (Kortner *et al* 2007). Important habitats for the species include Sand Plain, Drainage Area/Floodplain, and Stony Plain.	The Brush-tailed Mulgara may use the Sand Plain, Stony Plain and Drainage Area/Floodplain habitats within the Amendment Application Area. Brush-tailed Mulgara have been recorded 2.3 km to the east of the Amendment Application Area in Sand Plain habitat. Due to the abundance of the species preferred habitat outside of the Amendment Application Area, it is unlikely that Sand Plain habitat within the Amendment Application Area supports a population, however transient or dispersing individual/s may utilise the area for foraging and/or dispersal (Onshore 2015b).	Possible	**Low** The proposed activities are unlikely to have an impact on Brush-tailed Mulgara given the species high mobility, and the large areas of Brush-tailed Mulgara preferred habitat available in the surrounding region of the Amendment Application Area. The proposed clearing is unlikely to impact on this species as: • The species is unlikely to be reliant upon the small area of suitable habitats (Sand Plain, Stony Plain and Drainage Area/Floodplain) within the access track extent • The habitats within the Amendment Application Area are contiguous with habitats in the local and regional area • There are large areas of suitable habitat for this species adjacent to the Amendment Application Area • No Brush-tailed Mulgara have been recorded in the Application Area. • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Brush-tailed Mulgara
Ghost Bat *(Macroderma gigas)*	Vulnerable EPBC Act Vulnerable BC Act	The Ghost Bat is the largest microbat in Australia, and is known to occur in all four sub-regions of the Pilbara (McKenzie and Bullen 2009). The Pilbara Ghost Bat population was estimated to be approximately 1,850 in 2021 (350 across the Hammersley Range and 1,500 across the eastern Pilbara) (Bat Call WA 2021). In the Pilbara region, the species roost in deep, complex caves beneath bluffs and low rounded hills, often composed of Marra Mamba iron formation or banded iron formation, granite rock piles and abandoned mines (Armstrong and Anstee 2000). Ghost Bat tracking studies show that males and females of the species forage over large areas over 12 km from their diurnal roost (Augusteyn *et al* 2018, and Bullen 2021)	Within the Amendment Application Area there are no occurrences of Gorge/Gully or Breakaway/Cliff habitats, which are critical habitat to Ghost Bat. Foraging and dispersal habitats for Ghost Bat occur within the Amendment Application Area, comprising: Drainage Area/Floodplain (26.8 ha), Hillcrest/Hillslope (12.7 ha), Major Drainage Line (41.3 ha), Sand Plain (190.9 ha) and Stony Plain (22.5 ha). The nearest Category 2 Ghost Bat roost (CNIN-03) is located 15 km to the south-west of the Activity Area (Biologic 2023).	Possible	**Low** There is a low potential risk of impact to Ghost Bat from the proposed Amendment Application, given: • No critical habitat or caves are located within the Amendment Application Area • New clearing will be limited, with the majority of clearing already completed within the Amendment Application Area • No nightworks are proposed, therefore potential impacts from light spill and vehicles are negligible • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Ghost Bat suitable habitat will remain undisturbed • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Ghost Bat
Greater Bilby (*Macrotis lagotis*)	Vulnerable EPBC Act Vulnerable BC Act	Three major vegetation types associated with the Greater Bilby are listed by Southgate (1990) comprising: open tussock grassland on uplands and hills, Mulga Woodlands/shrublands on ridges and rises, and hummock grassland in plains and alluvial areas. Other habitats used by the species include stony downs, cracking clays, desert sandplains and dune fields, spinifex grassland and *Acacia* species shrublands on red earths (Johnson 2008).	Habitat which may support the Greater Bilby occurs within the Amendment Application Area, comprising Mulga Woodland, Sand Plain and Stony Plain. These habitat types are contiguous outside of the Amendment Application Area and are common in the surrounding area and the broader region. The nearest recorded evidence of Greater Bilby is a potential burrow located in Sand Plain habitat more than 17 km to the south-east of the Activity Area attributed to a transient/dispersing individual/s (Astron 2024).	Possible	**Low** There is a low potential risk of impact to Greater Bilby from the proposed Amendment Application, given: • The Sand Plain, Stony Plain and Mulga Woodland habitats within the Amendment Application Area are widespread in the area and in the broader Pilbara region • The nearest records of Greater Bilby are located more than 17 km to the south-east and are attributed to transient or dispersing individual/s • A relatively small portion of habitat suitable to the species has been/will be cleared, with large areas of Sand Plain, Stony Plain and Mulga Woodland remaining undisturbed • No nightworks are proposed, therefore potential impacts from light spill and vehicles are negligible • No known Greater Bilby populations occur within the Amendment Application Area • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to

Significant Species	Conservation Status	Distribution and Ecology	Habitat Relevance	Likelihood	Potential Impact on Species
					Greater Bilby
Northern Quoll (*Dasyurus hallucatus*)	Endangered EPBC Act Endangered BC Act	Northern Quoll distribution within the Pilbara Bioregion is most prevalent within complex rocky areas in the north, west and central Pilbara (Cramer *et al* 2016b; Shaw *et al.* 2023 in Northover *et al* 2023). Northern Quoll prefers rocky habitats which offer protection from predators and are generally more productive in terms of availability of resources (Braithwaite & Griffiths 1994, Oakwood 2000). Other microhabitat features important to the species include rock cover, proximity to permanent water and time since last fire (Woinarski *et al* 2008).	The Amendment Application Area is located in the south-east of the Pilbara Bioregion, which has limited records of Northern Quoll. The nearest located evidence of Northern Quoll is a scat on a rehabilitated waste dump (DBCA, date unknown) approximately 13.3 km to the west of the Amendment Application Area. Within the Amendment Application area there is no occurrence of Northern Quoll critical denning habitat, however dispersal/ foraging habitat Major Drainage Line occurs along the length of the Amendment Application Area. When Major Drainage Line habitat occurs within the home range of Northern Quoll, it is considered to be critical habitat, however the Amendment Application Area is not known to intersect the home range of Northern Quoll individual/s or population. Supporting foraging habitats Hillcrest/Hillslope, Sand Plain and Stony Plain occur throughout the Amendment Application Area.	Possible	**Low** There is a low potential risk of impact to Northern Quoll from the proposed Amendment Application, given: • The nearest Northern Quoll record is located greater than 13 km to the west, and the nearest Northern Quoll population is located approximately 97 km to the north-west of the Amendment Application Area • The Amendment Application clearing and purpose are small in scope • There are large areas of undisturbed suitable habitat for the species within and outside of the Amendment Application Area • No changes to groundwater or surface water are proposed to support the Amendment Application, therefore no impacts are expected from habitat degradation associated with groundwater or surface water changes • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Major Drainage Line, Hillcrest/Hillslope, Sand Plain and Stony Plain will remain undisturbed • No nightworks are proposed to support the Amendment Application, therefore potential impacts from light spill and vehicles are negligible • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for hydrological monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Northern Quoll
Pilbara Leaf-nosed Bat (*Rhinonicteris aurantia*)	Vulnerable EPBC Act Vulnerable BC Act	The Pilbara Leaf-nosed Bat occurs over an approximate area of 120 million hectares and is restricted to the Pilbara bioregion of Western Australia (DCCEEW 2024). Pilbara Leaf-nosed Bat roosts within caves and abandoned mines with a stable microclimate of high humidity (95%) and temperature (32°C) (Armstrong 2001). The species forage in caves and along waterbodies with fringing vegetation (TSSC 2016).	Within the Amendment Application Area supporting foraging habitat for Pilbara Leaf-nosed Bat occurs, comprising Drainage Area/Floodplain Hillcrest/Hillslope, Major Drainage Line, and Sand Plain. The nearest evidence of Pilbara Leaf-nosed Bat was a vocalisation in Drainage Area/Floodplain habitat, recorded 9 km to the north-west of the Amendment Application Area (Biota 2022). The nearest located Category 2 Pilbara Leaf-nosed Bat roost (permanent/semi-permanent possible breeding roosts that are used during some part of the breeding cycle) is CNIN-12, located 20.9 km to the west of the Amendment Application Area. The nearest located Category 3 Pilbara Leaf-nosed Bat roost (transitory diurnal roosts, occupied part of the year only, outside the breeding season that facilitate long distance dispersal) is CCAT-13, located approximately 42 km to the west of the Amendment Application Area. Due to the distance from the Amendment Application Area to the nearest significant cave is greater than 10 km, no critical foraging habitat for Pilbara Leaf-nosed Bat occurs within the Amendment Application Area.	Possible	**Low** The Major Drainage Line, Drainage Area/Floodplain, Hillcrest/Hillslope, and Sand Plain habitats within the Amendment Application Area may be used by Pilbara Leaf-nosed bat, however the proposed clearing is unlikely to impact the species, as: • The habitat within the Amendment Application Area is likely to only be used occasionally due to the distance to the nearest known high value cave (Category 1 to 3), located greater than 20 km to the west (CNIN-12 - Category 2). • The Amendment Application clearing and purpose are small in scope • There are large areas of undisturbed suitable habitat for the species within and outside of the Amendment Application Area • No changes to groundwater or surface water are proposed to support the Amendment Application, therefore no impacts are expected from habitat degradation associated with groundwater or surface water changes • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Major Drainage Line, Drainage Area/Floodplain, Sand Plain, and Hillcrest/Hillslope will remain undisturbed • No nightworks are proposed to support the Amendment Application, therefore potential impacts from light spill and vehicles are negligible • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Pilbara Leaf-nosed Bat
Western Pebble-mound Mouse	Priority 4 DBCA	The Western Pebble-mound Mouse is restricted to the Pilbara, where it is recognised as an endemic species. The construction of extensive pebble mounds, built from small stones, which typically cover areas from 0.5-9.0 square metres, is characteristic of this species. Mounds	Preferred habitat for this species includes the Hillcrest/ Hillslope and Stony Plain habitats of the Application Area. While the Western Pebble-mound Mouse has not been recorded within the Amendment Application Area it has been recorded in the broader region.	Possible	**Low** While the Hillcrest/Hillslope and Stony Plain habitats of the Application Area may be utilised by the Western Pebble-mound Mouse, the proposed clearing is unlikely to impact on this species as:

Significant Species	Conservation Status	Distribution and Ecology	Habitat Relevance	Likelihood	Potential Impact on Species
(*Pseudomys chapmani*)		are restricted to suitable class stones, and are usually found on gentle slopes and spurs (van Dyck and Strahan, 2008).	The nearest located records of the Western pebble-mound Mouse are located 1 km to the south-west of the Amendment Application Area on Hillcrest/Hillslope habitat.		• The Stony Plain and Hillcrest/ Hillslope habitats are widespread in the local area, occurring contiguous to the Amendment Application Area and are common in the broader regional area • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Hillcrest/Hillslope and Stony Plain habitats will remain undisturbed • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Western Pebble-mound Mouse
Birds					
Fork-tailed Swift (*Apus pacificus*)	Migratory (EPBC Act) Migratory (BC Act)	The Fork-tailed Swift breeds in north-east and east Asia, wintering in Australia and southern New Guinea (Johnstone and Storr 1998). Fork-tailed Swifts are entirely aerial within the Pilbara and may forage sporadically over the Amendment Application Area in the summer months, associated with thunderstorms and cyclonic systems (Johnstone and Storr 1998). The species inhabits dry/open habitats, inclusive of riparian woodlands and tea-tree swamps, low scrub, heathland or saltmarsh, as well as treeless grassland and sandplains covered with spinifex, open farmland and inland and coastal sand-dunes	The Fork-tailed Swift is largely an aerial species and has a broad distribution across much of Western Australia. It is viewed as a nomadic species and may fly over the Amendment Application Area. The nearest record of Fork-tailed Swift was located outside of the Amendment Application Area, 3.7 km to the west in Sand Plain habitat (Biota 2022)	Possible	**Negligible** As this species is entirely aerial and not reliant on terrestrial habitats, the potential risk of impact from the Amendment Application to this species is considered to be negligible.
Grey Falcon (*Falco hypoleucos)*	Vulnerable EPBC Act Vulnerable BC Act	The Grey Falcon occurs at low densities in arid and semi-arid regions of Australia, including Murray-Darling Basin, Eyre Basin, central Australia and Western Australia (Marchant and Higgins 1993, as cited in TSSC 2020). The species frequents timbered lowland plains, particularly Acacia shrublands that are crossed by tree-lined watercourses (Garnett et al 2011; Watson 2011. Schoenjahn 2018, as cited in TSSC 2020). Favoured nesting trees are River Red Gum (*Eucalyptus camaldulensis*) and Coolibah (*E. Coolibah*), as well as telecommunications towers or similar artificial structures (Marchant and Higgins 1993; Schoenjahn 2013; Schoenjahn 2018; Falkenberg 2011, as cited in TSSC 2020).	Suitable habitat for Grey Falcon occurs within the Amendment Application Area, comprising critical habitat Major Drainage Line, and supporting habitats Drainage Area/ Floodplain, Sand Plain and Stony Plain. The nearest Grey Falcon record occurs 10.7 km to the west of the Amendment Application Area, in Sand Plain habitat adjacent the Fortescue River (Biota 2022).	Possible	**Low** There is a low potential risk of impact to Grey Falcon from the proposed Amendment Application, given: • The Sand Plain, Stony Plain, Drainage Area/Floodplain and Major Drainage Line habitats within the Amendment Application Area are widespread in the area and in the broader Pilbara region • The nearest records of Grey Falcon are located more than 10 km to the west • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Sand Plain, Stony Plain, Drainage Area/Floodplain, and Major Drainage Line will remain undisturbed • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Grey Falcon
Peregrine Falcon (*Falco peregrinus*)	Other Specially Protected Species (BC Act)	Peregrine Falcon prefers arid areas and is most often encountered along cliffs above rivers, ranges and wooded watercourses where it hunts birds (Johnstone & Storr 1988). It typically nests on tall, vertical cliff faces between 25 m and 50 m high (Olsen et al 2004; Olsen & Olsen 1989). In general, it nests on cliffs, granite outcrops and quarries (Johnstone & Storr 1998) associated with Gorge/Gully and Breakaway/Cliff habitats.	Within the Amendment Application Area habitat suitable for Peregrine Falcon foraging comprises Hillcrest/Hillslope and Major Drainage Line habitats. There is no suitable nesting habitat for Peregrine Falcon within the Amendment Application Area. The nearest record of Peregrine Falcon is located 9.9 km to the south of the Amendment Application Area in Mulga Woodland habitat (GHD 2019)	Possible	**Low** There is a low potential risk of impact to Peregrine Falcon from the proposed Amendment Application, given: • The Hillcrest/Hillslope and Major Drainage Line habitats within the Amendment Application Area are widespread in the area and in the broader Pilbara region • The nearest record of Peregrine Falcon is located 9.9 km to the south • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Hillcrest/Hillslope and Major Drainage Line will remain undisturbed • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Peregrine Falcon
Southern Whiteface (*Aphelocephala leucopsis*)	Vulnerable (EPBC Act)	The Southern Whiteface is distributed across the mainland of Australia, and occupies a wide range of open woodlands and shrublands with grass and/or shrub dominated understory (DCCEEW 2023). Vegetation is often dominated by Acacia or *Eucalyptus/Corymbia* species on ranges, foothills and plains	Suitable foraging habitat for the Southern Whiteface occurs within the Amendment Application Area, comprising Major Drainage Line, Sand Plain, Mulga Woodland, Stony Plain and Drainage Area/Floodplain. The nearest located record of Southern Whiteface occurs 20 km to the south-east of the Amendment Application Area in Mulga	Possible	**Low** There is a low potential risk of impact to Southern Whiteface from the proposed Amendment Application, given: • The Drainage Area/Floodplain, Sand Plain, Stony Plain and Major Drainage Line habitats within the Amendment Application Area

Significant Species	Conservation Status	Distribution and Ecology	Habitat Relevance	Likelihood	Potential Impact on Species
		(DCCEEW 2023). The species forages almost exclusively on the ground, favouring areas with low tree density and herbaceous understory litter cover (DCCEEW 2023). Breeding takes place between July to October with nesting often occurring in a hollow or crevice and less frequently in low bushes (Higgins and Peter 2002).	Woodland habitat (Astron 2024).		are widespread in the area and in the broader Pilbara region, and occur contiguous to the Amendment Application Area • The nearest records of Southern Whiteface are located more than 20 km to the south-east • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Drainage Area/Floodplain, Sand Plain, Stony Plain and Major Drainage Line will remain undisturbed • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Southern Whiteface
Reptiles					
Ganes Blind Snake (*Anilios ganei*)	Priority 1 DBCA	The Pilbara Flat-Headed Blind Snake is endemic to the Pilbara. This insectivorous species feeds on termites and their eggs, and larvae and pupae of ants (Wilson and Swan 2008). This species is fossorial and is rarely encountered. There are few records of the species in the Pilbara, however, given the species preference for rocky stony soils, it could occur broadly across the region.	Little is known about this species habitat preferences and it may occur within habitats of the Application Area. This species may occur in the Hillcrest / Hillslope, Stony Plain and Sand Plain habitats of the Amendment Application Area. The nearest located occurrence of the species was recorded 14 km to the west of the Amendment Application Area in Hillcrest / Hillslope habitat (ENV 2007)	Possible	**Low** There is a low potential risk of impact to Ganes Blind Snake from the proposed Amendment Application, given: • The Hillcrest/Hillslope, Stony Plain and Sand Plain habitats within the Amendment Application Area are widespread in the area and in the broader Pilbara region, and occur contiguous to the Amendment Application Area • The nearest records of Pilbara Olive Python are located more than 14 km to the west • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Hillcrest/Hillslope, Stony Plain and Sand Plain habitats will remain undisturbed • This species may utilise the habitat types within the Amendment Application Area however is unlikely to be reliant on the areas within the Amendment Application Area, particularly as its preferred habitat (believed to be Gorge/Gully) is absent from the Amendment Application Area. • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Ganes Blind Snake
Pilbara Olive Python (*Liasis olivaceus subsp. barroni)*	EPBC Act Vulnerable BC Act Vulnerable	Pilbara Olive Python is endemic to the Pilbara and northern parts of the Gascoyne bioregions. The species is primarily nocturnal and tends to shelter amongst rocky habitats, in small caves or under vegetation during the day. The species commonly inhabits areas such as gorges, rivers, pools and surrounding hills, but can be found in a range of habitats (Burbidge 2004, DSEWPaC 2011). associated with drainage systems, including areas with localised drainage and watercourses (Pearson 1993). In the inland Pilbara, the species is most often encountered near permanent waterholes in rocky ranges or among riverine vegetation, drainage systems and watercourses (Pearson 1993).	Pilbara Olive Python supporting foraging habitat Major Drainage Line occurs within the Amendment Application Area. Major Drainage line occurs along the entire corridor of the Amendment Application Area, and whilst the habitat is suitable for foraging, there is limited connectivity to Pilbara Olive Python critical habitats Gorge/Gully, Breakaway/Cliff and Water Holes. The nearest located record of Pilbara Olive Python was recorded 15.6 km to the west of the Amendment Application Area in Gorge/Gully habitat (Biologic 2014).	Possible	**Low** There is a low potential risk of impact to Pilbara Olive Python from the proposed Amendment Application, given: • The Major Drainage Line habitat within the Amendment Application Area is widespread in the area and in the broader Pilbara region, and occur contiguous to the Amendment Application Area • The Amendment Application Area does not have any connectivity to critical habitat for Pilbara Olive Python • The nearest records of Pilbara Olive Python are located more than 15.6 km to the west • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Major Drainage Line will remain undisturbed • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Pilbara Olive Python
Spotted Ctenotus (*Ctenotus uber subsp. johnstonei*)	DBCA Priority 2	Within the Pilbara, the Spotted Ctenotus is known to prefer *Triodia* on hillslopes, *Acacia xiphophylla* over chenopods, and *Acacia xiphophylla* scattered tall shrubs to high open shrublands (Cogger 2014) The species may occur in Stony Plain, Undulating Low Hills and lower	The Spotted Ctenotus may use the Stony Plain and Hillcrest/Hillslope habitats within the Amendment Application Area, which are widespread within and contiguous to the Amendment Application Area. The nearest located evidence of Spotted Ctenotus was recorded	Possible	**Low** There is a low potential risk of impact to the Spotted Ctenotus from the proposed Amendment Application, given • The Stony Plain and Hillcrest/Hillslope habitats within the

Significant Species	Conservation Status	Distribution and Ecology	Habitat Relevance	Likelihood	Potential Impact on Species
		slopes of Hillcrest/Hillslopes.	10.9 km to the south-west of the Amendment Application Area in Hillcrest/Hillslope habitat (Biologic 2013).		Amendment Application Area are widespread in the area and in the broader Pilbara region, and occur contiguous to the Amendment Application Area • The nearest records of Spotted Ctenotus are located 10.9 km to the south-west • A relatively small portion of habitat suitable to the species has been/will be cleared, therefore large areas of Stony Plain and Hillcrest/Hillslope habitats will remain undisturbed • The purpose of the Amendment Application is to maintain and allow continued use of the access tracks required for monitoring of Jimblebar Creek. The low intensity of the Amendment Application activity will result in minimal potential risk of impact to Spotted Ctenotus

3.5 GROUNDWATER

The Amendment Application Area is located in the Pilbara Groundwater Area, proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act) (DoW 2009a). Two aquifers occur within the Amendment Application Area:

Combined - Fractured Rock West which is described as**:** "*Alluvium Aquifer: Alluvial and surficial sediments lie along the main river valleys of the Yilgarn Craton and adjacent Proterozoic basins. The alluvium overlies calcrete, palaeochannels, and fractured rock. The thickness is probably up to about 30 metres. The alluvium probably consists of silts, sands and clays but mostly fine-grained material. It is not known to be a major aquifer. The groundwater level may be as much as 15 to 20 metres below the surface. The groundwater salinity is variable, being generally fresh in the valley sides with salinity increasing into the centre of the valleys. Usage is mainly for pastoral purposes through bores and wells in the Murchison and Gascoyne. Further south in the wheatbelt groundwater salinity is generally high and often too high even for stock purposes. Alluvial and surficial aquifers are utilised for town supply at Meekatharra, Yerecoin, New Norcia, Yenart (Calingiri), Bolgart and Happy Valley (Brookton). Potential localised low salinity groundwater resources exist in the Darling Range, and to the south of Kojonup."* (DoW 2016); and

Hamersley – Fractured Rock Aquifer which is described as: "*The Precambrian rocks of the Hamersley Basin are principally volcanics, shales and iron formations. Groundwater is contained within fractures within these rocks. The groundwater level may be deep below the surface, and is generally fresh. The main use of this aquifer is for mining and mine dewatering from iron ore mines. Bores have also been drilled for road and railway construction. There will be increasing dewatering from the fractured rocks around iron ore mines as the pits become deeper* (DoW 2015)".

3.6 SURFACE WATER

The Amendment Application Area is located in the Pilbara Surface Water Area, proclaimed under the *Rights in Water and Irrigation Act 1914* (RIWI Act) (DoW 2009b).

The Amendment Application is located in the Upper Fortescue River Catchment with Jimblebar Creek running through the Amendment Application Area. The access track follows the western edge of Jimblebar Creek, and the Amendment Application Area spans both sides of the creek to allow installation and maintenance of hydrological monitoring infrastructure.

Where practicable existing cleared tracks will be used to cross or access Jimblebar Creek. Where new access points or crossings may be required, clearing will be minimised and crossings will be constructed to maintain the natural surface flow (i.e. flat, level surface treatment without bunds).

4 ENVIRONMENTAL MANAGEMENT

Environmental aspects of BHP's operations within the Amendment Application Area are managed under the company's AS/NZS ISO 14001:2004 certified Environmental Management System (EMS). The EMS describes the organisational structure, responsibilities, practices, processes and resources required to implement and maintain environmental performance across all BHP sites

Operational environmental controls are further guided by BHP's Charter values, which outline a commitment to develop and maintain management systems that support sustainable development, continual improvement, and the efficient use of resources. To support these commitments, BHP has developed a series of Global Documents that outline minimum environmental requirements across all operations.

BHP's Sustainable Development Policy reinforces these commitments by establishing objectives and targets to achieve sustainable outcomes and drive continual performance improvement.

BHP also implements an internal land disturbance permit process, which ensures that all environmental, Aboriginal heritage, land tenure and legal obligations are identified and addressed prior to, and during, land disturbance. All clearing and ground disturbance activities will meet all relevant legislative and regulatory requirements, the BHP Charter, industry standards, and codes of practice.

5 PROJECT COMPLIANCE WITH THE TEN CLEARING PRINCIPLES

BHP considers that native vegetation clearing within the Amendment Application Area will not result in any significant environmental or social impacts, and complies with the Ten Clearing Principles, as defined in Schedule 5 of the EP Act. Section 6 provides an assessment of project compliance with the Ten Clearing Principles.

6 ASSESSMENT AGAINST THE TEN CLEARING PRINCIPLES

The information used to assess the Amendment Application against the Ten Clearing Principles has been informed by the findings of multiple baseline surveys (Section 3).

6.1 PRINCIPLE A

Native vegetation should not be cleared if it comprises a high level of biological diversity

This proposal is not likely to be at variance to this Principle.

Vegetation and habitat types present within the Amendment Application Area are well represented in the surrounding landscape. Similar vegetation communities occur extensively outside the Amendment Application Area and are expected to support comparable levels of biodiversity and conservation value. Given the widespread availability of similar habitat in the local and regional context, the proposed clearing is unlikely to result in a significant impact on biodiversity values.

Table 7 provides an assessment of the proposed clearing activities within the Amendment Application Area against the components of clearing Principle A.

Table 7: Assessment against Principle A components

Principle	Criteria	Assessment	Outcome
a) Native vegetation should not be cleared if it comprises a high level of biological diversity.	a1) Native vegetation should not be cleared if it is representative of an area of outstanding biodiversity in the Bioregion.	Vegetation communities within the Amendment Application Area are widespread and well represented across the Fortescue subregion; surveys did not identify unique or restricted communities. Vegetation condition is consistent with the surrounding landscape. Therefore, the area does not represent outstanding bioregional biodiversity.	Not at variance with clearing principle.
	a2) Native vegetation should not be cleared if it has higher diversity of indigenous aquatic or terrestrial plant or fauna species than native vegetation of that ecological community in good or better condition in the Bioregion.	Flora and fauna surveys (Onshore 2014; 2015a; 2015b) recorded assemblages typical of the mapped vegetation types. Diversity levels are comparable to nearby areas of similar type and condition. Species richness within the Amendment Application Area is not elevated compared to the broader Bioregion.	Not at variance with clearing principle.
	a3) Native vegetation should not be cleared if it has higher diversity of indigenous aquatic or terrestrial plant or fauna species than the remaining vegetation of that ecological community in the local area.	Native vegetation and habitat types within the Amendment Application Area are continuous with adjoining native vegetation. Survey results indicate no higher local-scale species diversity or conservation value within the Amendment Application Area relative to adjacent vegetation.	Not at variance with clearing principle.
	a4) Native vegetation should not be cleared if it has higher ecosystem diversity than other native vegetation of that local area.	Ecosystem diversity within the Amendment Application Area is typical of the surrounding landscape. There are eight broad floristic communities and 22 vegetation associations mapped across the Amendment Application Area, all of which are well represented locally and regionally, and none are considered to be rare or restricted.	Not at variance with clearing principle.
	a5) Native vegetation should not be cleared if it has higher genetic diversity than the remaining native vegetation of that ecological community.	The native vegetation within the Amendment Application Area is not considered to have a higher genetic diversity than the remaining native vegetation of that ecological community. Vegetation within the Amendment Application Area is contiguous with adjacent native vegetation, and has no special features, fragmentation, or isolation which would promote genetic distinction.	Not at variance with clearing principle.
	A6) Native vegetation should not be cleared if it is necessary for the continued in situ existence of significant habitat for priority flora species published by	No Priority or Threatened flora species have been recorded in the Amendment Application Area. Should any previously undetected Priority flora be	Not at variance with clearing principle.

	the Department of Environment and Conservation.	identified, clearing will avoid individuals with a 10 m buffer.	

6.2 PRINCIPLE B

Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia

This proposal is not likely to be at variance to this Principle.

There are six broad fauna habitat types within the Amendment Application Area (Figure 3). The vegetation and habitat found within the Amendment Application Area are considered to be well represented in the Pilbara bioregions.

One fauna species of significance has been recorded from within the Amendment Application Area with an additional eight species considered to potentially occur within the Amendment Application Area (Table 6). As described in Section 3.4.4 and Table 6 clearing of the Amendment Application Area is expected to have a low potential of impact on these species.

Table 8 provides an assessment of the proposed clearing activities within the Amendment Application Area against the components of clearing Principle B.

Table 8: Assessment against Principle B components

Principle	Criteria	Assessment	Outcome
b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.	b1) Native vegetation should not be cleared if it is or is likely to be habitat for fauna that is declared Specially Protected under the BC Act.	As detailed in **Table 5** the proposed activities are unlikely to have a significant impact on EPBC Act protected species that may use the Application Area as the species is common and widespread in the Pilbara, and suitable foraging habitat is well represented in the region in the same or better condition than that of the Amendment Application Area	Not at variance with clearing principle.
	b2) Native vegetation should not be cleared if it is or is likely to be habitat for Priority Listed Fauna.	Thirteen fauna species are either Priority or Conservation listed have the potential to occur within the Amendment Application Area (detailed in Table 6). The preferred/critical habitats of these species are either absent, limited, or not restricted to the Amendment Application Area. Therefore, the likelihood of risk to these species that may possibly occur within the Amendment Application Area is considered to be low.	Not at variance with clearing principle.
	b3) Native vegetation should not be cleared if it is or is likely to be habitat for fauna that is otherwise significant.	Native vegetation within the Amendment Application Area may be suitable habitat for conservation significant fauna, however similar habitat in equal or better condition is widespread in the region and contiguous with the Amendment Application Area.	Not at variance with clearing principle.
	b4) Native vegetation should not be cleared if it provides significant habitat for fauna species in the local area.	The habitats that occur within the Amendment Application Area are not locally restricted and occur broadly in the surrounding area. Habitat within the Amendment Application Area is not considered significant habitat for fauna species within the local area.	Not at variance with clearing principle.
	b5) Native vegetation should not be cleared if it maintains ecological functions and processes that protect significant habitat for fauna.	The small scale and nature of works (track maintenance and limited new disturbance) not considered to alter ecological functions (e.g. foraging connectivity, shelter availability) and processes that protect significant habitat for fauna.	Not at variance with clearing principle.
	b6) Native vegetation should not be cleared if it forms, or is part of, an ecological linkage that is necessary for the maintenance of fauna.	No ecological linkages run through the Amendment Application Area that are necessary for the maintenance of fauna.	Not at variance with clearing principle.
	b7) Native vegetation should not be cleared if it provides significant habitat for fauna communities (assemblages) and meta-populations.	There is no evidence of the occurrence of fauna communities, geographically isolated assemblages, or meta-populations within the Amendment Application Area. Assemblages are typical and well represented outside of the Amendment Application Area.	Not at variance with clearing principle.

6.3 PRINCIPLE C

Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora

This proposal is not likely to be at variance to this Principle.

No species listed under the EPBC Act or gazetted as Threatened under the BC Act were recorded in the Amendment Application Area. No species listed as Priority Flora by the DBCA have been recorded in the Amendment Application Area (Section 3.4.2).

Table 9 provides an assessment of the proposed clearing activities within the Amendment Application Area against the components of clearing Principle C.

Table 9: Assessment against Principle C components

Principle	Criteria	Assessment	Outcome
c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	c1) Native vegetation should not be cleared if it is necessary for the continued *in situ* existence of populations of Declared Rare Flora under the *BC Act 2016*	No flora species listed as Threatened (Declared Rare) under BC Act have been recorded in the Amendment Application Area.	Not at variance with clearing principle.
	c2) Native vegetation should not be cleared if it is necessary for the continued *in situ* existence of other significant flora.	No species listed under the EPBC Act or other significant flora species were recorded in the Amendment Application Area.	Not at variance with clearing principle.

6.4 PRINCIPLE D

Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community

This proposal is not likely to be at variance to this Principle.

No TECs, Environmentally Sensitive Areas or PECs are located in the Amendment Application Area (Onshore Environmental, 2014, 2015a and 2015b).

Table 10 provides an assessment of the proposed clearing activities within the Amendment Application Area against the components of clearing Principle D.

Table 10: Assessment against Principle D components

Principle	Criteria	Assessment	Outcome
d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.	d1) Native vegetation should not be cleared if threatened ecological communities listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* are present.	No EPBC Act TECs are present in the Amendment Application Area.	Not at variance with clearing principle.
	d2) Native vegetation should not be cleared if it is necessary for the maintenance of Threatened Ecological Communities listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*.	No EPBC Act TECs or associated native vegetation will be impacted by the proposed works.	Not at variance with clearing principle.
	d3) Native vegetation should not be cleared if other significant ecological communities are present.	No significant ecological communities are known to occur or are likely to occur within the Amendment Application Area.	Not at variance with clearing principle.
	d4) Native vegetation should not be cleared if it is necessary for the maintenance of other significant ecological communities.	No DBCA listed TECs or associated native vegetation will be impacted by the proposed works.	Not at variance with clearing principle.
	d5) Native vegetation should not be cleared if it is necessary for the continued *in situ* existence of significant examples of priority threatened ecological communities published by the Department of Environment and Conservation.	No DBCA listed PECs or associated native vegetation will be impacted by the proposed works.	Not at variance with clearing principle.

6.5 PRINCIPLE E

Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared

This proposal is not likely to be at variance to this Principle.

The habitat and vegetation within the Amendment Application Area is well represented in the Land Systems of the region (Section 3.4.1), and therefore it is unlikely individual species would be restricted to a particular habitat and vegetation occurring in the Amendment Application Area.

Table 11 provides an assessment of the proposed clearing activities within the Amendment Application Area against the components of clearing Principle E.

Table 11: Assessment against Principle E components

Principle	Criteria	Assessment	Outcome
e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.	e1) Native vegetation should not be cleared if the remaining native vegetation represents less than 30%, or the clearing would reduce the representation of remaining native vegetation to less than 30% in the Bioregion (or subregion where applicable).	Clearing will not reduce native vegetation below 30% in the bioregion/subregion; relevant vegetation associations retain >98 – 100% of pre-European extent.	Not at variance with clearing principle.
	e2) Native vegetation should not be cleared if an ecological community represents less than 30% of its original extent or clearing would reduce the representation of any ecological community to less than 30% of its original extent in the Bioregion (or subregion where applicable).	Clearing native vegetation within the Amendment Application Area will not significantly reduce the known extent of the ecological community from pre-European extents; current extents of the relevant vegetation communities remain at more than 98% of pre-European extents (**Table 2**).	Not at variance with clearing principle.
	e3) Native vegetation should not be cleared if clearing would reduce an ecological community to less than 1% of the Bioregion (or subregion where applicable)	Clearing native vegetation within the Amendment Application Area will not significantly reduce the known extent of a vegetation community in the bioregion.	Not at variance with clearing principle.
	e4) Native vegetation should not be cleared if the remaining native vegetation represents less than 30% or the clearing would reduce the representation of remaining native vegetation to less than 30% in the Local Area.	Native vegetation clearing within the Amendment Application Area will not reduce the representation of remaining native vegetation to less than 30% in the local area, given the limited scale of proposed clearing within the Amendment Application Area.	Not at variance with clearing principle.
	e5) Native vegetation should not be cleared if an ecological community represents less than 30% of its original extent or clearing will reduce the representation of any ecological community to less than 30% of its original extent in the Local Area.	Clearing native vegetation within the Amendment Application Area will not reduce the representation of any ecological community to less than 30% of its original extent in the local area.	Not at variance with clearing principle.
	e6) Native vegetation should not be cleared if clearing would reduce any ecological community to less than 1% of the Local Area.	Clearing native vegetation within the Amendment Application Area will not significantly reduce the known extent of the vegetation community in the local area, given the limited clearing proposed within the Amendment Application Area.	Not at variance with clearing principle.

6.6 PRINCIPLE F

Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland

This proposal is unlikely to be at variance to this Principle.

The Application Area is located in the Fortescue River Upper catchment. Jimblebar Creek runs through the Application Area with the proposed access track will follow the western edge of the creek. The Application Area covers both sides of Jimblebar Creek to enable the installation and maintenance of equipment for hydrological investigations.

Where possible existing cleared tracks will be used to cross or access Jimblebar Creek. Where it is necessary for new crossings or access points to be installed clearing will be kept to a minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow.

Table 12 provides an assessment of the proposed clearing activities within the Amendment Application Area against the components of clearing Principle F.

Table 12: Assessment against Principle F components

Principle	Criteria	Assessment	Outcome
f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	f1) Native vegetation should not be cleared if it is growing in a watercourse or wetland that has been identified as having significant environmental values.	No watercourses or wetlands of significant environmental values occur within the Application Area.	Not at variance with clearing principle.
	f2) Native vegetation should not be cleared if it provides a buffer area for watercourses and wetlands identified in criteria (f1) and (f2).	No vegetation providing a buffer to watercourses or wetlands of significant environmental values occurs within the Application Area.	Unlikely to be at variance with clearing principle.
	f3) Native vegetation should not be cleared if water tables are likely to change and adversely affect ecological communities that are wetland or groundwater dependent.	Clearing proposed in this Amendment Application is not considered likely to alter water tables, and as such will not result aversely affect ecological communities that are wetland or groundwater dependent.	Not at variance with clearing principle.
	f4) Native vegetation should not be cleared if it is growing in other watercourses or wetlands.	Jimblebar Creek runs the length of the Amendment Application Area. The access track follows the western edge of the creek line. The Amendment Application Area covers both sides of Jimblebar Creek to enable the installation and maintenance of equipment for hydrological investigations. Where possible existing cleared tracks will be used to cross or access Jimblebar Creek. Where it is necessary for new crossings or access points to be installed clearing will be kept to a minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow.	Unlikely to be at variance with clearing principle.

6.7 PRINCIPLE G

Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation

This proposal is not likely to be at variance to this Principle.

Land degradation may include impacts such as erosion, changes to pH, water logging, salinisation or spread of weeds. These potential impacts are assessed in the sections below. Table 13 provides an assessment of the proposed clearing activities within the Application Area against the components of clearing Principle G.

Given the proposed management strategies for weed species and the low susceptibility of the soils to erosion, it is considered that the project will not be at variance to Principle G.

6.7.1 Erosion

It is not anticipated that the removal of vegetation will contribute to increased amounts of wind or water erosion in the Amendment Application Area or adjacent areas.

6.7.2 Changes to pH

The Amendment Application Area is not in an area at risk of acid sulphate soils and there are no recorded acid sulphate soils within the Amendment Application Area. It is not expected that the proposed clearing will result in changes to soil pH.

6.7.3 Water logging and salinisation

It is not expected that there will be a significant reduction in groundwater uptake due to the proposed clearing. No water logging or increased salinisation is expected to occur as a result of the proposed clearing.

6.7.4 Weeds

Two introduced flora species have been recorded in the Amendment Application Area (Table 5). None are listed as a Declared Pest under the BAM Act. These are typical introduced species commonly recorded in the Pilbara region.

Control of established weed populations will be carried out according to the BHP Environmental Weed Management in Western Australia Procedure.

Table 13: Assessment against Principle G components

Principle	Criteria	Assessment	Outcome
g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	g1) Native vegetation should not be cleared if wind or water erosion of soil is likely to be increased (on or off site).	Soil erosion is not anticipated to occur as areas cleared will be revegetated where practicable, if not required for infrastructure. The small-scale, linear disturbance associated with track maintenance and use of existing disturbance will reduce the potential risk of erosion associated with vegetation clearing	Not considered to be at variance with clearing principle.
	g2) Native vegetation on land with soils with high or low pH should not be cleared.	No acid sulphate soil risk has been identified within the Amendment Application. No vegetation on land with soils with significantly low (or high) pH will be impacted by the proposed works.	Not at variance with clearing principle.
	g3) Native vegetation should not be cleared if water logging is likely to be increased (on or off site).	The works subject of this Amendment Application will not materially impact infiltration and/or run-off at a scale that would result in waterlogging.	Not at variance with clearing principle.
	g4) Native vegetation should not be cleared if land salinisation is likely to be increased (on or off site).	The risk of increased soil salinity is considered to be negligible within the Amendment Application Area (on or off site) by the clearing of native vegetation, given the position in the landscape ad limited clearing extent.	Not at variance with clearing principle.

6.8 PRINCIPLE H

Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area

This proposal is not likely to be at variance to this Principle.

The Amendment Application Area is not within any conservation areas as listed by the DBCA or those protected under the EPBC Act. The closest conservation areas are Collier Range National Park (135 km to the south-west) and Karijini National Park (160 km to the west) of the Amendment Application Area.

The Amendment Application Area is not considered to form an ecological linkage to these conservation areas.

An assessment of the proposed clearing activities within the Amendment Application Area against the components of clearing Principle H is provided in Table 14 below.

Table 14: Assessment against Principle H components

Principle	Criteria	Assessment	Outcome
h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.	h1) Native vegetation should not be cleared if it contributes significantly to the environmental values of a conservation area.	The Amendment Application Area is not within or adjacent to a conservation reserve; and does not contribute to the environmental values of a conservation area	Not at variance with clearing principle.
	h2) Native vegetation should not be cleared if that vegetation provides a buffer to a conservation area.	There are no conservation areas or buffers occur within or adjacent to the Amendment Application Area.	Not at variance with clearing principle.
	h3) Native vegetation should not be cleared if the land contributes to an ecological linkage to a conservation area.	No connectivity function or ecological linkage exits between the Amendment Application Area and the nearest conservation areas (Collier Range ~135 km; Karijini National Park ~160 km).	Not at variance with clearing principle.
	h4) Native vegetation should not be cleared if it provides habitats not well represented on conservation land.	There are no habitats within the Amendment Application Area that are not well represented on conservation land.	Not at variance with clearing principle.

6.9 PRINCIPLE I

Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water

This proposal is not likely to be at variance to this Principle.

The Application Area is located in the Pilbara Surface Water Area, proclaimed under the RIWI Act (DoW 2009b). Jimblebar Creek runs through the Application Area with the proposed access track will follow the western edge of the creek. The Application Area covers both sides of Jimblebar Creek to enable the installation and maintenance of equipment for hydrological investigations.

Where possible existing cleared tracks will be used to cross or access Jimblebar Creek if required. Where it is necessary for new crossings or access points to be installed clearing will be kept to a minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow.

The clearing is unlikely to cause deterioration in the quality of any surface or underground water given the limited extent of the proposed activity.

Table 15 provides an assessment of the proposed clearing activities within the Amendment Application Area against the components of clearing Principle I.

Table 15: Assessment against Principle I components

Principle	Criteria	Assessment	Outcome
i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.	i1) Native vegetation should not be cleared if clearing the vegetation will reduce the quality of surface or underground water in proclaimed, gazetted or declared areas or catchments.	The clearing of native vegetation is not considered likely to alter the quality of surface or ground water due to the lack of permanent water bodies within the Amendment Application Area. The potential risk to surface or groundwater quality associated with establishment and maintenance of access tracks within the Amendment Application Area is negligible.	Not at variance with clearing principle.
	i2) Native vegetation should not be cleared if sedimentation, erosion, turbidity or eutrophication of water bodies on or off site is likely to be caused or increased.	Permanent waterbodies are not present within or adjacent to the Amendment Application Area, therefore the risk of increased sedimentation, erosion,	Not at variance with clearing principle.
	i3) Native vegetation should not be cleared if water tables are likely to change significantly altering salinity or pH.	The clearing of native vegetation is not considered likely to alter the quality of surface or groundwater within the Amendment Application Area.	Not at variance with clearing principle.
	i4) Native vegetation should not be cleared if the clearing is likely to alter the water regimes of groundwater-dependent ecosystems on or off site, causing degradation to the biological communities associated with these systems.	The clearing of native vegetation is not considered likely to alter the regimes of surface or groundwater dependent vegetation within the vicinity of the Amendment Application Area.	Not at variance with clearing principle.

6.10 PRINCIPLE J

Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding

This proposal is not likely to be at variance to this Principle.

Massive surface water runoff and localised flooding occur following intense rainfall events during December to April. However, the incidence or intensity of flooding is not likely to be significantly influenced by the proposed vegetation clearing. It is highly improbable that surface runoff generated from the cleared area could create sufficient concentrated water volumes to cause even a localised flood event. Therefore, the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding.

Table 16 provides an assessment of the proposed clearing activities within the Amendment Application Area against the components of clearing Principle J.

Table 16: Assessment against Principle J components

Principle	Criteria	Assessment	Outcome
j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.	j1) Native vegetation should not be cleared if it is likely to lead to an incremental increase in peak flood height.	Given the limited clearing footprint, the clearing of native vegetation proposed within the Amendment Application Area is considered unlikely to cause any alteration to peak flood height, and any change in runoff is likely to be negligible.	Not at variance with clearing principle.
	j2) Native vegetation should not be cleared if it is likely to lead to an incremental increase in duration of flood peak.	The clearing of native vegetation is not considered likely to cause any impact on duration of flood peak.	Not at variance with clearing principle.

7 HERITAGE

BHP complies with the *Aboriginal Heritage Act 1972*, and all other state and federal heritage legislation.

The Amendment Application Area is located within the Nyiyaparli People Native Title Determination Area (WCD2018/008). Ethnographic and archaeological surveys of the Application Area have been conducted in consultation with the Nyiyaparli people. All land disturbance activities are subject to ethnographic and archaeological surveys as part of an internal PEAHR. The PEAHR process ensures that all heritage sites in the vicinity of the Application Area are identified and avoided.

If any heritage site cannot practicably be avoided, BHP Iron Ore would consult the relevant traditional owners and seek approval under the *Aboriginal Heritage Act 1972* before the site is disturbed.

8 CONCLUSION

The proposed clearing of up to 23 ha within the 807.16 ha Amendment Application Area is unlikely to have any significant negative impacts on biodiversity and environmental values in the area and is unlikely to be at variance to any of the Ten Clearing Principles.

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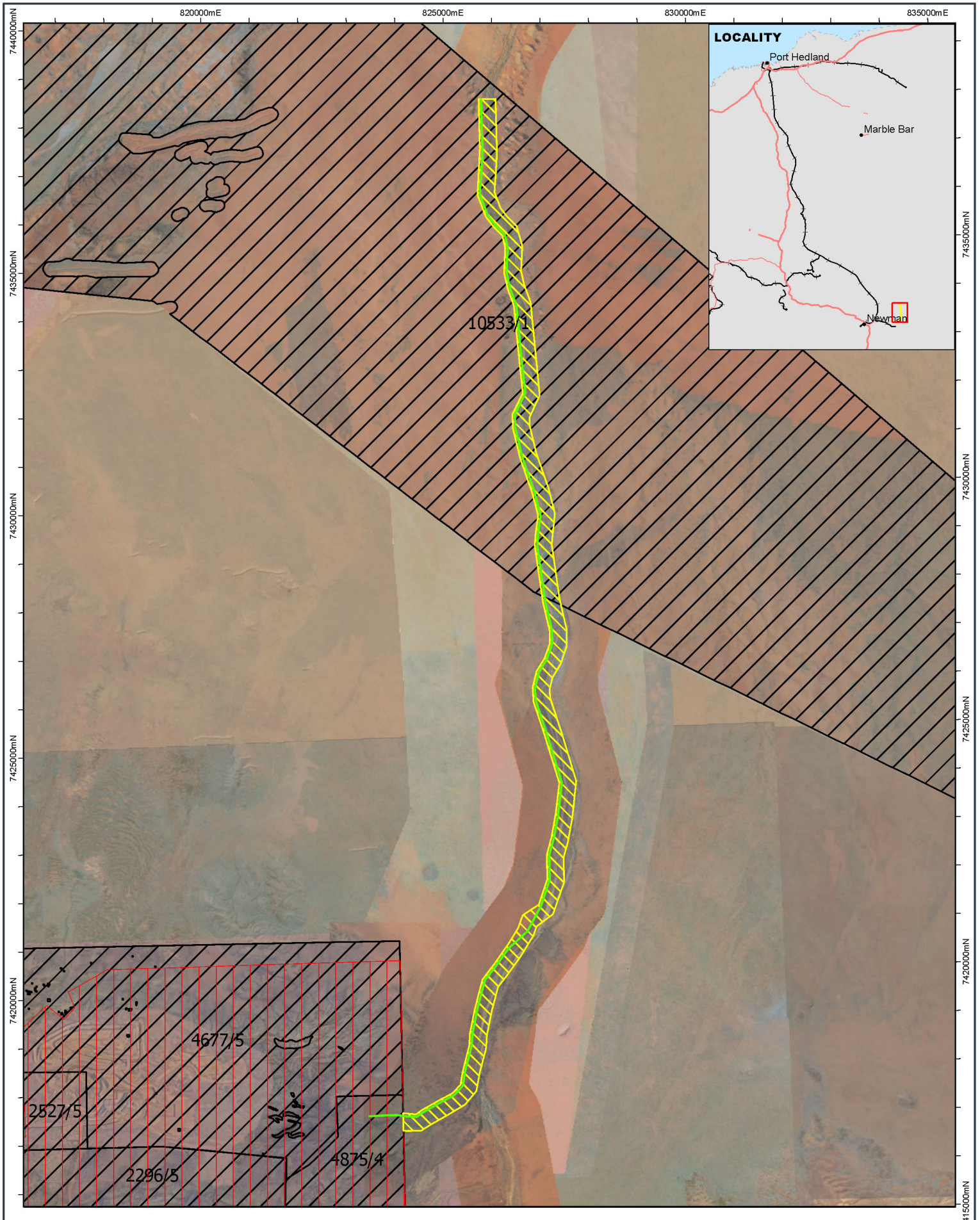
Figures

Figure 1: Renewal of NVCP CPS 7647/1 Jimblebar Creek Access Track – Regional Overview



Proposed NVCP Boundary
Indicative Access Track Location
Orebody 31 (MS1021)
Active Native Vegetation Clearing Permit

N

0 1 2 3 4
KILOMETRES

GDA 1994 MGA ZONE 51

BHP

PUBLIC

JIMBLEBAR CREEK ACCESS TRACK REGIONAL OVERVIEW

WAIO- PLANNING, TECHNICAL & ENVIRONMENT

SCALE @A4:	1:100,000	REQUESTOR:	Env. Approvals	FIGURE:	1
DATE:	12/03/2026	PREPARED:	Geomatics	NO:	A954-001 RevB
		REVIEWED:	Env. Approvals		

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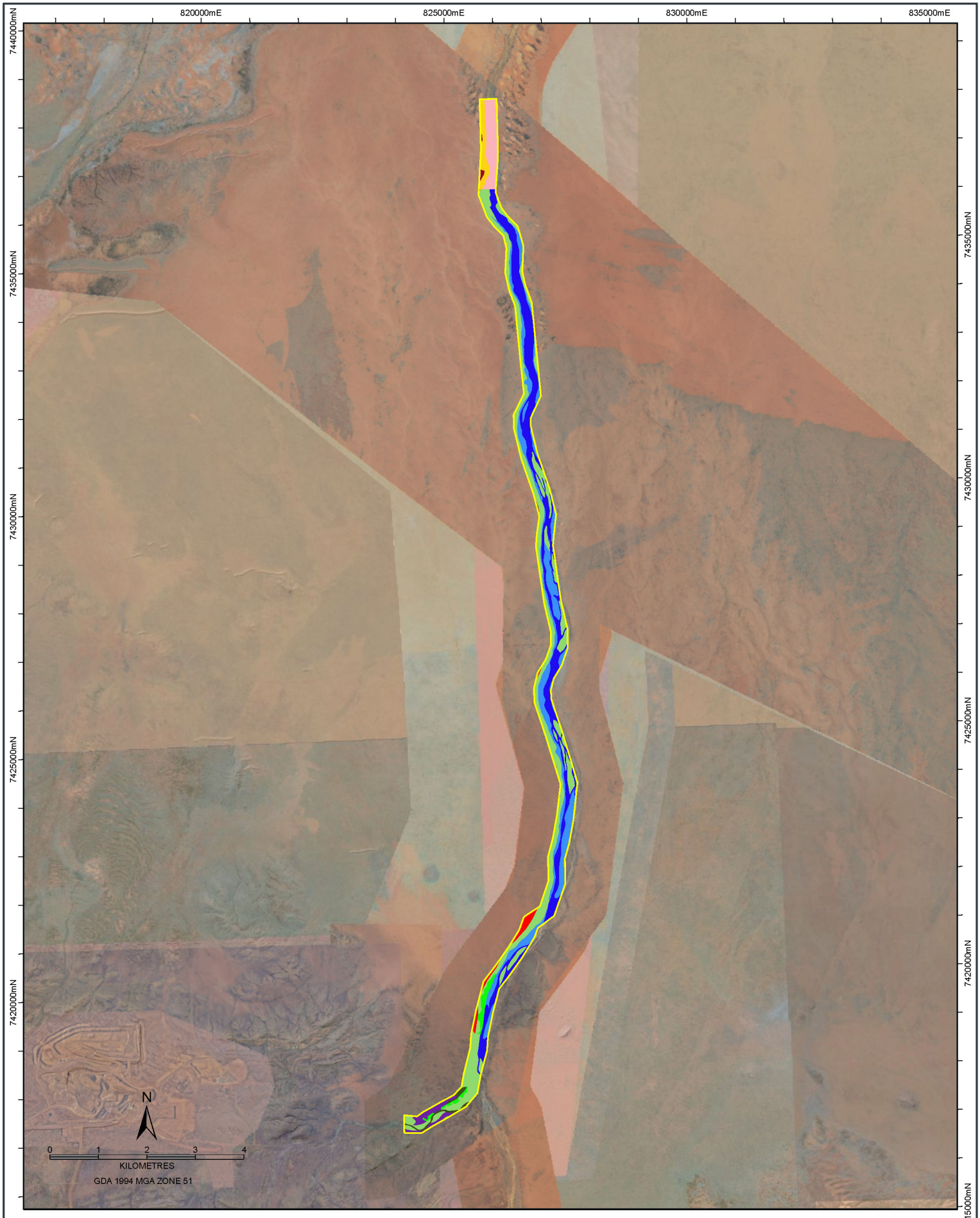
Figure 2: Renewal of NVCP CPS 7647/1 Jimblebar Creek Access Track – Vegetation Associations



Proposed NVCP Boundary

Broad Floristic Communities

- *Cenchrus Tussock Grassland
- Acacia High Open Shrubland
- Acacia Low Open Forest
- Acacia Low Open Woodland
- Acacia Open Scrub
- Eucalyptus Woodland
- Low woodland of Acacia aptaneura and Acacia paraneura with occassional Corymbia aspera and Corymbia hamersleyana scattered trees
- No Survey Data
- Open Forest of Eucalyptus victrix and Eucalyptus camaldulensis subsp. refulgens on silty clay loam on major drainageline
- Scattered low trees of Hakea lorea subsp. lorea and Acacia sericophylla with occasional scattered Corymbia hamersleyana
- Triodia Hummock Grassland
- Triodia Humock Grassland
- Triodia Open Hummock Grassland

BHP

PUBLIC

JIMBLEBAR CREEK ACCESS TRACK BROAD FLORISTIC COMMUNITIES

WAIO- PLANNING, TECHNICAL & ENVIRONMENT

SCALE @A4:	1:100,000	REQUESTOR:	Env. Approvals	FIGURE:	2
DATE:	12/03/2026	PREPARED:	Geomatics	NO:	A954-002 RevB
		REVIEWED:	Env. Approvals		

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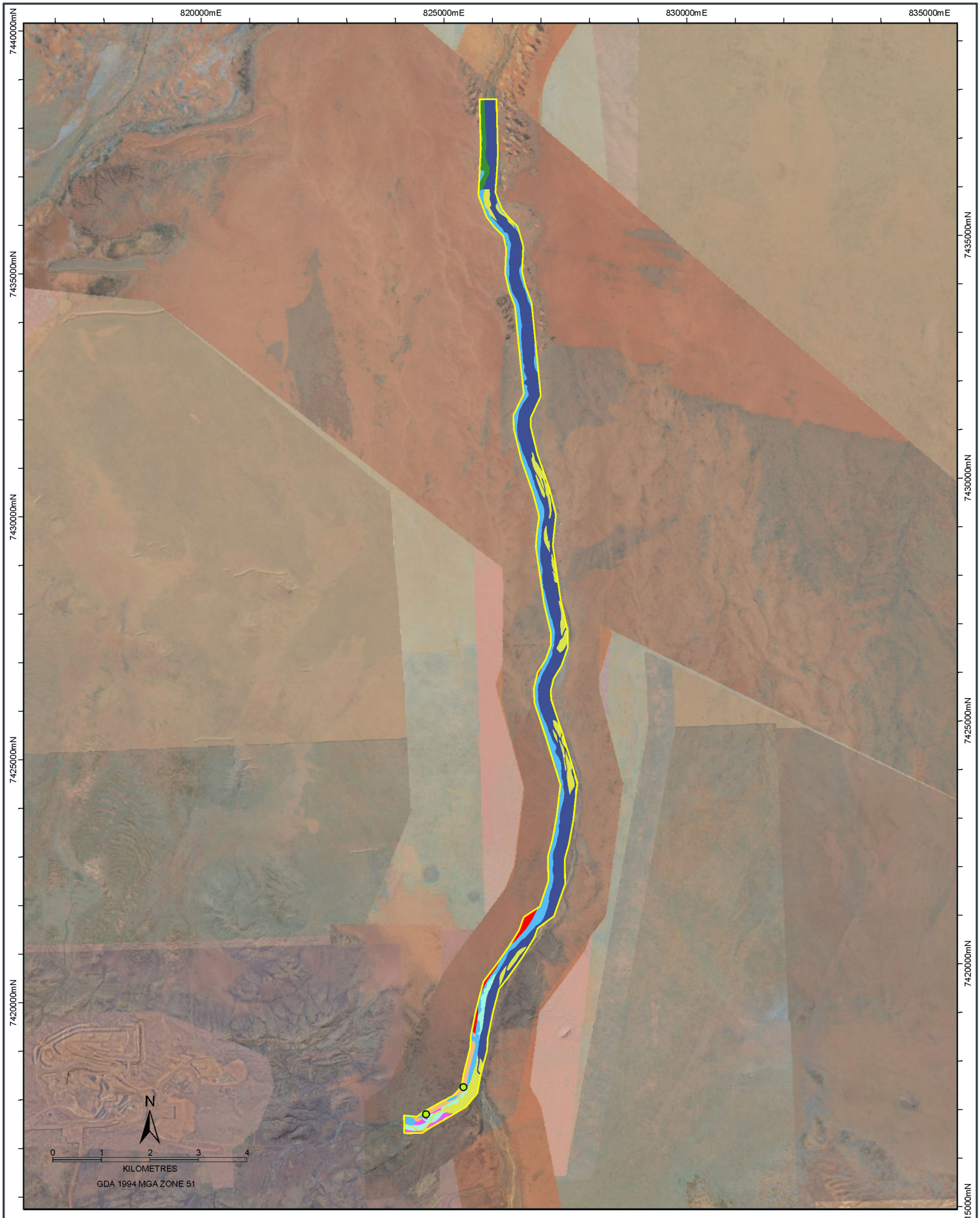
Figure 3: Renewal of NVCP CPS 7647/1 Jimblebar Creek Access Track – Vertebrate Fauna Habitat and Significant Fauna



Proposed NVCP Boundary

Significant Fauna Observations

- *Merops ornatus* (Rainbow Bee-eater) - EPBC Act Marine

Habitat Type

- Flood Plain
- Hill Slope / Crest
- Major Drainage Lines
- Medium Drainage Lines
- Mulga Woodland
- No Survey Data
- Sand Plain
- Stony Plain

BHP

PUBLIC

JIMBLEBAR CREEK ACCESS TRACK FAUNA HABITAT AND SIGNIFICANT FAUNA

WAIO- PLANNING, TECHNICAL & ENVIRONMENT

SCALE @A4:	1:100,000	REQUESTOR:	Env. Approvals	FIGURE:	3
DATE:	12/03/2026	PREPARED:	Geomatics	NO:	A954-003 RevB
		REVIEWED:	Env. Approvals		

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Appendices

Appendix 1: Consolidation of Regional Vegetation Mapping BHP Iron Ore Pilbara Tenure (Onshore Environmental 2014)

Appendix 2: Jimblebar Creek Riparian Flora and Vegetation Baseline Survey (Onshore Environmental 2015a)

Appendix 3: OB31 Jimblebar Access Track VCP Level 1 Flora & Vegetation Survey and Vertebrate Fauna Assessment (Onshore Environmental 2015b)