Application for a new NVCP Jinidi s91 Area

Native Vegetation Clearing Permit Application Supporting Document

June 2026



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1 INTRODUCTION

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

- Newman Operations consisting of:
  - The Mount Whaleback hub (including Orebodies 29, 30, 35 and Western Ridge) located approximately two kilometres (km) west of Newman Township
  - The Eastern Ridge hub (Consisting of Orebodies 23, 24, 25 25 West and 32) located approximately 5 km east of Newman Township
- Mining Area C / South Flank located approximately 90 km north west of Newman Township
- Orebodies 18 and Wheelarra Hill (Jimblebar) Mine located approximately 35 km east of Newman Township
- Yandi Mine located approximately 100 km north west of Newman Township

Ore from the above mining operations is transported to Port Hedland via the BHP Newman to Port Hedland Mainline (and associated spur lines) and is then shipped out through Port Hedland at the BHP facilities at Nelson Point and Finucane Island.

BHP has been granted a s91 application over the potential rail routes for access to the Jinidi Hub. BHP is therefore seeking a new Native Vegetation Clearing Permit (NVCP) over a portion of this area (**Figure 1**) to allow for the clearing of up to 200 hectares (ha) within a 9,644.67 ha Application Area for the purposes of environmental, ethnographic, heritage, hydrological, hydrogeological, topographical and geotechnical investigations; construction and maintenance of access tracks and any other associated activities.

Survey details are currently pending for a 5,398.61 ha of the NVCP Application Area (**Figure 1**). BHP does not propose to undertake any disturbance in this area until flora, vegetation and fauna surveys have been completed, the reports provided to the Department of Water and Environmental Regulation (DWER) and the spatial data accepted by IBSA.

In accordance with Part V Division 2 of the *Environmental Protection Act 1986* (EP Act), BHP hereby refers the application for a new NVCP to DWER.

BHP considers that the proposed application will not result in any significant environmental or social impacts and that the proposed Project complies with the 'Ten Clearing Principles', as defined in Schedule 5 of the EP Act.

1.1 LOCATION

The Application Area is located approximately 60 km northwest of Newman in the Pilbara region of Western Australia (**Figure 1**).

1.2 TENURE

The Application Area is located on portions of:

- Lot 19 on DP 48921 (CL841/1967 Newman Mainline) Crown Lease I154279 over Lot 19 on DP 48921;
- Lot 1580 on DP 72910 (LR3161/597) being Marillana Pastoral Station (Lease N050368);
- Unallocated Crown Land Lot 151 on DP 243201;
- Unallocated Crown Land Lot 908 on DP 72908; and
- Unallocated Crown Land PIN 11455504.

1.3 LOCAL GOVERNMENT JURISDICTION

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

1.4 PROPONENT

The Project is managed and operated by BHP Iron Ore on behalf of the owners, the Newman Joint Venture (NJV). The split between the partners of the MGJV is as follows:

- BHP Minerals Pty Ltd 85%
- Itochu Minerals and Energy Australia Pty Ltd 5%
- Mitsui Iron Ore Corporation Pty Ltd 10%

The key contact for this proposal is:

[redacted]

1.5 PROJECT DESCRIPTION

The proposed works will involve clearing for the purposes of environmental, ethnographic, heritage, hydrological, hydrogeological, topographical and geotechnical investigations; construction and maintenance of access tracks and any other associated activities.

1.6 MITIGATION HIERARCHY

1.6.1 Avoid

The proposed Application Area has been developed to exclude:

- Five Category 4 Ghost Bat caves with a 150 m buffer
- Four water features with a 10 m buffer.

Should the pending biological surveys identify any of the following features they will be avoided with the indicated exclusion zone:

- Category 1 bat caves 500 m buffer
- Category 2 and 3 bat caves 150 m buffer
- Category 4 and 5 bat caves 50 m buffer
- Threatened flora: 50 m buffer.

1.6.2 Minimise

Where practicable any ground disturbance will be kept to previously disturbed areas.

Should the pending biological surveys identify any Priority flora, these will be avoided using a 10 m buffer, where practicable.

Where practicable, existing cleared tracks will be used to cross areas identified as Gorge and Gully habitat (**Figure 3; Attachment 1**). If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum. Should any geotechnical investigations be required they will be conducted immediately adjacent to the access track (allowing for safe access).

Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow.

1.6.3 Mitigate

Areas that are no longer required for the purpose for which they were cleared will be rehabilitated in accordance with relevant Conditions of the NVCP once approved.

1.6.4 Offset

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

1.7 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	DWER
Permit Title	Jinidi s91 Area NVCP
Area to be cleared	200 hectares
Application Area	9,644.67 ha
Purpose of the permit	Clearing for the purposes of environmental, ethnographic, heritage, hydrological, hydrogeological, topographical and geotechnical investigations; construction and maintenance of access tracks and any other associated activities
Tenure	Portions of: • Lot 19 on DP 48921 (CL841/1967 Newman Mainline) Crown Lease I154279 over Lot 19 on DP 48921; • Lot 1580 on DP 72910 (LR3161/597) being Marillana Pastoral Station (Lease N050368); • Unallocated Crown Land Lot 151 on DP 243201; • Unallocated Crown Land Lot 908 on DP 72908; and • Unallocated Crown Land PIN 11455504.
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: • JND_007NVCP_001_RevB_0 • JND_007NVCP_002_RevA_0 • JND_007NVCP_003_RevB_0 BHP Shapefile D2 Reference: https://waio-dctm.bhp.com/D2/?docbase=bhpbio_od_prod&locateId=0b03c41a84f01b94

Application Commitments	**Section**
Should the pending biological surveys identify any of the following features they will be avoided with the indicated exclusion zone: • Category 1 bat caves 500 m buffer • Category 2 and 3 bat caves 150 m buffer • Category 4 and 5 bat caves 50 m buffer • Water features 10 m buffer • Threatened flora: 50 m buffer.	1.6.1 3.4.2
Where practicable any ground disturbance will be kept to previously disturbed areas.	1.6.2
Should the pending biological surveys identify any Priority flora will be avoided using a 10 m buffer, where practicable	1.6.2 3.4.2 6.1
Disturbance within the Gorge/ Gully habitats will be minimised and where practicable, existing cleared tracks will be used to cross areas identified as Gorge and Gully habitat (**Figure 3; Attachment 1**). If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum. Should any geotechnical investigations be required they will be conducted immediately adjacent to the access track (allowing for safe access).	1.6.2 3.4.4
Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow.	1.6.2 3.4.4 3.6 6.6 6.9

Application Commitments	Section
Areas that are no longer required for the purpose for which they were cleared will be rehabilitated in accordance with relevant Conditions of the NVCP once approved.	1.6.2
Control of established weed populations will be carried out according to BHP's standard Weed Control and Management Procedures.	3.4.3 6.7.4
Active Pebble-mouse mounds will be avoided using a 10 m buffer, where practicable.	3.4.4 6.2

2 ASSOCIATED APPROVALS

Any other additional approvals will be sought as required.

3 EXISTING ENVIRONMENT

3.1 CLIMATE

Newman Aero meteorological site (007176) is the closest Bureau of Meteorology (BoM) station to the Application Area. Average annual rainfall at Newman Aero is 318.0 mm (BOM 2024a). This is mainly derived from tropical storms and cyclones during summer, producing sporadic, heavy rains over the area. Mean monthly rainfall varies from 4.6 mm in September to 71.6 mm in February (BoM 2024a). Daily rainfall is highly variable; the highest maximum daily rainfall ranges from 34.8 mm in October, to 305.6 mm in February (BoM 2024a). The mean maximum temperature in summer months (October to March) is 35.2°C to 39.4°C and mean maximum temperature in winter (April to September) is between 23.0°C and 32.1°C (BoM 2024a).

Wittenoom meteorological site (005026) is the closest station to the Application Area that records daily evaporation. Wittenoom is located approximately 120 km northwest of the Application Area. Mean daily evaporation at Wittenoom throughout the year is 8.6 mm/day (BoM 2023b), which equates to 3.1 metres per year. Evaporation greatly exceeds rainfall in the region throughout the year and on a month-by-month basis (BoM 2024b).

3.2 BIOREGION, LANDFORMS AND LAND SYSTEMS

The Application Area is situated in the following biogeographic sub-region:

- Hamersley subregion (PIL3) of the Pilbara region described as: "*Mountainous area of Proterozoic sedimentary ranges and plateaux, dissected by gorges (basalt, shale and dolerite). Mulga low woodland over bunch grasses on fine textured soils in valley floors, and Eucalyptus leucophloia over Triodia brizoides on skeletal soils of the ranges. The climate is semi-desert tropical, average 300 mm rainfall, usually in summer cyclonic or thunderstorm events. Winter rain is not uncommon. Drainage into either the Fortescue (to the north), the Ashburton to the south, or the Robe to the west. Subregional area is 6,215,092ha*" (Kendrick 2001).

The proposed Application Area is also located in the following land systems, as mapped by van Vreeswyk *et al.* (2004):

McKay: Hills, ridges, plateaux remnants and minor breakaways of sedimentary and meta sedimentary rocks, relief up to 100 m.

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

These Land Systems are well represented in their bioregions.

3.3 GEOLOGY AND SOILS

The Australian Soil Resource Information System (ASRIS) provides soil and land resource information across Australia. The following soil type occurs within the Application Area (CSIRO 2021):

Fa13: Ranges of banded jaspilite and chert along with shales, dolomites, and iron ore formations; some areas of ferruginous duricrust as well as occasional narrow winding valley plains and steeply dissected pediments. This unit is largely associated with the Hamersley and Ophthalmia Ranges. The soils are frequently stony and shallow and there are extensive areas without soil cover: chief soils are shallow stony earthy loams (Um5.51) along with some (Uc5.11) soils on the steeper slopes. Associated are (Dr2.33 and Dr2.32) soils on the limited areas of dissected pediments, while (Um5.52) and (Uf6.71) soils occur on the valley plains.

3.4 FLORA, VEGETATION AND FAUNA

There has been one key flora and vegetation surveys across the Application Area:

- *Jinidi Rail Corridor and Borrow Pit Detailed Flora and Vegetation Assessment* (Spectrum Ecology and Spatial 2025) (**Appendix 1**).

There have been two key vertebrate fauna surveys across the Application Area:

- *Jinidi Rail Corridor and Borrow Pit Targeted Significant Vertebrate Fauna Survey July 2024* (Astron 2025) (**Appendix 2**)
- *Jinidi to Mindy Level 1 Fauna Survey* (Biota 2013)[1]

3.4.1 Vegetation Communities

The Application Area is located within the Interim Biogeographic Regionalisation for Australia (IBRA) Pilbara Bioregion (Department of Environment and Heritage 2005). According to the Government of Western Australia (2013), this bioregion is more than 99.9% vegetated (**Table 2**). The vegetation within the Application Area is classified as the following vegetation association, as mapped by Beard (1975):

82 Hummock grasslands, low tree steppe; snappy gum over *Triodia wiseana*.

There is more than 99% of the pre-European vegetation remaining of these vegetation associations (**Table 2**). The Application Area is not part of any significant remnant vegetation in the wider regional area.

Table 2: Pre European extent of vegetation associations occurring within the Application Area (Shepherd *et al.* 2001)

Vegetation Association	Pre-European Extent (ha)	Current Extent (ha)	% Remaining	Pre-European % in IUCN Class I-IV Reserves
Pilbara IBRA Bioregion	17,808,657	17,733,584	99.58	6.34
Vegetation association 82 within Western Australia	2,565,901	2,553,217	99.51	10.25
Vegetation association 82 within the Pilbara IBRA	2,563,583	2,550,899	99.51	10.26

A total of six broad floristic formations with eight vegetation associations have been described and mapped within the Application Area (**Figure 2 and Table 3**).

Table 3: Vegetation associations of the Application Area (Spectrum Ecology and Spatial 2005)

Broad Floristic Formation	Vegetation Association Description	
Acacia low open woodland	*SA TbTscPamu EgAiCh AancAdPec*	Hummock Grassland of *Triodia basedowii* and *Triodia schinzii* with *Neurachne muelleri* Scattered Tussock Grass with Low Open Woodland of *Acacia inaequilatera*, *Corymbia hamersleyana* and Very Open Mallee of *Eucalyptus gamophylla* over Open Shrubland of *Acacia ancistrocarpa*, *Acacia dictyophleba* and *Petalostylis cassioides* on red clayey sand on flat plains.
Acacia mid sparse shrubland	*SA TbTp AancApaHc BeScp*	Hummock Grassland of *Triodia basedowii* and *Triodia pungens* with Low Scattered Shrubs of *Acacia ancistrocarpa*, *Acacia ancistrocarpa* and *Hakea chordophylla* over scattered herbs of *Bonamia erecta* and *Scaevola parvifolia* subsp. *pilbarae* on red-orange loamy sand on flat plain.
Acacia tall sparse shrubland	*SS TpTb AprAiHall AbAsiSeah*	Hummock Grassland of *Triodia pungens* and *Triodia basedowii* with High Open Shrubland of *Acacia pruinocarpa*, *Acacia inaequilatera* and *Hakea lorea* subsp. *lorea* over Open Shrubland of *Acacia bivenosa*, *Acacia sibirica* and *Senna artemisioides* subsp. *helmsii* on dark red-orange sandy clay loam on plains with ironstone gravel.
Corymbia low open woodland	*ME AtpPlApyp TpTwTt Ch*	Open Scrub of *Acacia tumida* var. *pilbarensis*, *Petalostylis labicheoides* and *Acacia pyrifolia* var. *pyrifolia* with Open Hummock Grassland of *Triodia pungens* and *Triodia wiseana* with Very Open Tussock Grassland of *Themeda triandra* with Low Open Woodland of *Corymbia hamersleyana* on red-orange, brown clayey sand on medium drainage lines with creek stone/ironstone cobbles.

[1] Note that this survey is only relevant for the additional Western Pebble-mound Mouse locations that overlap the Application Area.

Broad Floristic Formation	Vegetation Association Description	
Corymbia low woodland	*FP Tp Ch AdHcAi*	Very Open Hummock Grassland of *Triodia pungens* with Scattered Trees of *Corymbia hamersleyana* over Scattered Shrubs of *Acacia dictyophleba*, *Hakea chordophylla* and *Acacia inaequilatera* on dark red-orange clay loam with ironstone gravel on floodplains.
Eucalyptus low open woodland	*FS TvTp AbAtenAi Ell*	Hummock Grassland of *Triodia vanleeuwenii* and *Triodia pungens* with Open Shrubland of *Acacia bivenosa*, *Acacia tenuissima* and *Acacia inaequilatera* with Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* on red-orange sandy clay loam on foot slopes with ironstone gravel.
	HC TvTw AhiAbSegp EllHc	Hummock Grassland of *Triodia vanleeuwenii* and *Triodia wiseana* with Low Open Shrubland of *Acacia hilliana*, *Acacia bivenosa* and *Senna glutinosa* subsp. *pruinosa* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia* and *Hakea chordophylla* on red-orange clayey sand on hill crests with ironstone cobbles.
	HC TvTwTp ColsSeggAa r EllHcCh	Hummock Grassland of *Triodia vanleeuwenii*, *Triodia wiseana* and *Triodia pungens* with Low Open Shrubland of *Corchorus lasiocarpus* var. *parvus*, *Senna glutinosa* subsp. *glutinosa* and *Acacia arida* with Low Open Woodland of *Eucalyptus leucophloia* subsp. *leucophloia*, *Hakea chordophylla* and *Corymbia hamersleyana* on red-orange, brown sandy clay on hill crests with ironstone gravel.

The distinct mapped broad floristic communities and vegetation associations identified within Application Area extend or occur beyond the project boundary.

None of the vegetation associations identified within the Application Area are representative of a Threatened Ecological Community (TEC) or a Priority Ecological Community (PEC). The closest PEC the Weeli Wolli Spring Community (Priority 1) which is approximately 5.5 km west of the Application Area.

Vegetation condition within the Application Area ranges from Excellent to completely Degraded.

3.4.2 Significant Flora

No species listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or gazetted as Threatened Flora species under the *Biodiversity Conservation Act 2016* (BC Act) or listed as Priority Flora by the Department of Biodiversity, Conservation and Attractions (DBCA) have been identified within the Application Area.

Should the pending biological surveys identify any of the following features they will be avoided with the indicated exclusion zone:

- Threatened flora will be avoided using a 50 m buffer.
- Priority flora will be avoided using a 10 m buffer, where practicable.

3.4.3 Weeds

Three introduced flora species (weeds) have been recorded within the Application Area (**Table 4**). Control of established weed populations will be carried out according to BHP's standard *Weed Control and Management Procedures*.

Table 4: Introduced Flora of the 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
**Setaria verticillata*	Whorled Pigeon Grass	High and Rapid	No

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

3.4.4 Fauna Habitats and Significant Fauna

Astron (2025) identified the following five vertebrate fauna habitats within the Application Area (**Figure 3**):

- **Drainage Area / Floodplain**: habitat consisted of hummock grassland with emergent shrubs and sparse *Corymbia* trees on mostly stony and sandy soils in association with Weeli Wolli Creek and other tributaries. A moderate diversity of microhabitats occurred, with tree hollows, soft soil, old *Triodia* and leaf litter present. This habitat occurred in proximity to the Sand Plain, Stony Plain and Mulga Woodland habitats in the northern half of the Survey Area, and Hillcrest/ Hillslope and drainage line habitats in the southern half of the Survey Area. Disturbance included some cattle grazing and road/ track access.
- **Minor Drainage Line**: habitat consisted of small drainage channels less than 10 m wide, with mostly fringing eucalypt trees, shrubland and grassland along the banks. A moderate diversity of microhabitats were exhibited, with tree hollows, soft soil (burrows), old *Triodia* and leaf litter present. Cattle grazing and weed invasion was often present in the ground story vegetation.
- **Medium Drainage Line**: habitat consisted of drainage channels with eucalypt trees growing in the riparian zone, and some patches of dense shrubland throughout the channel. A moderate diversity of microhabitats were present and included tree hollows, woody debris (logs and leaf litter), soft soil (burrows) and old *Triodia*. Cattle grazing and weeds were often present.
- **Hillcrest / Hillslope**: habitat consisted of hummock grassland with an overstory of scattered eucalypt and *Acacia* shrubs on stony soils. Microhabitats were limited with some old *Triodia*, crevices and occasional tree hollows and logs. Disturbances were absent from this habitat type. Hillcrest/ Hillslope habitat was common throughout the southern half of the Survey Area and found in conjunction with Gorge/ Gully and Drainage Area/ Floodplain habitats.
- **Gorge / Gully**: habitat was common throughout the southern half of the Survey Area and was characterised by semi-enclosed rock formations. A high diversity of microhabitats was exhibited, with caves, overhangs, crevices, pools, woody debris (logs and leaf litter), tree hollows and thick undergrowth. Most of the banded iron formation (BIF) geology lacked the structural stability to produce structurally complex caves and were generally open and shallow. Twelve caves and 11 surface water pools were recorded within this habitat type. This habitat was found in conjunction with Hillcrest/ Hillslope and Breakaway/ Cliff habitats, and no disturbance was observed.

Astron (2025) identified the following habitat features which have been clipped from the Application Area (**Figure 3**):

- Five Category 4 Ghost Bat caves which have been clipped from the Application Area using a 50 m buffer
- Four water features which have been clipped from the Application Area using a 10 m buffer.

Astron (2025) recorded one fauna species of significance within the Application Area (**Figure 3**):

- *Pseudomys chapmani* (Western Pebble-mound Mouse) (DBCA Priority 4).

Two fauna species have been recorded solely from habitat features which have been excluded from the Application Area (**Figure 3**). Given the proximity of the habitat features and the highly mobile nature of these species they are considered to be recorded within the Application Area:

- *Liasis olivaceus* subsp. *barroni* (Pilbara Olive Python) (EPBC Act and BC Act Vulnerable)
- *Macroderma gigas* (Ghost Bat) (EPBC Act and BC Act Vulnerable).

Based on the occurrence of the habitat types and significant fauna species previously recorded in the vicinity, an additional four species are considered to potentially occur within the Application Area (i.e. those considered 'likely' or 'possible' to occur within the Application Area):

- *Anilios ganei* (Pilbara Flat-headed Blind-snake) (DBCA Priority 1)
- *Apus pacificus* (Fork-tailed Swift) (EPBC Act and BC Act Migratory)
- *Dasyurus hallucatus* (Northern Quoll) (EPBC Act and BC Act Endangered)
- *Falco peregrinus* (Peregrine Falcon) ('Other Specially Protected Fauna' BC Act)

An assessment of the potential impact of the proposed clearing on the species of significant fauna that may occur in the application area is provided in **Table 5**.

Table 5: Significant Fauna Potentially Occurring within the Application Area

Significant Species	Conservation Status	Distribution and Ecology	Habitat Relevance	Likelihood	Potential Impact on Species
Birds					
Fork-tailed Swift (*Apus pacificus*)	Migratory (EPBC Act) Schedule 5 (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 Application Area in the summer months, associated with thunderstorms and cyclonic systems (Johnstone and Storr 1998).	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 Application Area.	Likely	**Negligible** As this species is entirely aerial and not reliant on terrestrial habitats, the impact to this species is considered to be negligible.
Peregrine Falcon (*Falco peregrinus*)	Other Specially Protected Fauna (BC Act)	The Peregrine Falcon is uncommon but wide ranging across Australia. They occur mainly along coastal cliffs, rivers and ranges as well as wooded watercourses and lakes. The Peregrine Falcon nests primarily on cliffs, granite outcrops and quarries, and feed mostly on birds (Johnstone and Storr 1998).	There are no suitable breeding sites have been identified within the Application Area for this species. Although it may forage within the Gorge / Gully and associated Minor and Medium Drainage Line habitats as part of a wider home range.	Possible	**Low** The proposed clearing activities are unlikely to impact on the Peregrine Falcon as it has the ability to egress from areas being disturbed. More suitable habitat for this species occurs outside of the Application Area. Steep Gorge / Gully habitat is unsuitable for access tracks and will be avoided.
Mammals					
Ghost Bat (*Macroderma gigas*)	Vulnerable (EPBC Act) Vulnerable (BC Act)	Ghost Bats are patchily distributed across most of northern Australia, however the recent contraction in the distribution in central Australia has left the Pilbara population of ghost bats isolated by extensive sandy deserts (Worthington-Wilmer *et al*. 1994). They are generally associated with Gorge / Gully or drainage line habitats, requiring an undisturbed cave, deep fissure or disused mine shaft in which to roost. The Ghost Bat forages in areas of open woodland (Churchill 2008).	The five Category 4 caves for this species have been clipped from the Application Area with a 150 m buffer. This species may forage over the habitats of the Application Area as part of a larger home range.	Recorded	**Low** All suitable caves have been clipped from the Application Area. This species is likely to forage over the habitats within the Application Area and surrounds, however given the nature of the proposed activities, the Ghost Bat is unlikely to be impacted from proposed activities.
Northern Quoll (*Dasyurus hallucatus*)	Endangered (EPBC Act) Endangered (BC Act)	Northern Quoll populations occur in six geographical centres around Australia, including: Drummond Range, central Queensland; the wet tropics of Northern Queensland; northern Cape York Peninsula; northern and western Top End, Northern Territory; north Kimberley and the Pilbara, Western Australia (Braithwaite and Griffiths 1994). Northern Quoll denning habitat in the Pilbara is associated with rocky habitats or riverine habitats with mature Eucalypt trees with hollows (SEWPaC 2011).	Gorge/ Gully habitat provides key foraging and dispersal habitat for this species. Based on the overall scarcity and concentration of records in the broader region, the species is unlikely to be reliant on the habitats within the Application Area for long-term persistence at a local and/or regional scale. based on the results of the current survey. Based on the results of the Astron (2025) survey, the occurrence of northern quoll within the Application Area is unlikely to be representative of an important population.	Possible	**Low** The proposed clearing activities will have negligible impact on the Northern Quoll as: • The records of this species are not considered to be representative of an important population; and • Disturbance within the Gorge/ Gully habitats will be minimised and where practicable, existing cleared tracks will be used to cross areas identified as Gorge and Gully habitat (**Figure 3; Attachment 1**). If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum. Should any geotechnical investigations be required they will be conducted immediately adjacent to the access track (allowing for safe access). • the proposed area for clearing is small in a regional context.
Western Pebble-mound mouse (*Pseudomys chapmani*)	Priority 4 (DBCA)	The Western Pebble-mound Mouse is restricted to the Pilbara region, where it is recognised as an endemic species. Abandoned mounds to the east of its current range indicate a decline in distribution (Menkhorst and Knight 2004). Abandoned mounds in disturbed areas suggest that the species is under threat by grazing and mining activities. 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 are restricted to suitable class stones, and are usually found on gentle slopes and spurs (van Dyck and Strahan 2008).	This species is common in the Hillcrest / Hillslope habitat of the local and regional area. There are 27 records of this species within the Application Area (Figure 3): • 10 active mounds • 8 recently inactive mounds • 9 inactive mounds	Recorded	**Low** This species was recorded and typically occurs within the Hill Crest / Hill Slope habitats within the Application Area. While the Hill Crest / Hill Slope is utilised by the Western Pebble-mound Mouse, the proposed area for clearing is small in a regional context and is contiguous with habitats in the local and regional area. Active Pebble-mouse mounds will be avoided using a 10 m buffer, where practicable.

Significant Species	Conservation Status	Distribution and Ecology	Habitat Relevance	Likelihood	Potential Impact on Species
Reptiles					
Pilbara Flat-headed Blind Snake (*Anilios ganei*)	Priority 1 (DBCA)	The Pilbara Flat-headed Blind Snake is a moderately robust blind snake known from widely separated areas between Newman and Pannawonica. A very cryptic species. Most often recorded in rocky or stony areas and considered to be possibly associated with moist gorges and gullies (Wilson and Swan 2010)	This species has not been recorded within the Application Area, however the Gorge / Gully and Hill Crest / Hill Slope habitats of the Application Area provide suitable habitat for this species, so it may disperse and forage through the Application Area.	Possible	**Low** The impact upon this species is likely to be low as: • Disturbance within the Gorge/ Gully habitats will be minimised and where practicable, existing cleared tracks will be used to cross areas identified as Gorge and Gully habitat (**Figure 3; Attachment 1**). If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum. Should any geotechnical investigations be required they will be conducted immediately adjacent to the access track (allowing for safe access). • Given the regional distribution of Pilbara Flat-headed Blind Snake, the loss of some habitat from the proposed clearing associated with the Application Area is considered as being low when compared to the expansive areas of suitable habitat remaining and throughout in the Pilbara.
Pilbara Olive Python (*Liasis olivaceus barroni)*	Vulnerable (EPBC Act) Vulnerable (BC Act)	The Pilbara Olive Python's range is restricted to the Pilbara region, north Western Australia and the Dampier Archipelago. Habitat consists of rocky escarpments, gorges and waterholes within the Pilbara Region. The preferred microhabitat for this species are under rock piles, on top of rocks and under spinifex as well as in artificial features such as overburden heaps, railway embankments an sewerage treatment ponds. The species' breeding season occurs from June to August, with males moving long distances in search of breeding females (Wilson and Swan 2017).	There is one record of this species from an area excluded from the Application Area. All known water features have been excluded from the Application Area. This species may utilise the Drainage Area/ Floodplain, Gorge/ Gully, Minor Drainage Line and Medium Drainage Line habitats of the Application Area.	Recorded	**Low** The impact upon this species is likely to be low as: • Key habitat features (waterholes) have been clipped from the Application Area. • Disturbance within the Gorge/ Gully habitats will be minimised and where practicable, existing cleared tracks will be used to cross areas identified as Gorge and Gully habitat (Figure 3; Attachment 1). If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum. Should any geotechnical investigations be required they will be conducted immediately adjacent to the access track (allowing for safe access). • Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow. • There are larger areas of suitable habitat in a similar or better condition adjacent to the Application Area and in the wider area.

3.5 GROUNDWATER

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

There is one main aquifer within the Application Area:

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 Application Area is situated in the Pilbara Surface Water Area, proclaimed under the RIWI Act (DoW 2009b).

There are multiple non-perennial drainage lines that flow predominately to the northwest across the Application Area before joining Weeli Wolli Creek.

Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow.

4 ENVIRONMENTAL MANAGEMENT

The management of the environmental aspects of BHP's operations at the 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 for implementing and maintaining environmental objectives at all BHP sites

Additionally, operational controls for environmental management for the Project area are guided by BHP's Charter values. The Charter Values outline a commitment to develop, implement and maintain management systems for sustainable development that drive continual improvement and set and achieve targets that promote efficient use of resources. In order to give effect to the Charter Values, a series of Global Documents have been developed.

BHP has also developed a Sustainable Development Policy for its operations. The Sustainable Development Policy outlines a commitment to setting objective and targets to achieve sustainable outcomes and to continually improve our performance.

BHP also has an internal Project Environmental and Aboriginal Heritage Review (PEAHR) Procedure. The purpose of the procedure is to manage implementation of environmental, Aboriginal heritage, land tenure and legal commitments prior to and during land disturbance. All ground disturbance activities will meet the requirements of the PEAHR procedure, all relevant legislative and regulatory requirements, the BHP Charter, industry standards, and codes of practice.

All personnel carrying out works associated with clearing activities are required to comply with BHP's Charter Values, BHP's Global Documents, and relevant legislative and licensing requirements.

5 PROJECT COMPLIANCE WITH THE TEN CLEARING PRINCIPLES

BHP considers that native vegetation clearing within the 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 application against the Ten Clearing Principles has been based on 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.

Similar habitat to the Application Area is located outside the Application Area. These other areas of similar vegetation type are therefore expected to have a similar biological diversity and conservation value than that of the Application Area.

The proposed clearing is therefore unlikely to have any significant impact on the biodiversity of the region.

Table 6 provides an assessment of the proposed clearing activities within the Application Area against the components of clearing Principle A.

Table 6: 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.	The native vegetation within the Application Area is represented in the same condition within the broader region and is not considered to be of outstanding biodiversity in the Bioregion.	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.	The native vegetation within the Application Area is in the same condition as other areas of similar vegetation type within the broader region.	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.	The native vegetation within the Application Area is not considered to have higher biodiversity and conservation value than that of the surrounding vegetation within the local area.	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.	The native vegetation within the Application Area is not considered to have a higher ecosystem diversity than other native vegetation of that local area.	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 Application Area is not considered to have a higher genetic diversity than the remaining native vegetation of that ecological community as the vegetation is contiguous with adjacent native vegetation and has no special features.	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 the Department of Environment and Conservation.	No Priority flora species have been recorded in the Application Area. Should the pending biological surveys identify any Priority flora will be avoided using a 10 m buffer, where practicable.	Not at variance with clearing principle.

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 five broad fauna habitat types within the Application Area (**Figure 3**).

The vegetation and habitat found within the Application Area are considered to be well represented in the Pilbara bioregions.

Three fauna species of significance have been recorded from within the Application Area (or specific exclusion zones) with an additional four species considered to potentially occur within the Application Area (**Table 5**). As described in **Section 3.4.4** and **Table 5** clearing of the Application Area is expected to have a low impact on these species.

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

Table 7: 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.	Two BC Act protected species have been recorded from areas specifically excluded from the Application and three BC Act protected species are considered 'possible' or 'likely' to occur within the Application Area (**Table 5**). The proposed activities are unlikely to have a significant impact on these species as: • All species are wide-ranging and found throughout the broader region; • Key habitat features (caves and water features) have been clipped from the Application Area; • Disturbance within the Gorge/ Gully habitats will be minimised and where practicable, existing cleared tracks will be used to cross areas identified as Gorge and Gully habitat (**Figure 3; Attachment 1**). If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum. Should any geotechnical investigations be required they will be conducted immediately adjacent to the access track (allowing for safe access). • Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow. • These species do not exclusively depend on any habitat type or feature within the Application Area; and • Similar habitat is well represented outside the Application Area. • Should the pending biological surveys identify any of the following features they will be avoided with the indicated exclusion zone: o Category 1 bat caves 500 m buffer o Category 2 and 3 bat caves 150 m buffer o Category 4 and 5 bat caves 50 m buffer o Water features 10 m buffer	Unlikely to be at variance with clearing principle.

Principle	Criteria	Assessment	Outcome
	b2) Native vegetation should not be cleared if it is or is likely to be habitat for Priority Listed Fauna.	One Priority fauna species has been recorded within the Application Area with one other species considered 'possible' or 'likely' to occur within the Application Area. As detailed in **Table 5** these species are unlikely to be impacted for the following reasons: • The preferred habitat for these species is well represented outside the Application Area; • Similar habitat within close vicinity to the Application Area was found to be the same or better condition than that of the Application Area; • Disturbance within the Gorge/ Gully habitats will be minimised and where practicable, existing cleared tracks will be used to cross areas identified as Gorge and Gully habitat (**Figure 3; Attachment 1**). If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum. Should any geotechnical investigations be required they will be conducted immediately adjacent to the access track (allowing for safe access). • Active mounds of the Western Pebble-mound Mouse will be avoided using a 10 m buffer, where practicable.	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.	Habitat found within the Application Area may be suitable for use by conservation significant fauna, however similar habitat in the same or better condition is widespread in the Application Area surrounds	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.	Habitat within the Application Area is not considered significant habitat for fauna species within the local area. Similar habitat to that proposed to be cleared is located to the area surrounding of the Application Area. Key habitat features (caves and water features have been clipped from the Application Area. Disturbance within the Gorge/ Gully habitats will be minimised and where practicable, existing cleared tracks will be used to cross areas identified as Gorge and Gully habitat (**Figure 3; Attachment 1**). If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum. Should any geotechnical investigations be required they will be conducted immediately adjacent to the access track (allowing for safe access). Should the pending biological surveys identify any of the following features they will be avoided with the indicated exclusion zone: • Category 1 bat caves 500 m buffer • Category 2 and 3 bat caves 150 m buffer • Category 4 and 5 bat caves 50 m buffer • Water features 10 m buffer	Not at variance with clearing principle.

Principle	Criteria	Assessment	Outcome
	b5) Native vegetation should not be cleared if it maintains ecological functions and processes that protect significant habitat for fauna.	The clearing of native vegetation is not considered to alter ecological functions 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 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.	The Application Area is not considered to contain significant habitat for faunal assemblages that are not also present in other areas within the vicinity. The Application Area is not considered likely to contain geographically isolated fauna populations.	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 Application Area (**Section 3.4.2**).

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

Table 8: 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 Threatened flora species were recorded in the Application Area. Should the pending biological surveys identify any of the following features they will be avoided with the indicated exclusion zone: • Threatened flora: 50 m buffer.	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 Application Area. Should the pending biological surveys identify any of the following features they will be avoided with the indicated exclusion zone: • Threatened flora: 50 m buffer.	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.

None of the vegetation associations or landforms identified within the Application Area are associated with a TEC or PEC (Spectrum Ecology and Spatial 2025). The closest PEC is the Weeli Wolli Spring Community (Priority 1) which is approximately 5.5 km west of the Application Area (**Section 3.4.1**).

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

Table 9: 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 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 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 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 Application Area.

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

Table 10: 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 native vegetation within the Application Area will not reduce the extent of native vegetation below 30% in the bioregion or subregion.	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 Application Area will not significantly reduce the known extent of the ecological community from pre-European extents. Current remaining extents of the vegetation communities in the bioregion are almost 100% of pre-European extents.	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 Application Area will not significantly reduce the known extent of the 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.	Clearing native vegetation within the Application Area will not reduce the representation of remaining native vegetation to less than 30% in the local 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 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 Application Area will not significantly reduce the known extent of the vegetation community in the local 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.

There are multiple non-perennial drainage lines that flow predominately to the northwest across the Application Area before joining Weeli Wolli Creek located approximately 5 km from the Application Area.

Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare 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 11 provides an assessment of the proposed clearing activities within the Application Area against the components of clearing Principle F.

Table 11: 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 permanent watercourses or wetlands are located within with the Application Area. There are multiple non-perennial drainage lines that flow predominately to the northwest across the Application Area before joining Weeli Wolli Creek located approximately 5 km from the Application Area. Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow	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 permanent watercourses or wetlands are located within with the Application Area. There are multiple non-perennial drainage lines that flow predominately to the northwest across the Application Area before joining Weeli Wolli Creek located approximately 5 km from the Application Area. Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare minimum and will be constructed flat level to the surface (i.e. a simple clearing with no bunds) to maintain the natural surface flow	Not 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.	Due to the small scale of clearing this Project is not considered likely to adversely alter water tables, and as such will not impact on any 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.	No permanent watercourses or wetlands are located within with the Application Area or in association with any other immediate watercourses or wetland in the surrounding area.	Not 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 12** provides an assessment of the proposed clearing activities within the Application Area against the components of clearing Principle G.

Given the relatively small amount of clearing required for the project, the proposed management strategies for weed species within the Application Area 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 Application Area or adjacent areas.

6.7.2 Changes to pH

The Application Area is not in an area at risk of acid sulphate soils and there are no recorded acid sulphate soils within the 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

Three introduced flora species have been recorded in the Application Area (**Table 4**). 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 Weed Control and Management Procedure*.

Table 12: 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 any areas cleared will be revegetated where practicable, if not required for infrastructure.	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.	The Application Area is not considered to contain soils at risk of having acid sulphate soils present. No vegetation on 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).	It is not expected that water logging would be increased by the clearing of native vegetation within the Application Area.	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).	Soil salinity is not considered to be increased in the Application Area (on or off site) by the clearing of native vegetation.	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 Application Area is not within any conservation areas as listed by the DBCA or those protected under the EPBC Act. The closest conservation area is Karijini National Park which is more than 55 km west of the Application Area.

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

An assessment of the proposed clearing activities within the Application Area against the components of clearing Principle H is provided in **Table 13** below.

Table 13: 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 vegetation of the Application Area 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 within the vicinity of the 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.	The nearest conservation area is 55 km west of the Application Area.	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 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.

Appropriate surface water management practices will be implemented to minimise erosion and minimise potential impacts on the quality of surface water. The clearing is unlikely to cause deterioration in the quality of any surface or underground water.

Where practicable, existing cleared tracks will be used to cross the unnamed non-perennial minor drainage line. If it is necessary for new crossings to be installed, clearing will be kept to a bare 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 14 provides an assessment of the proposed clearing activities within the Application Area against the components of clearing Principle I.

Table 14: 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 within the Application Area due to the limited nature of the clearing within the Application Area.	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.	Localised erosion will not impact any waterbodies as clearing will be restricted to a bare minimum near surface water features and cleared areas that are no longer required will be revegetated.	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 ground water within the 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 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 occurs 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. Drainage infrastructure will be designed to ensure that post-construction flows will not differ significantly from pre-construction flows. Therefore the proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding.

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

Table 15: 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.	The clearing of native vegetation is not considered likely to cause any alteration to peak flood height.	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. 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 Project Area are identified and avoided where practicable.

The Application Area is located within the Nyiyaparli People Native Title Claim (WC2005/006). Ethnographic and archaeological surveys of the Application Area have been conducted in consultation with the Nyiyaparli people. A number of heritage sites were identified within the Application Area (site details are not provided here out of respect of the wishes of the Traditional Owners).

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 400 ha within the proposed 9,644.67 ha 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

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Kilometers

PORT HEDLAND

Legend

- Proposed NVCP Boundary
- Proposed Conditioned Area - Additional Suvreys Required
- Jinid Exploration NVCP CPS 4468/4

N

ENVIRONMENTAL APPROVALS

JINIDI S91 OVERLAP AREA NVCP

REGIONAL OVERVIEW

SCALE (A3): 1:100,000	DATUM: GDA2020/MGA 50	FIGURE 1
Prepared: [redacted]	Revision: FINAL	
Centre: Perth	Date: 01 December 2025	Dwg: JND_007NVCP_001_RevB_0

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Kilometers

Legend

Proposed NVCP Boundary

Vegetation Associations

- Acacia low open woodland (SA TbTscPamu EgAiCh AancAdPec)
- Acacia mid sparse shrubland (SA TbTp AancApaHc BeScp)
- Acacia tall sparse shrubland (SS TpTb AprAiHall AbAsiSeah)
- Corymbia low open woodland (ME AtpPlApyp TpTwTt Ch)
- Corymbia low woodland (FP Tp Ch AdHcAi)
- Eucalyptus low open woodland (FS TvTp AbAtenAi Ell)
- Eucalyptus low open woodland (HC TvTw AhiAbSegp EllHc)
- Eucalyptus low open woodland (HC TvTwTp ColsSeggAar EllHcCh)
- Cleared

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ENVIRONMENTAL APPROVALS

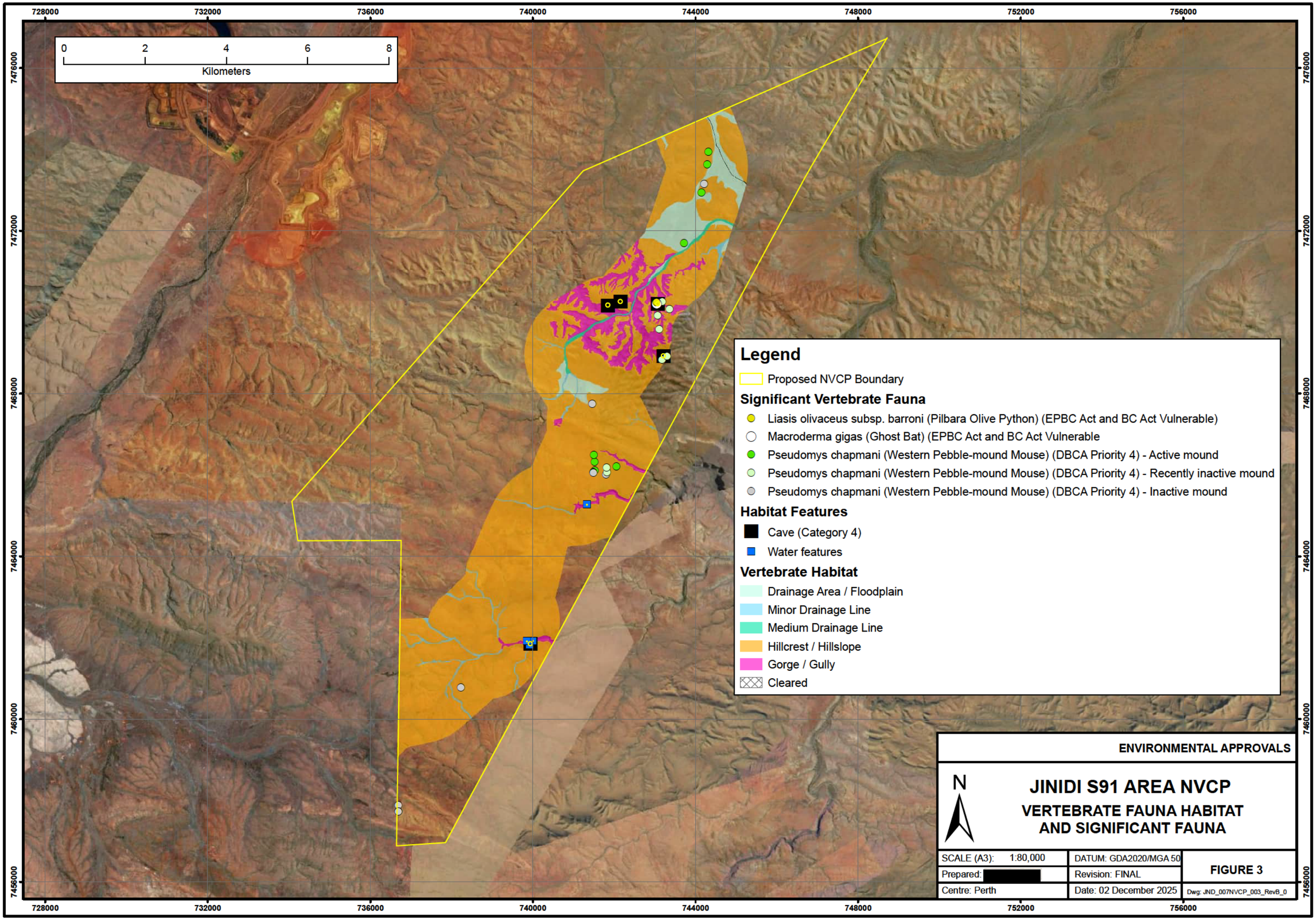
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JINIDI S91 OVERLAP AREA NVCP

VEGETATION ASSOCIATIONS

SCALE (A3): 1:80,000	DATUM: GDA2020/MGA 50	FIGURE 2
Prepared: [redacted]	Revision: FINAL	
Centre: Perth	Date: 01 December 2025	Dwg: JND_007NVCP_002_RevA_0

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Appendices

Appendix 1: ***Jinidi Rail Corridor and Borrow Pit Detailed Flora and Vegetation Assessment*** **(Spectrum Ecology and Spatial 2025)**

Appendix 2: ***Jinidi Rail Corridor and Borrow Pit Targeted Significant Vertebrate Fauna Survey July 2024*** **(Astron 2025)**