

BHP

Orebody 29/30/35

Impact Reconciliation Procedure

**November 2024
Version 1**

Version Control

Version	Description	Key changes	Date
Version 0	Draft version for Traditional Owner review	Original document	16/08/2024
Version 1	Final version as part of the EPA referral of the Orebody 29/30/35 Significant Amendment	Minor edits	19/11/2024

Abbreviations and Definitions

Term	Meaning
BHP	BHP Iron Ore Pty Ltd
CEO	Chief Executive Officer
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DWER	Department of Water and Environmental Regulation
ECW	Enhanced Compressed Wavelet
EPA	Environmental Protection Authority
ESRI	Environmental Systems Research Institution
GDA2020	Geocentric Datum of Australia 2020
GeoTIFF	Geographic Tagged Image File Format
ha	Hectares
IBRA	Interim Biogeographic Regionalisation for Australia
the Instructions	<i>Instructions on how to prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports</i> (EPA 2021)
IRP	Impact Reconciliation Procedure
IRR	Impact Reconciliation Report
m	metres
MRF	Mining Rehabilitation Fund
MS	Ministerial Statement
NVCP	Native Vegetation Clearing Permit
PEOF	Pilbara Environmental Offsets Fund

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1 The proposal and condition requirements

1.1 The Proposal

This Impact Reconciliation Procedure (IRP) has been prepared by BHP Iron Ore Pty Ltd (BHP) to support the Orebody 29/30/35 Proposal (the Proposal), which is a Significant Amendment of the Orebody 29/30/35 mine approved under Ministerial Statement 963 (MS963) (the Approved Proposal). The IRP has been developed in accordance with the *Instructions on how to prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports* (EPA 2024) (the Instructions).

The approval of the Proposal will result in a new Ministerial Statement (**MSXXXX**) for Orebody 29/30/35 and authorise clearing of no more than 116 ha of native vegetation within the Development Envelope (Figure 1). Clearing associated with the existing Approved Proposal is authorised under the Mount Whaleback Strategic Native Vegetation Clearing Permit 5617 (NVCP 5617). This IRP does not apply to clearing undertaken under the authority of other existing approvals (i.e. other Ministerial Statements or NVCPs) for existing operations at the Newman Hub that intersect the vegetation or environmental value/s requiring offset, including clearing undertaken for the Approved Proposal.

The purpose of this IRP is to outline the methods used to calculate the area of vegetation or environmental value/s impacted within the Hamersley Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the Pilbara bioregion (Figure 2), in relation to the Proposal.

1.2 Ministerial Statement condition requirements

BHP is required to implement the *Orebody 29/30/35 Impact Reconciliation Procedure* (this IRP) as per Condition B4-5 of **MSXXXX**. The condition requirements relevant to the preparation of this IRP are detailed in Table 1. The condition requirements for Condition B4 of **MSXXXX** are provided in Appendix 1.

Table 1: **MSXXXX Condition B4 Offsets**

Ministerial Statement	Condition number	Condition Requirement
XXXX	B4-5	<p>To achieve the objective in condition B4-1, the proponent must implement the Orebody 29/30/35 Impact Reconciliation Procedure:</p> <ol style="list-style-type: none"> (1) spatially define the environmental value(s) identified in condition B4-1; (2) spatially define the areas where offsets required by condition B4-1 are to be exempt; (3) include a methodology to calculate the amount of clearing undertaken during each year of the biennial reporting period for each of the environmental values identified in condition B4-3; (4) state that clearing calculation for the first biennial reporting period will commence from ground disturbing activities in accordance with condition B4-2 and end on the second 30 June following commencement of ground disturbing activities; (5) state that clearing calculations for each subsequent biennial reporting period will commence on 1 July of the required reporting period, unless otherwise agreed by the CEO; (6) indicate the timing and content of the Impact Reconciliation Reports; and (7) be prepared in accordance with <i>Instructions on how to prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports</i> (or any subsequent revisions).

2 Procedure

2.1 Identification of the environmental values requiring offsets

The environmental values required to be offset have been identified through the environmental impact assessment for the Proposal, and by Condition B4-1 of **MSXXXX**. BHP will contribute to the Pilbara Environmental Offsets Fund (PEOF) biennially, with the amount to be contributed calculated in accordance with the rates in Condition B4-3 of **MSXXXX** (Table 2).

The environmental impact assessment for the Proposal found that following mitigation, there is potential for significant residual impacts on Terrestrial Fauna from the clearing of critical Ghost Bat foraging habitat. The total extent of clearing of critical Ghost Bat foraging habitat for the Proposal is up to 14 ha, all of which occurs within the Hamersley subregion of the Pilbara region and will require offset (Table 2).

In addition, the Environmental Protection Authority (EPA) considered that the clearing of native vegetation in Good to Excellent condition is a significant residual impact on Flora and Vegetation due to the cumulative impacts of clearing in the Pilbara. The clearing of up to 104 ha of native vegetation in Good to Excellent condition has been identified for the Proposal, of which 100 ha occurs within the Hamersley subregion of the Pilbara region and will require offset (Table 2).

In order to avoid duplication of offsets, the extent to be offset for vegetation in Good to Excellent condition will exclude the extents to be offset for critical foraging habitat, given that offsets for critical foraging habitat will be paid at the higher published rate. The total extent requiring offset for the Proposal is 100 ha, as summarised in Table 2.

Table 2: Environmental values that require offset and the contribution rate under **MSXXXX Condition B4**

Significant residual impact	Environmental value/s	Offset rate (\$/ha) ¹	Extent of significant residual impact (ha)	Extent to be offset (ha)
Clearing native vegetation in Good to Excellent condition	Native vegetation in Good to Excellent condition within the Development Envelope within the Hamersley IBRA subregion	986	100	86 ²
Clearing of critical foraging habitat for Ghost Bat	Critical foraging habitat (Minor Drainage Line, Sandy/Stony Plain and Stony Plain) for the Ghost Bat within the Development Envelope within the Hamersley IBRA subregion	1,972	14	14
Total extent to be offset				100

1. Based on 2023-2024 financial offset rates, to be indexed annually in accordance with the Perth - All Groups Consumer Index.

2. To avoid duplication, the extent to be offset for native vegetation in Good to Excellent condition excludes the extent to be offset for critical foraging habitat.

2.1.1 Baseline survey information

Prior to commencement of ground disturbance for the Proposal, baseline biological surveys were undertaken to classify the native vegetation condition and fauna habitat types in the Development Envelope, in accordance with the EPA technical guidelines.

The baseline biological survey information that establishes the extent and condition of the environmental values, is described below and further in Appendix 2.

Native vegetation condition

Vegetation condition mapping of the Development Envelope was undertaken in 2024 (Spectrum 2024) and classified according to the condition scale for the Eremaean Botanical Province in the EPA Technical Guidance for Flora and Vegetation (EPA 2016). The vegetation condition data was mapped spatially and is stored in an internal database. The internal database also contains the IBRA subregion spatial data as defined by the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW), as required by the Instructions.

A large portion (82%) of the Development Envelope has already been disturbed as part of existing operations, with clearing approved under NVCP 5617. Of the native vegetation remaining in the Development Envelope (comprising 246 ha of the Development Envelope), most (52%) is rated as being in Excellent condition (Figure 3). Areas in Poor or Completely Degraded condition (22% of the native vegetation mapped in the Development Envelope) are generally adjacent to existing mining operations and infrastructure or low lying area where grazing and weeds are present. The latest available land disturbance data for existing clearing (as at FY2023) was used in the condition mapping of the Development Envelope.

Of the 116 ha of native vegetation clearing required for the Proposal, up to 104 ha is in Good to Excellent condition. Of this, 100 ha occurs within the Hamersley subregion and will require offset (Table 2). The remaining 4 ha occurs within the Gascoyne bioregion and will not be offset.

Fauna habitats

Detailed fauna habitat mapping of the Development Envelope was undertaken in 2023 (Astron 2024) in accordance with the EPA Technical Guidance for Vertebrate Fauna (EPA 2020). The fauna habitat data was mapped spatially and is stored in an internal database, along with the IBRA subregion spatial data, as required by the Instructions.

A total of 11 fauna habitat types were described and mapped within the Development Envelope. Of these habitat types, Minor Drainage Line, Sandy/Stony Plain and Stony Plain were identified as critical foraging habitat for Ghost Bat where they occur in proximity (<12 km) to critical roosting habitat¹, and when they are in Poor or better condition² (Figure 4).

Based on the fauna habitat and condition mapping, of the 116 ha of clearing for the Proposal, the total extent of clearing of critical Ghost Bat foraging habitat is up to 14 ha, all of which occurs within the Hamersley subregion and will require offset (Table 2).

2.1.2 Offset exemptions

This IRP applies only to clearing within the Development Envelope authorised under **MSXXXX** for the Proposal (i.e. clearing is up to 116 ha).

While the Development Envelope crosses into the Augustus subregion of the Gascoyne bioregion, the environmental values only apply to Hamersley subregion of the Pilbara bioregion. Of the 116 ha of native vegetation clearing authorised under **MSXXXX**, most (112 ha) is located in the Hamersley IBRA subregion of

¹ Critical roost habitat is considered to be caves classified as Category 1 or Category 2 roosts. While no Category 1 or Category 2 roosts occur within the Development Envelope, two Category 2 roosts occur adjacent (within 7 km) to the Development Envelope (Figure 4) and as such, suitable habitat within the Development Envelope is within the foraging range (i.e. 12 km) to these caves and is therefore classified as critical foraging habitat.

² The extent of critical foraging habitat for Ghost Bat coincides with vegetation in Poor to Excellent condition. The extent of the critical foraging habitat with vegetation in Degraded or Completely Degraded condition is excluded on the basis that these areas are highly unlikely to support the species as they lack the key features required to support foraging (i.e. trees that provides foraging perches) and/or are significantly less productive when compared to the surrounding critical foraging habitat within the Development Envelope in Poor or better condition.

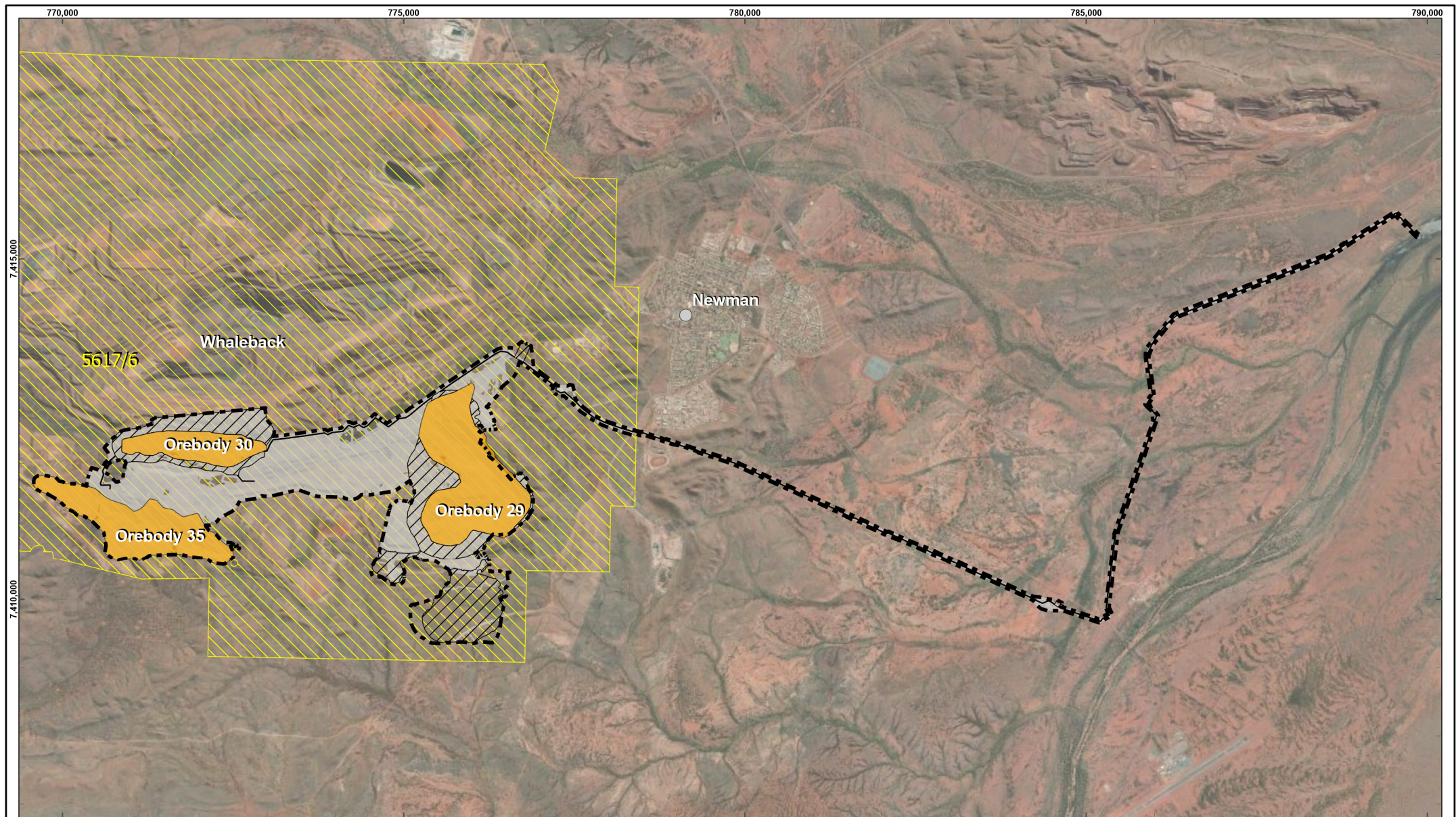
the Pilbara bioregion, with a small portion (4 ha) located within the Augustus IBRA subregion of the Gascoyne bioregion (Figure 2). As per Condition B4-3 of **MSXXXX**, offsets will only apply to the clearing within the Hamersley IBRA subregion of the Pilbara bioregion, and the 4 ha of clearing within the Augustus IBRA subregion is exempt from offsets (Table 3).






Clearing associated with the Orebody 29/30/35 Approved Proposal and the adjacent Mount Whaleback mining operation is approved under NVCP 5617, which overlaps the Development Envelope (Figure 1). There is also existing clearing within the pipeline corridor of the Development Envelope that has been undertaken subject to other approval mechanisms or is historical clearing which predate the EP Act within the area. Clearing undertaken under other approval mechanisms within the Development Envelope (totalling 1,100 ha) is exempt from offsets and is not covered under this IRP (Table 3).

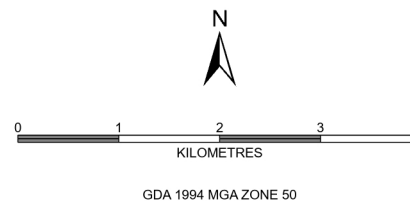
Table 3: Clearing exempt from offsets for the Orebody 29/30/35 Proposal

Condition	Offset requirement	Exemption area (ha)
B4-3	<ul style="list-style-type: none"> (1) Good to Excellent condition native vegetation within the Hamersley IBRA subregion (2) Ghost Bat critical foraging habitat within the Hamersley IBRA subregion 	<p>The following clearing is exempt:</p> <ul style="list-style-type: none"> • 4 ha of proposed clearing within the Development Envelope in the Augustus subregion of the Gascoyne bioregion • 1,100 ha of existing clearing within the Development Envelope comprising clearing undertaken under NVCPs and historical clearing associated with existing mining operations¹

1. The existing clearing exemption extent is not included within the authorised extent (clearing amount) for the Proposal.



-  Orebody 29/30/35 Development Envelope
-  Significant Amendment Indicative Footprint
-  Indicative Cleared Areas as at FY2023
-  Approved Proposal MS963 Boundary
-  Mount Whaleback Strategic NVCP



BHP

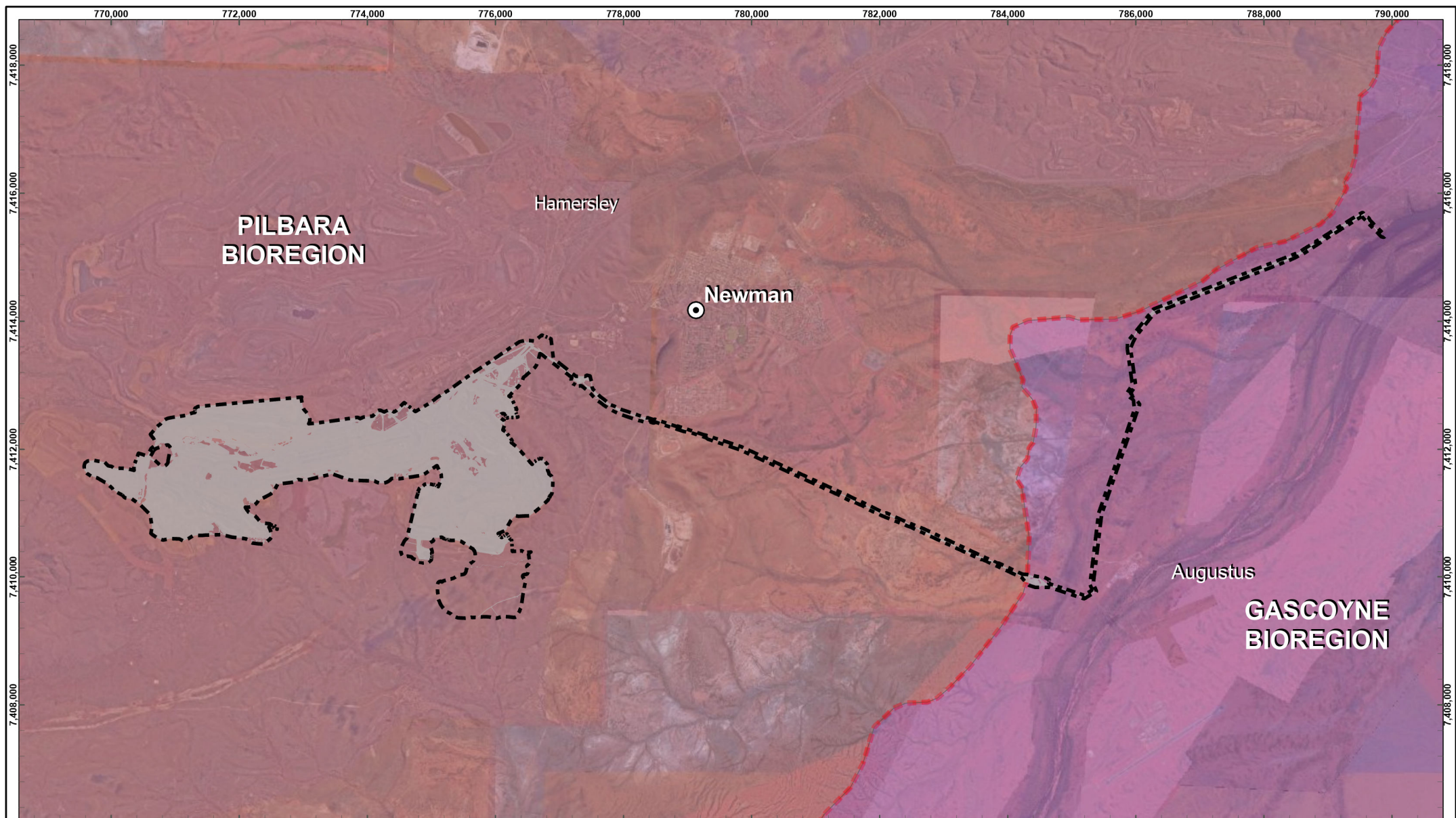
INTERNAL

OREBODY 29/30/35 IMPACT RECONCILIATION PROCEDURE Development Envelope

RESOURCE ENGINEERING - IRON ORE

SCALE @ A4: 1:75,000	PREPARED: GEOMATICS	FIGURE: 1
DATE: 21/08/2024	REQUESTOR: ENV. APPROVALS	

929/068_RevC



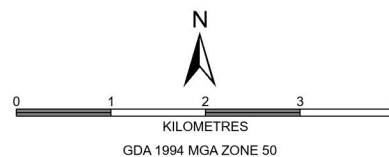
--- Orebody 29/30/35 Development Envelope

■ Indicative Cleared Area as at FY2023

IBRA Subregions

■ Augustus Subregion

■ Hamersley Subregion



BHP

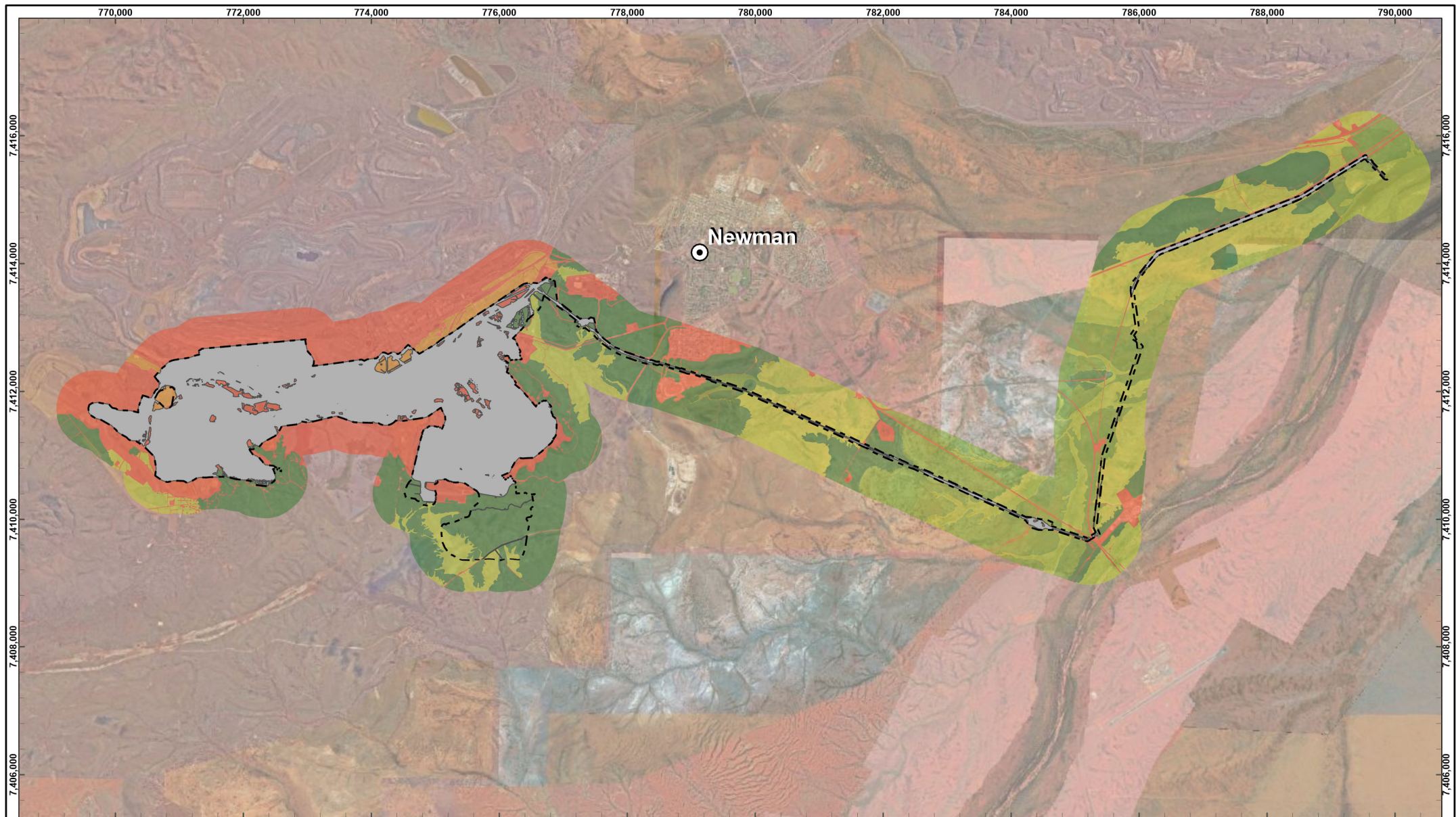
PUBLIC

**OREBODY 29/30/35
IMPACT RECONCILIATION PROCEDURE
IBRA BIOREGIONS AND SUBREGIONS**

PLANNING & STANDARDS - IRON ORE

SCALE @ A4:	1:80,000	PREPARED:	GEOMATICS	FIGURE:	2
DATE:	11/11/2024	REQUESTOR:	ENV APPROVALS	NO:	
		REVIEWED:			

A929_069_RevD

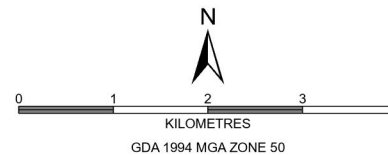


--- Orebody 29/30/35 Development Envelope

■ Indicative Cleared Area as at FY2023

Vegetation Condition

- Excellent
- Very Good
- Good
- Poor
- Completely Degraded



BHP

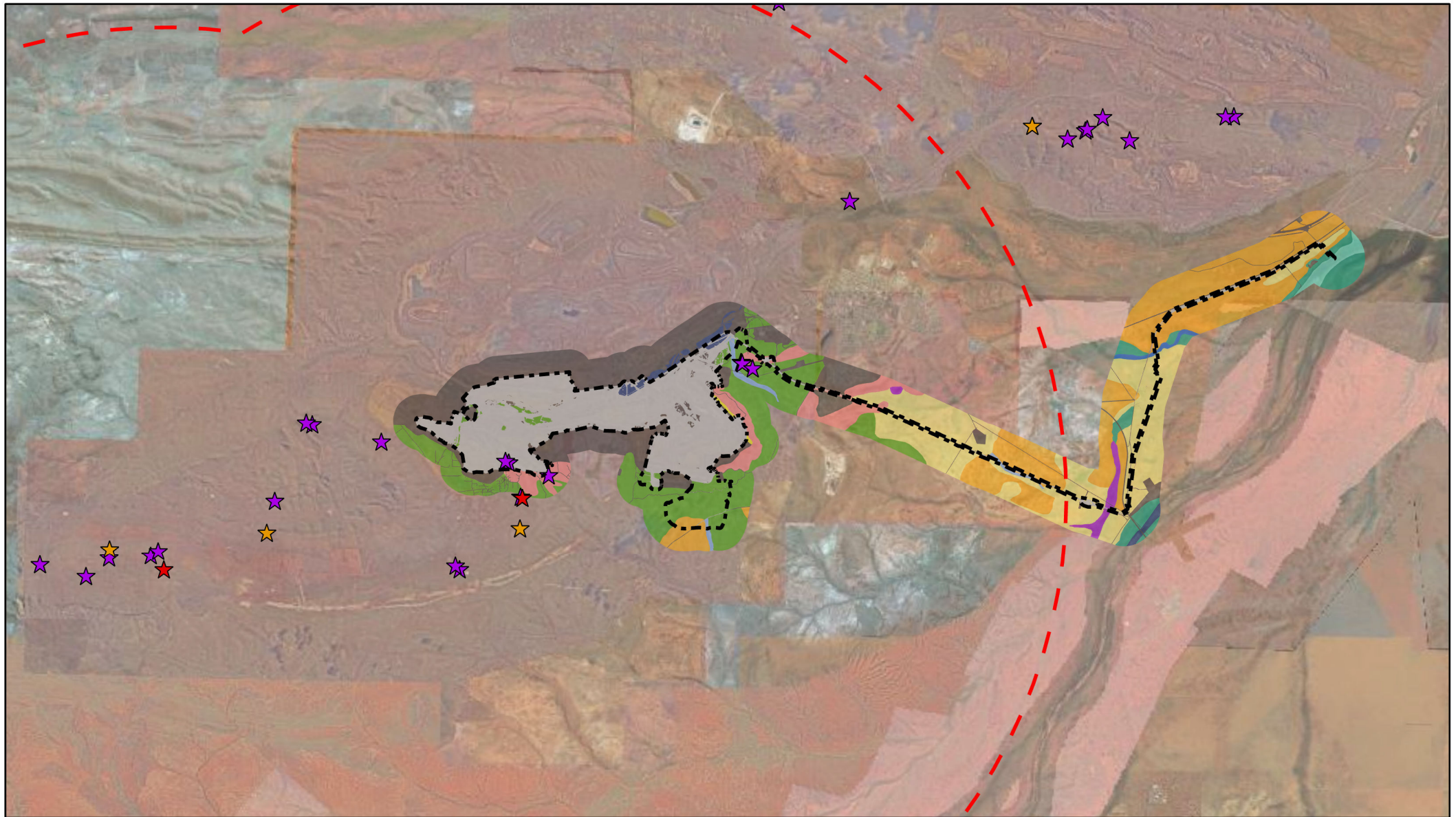
PUBLIC

OREBODY 29/30/35 IMPACT RECONCILIATION PROCEDURE VEGETATION CONDITION

PLANNING & STANDARDS - IRON ORE

SCALE @ A4:	1:80,000	PREPARED:	GEOMATICS	FIGURE:	3
DATE:	11/11/2024	REQUESTOR:	ENV APPROVALS	NO:	
		REVIEWED:			

A929_088_RevB



- Orebody 29/30/35 Development Envelope
- Indicative Cleared Area as at FY2023
- Category 2 roost 12km foraging range

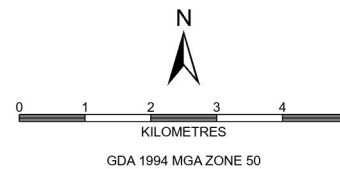
Ghost Bat Cave Category

- Category 2
- Category 3
- Category 4

Habitat Type

- Breakaway/ Cliff
- Cleared/ Disturbed
- Drainage Area/ Floodplain
- Hillcrest/ Hillslope
- Major Drainage Line
- Medium Drainage Line
- Minor Drainage Line

- Mulga Woodland
- Sandy/ Stony Plain
- Stony Plain
- Undulating Low Hills
- Wetland



BHP

PUBLIC

**OREBODY 29/30/35
IMPACT RECONCILIATION PROCEDURE
FAUNA HABITATS AND CAVES**

PLANNING & STANDARDS - IRON ORE

SCALE @ A4:	1:115,000	PREPARED:	GEOMATICS	FIGURE:	4
DATE:	11/11/2024	REQUESTOR:	ENV APPROVALS	NO:	
		REVIEWED:			

A929_070_RevD

2.2 Method to determine impacts

As discussed in Section 2.1.1, flora and vegetation surveying (including vegetation condition assessment and mapping) and vertebrate fauna surveying (including identification and mapping of fauna habitats for significant fauna species) of the Development Envelope were undertaken in accordance with the EPA technical guidelines (EPA 2016, 2020). The vegetation condition and fauna habitat mapping completed during the surveys is considered to form the baseline state of the environmental values for this IRP (described further in Appendix 2).

The Development Envelope for the Proposal comprises existing mining operations (Approved Proposal and Mount Whaleback mining operations). As discussed in Section 2.1.2, existing clearing associated with the Approved Proposal or Mount Whaleback mining operations is exempt from offsets and not covered in this IRP.

2.2.1 Impacts

BHP will use the methodology detailed in Steps 1 to 3 below to calculate the amount of land disturbance (i.e. clearing of native vegetation) within the Development Envelope. This will result in a verified Land Disturbance dataset that is used to determine the amount of clearing that is required to be offset against the environmental value/s (i.e. Step 4).

The verified Land Disturbance dataset is also used to update the baseline datasets for the condition of vegetation and state of environmental value/s that is to be used for the next financial year reconciliation.

This process will be repeated annually to determine the amount of clearing in each financial year, as is required to be reported in the Impact Reconciliation Report (IRR) (see Section 3.2).

Step 1 - Remotely Sensed data

BHP sources appropriate remotely sensed data (i.e. aerial photography or satellite imagery) for the area of the IRR. The remotely sensed data may come from a variety of sources and where appropriate, it will be mosaicked together. The mosaicked remotely sensed data is then re-sampled to 1 m resolution. This remotely sensed data set is used for the capture of the land clearing that is to be supplied as an end deliverable dataset.

Step 2 - Land Disturbance data

Direct land disturbance (i.e. clearing) is captured on a periodic basis throughout the financial year. The data is captured via digitising the land disturbance visible in orthophotos and/or satellite imagery, at a scale of 1:2,000 (this scale may vary in some instances depending on the resolution of the imagery captured).

All land disturbance data is then attributed with the reporting year, responsible operational entity, the underlying approval and the proposed or actual land-use (using the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) Mining Rehabilitation Fund (MRF) classifications). Where there are multiple approvals within the same area, the site responsible person is accountable for allocating the land disturbance to the appropriate approval.

Step 3 - Data review

Following the capture of the Land Disturbance data (Step 2), the dataset is reviewed at the end of each financial year to ensure:

- all land disturbance activities for the financial year period have been identified
- accurate and clean boundaries (removal of overlaps and correction of anomalies)

- data attribute completeness and correctness.

As BHP captures land disturbance/clearing at a scale of 1:2,000 (i.e. +/- 1 m on the ground), any polygon slivers or gaps in the dataset under one square metre are ignored and are considered acceptable in the context of analysing datasets at vastly different scales.

Step 4 - Processing of environmental value/s datasets

BHP have developed a methodology which automates the process of combining Land Disturbance, IBRA subregions and environmental value/s (i.e. vegetation condition and fauna habitat) datasets to ensure the process of deriving the final offset calculation is consistent and repeatable. The process manipulates the datasets (e.g. clips inputs to the Development Envelope, cleans any overlaps) to match the requirements of the Instructions, resulting in a final area calculation.

3 Reporting

3.1 Frequency and timing

The first biennial reporting period shall commence at the beginning of the financial year that ground disturbance activities as approved under **MSXXXX** are undertaken. For the Proposal, clearing is estimated to commence in Q1 2026 (i.e. FY2026). Orebody 29/30/35 operations is estimated to have a maximum project life of 50 years (comprising 40 years construction and mine operation, and 10 years decommissioning and closure), with an expected end date of 2075. Table 4 documents the timing of the biennial reporting periods for Orebody 29/30/35 operations to end of life.

As per the Instructions, the IRR will be submitted no later than four months after the conclusion of the biennial reporting period. As specified in Table 4, BHP propose to submit the IRR on the last business day in September following the end of the reporting period.

Table 4: Reporting period and frequency of the Impact Reconciliation Reports

Biennial period	Action	Timing
	Ministerial Statement XXXX issued	TBC
	Proposal clearing commences under MS XXXX	Estimated to commence FY2026
Period 1	First biennial reporting period	1 July 2025 to 30 June 2027
	IRR submitted to DWER	30 September 2027
Period 2	Second biennial reporting period	1 July 2027 to 30 June 2029
	IRR submitted to DWER	28 September 2029
Period 3	Third biennial reporting period	1 July 2029 to 30 June 2031
	IRR submitted to DWER	30 September 2031
Period 4	Fourth biennial reporting period	1 July 2031 to 30 June 2033
	IRR submitted to DWER	30 September 2033
Period 5	Fifth biennial reporting period	1 July 2033 to 30 June 2035
	IRR submitted to DWER	28 September 2035
Period 6	Sixth biennial reporting period	1 July 2035 to 30 June 2037
	IRR submitted to DWER	30 September 2037
Period 7	Seventh biennial reporting period	1 July 2037 to 30 June 2039
	IRR submitted to DWER	30 September 2039
Period 8	Eighth biennial reporting period	1 July 2039 to 30 June 2041
	IRR submitted to DWER	30 September 2041

Biennial period	Action	Timing
Period 9	Ninth biennial reporting period	1 July 2041 to 30 June 2043
	IRR submitted to DWER	30 September 2043
Period 10	Tenth biennial reporting period	1 July 2043 to 30 June 2045
	IRR submitted to DWER	29 September 2045
Period 11	Eleventh biennial reporting period	1 July 2045 to 30 June 2047
	IRR submitted to DWER	30 September 2047
Period 12	Twelfth biennial reporting period	1 July 2047 to 30 June 2049
	IRR submitted to DWER	30 September 2049
Period 13	Thirteenth biennial reporting period	1 July 2049 to 30 June 2051
	IRR submitted to DWER	29 September 2051
Period 14	Fourteenth biennial reporting period	1 July 2051 to 30 June 2053
	IRR submitted to DWER	30 September 2053
Period 15	Fifteenth biennial reporting period	1 July 2053 to 30 June 2055
	IRR submitted to DWER	30 September 2055
Period 16	Sixteenth biennial reporting period	1 July 2055 to 30 June 2057
	IRR submitted to DWER	28 September 2057
Period 17	Seventeenth biennial reporting period	1 July 2057 to 30 June 2059
	IRR submitted to DWER	30 September 2059
Period 18	Eighteenth biennial reporting period	1 July 2059 to 30 June 2061
	IRR submitted to DWER	30 September 2061
Period 19	Nineteenth biennial reporting period	1 July 2061 to 30 June 2063
	IRR submitted to DWER	28 September 2063
Period 20	Twentieth biennial reporting period	1 July 2063 to 30 June 2065
	IRR submitted to DWER	30 September 2065
Period 21	Twenty-first biennial reporting period	1 July 2065 to 30 June 2067
	IRR submitted to DWER	30 September 2067
Period 22	Twenty-second biennial reporting period	1 July 2067 to 30 June 2069
	IRR submitted to DWER	30 September 2069
Period 23	Twenty-third biennial reporting period	1 July 2069 to 30 June 2071

Biennial period	Action	Timing
	IRR submitted to DWER	30 September 2071
Period 24	Twenty-fourth biennial reporting period	1 July 2071 to 30 June 2073
	IRR submitted to DWER	29 September 2073
Period 25 Final biennial report period	Twenty-fifth biennial reporting period	1 July 2073 to 30 June 2075
	IRR submitted to DWER	30 September 2075

3.2 Impacts and reconciliation

Ground disturbance activities will wholly occur within the Orebody 29/30/35 Development Envelope. Clearing is ongoing for the existing operations authorised under NVCP 5617, with new proposed clearing for the Proposal expected to commence in Q1 2026 (i.e. FY2026) once the new Ministerial Statement is granted.

As discussed in Section 2.1, clearing of vegetation in Good to Excellent condition and of critical Ghost Bat foraging habitat within the Hamersley IBRA subregion of the Pilbara bioregion for the Proposal will be up to 100 ha. Orebody 29/30/35 operations is estimated to have a maximum project life of 50 years. Clearing is expected to occur within the first two years of construction and operations. As detailed in Section 2.2, the clearing of vegetation will be captured spatially and reconciled against the baseline data (for vegetation condition and fauna habitats) within the Development Envelope.

As per Condition B4-7 of **MSXXXX**, the IRR will provide the location and spatial extent of the clearing undertaken during each year of each biennial reporting period. More specifically, the following information will be submitted in each IRR:

- amount of clearing (ha) of fauna habitats identified as critical Ghost Bat foraging habitat, within the Hamersley IBRA subregion of the Pilbara bioregion, that has occurred during each financial year of the reporting period, including the offset rate
- amount of clearing (ha) of vegetation in Good to Excellent condition, within the Hamersley IBRA subregion of the Pilbara bioregion, that has occurred during each financial year of the reporting period, including the offset rate
- information used to validate amount of clearing (e.g. aerial imagery, remote sensing data, digitised polygons and/or ground-truthing surveys) in each financial year
- information regarding any exemptions, other clearing approvals, or reductions to contributions to the fund (e.g. where impacts have occurred that are applied to a different Ministerial Statements or NVCP)
- forward estimate of impacts expected to be reported in subsequent reporting periods
- details and spatial data for historical impacts excluded from offset requirements.

4 References

Astron Environmental Services (Astron) (2024) *OB29, 30 and 35 Expansion and Newman Surplus Water Targeted Significant Fauna Survey*. Report prepared for BHP Western Australia Iron Ore, July 2024, Western Australia.

BHP Iron Ore Pty Ltd (BHP) (2020) *Biodiversity Survey Spatial Data Requirements Procedure*. Document number SPR-IEN-EMS-015. Version 11.0. Published January 2020.

Environmental Protection Authority (EPA) (2016) *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment*. Environmental Protection Authority. Western Australia. Published 13 December 2016.

Environmental Protection Authority (EPA) (2020) *Technical Guidance - Terrestrial vertebrate fauna surveys for environmental impact assessment*. Environmental Protection Authority. Western Australia. Published 1 July 2020.

Environmental Protection Authority (EPA) (2024) *Instructions on how to prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports*. Environmental Protection Authority. Western Australia. Published March 2024.

Spectrum Ecology and Spatial (Spectrum) (2024) *OB29, 30 & 35 Expansion and Newman Surplus Water Reconnaissance Flora and Vegetation Assessment*. Report prepared for BHP, November 2024, Western Australia.

Appendices

Appendix 1 Ministerial Statement XXXX Condition B4 requirements

Condition number	Condition requirements
B4 Offsets	
B4-1	<p>The proponent must contribute funds to the Pilbara Environmental Offsets Fund calculated pursuant to condition B4-2, to achieve the objective of counterbalancing the significant residual impacts to:</p> <ol style="list-style-type: none"> (1) Good to Excellent condition native vegetation (2) Ghost Bat critical foraging habitat
B4-2	<p>The proponent's contribution to the Pilbara Environmental Offsets Fund must be paid biennially, with the amount to be contributed calculated based on the clearing undertaken in each year of the biennial reporting period in accordance with the rates in condition B4-3. The first biennial reporting period must commence from clearing activities of the environmental value(s) identified in condition B4-3.</p>
B4-3	<p>Calculated on the 2023-2024 financial year, the contribution rates are:</p> <ol style="list-style-type: none"> (1) \$986 AUD (excluding GST) per ha of the following environmental values cleared as a result of the proposal within the Hamersley IBRA subregion: <ol style="list-style-type: none"> (a) Good to Excellent condition native vegetation (2) \$1,972 AUD (excluding GST) per ha of the following environmental values cleared as a result of the proposal within the Hamersley IBRA subregion: <ol style="list-style-type: none"> (a) Ghost Bat critical foraging habitat
B4-4	<p>The rates in condition B4-3 change annually each subsequent financial year in accordance with the percentage change in the CPI applicable to that financial year.</p>
B4-5	<p>To achieve the objective in condition B4-1, the proponent must implement the Orebody 29/30/35 Impact Reconciliation Procedure:</p> <ol style="list-style-type: none"> (1) spatially define the environmental value(s) identified in condition B4-1; (2) spatially define the areas where offsets required by condition B4-1 are to be exempt; (3) include a methodology to calculate the amount of clearing undertaken during each year of the biennial reporting period for each of the environmental values identified in condition B4-3; (4) state that clearing calculation for the first biennial reporting period will commence from ground disturbing activities in accordance with condition B4-2 and end on the second 30 June following commencement of ground disturbing activities; (5) state that clearing calculations for each subsequent biennial reporting period will commence on 1 July of the required reporting period, unless otherwise agreed by the CEO; (6) indicate the timing and content of the Impact Reconciliation Reports; and (7) be prepared in accordance with <i>Instructions on how to prepare Environmental Protection Act 1986 Part IV Impact Reconciliation Procedures and Impact Reconciliation Reports</i> (or any subsequent revisions).
B4-6	<p>The proponent must submit an Impact Reconciliation Report in accordance with the confirmed Impact Reconciliation Procedure in condition B4-5.</p>

Condition number	Condition requirements
B4-7	The Impact Reconciliation Report required pursuant to condition B4-6 must provide the location and spatial extent of the clearing undertaken as a result of the proposal during each year of each biennial reporting period.
B4-8	<p>The proponent may apply in writing and seek the written approval of the CEO to reduce all or part of the contribution payable under condition B4-2 where:</p> <ol style="list-style-type: none"> (1) a payment has been made to satisfy a condition of an approval under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> in relation to the proposal; and (2) the payment is made for the purpose of counterbalancing impacts of the proposal on matters of national environmental significance.
B4-9	The CEO may grant approval to discount the amount payable under condition B4-2, if the CEO is satisfied that the payment will offset the significant residual impacts of the proposal.
B4-10	Condition C2 applies to the confirmed Impact Reconciliation Procedure required by condition B4-5 as if it were an environmental management plan.
B4-11	Failure to implement a confirmed Impact Reconciliation Procedure or submit an Impact Reconciliation Report as required by condition B4-6 represents a non-compliance with these conditions.

Appendix 2 Baseline spatial data associated with the environmental value requiring offset

Flora, vegetation, and vertebrate fauna surveying of the Development Envelope was undertaken in accordance with the EPA Technical Guidance relevant at the time of surveying (EPA 2016, 2020). The flora and vegetation surveying included the assessment and mapping of vegetation condition. The condition of vegetation was mapped using the Vegetation Condition Scale for the Eremaean and Northern Botanical Provinces as per Table 2 in the EPA Technical Guidance (EPA 2016). The vertebrate fauna survey included the identification and mapping of fauna habitats, and an assessment of their importance to threatened fauna species that are known to occur in the Development Envelope.

All baseline environmental survey data captured during the surveys was supplied to BHP in accordance with BHP Data Standards (document SPR-IEN-EMS-015) (BHP 2020). The BHP Data Standards ensure a consistent and repeatable method of capturing environmental survey data. The survey data is stored on BHP's internal database system following review for technical and spatial accuracy.

This baseline environmental survey data and existing land disturbance data is considered to form the baseline state (of vegetation condition and fauna habitats) for this IRP.

The following spatial data is provided to support this IRP, as per the Instructions:

- **boundary:** the Orebody 29/30/35 (Significant Amendment) Development Envelope
- **baseline:** vegetation condition mapping (baseline survey data), fauna habitat mapping (baseline survey data), existing land disturbance data, and IBRA subregions
- **imagery:** aerial imagery for the extent of the Development Envelope.

All spatial data is provided in a format that complies with the requirements of the Instructions, and as per the following parameters:

- **data type:** closed polygons for boundary and baseline data attributes as per Table 6 of the Instructions
- **format:** shapefiles or Environmental Systems Research Institution (ESRI) geodatabase format
- **coordinate system:** Geocentric Datum of Australia 2020 (GDA2020) datum, projected into the appropriate Map Grid of Australia zone
- **imagery:** Enhanced Compressed Wavelet (ECW) format or Geographic Tagged Image File Format (GeoTIFF), at a minimum 1 m resolution.