

# Clearing Desktop Report – Short Form



This Clearing Desktop Report – Short Form is required for proposals with low clearing impacts that do not require a full assessment through a Clearing Desktop Report (CDR). Clearing that may be or is at variance should not be assessed using this form. This form must be reviewed and endorsed by the Central Review and Submissions Process (CRSP) Team, who will determine whether the clearing impacts have been assessed properly. Send the form via [clearingpermit@mainroads.wa.gov.au](mailto:clearingpermit@mainroads.wa.gov.au). The Environment Officer will be advised within **2 business days** if the assessment of the proposal clearing is endorsed. Refer to the [Factsheet on the Assessment of Low Impact Clearing under Main Roads Statewide Clearing Permit CPS 818 \(D17#452322\)](#) for further information. Text in *red italics* are guidance notes and should be deleted once the HRA is complete. *Blue non-italicised* text is where relevant information is to be added and changed to black once complete.

## 1. PROPOSAL DETAILS

|                                       |                                  |                         |            |
|---------------------------------------|----------------------------------|-------------------------|------------|
| <b>Proposal Name:</b>                 | MRDH4 Construction Camp          |                         |            |
| <b>Region/Directorate:</b>            | Pilbara                          |                         |            |
| <b>Local Government:</b>              | Shire of Ashburton               |                         |            |
| <b>Road/Bridge Name &amp; Number:</b> | Tom Price Railway Road - 811Z076 |                         |            |
| <b>Proposal Location (SLK):</b>       | SLK 139                          |                         |            |
| <b>CDR Short Form TRIM Number:</b>    | D24#774509                       |                         |            |
| <b>Spatial Data TRIM Number:</b>      | D23#1125665                      |                         |            |
| <b>EOS Number:</b>                    | 3264                             |                         |            |
| <b>Expected Proposal Start Date:</b>  | June 2024                        |                         |            |
| <b>Oracle Project No:</b>             | 30002809                         | <b>Task Code:</b>       | 19301      |
| <b>LISC TRIM Number:</b>              | D24#340573                       | <b>HRA TRIM Number:</b> | D24#341216 |

## 2. PURPOSE OF CLEARING

The proposed clearing is for the establishment of an accommodation camp to support realignment of the Red Dog Highway. The proposed development footprint includes a 2 km long access track (2.17 ha of clearing), and the camp development envelope which is 24.28 ha. Of the 24.28 ha, 3.66 ha will be completely cleared to meet bushfire safety requirements, along with another 4 ha for camp and related infrastructure. The project location and proposed clearing is displayed in Figure 1 below.

## 3. ALTERNATIVES TO CLEARING

Alternative sites for the camp were explored, and disregarded due to tenure, safety or flood risk.

Areas to the north of the road are owned, leased or managed by Rio Tinto, with a rail level crossing that would have to be regularly traversed. The safety risk for this was unacceptable to both MRWA and the landholder.

Lands to the south of the proposed road alignment are vested with Water Corporation, and currently under a pastoral lease for low-intensity grazing. The current location (even though it too is vested with Water Corporation) was the only location option accepted by the current lease-holder that complied with distance from rail and noise, the proposed construction works and flood risk.

## 4. MEASURES TO AVOID, MINIMISE, MITIGATE AND MANAGE PROPOSAL CLEARING IMPACTS

The following alternatives to clearing were considered during the development of the proposal:

The proposed access track has been aligned to avoid clearing of any substantial trees, weaving its way from the main road to the campsite.

The campsite itself is located in the lowest flood risk area, and while the footprint sits within some stands of trees, these are being parkland cleared only, except for the minimum Bushfire Attack Level (BAL) clearances for bushfire safety requirements around the buildings denoted in grey in the image below.

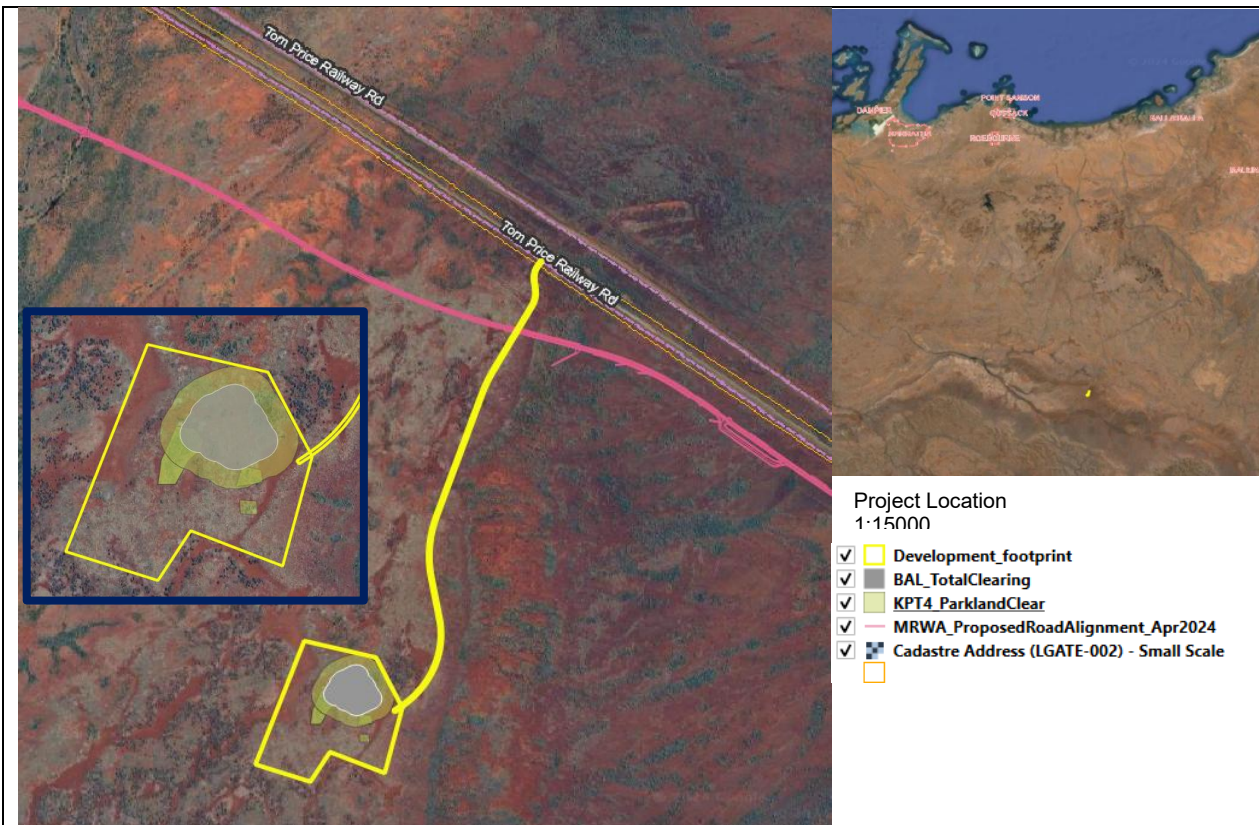


Figure 1: Project location and proposed clearing.

## 5. APPROVED POLICES AND PLANNING INSTRUMENTS

The clearing of native vegetation in Western Australia is regulated under the *Environmental Protection Act 1986* (EP Act) and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.3), Main Roads has also had regard to the following documents.

### **Environmental Protection Policies:**

- Environmental Protection (Peel Inlet - Harvey Estuary) Policy 1992
- Environmental Protection (Western Swamp Tortoise Habitat) Policy 2011

### **Other legislation of relevance for assessment of clearing and planning/other matters:**

- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Country Areas Water Supply Act 1947* (WA) (CAWS Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Planning and Development Act 2005* (WA) (P&D Act)
- *Soil and Land Conservation Act 1945* (WA)
- *Rights in Water and Irrigation Act 1914* (WA) (RIWI Act)
- *Aboriginal Heritage Act 1972* (WA) (AHA)
- *Town Planning and Development Act* (WA) 1928

### **Relevant other policies and guidance documents:**

- Environmental Offsets Policy (Government of Western Australia, 2011)
- A guide to the assessment of applications to clear native vegetation (DER, December 2014)
- Procedure: Native vegetation clearing permits (DWER, October 2021)
- Environmental Offsets Guidelines (Government of Western Australia, August 2014)
- Technical guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)
- Technical guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA, 2020)
- Approved conservation advice under section 266B of the EPBC Act for threatened flora/fauna/vegetation communities

- Approved Recovery Plans for threatened species
- EPBC Act Referral guidelines for the three threatened black cockatoo species
- Strategic advice - EPA

## 6. CLEARING AREA

|                              |                                                                     |                           |     |
|------------------------------|---------------------------------------------------------------------|---------------------------|-----|
| <b>Clearing Area (ha):</b>   | 9.83 ha                                                             | <b>No. Trees Cleared:</b> | N/A |
| <b>Species Name(s):</b>      | <i>Corymbia spp.</i> and <i>Eucalyptus spp.</i> and hummock grasses |                           |     |
| <b>Easting and Northing:</b> | -21°42'43.395", 117°28'3.556"                                       |                           |     |

## 7. EXISTING ENVIRONMENT AND SITE INFORMATION

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Site Vegetation Description/Association:</b> | <p><b>Eastern half of camp area and access track</b><br/>Chichester Plateau_607_35 – Low Tree Steppe, Hummock grassland with scattered bloodwoods (<i>Corymbia spp.</i>) &amp; snappy gum, <i>Triodia spp</i> <i>Corymbia dichromophlois</i> and <i>Eucalyptus leucophloia</i></p> <p><b>Western half of camp</b><br/>Chichester Plateau_646_38 – Shrub-steppe, Hummock grassland with scattered shrubs or mallee <i>Triodia spp.</i> <i>Acacia spp.</i>, <i>Grevillea spp</i> and <i>Eucalyptus spp.</i></p> |
| <b>Site Vegetation Condition:</b>               | Vegetation on site has experienced low intensity grazing for at least the last 50 years. The vegetation across the camp area is primarily hummock grasses with scattered trees. The majority of trees will be retained and the site parkland cleared, although 5.83 ha will be totally cleared to comply with bushfire safety requirements for buildings and structures. Vegetation is in 'Good' to 'degraded' condition.                                                                                     |
| <b>Pre-European Extent Remaining (%):</b>       | Chichester Plateau_607: 99.84%<br>Chichester Plateau_646: 100%                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## 8. ASSESSMENT OF PROPOSAL AGAINST CLEARING PRINCIPLES

| <b>Is vegetation to be cleared at variance with:</b>                                                                 | <b>Justification or Evidence:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Principle (a)</b> – Native vegetation should not be cleared if it comprises a high level of biological diversity. | <p>The proposed project site is located with Chichester subregion of the Pilbara IBRA region characterised by coastal plains and inland mountain ranges. Vegetation is predominantly mulga low woodlands or snappy gum over hummock grasses.</p> <p>A search of publicly available DBCA datasets identified one location of Priority Fauna located 6.4 km to the north-east, and one Priority 2 listed flora species located 8.3 km to the north of the proposed clearing area. State listed Priority Ecological Communities are located greater than 10 km to the south-west, south-east and north-east.</p> <p>A review of the DCCEE Protected Matters Search Tool (PMST) identified 11 Listed Threatened Species, and 10 listed migratory species, as potentially occurring within one km of the proposed camp site. An assessment of the likelihood of presence/absence of these species has been provided in Attachment 1.</p> <p>The condition of the vegetation within the clearing footprint has been described as 'good' to 'degraded'.</p> <p>The vegetation type and condition and is typical of the level of biological diversity found in this area. The associated landform is not known to be high risk for the occurrence of unique or poorly distributed species. Any listed species are likely to be found across the extent of this vegetation and landform region.</p> <p>Based on this assessment, it is not considered likely that the vegetation within the clearing footprint represents a high level of</p> |

|                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|                                                                                                                                                                                   | biological diversity and is not likely to be at variance to this Principle.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Principle (b)</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.   | <p>The proposed clearing area contains two vegetation types detailed in Section 7 above. The site has experienced low-intensity grazing for at least the last 50 years. There are no recorded threatened or priority listed fauna within three kilometres of the proposed site.</p> <p>The Northern Quoll, Pilbara Leaf-nosed Bat and Ghost Bat may potentially forage or move through the area on occasion. However, these species are highly mobile and critical breeding, foraging and roosting habitat is unlikely to be impacted given the lack of rocky hill systems, caves and watercourses in the proposed clearing area. Similarly, the habitat at this location is unlikely to be suitable for the Pilbara Olive Python given the absence of the above-listed habitat features.</p> <p>The most critical linkage for fauna movement is likely to be the Fortescue River, located more than 5 km south of the proposed works. This River will not be impacted due to the small scale of proposed works and separation distance from the proposed clearing.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p> |
| <b>Principle (c)</b> – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.                                  | <p>The proposed clearing area contains two vegetation types detailed in Section 7 above. The site has experienced low-intensity grazing for at least the last 50 years. A desktop search of DBCA datasets and the PMST identified no Threatened Flora species within 10 km of the site.</p> <p>The proposed vegetation at the site is typical of the broader vegetation communities and is unlikely to provide a significant habitat necessary for the continued existence of any threatened flora species that may exist in the wider area.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Principle (d)</b> – 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. | <p>A desktop search of DBCA Threatened and Priority Ecological communities and the DCCEE Protected Matters Search Tool found there were no TECs within 10 km of the proposed clearing.</p> <p>The native vegetation present within the proposed clearing area is typical of the broader vegetation associations [Chichester Plateau_607 and Chichester Plateau] and is unlikely to comprise whole or part of, or be necessary for the maintenance of a TEC.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Principle (e)</b> – Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.               | <p>As detailed in Section 7 above, the site is located in the Chichester IBRA sub-Region, and vegetation communities on the site are well represented in the region and described at the high level by Beard (1990):</p> <p>Eastern half of camp area and access track - Chichester Plateau_607: 99.84%</p> <p>Description 607_35 – Low Tree Steppe, Hummock grassland with scattered bloodwoods (<i>Corymbia spp.</i>) &amp; snappy gum, <i>Triodia</i> spp <i>Corymbia dichromophloia</i> and <i>Eucalyptus leucophloia</i></p> <p>Western half of camp - Chichester Plateau_646: 100%</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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|                                                                                                                                                                                                              | <p>Description 646_38 – Shrub-steppe, Hummock grassland with scattered shrubs or mallee <i>Triodia spp.</i> <i>Acacia spp.</i>, <i>Grevillea spp</i> and <i>Eucalyptus spp</i>.</p> <p>See Site Photos in Attachment 2.</p> <p>The project is not located within a constrained area, and with near to 100% of the pre-European extent of vegetation associations remaining, the proposed clearing area is not a significant remnant of native vegetation in an area that has been extensively cleared.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>                                                                                                                                                   |
| <p><b>Principle (f)</b> – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.</p>                                  | <p>Based on desktop databases and site photos, the vegetation proposed to be cleared is not considered riparian in nature, and the nearest water courses are five kilometres to the south of the site (the Fortescue River) and a tributary greater than two kilometres to the west of the project site.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p>                                                                                                                                                                                                                                                                                                                                    |
| <p><b>Principle (g)</b> – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.</p>                                                     | <p>Based on desktop databases, the soil in the application area is mapped as:</p> <p>Hooley land system - comprises alluvial clay plains supporting a mosaic of snakewood shrublands and tussock grasslands.</p> <p>The mapped soil is not susceptible to wind and water erosion, and the application area is located within an area mapped as low risk for acid sulphate soils.</p> <p>The proposed clearing is not likely to cause appreciable land degradation and is therefore not likely to be at variance to this Principle.</p>                                                                                                                                                                                                              |
| <p><b>Principle (h)</b> – 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.</p> | <p>Based on desktop databases, the closest DBCA managed conservation land is located 11 km north-east of the proposed clearing area. Significant wetlands are located more than 35 km to the west.</p> <p>The vegetation types within the proposed clearing area are well represented and the condition of the vegetation is similar to adjacent vegetation. It is unlikely that the environmental values of any conservation area will be impacted by the proposed clearing, therefore the proposed clearing is not likely to be at variance to this Principle.</p>                                                                                                                                                                                |
| <p><b>Principle (i)</b> – 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.</p>                     | <p>Based on desktop databases, there are no watercourses or wetlands mapped as occurring in the proposed clearing area. The nearest water courses are five kilometres to the south of the site (the Fortescue River) and a tributary greater than two kilometres to the west of the project site. The proposed clearing is therefore unlikely to cause deterioration in the quality of surface water.</p> <p>The proposed clearing area is located in the Millstream Public Drinking Water Source Area which is proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI). The Millstream Water Reserve was proclaimed under the <i>Country Areas Water Supply Act 1947</i> (CAWS) in 1969. A Drinking Water Source Protection</p> |

|                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
|                                                                                                                                                                             | <p>Plan was prepared for the Millstream Water Reserve in June 2010 (Millstream Water Reserve drinking water source protection plan) (DWER, 2023). In relation to adjacent Main Roads’ adjacent clearing permit (CPS 10273/1), located within one kilometre east of this clearing proposal, the DWER North West Region recommended that during the disturbance and operation activities, hydrocarbons, chemicals and potentially hazardous substances are stored and disposed of in accordance with the Departments’ Guidelines and Water Quality Protection Notes (DWER, 2023). That advice is applicable to this clearing proposal, with additional controls also being applied to ensure the non-clearing related activities associated with the camp are managed appropriately from a land use and water protection perspective.</p> <p>The proposed native vegetation clearing activity is unlikely to adversely impact groundwater levels or quality.</p> <p>Based on the above, the proposed clearing is not likely to be at variance to this Principle.</p> |                                       |
| <p><b>Principle (j)</b> – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.</p> | <p>Flood modelling was completed as part of a process to select an appropriate site for the work camp. The proposed campsite has been specifically selected to avoid flood prone areas as a safety requirement for the location of the camp.</p> <p>Based on desktop databases, the nearest water course is a tributary greater than two kilometres to the south of the site, and the Fortescue River, located more than five kilometres south and downstream of the site. The proposed clearing is unlikely to cause or exacerbate the incidence or intensity of flooding and is therefore not likely to be at variance to this Principle.</p>                                                                                                                                                                                                                                                                                                                                                                                                                    |                                       |
| <p><b>Methodology Used and References:</b></p>                                                                                                                              | <p>Photographs of Site: Attachment 2</p> <p>Assessment of Publicly Available Spatial Data Layers. See References.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                       |
| <p><b>9. REHABILITATION, REVEGETATION AND OFFSETS</b></p>                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                       |
| <p><b>Offset Proposal:</b></p>                                                                                                                                              | <p>No offset proposal is required as the proposed clearing will not result in significant residual impacts to native vegetation within the region.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                       |
| <p><b>Revegetation and Rehabilitation:</b></p>                                                                                                                              | <p>No temporary clearing will be undertaken as part of the Proposal activities.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                       |
| <p><b>10. COMPLIANCE WITH CPS818</b></p>                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                       |
| <p>The clearing associated with the proposal is not at variance with the Clearing Principles. Additional management actions under CPS 818 are detailed below.</p>           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                       |
| <p><b>Impact of Clearing</b></p>                                                                                                                                            | <p><b>Yes/No or NA</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <p><b>Further Action Required</b></p> |

|                                                                                                                                                                                                                                                                                                                                                 |                              |                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|
| <b>1. Proposal is within a Region that:</b> <ul style="list-style-type: none"> <li>• has rainfall greater than 400mm; and,</li> <li>• is South of the 26<sup>th</sup> parallel; and,</li> <li>• works are necessary in 'Other than dry conditions'; and,</li> <li>• works have potential for <b>uninfested</b> areas to be impacted.</li> </ul> | <b>No</b>                    | No further action required. |
| <b>2. Do the proposed works require clearing within or adjacent to DBCA managed lands in non-dry conditions?</b>                                                                                                                                                                                                                                | <b>No</b>                    | No further action required. |
| <b>3. Main Roads has been notified by DWER or an environmental specialist that the area to be cleared is susceptible to a pathogen other than dieback.</b>                                                                                                                                                                                      | <b>No</b>                    | No further action required. |
| <b>4. Weeds are likely to spread to and result in environmental harm to adjacent areas of native vegetation that are in good or better condition.</b>                                                                                                                                                                                           | <b>No</b>                    | No further action required. |
| <b>Completed By:</b>                                                                                                                                                                                                                                                                                                                            |                              |                             |
| <b>Name</b>                                                                                                                                                                                                                                                                                                                                     | Redacted                     |                             |
| <b>Signature</b>                                                                                                                                                                                                                                                                                                                                | <i>Redacted</i>              |                             |
| <b>Job Title</b>                                                                                                                                                                                                                                                                                                                                | Senior Advisor - Environment |                             |
| <b>Date</b>                                                                                                                                                                                                                                                                                                                                     | 01/05/2024                   |                             |

**Once all sections are completed, send the form to CRSP for review and endorsement.**

| DECISION ON CLEARING ASSESSMENT |                                 |
|---------------------------------|---------------------------------|
| <b>Name</b>                     | Redacted                        |
| <b>Signature</b>                | <i>Redacted</i>                 |
| <b>Job Title</b>                | Principal Environmental Officer |
| <b>Date</b>                     | 07/06/2024                      |

## References

Department of Environment (2013) *Matters of National Environmental Significance- Significant Impact Guidelines 1.1: Environmental Protection and Biodiversity Conservation Act 1999*. [Online 2020]  
<https://www.environment.gov.au/epbc/publications/significant-impact-guidelines-11-matters-national-environmental-significance>

Department of Environment Regulation (2014). *A Guide to the Assessment of Application to Clear Native Vegetation; under Part V Division 2 of the Environmental Protection Act 1986*. Department of Environment Regulation, December 2014

Department of the Environment and Energy (2016) *Australia's 15 National Biodiversity Hotspots*. Department of the Environment and Energy <https://www.environment.gov.au/biodiversity/conservation/hotspots/national-biodiversity-hotspots>

Department of Sustainability, Environment, Water, Population and Communities (2012) *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*. Department of Sustainability, Environment, Water, Population and Communities, October 2012

Department of Water and Environmental Regulation (DWER) (Regulatory Services – Water) (2023) Ground and Surface Water Advice Request - *Rights in Water and Irrigation Act 1914* advice for clearing permit application CPS 10273/1, received 8 August 2023 (DWER Ref: DWERDT818469).

Environmental Protection Authority (EPA) (2016). Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment. Available from:  
[http://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey\\_Dec13.pdf](http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf).

Environmental Protection Authority (EPA) (2016). Technical Guidance – Terrestrial Fauna Surveys. Available from:  
[https://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/Tech%20guidance%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf](https://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/Tech%20guidance%20Terrestrial%20Fauna%20Surveys-Dec-2016.pdf).

Government of Western Australia. (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>

## Spatial References

**Publicly available GIS Databases used** (sourced from [www.data.wa.gov.au](http://www.data.wa.gov.au)):

- Cadastre (LGATE-218)
- Contours (DPIRD-073)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia – Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography – Inland Waters – Waterlines
- IBRA Vegetation Statistics
- Imagery
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)

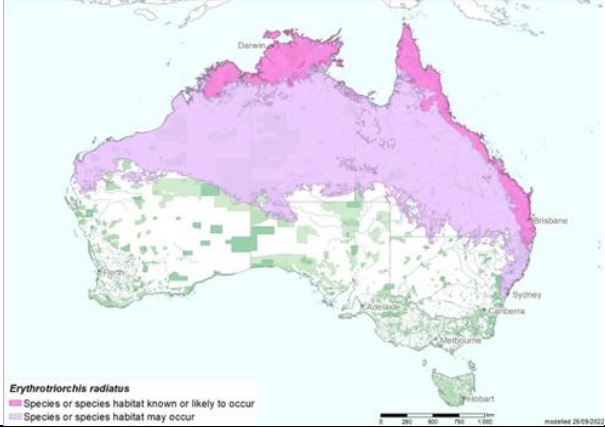
## OFFICIAL

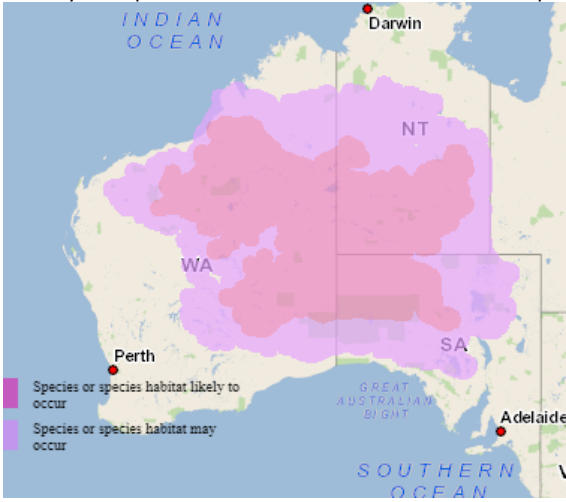
- Soil Landscape Land Quality – Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Systems

### **Restricted GIS Databases used:**

- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

## Attachment 1 - Assessment of Presence/Absence of listed MNES

| Threatened Fauna                                    | Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sharp-tailed Sandpiper<br><i>Calidris acuminata</i> | Vulnerable listed species effective January 2024. This is a migratory species that travels from Siberia to Australia, and this is the non-breeding continent for the species. The species is common in coastal areas and widely, but sparsely scattered inland. They are found primarily in the south-east of the continent. The proposed works will not be undertaken within or adjacent to the preferred habitat of this species, it is unlikely that this project will have any measurable impact on the survival or distribution of this species.                                                                                                                                                                                                                                           |
| Curlew Sandpiper<br><i>Calidris ferriuginea</i>     | Critically endangered, migratory water bird found in coastal wetlands. They are found erratically in interior Australia, and it is unlikely that any birds present would be unable to move offsite during works. The proposed works will not be undertaken within or adjacent to the preferred habitat of this species, it is unlikely that this project will have any measurable impact on the survival or distribution of this species.                                                                                                                                                                                                                                                                                                                                                       |
| Red Goshawk<br><i>Erythroriorchis radiatus</i>      | <p>The species was listed as Endangered in March 2023. This is a large hawk, in rufous-brown colour growing 45-60cm in length. They are currently known to breed from the Kimberley, east to Cape York Peninsula, and on the Tiwi Islands.</p> <p>The species inhabits coastal and sub-coastal tall open forests and woodlands, tropical savannahs traversed by wooded or forested rivers and edges of rainforests. Favoured areas appear to contain permanent water. Whilst the species may traverse the proposed works location, it is unlikely to form breeding habitat, and the scale and localised impact is unlikely to have a significant impact on the survival or distribution of the species.</p>  |
| Grey Falcon<br><i>Falco hypoleucos</i>              | Vulnerably listed species. The Grey Falcon occurs at low densities across inland Australia and is known almost entirely from anecdotal and opportunistic sightings. The species is known to frequent timbered lowland plains, particular acacia shrublands that are crossed by tree-lined courses. The species generally nests in the tallest trees along water courses. The degraded nature of the proposed site, particularly the lack of trees, indicates that this site is unlikely to form critical breeding habitat for the species, thus the proposed works are unlikely to significantly impact the survival or distribution of the species.                                                                                                                                            |
| Night Parrot<br><i>Pezoporus occidentalis</i>       | A Critically Endangered species known from a number of discreet populations, although the exact distribution of the species is not fully described in the literature. Only two areas (western Queensland and the Pilbara) have reliable records confirming populations. Most habitat records are of Triodia (Spinifex) grasslands and/or chenopod shrublands in the arid and semi-arid zones. Roosting and nesting sites are consistently within clumps of dense vegetation. Often found close to inland wetland systems, FMG has confirmed a population near the Cloudbreak mine. It is unlikely that the localised nature of this work will impact on the survival or distribution of this species.                                                                                           |

| Threatened Fauna                                                                 | Assessment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Princess Parrot, Alexandra's Parrot<br/><i>Polytelis alexandrae</i></p>       | <p>Vulnerably listed in 2018. The princess parrot irregularly occurs across the arid zone from near Oodnadatta in South Australia, west to near Coolgardie and the east Murchison River in Western Australia, and north to near the Fitzroy River in Western Australia and to Howell Ponds in the Northern Territory. The princess parrot is usually recorded from shrubland in swales between sand dunes, with occupied sites typically having a variety of shrubs (including Grevillea, Hakea, Cassia and Eremophila species) among scattered emergent trees, with a ground-cover of spinifex <i>Triodia</i> species. Whilst the species may possibly occur at this site, the temporary and localised nature of the work is unlikely to impact the survival and distribution of this species.</p>  |
| <p>Australian Painted Snipe<br/><i>Rostratula australis</i></p>                  | <p>Endemic to wetlands of all States, but most common in Eastern Australia. The proposed works are largely occurring in inland locations, which the species is unlikely to utilise extensively. The proposed works are unlikely to have a significant impact on the distribution or survival of this species.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <p>Northern Quoll, Digul, Wijingadda, Wiminji<br/><i>Dasyurus hallucatus</i></p> | <p>Vulnerable listed terrestrial carnivore with a large range, shy of development. The proposed development footprint is within low-intensity pastoral lands, with good to degraded non-contiguous vegetation. The extent of clearing is unlikely to significantly impact the survival or distribution of the species.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <p>Ghost Bat<br/><i>Macroderma gigas</i></p>                                     | <p>Vulnerable listed species, listed as threatened under State legislation. The species is currently distributed in geographically disjunct colonies in the Pilbara. Only 14 breeding sites are currently known, and the proposed work will not impact these areas. The majority of known roost sites are known from six historical mines; Bamboo Creek, Bulletin, Comet, Klondyke Queen, Lalla Rookh and All Nations Mines. 2/3 of the remaining population are located in the Kimberley region. The lack of nearby caves or under ground mines, and small extent of clearing is unlikely to have a measurable impact on the survival and distribution of this species.</p>                                                                                                                                                                                                           |
| <p>Pilbara Leaf-nosed Bat<br/><i>Rhinonicteris aurantia</i></p>                  | <p>Listed as vulnerable, the Pilbara form of this species that has seen a greater than 30% decline in population. They rely on underground roosts supporting warm, humid microclimates found in relative deep, complex caves and disused underground mines. Proposed works are occurring above ground, and localised in extent and impact, and not closely located to any caves or collapsed mines. The species survival and distribution is unlikely to be impacted by the proposed clearing.</p>                                                                                                                                                                                                                                                                                                                                                                                     |
| <p>Pilbara Olive Python<br/><i>Liasis olivaceus barroni</i></p>                  | <p>Listed as Vulnerable, this species is known only from ranges within the Pilbara region. It is known to occur at 21 locations within the Pilbara including populations at Pannawonica, Millstream, Tom Price and Burrup Peninsula. The Olive Python (Pilbara subspecies) prefers deep gorges and water holes in the ranges of the Pilbara region. The proposed works will not be occurring within preferred habitat and the localised impact is unlikely to have a measurable impact on the survival or distribution of the species.</p>                                                                                                                                                                                                                                                                                                                                             |

## Attachment 2

Site Photos [13 Feb 2024]





