

Clearing Desktop Report – Short Form



This Clearing Desktop Report – Short Form is required for projects 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) role or delegate, who will determine whether the clearing impacts have been assessed properly. Send the form via clearingpermit@mainroads.wa.gov.au. The Environment Officer will be advised within **2 business days** if the assessment of the project 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.

1. PROJECT DETAILS

Project Name:	Bridge 0753 and 0754 Replacement and Road Realignment – Geotechnical Investigation		
Region/Directorate:	Wheatbelt		
Expected Project Start Date:	Q4 2021		
Road/Bridge Name and No:	Northam Pithara Road (M032) • Bridge 0753 – Mortlock River • Bridge 0754 – Mallabine Creek		
Project Location (SLK):	SLK 4.4 – SLK 5.8		
TRIM Document No:	D21#717420		
TRIM Link to Spatial Data:	D21#717409		
EOS No:	2122		
Project No:	30000662	Task Code:	11.02

2. PURPOSE OF CLEARING

Main Roads WA intends to replace the Mortlock River Bridge (Bridge 0753) and Mallabine Creek Bridge (Bridge 0754) on the Northam-Pithara Road (M032), in the shire of Northam, in the Wheatbelt Region. The existing road tie-ins of these bridges have sub-standard horizontal geometry on the northern and southern ends and the northern road tie-in connects to the Railway Crossing on a skew angle.

This CDR Short Form is to undertake minor clearing and pruning for access and geotechnical activities and services investigation. This will inform the type and design of the bridge structure that will replace the current bridges. The geotechnical and services investigations will involve:

- Bore holes: drilling using a truck mounted drilling rig accompanied by support vehicle with a water tank and mud tank.
- Cone Penetration Testing: utilising a 20-tonne tracked truck rig
- Test Pitting: excavation of 0.6m test pit with 8t backhoe equipped with 0.5m wide toothed bucket.
- Pot Holing: utilising a radio and electronic detection to locate the position of services, local shovelling to remove topsoil to 200mm below ground level and trailer-mounted unit to extract soil from the ground to the service. A PVC marker is left approximately 700mm above ground on which the service depth and type is recorded.

MRWA State-wide clearing permit CPS818/15 will be used to clear native vegetation to allow vehicle access and undertake geotechnical and service investigation activities described above. Approximately 0.1 ha of clearing will occur under CPS818/15.

3. ALTERNATIVES TO CLEARING

There are no alternatives to clearing for this scope of works. The clearing is required to enable access for geotechnical and service investigation activities at proposed new bridge site.

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

Clearing will be minimised where practicable and subject to Main Roads' standard environmental management requirements to minimise indirect impacts to the surrounding native vegetation, such as vehicle weed hygiene practices.

5. APPROVED POLICES AND PLANNING INSTRUMENTS

The clearing of native vegetation in Western Australia is regulated under the *Environmental Protection Act* (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 (DEC, December 2014)
- Procedure: Native vegetation clearing permits (DWER, October 2019)
- 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

Clearing Area (ha):	0.1ha	No. Trees Cleared:	-
Species Name:	ElHpOF: <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> and <i>Hakea preissii</i> mid open forest over <i>*Ehrharta longiflora</i>, <i>*Hordeum leporinum</i> and <i>Rhytidosperra</i> sp. Low grassland/tussock grassland (Ecoscape, 2020). • 0.08ha of this assemblage will be cleared CoErMrOF: <i>Casuarina obesa</i>, <i>Eucalyptus rudis</i> subsp. <i>rudis</i> and <i>Melaleuca raphiophylla</i> mid open forest over <i>*Ehrharta longiflora</i>, 'spiky rush' and <i>*Hordeum marinum</i> low (Ecoscape, 2020). • 0.02ha of this assemblage will be cleared.		
Easting and Northing:	470586.54mE, 6502622.15mN 470686.75mE, 6502716.74mN		

7. EXISTING ENVIRONMENT AND SITE INFORMATION

Site Vegetation Description/Association:	ElHpOF: <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> and <i>Hakea preissii</i> mid open forest over <i>*Ehrharta longiflora</i> , <i>*Hordeum leporinum</i> and <i>Rhytidosperma</i> sp. Low grassland/tussock grassland (Ecoscape, 2020). CoErMrOF: <i>Casuarina obesa</i> , <i>Eucalyptus rudis</i> subsp. <i>rudis</i> and <i>Melaleuca raphiophylla</i> mid open forest over <i>*Ehrharta longiflora</i> , 'spiky rush' and <i>*Hordeum marinum</i> low (Ecoscape, 2020).																																
Site Vegetation Condition:	Completely Degraded (Ecoscape, 2020).																																
Pre-European Extent Remaining (%):	<table><tr><th>Pre-European Vegetation Association</th><th>Scale</th><th>Pre-European (ha)</th><th>Current Extent (ha)</th><th>% Remaining</th><th>% Remaining in DBCA reserves</th></tr><tr><td rowspan="4">Veg Assoc No. 352</td><td>Statewide <i>352 (York)</i></td><td>724,268.73</td><td>142,012.22</td><td>19.61</td><td>1.75</td></tr><tr><td>IBRA Bioregion <i>Avon Wheatbelt</i></td><td>630,577.61</td><td>108,887.52</td><td>17.27</td><td>1.62</td></tr><tr><td>IBRA Sub-region <i>Katanning</i></td><td>337,871.73</td><td>36,295.58</td><td>10.74</td><td>0.23</td></tr><tr><td>Local Government Authority <i>Shire of Northam</i></td><td>66,825.54</td><td>7,623.24</td><td>11.41</td><td>0.45</td></tr></table>						Pre-European Vegetation Association	Scale	Pre-European (ha)	Current Extent (ha)	% Remaining	% Remaining in DBCA reserves	Veg Assoc No. 352	Statewide <i>352 (York)</i>	724,268.73	142,012.22	19.61	1.75	IBRA Bioregion <i>Avon Wheatbelt</i>	630,577.61	108,887.52	17.27	1.62	IBRA Sub-region <i>Katanning</i>	337,871.73	36,295.58	10.74	0.23	Local Government Authority <i>Shire of Northam</i>	66,825.54	7,623.24	11.41	0.45
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8. ASSESSMENT OF PROJECT AGAINST CLEARING PRINCIPLES

Is Vegetation to be cleared at variance with:	Justification or Evidence:
Principle (a) – Native vegetation should not be cleared if it comprises a high level of biological diversity.	The proposal area does not represent native vegetation of a high level of biological diversity. A detailed biological survey undertaken by Ecoscape (2020) in November 2020 concluded the following: - Seventy (70) flora species were identified with 39 of these being introduced species. - No Threatened or Priority flora species were identified within in the proposal area. - The vegetation was assessed as being in 'Completely Degraded' condition in the location where the clearing is proposed. - The survey did not identify vegetation considered representative of any State TEC/PEC or Federal TEC within and in the immediate vicinity of the area to be cleared. 31 vertebrate species were recorded during the survey. - No conservation listed or otherwise significant fauna species were recorded during the field survey. - Although Carnaby's Black Cockatoos could be present within the project area, none of the hollows identified in suitable DBH trees were considered adequate for breeding, with all being too small or shallow. The three suitable DBH trees that will be removed do not contain any hollows. Based on the above, the proposed clearing is not at variance to this Principle.

Principle (b) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.	The following fauna species were identified by Ecoscape (2020) as having a high likelihood of occurrence post-survey: • Carnaby's Cockatoo (<i>Calyptorhynchus latirostris</i>) • Western Quoll (<i>Dasyurus geoffroii fortis</i>) • Peregrine Falcon (<i>Falco peregrinus</i>) <i>Carnaby's Cockatoo</i> Whilst the project area is within the Carnaby's Cockatoo mapped breeding range (EPBC, 2011) and the boundary of the EPA 2019 estimated distribution areas, none of the identified Black Cockatoo Habitat trees have hollows suitable for breeding. Of the 48 trees in the survey area with suitable DBH, 10 with hollows were assessed by Tony Kirkby in December 2020, with all hollows found to be too small or too shallow for use by Black Cockatoos. The biological survey (Ecoscape, 2020) determined that whilst Carnaby's Cockatoo retains a high likelihood of occurring in the survey area it is most likely for occasional foraging rather than breeding. Whilst three trees of adequate DBH for Black Cockatoo habitat are located within the proposal area, none contain hollows and it is not considered that their removal will impact on the available breeding/roosting habitat for this species. The completely degraded vegetation condition also suggests the project area is unlikely to comprise quality foraging habitat for Carnaby's Cockatoos. <i>Western Quoll</i> Ecoscape (2020) determined that the habitat may be suitable for Western quoll, although denning sites may be limited due to few hollowing logs present and trampling and disturbance by cattle. The Western Quoll are unlikely to be depended on the Woodland habitat available within the survey area. <i>Peregrine Falcon</i> Ecoscape (2020) concluded that whilst there was a high likelihood of the Peregrine Falcon occurring within the survey area it is unlikely the species would occur as a resident and more so as an irregular visitor due to the lack of rocky cliffs and significant rocky outcrops within the survey or local area. Based on the above, the proposed clearing is not at variance to this Principle.
Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	The biological survey undertaken in November 2020 (Ecoscape, 2020) did not identify any Threatened flora within the survey boundary or proposal area. The proposed clearing is not at variance to this Principle.
Principle (d) – Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community.	The biological survey undertaken in November 2020 confirmed that the vegetation within the proposal area and immediate surrounds does not represent any Threatened Ecological Communities (TEC) The proposed clearing is not at variance to this Principle.

Principle (e) – Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.	Although the project area is mapped as occurring within an under-represented mapped vegetation association (i.e. <30% of pre-European extent remaining), based on the completely degraded condition of the vegetation within the proposal area, it is not considered to represent intact remnant vegetation. The proposed clearing is not at variance to this Principle.
Principle (f) – Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	No riparian vegetation will be cleared using CPS818/15. The clearing area is not associated with the watercourse or drainage line of the Mortlock River. The vegetation assemblage is not considered to be riparian. The proposed clearing is not at variance to this Principle.
Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	The vegetation condition at the location of the proposed clearing is 'completely degraded', largely as a result of livestock grazing. The small 0.1 ha of proposed clearing is mostly previous cleared understory and is unlikely to cause appreciable land degradation. The proposed clearing is not at variance to this Principle.
Principle (h) – Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.	There are no reserves or conservation areas located within and in the vicinity of the survey area boundary or adjacent to the locations of the proposed clearing footprint. The proposed clearing is not at variance to this Principle.
Principle (i) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.	The proposed clearing is not located in a Public Drinking Water Source Area. The small scale of the clearing and completely degraded condition of the vegetation is unlikely to affect surface or groundwater in the local area. The proposed clearing is not at variance to this Principle.
Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.	The clearing footprint is not associated with the watercourses or riparian vegetation. The proposed clearing area is very minor and dispersed across a number of test pits. It is therefore unlikely to impact on the incidence or intensity of flooding. The proposed clearing is not at variance to this Principle.

Methodology Used and References:	Government of Western Australia (2019). <i>2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report)</i>. Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. Available online from: https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics. Accessed 22/06/2021. Ecoscape (Australia) Pty Ltd (2020) <i>Northam Pithara Road Bridges 0753 and 0754 Replacement Biological Survey</i>. Unpublished report prepared for Main Roads WA (D21#522597). Kirkby, T (2021) <i>Possible Black Cockatoo Calyptorhynchus spp. Hollow Assessment, Bridges 0753 and 0754, Northam</i>. Unpublished report prepared for Main Roads (D21#522599).
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Completed By:	
Job Title	Environment Officer
Date	19/07/2021

DECISION ON CLEARING ASSESSMENT		
Clearing Assessment	ENDORSED ☒	REFUSED ☐
Job Title	Environment Officer	
Date	18/08/2021	



Figure 1

Bridges 753/754 Realignment - Northam Pithara Road (M032)
Geotechnical Investigation - CPS818/15

Legend

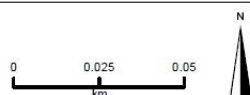
Road Network

Network Type

— State Road
— water course

Landgate
Cadastre

Proposal Area
(CPS818)



Author: c8374
Date: 19/07/2021
SCALE @ A4 : 2,000
SOURCE:
Imagery sourced Landgate, all other data
MRWA

Coordinate System: GCS GDA 1994
Units: GDA 1994
Units: Degree



Document Path: E:\Wheatbelt\Environmental\Bridges\Bridge 0753\Bed and Banks Geotech\Geotech_753_754_Bridges.mxd