

Clearing Desktop Report – Short Form

1. PROJECT DETAILS

Project Name:	Northam Pithara Road (M032) – Replace Bridges 0775, 0776 and 0778 with culverts		
Region/Directorate:	Wheatbelt		
Expected Project Start Date:	September 2022		
Road/Bridge Name and No:	Northam Pithara Road (M032)		
Project Location (SLK):	<ul style="list-style-type: none">• Bridge 0775: M032 – SLK 82.71• Bridge 0776: M032 – SLK 88.55• Bridge 0778: M032 – SLK 91.07		
TRIM Document No:	D21#814848		
TRIM Link to Spatial Data:	D21#1094267 (original) D22#880868/D22#883450 (amended)		
EOS No:	828		
Project No:	30000008	Task Code:	19301

2. PURPOSE OF CLEARING

Replace over 80 year old timber bridges 0775, 0776 and 0778 with Culverts, because the bridges have reached the end of their design life.

This CDR has been updated (August 2022) to reflect changes in the Proposal Area for Bridge 0775, due to a redesign of the side track.

3. ALTERNATIVES TO CLEARING

Not applicable – bridges need replacing as they are at the end of their design life. As the road needs to remain open to traffic, side access tracks are required to be constructed.

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

The disturbance footprint for the bridge replacements (including side access tracks) have been minimised where possible based on existing environmental values within or in proximity to the bridge replacement works.

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, 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 1928* (WA)

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)	0.5193 ha (all bridges) Bridge 0775 - 0.0793 ha CPS818 Bridge 0776 - 0.15 ha CPS818 Bridge 0778 - 0.29 ha CPS818	No. Trees Cleared:	Four suitable DBH Trees (one at Bridge 0775, two at Bridge 0776 and one at Bridge 0778).
Species Name	Bridge 0778 <i>E. camaldulensis</i> ssp. <i>arida</i> (-30.911639; 116.729122) Bridge 0776 <i>E. loxophleba</i> ssp. <i>loxophleba</i> (-30.93251; 116.740301) <i>E. loxophleba</i> ssp. <i>loxophleba</i> (-30.932471; 116.740281) Bridge 0775 <i>E. loxophleba</i> ssp. <i>loxophleba</i> (-30.980407, 116.757723) CPS 818/15 Disturbance Areas <u>Bridge 0775</u> TRIM D22#883450		
Easting and Northing	<u>Bridge 0776</u> GDA 94 Zone 50 polygon <ul style="list-style-type: none"> • 475222.58 6577740.6 • 475226.66 6577747.83 • 475227.75 6577749.77 • 475261.84 6577775.03 • 475282.01 6577729.92 • 475250.94 6577711.72 • 475247.09 6577709.47 • 475243.32 6577717.53 • 475237.45 6577730.06 • 475233.46 6577733.38 • 475226.67 6577737.88 • 475208.01 6577740.92 • 475181.76 6577820.22 • 475185.33 6577824.02 • 475186.28 6577839.35 • 475185.82 6577840.33 • 475179.73 6577853.34 • 475169.92 6577874.3 • 475175.64 6577876.89 • 475178.6 6577878.23 • 475190.1 6577883.43 • 475193.96 6577885.18 		

Easting and Northing	<ul style="list-style-type: none"> • 475195.0 6577885.65 • 475209.45 6577892.2 • 475233.75 6577837.85 • 475175.63 6577807.89 • 475178.92 6577817.21 <p>Bridge 0778 GDA 94 Zone 50 polygon</p> <ul style="list-style-type: none"> • 474142.53 6580053.98 • 474138.41 6580053.72 • 474132.14 6580054.11 • 474125.97 6580055.29 • 474120.55 6580057.05 • 474139.17 6580076.72 • 474167.78 6580093.32 • 474198.8 6580048.63 • 474193.44 6580044.79 • 474191.21 6580043.48 • 474187.57 6580041.32 • 474186.44 6580040.65 • 474186.21 6580040.52 • 474181.21 6580037.56 • 474177.47 6580035.34 • 474175.51 6580034.18 • 474174.34 6580033.49 • 474167.12 6580029.22 • 474144.67 6580054.11 • 474094.13 6580126.75 • 474096.19 6580130.51 • 474096.84 6580136.5 • 474075.72 6580186.09 • 474075.7 6580186.11 • 474087.66 6580193.18 • 474098.74 6580199.74 • 474126.14 6580153.29 • 474128.99 6580149.18 • 474135.65 6580139.59 • 474088.79 6580098.31 • 474088.5 6580100.58 • 474088.5 6580106.86 • 474089.29 6580113.08 • 474090.85 6580119.17 • 474093.16 6580125
7. EXISTING ENVIRONMENT AND SITE INFORMATION	
Site Vegetation Description/Association	<p>Bridge 0775</p> <p>EsSa: <i>Eucalyptus salmonophloia</i> and <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> open woodland over <i>Senna artemisioides</i> subsp. <i>filifolia</i> open shrubland over introduced pasture grasses</p> <p>OW: <i>Eucalyptus loxophleba</i> ssp. <i>loxophleba</i> open woodland over <i>Acacia saligna</i> subsp. <i>lindleyi</i>, open shrubland over introduced grasses</p> <p>El: Isolated <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> over introduced pasture grasses</p>

Site Vegetation Description/Association	<p><u>Bridge 0776</u></p> <p>El: Isolated <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> over introduced pasture grasses</p> <p>EsSa: <i>Eucalyptus salmonophloia</i> and <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> open woodland over <i>Senna artemisioides</i> subsp. <i>filifolia</i> open shrubland over introduced pasture grasses</p> <p>OW: <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> open woodland over <i>Acacia saligna</i> subsp. <i>lindleyi</i> open shrubland over over introduced grasses</p> <p><u>Bridge 0778</u></p> <p>LS: <i>Tecticornia indica</i> subsp. <i>bidens</i> and <i>Tecticornia pergranulata</i> subsp. <i>pergranulata</i> low shrubland over introduced grasses</p> <p>SL: <i>Acacia acuminata</i>, <i>Acacia</i> sp. indet and <i>Melaleuca uncinata</i> shrubland over over introduced grasses</p> <p>Ec: Non-native isolated <i>Eucalyptus camaldulensis</i> ?subsp. <i>arida</i> over introduced grasses (? denotes Taxonomist unsure of species)</p>																				
Site Vegetation Condition	<p><u>Bridge 0775</u></p> <p>Vegetation is in Completely degraded and Degraded condition</p> <p><u>Bridge 0776</u></p> <p>Vegetation is in Degraded and Degraded – Good condition</p> <p><u>Bridge 0778</u></p> <p>Vegetation is in Completely degraded and Degraded condition.</p>																				
Pre-European Extent Remaining (%)	<p><u>Pre-European Vegetation:</u></p> <p>Bridges 0775 and 0778: Guangan 1049</p> <p>VA 1049 (Medium woodland; wandoo, York gum, salmon gum, morrel & gimlet)</p> <table border="1"> <thead> <tr> <th>Levels</th><th>% Remaining</th></tr> </thead> <tbody> <tr> <td>Statewide:</td><td>6.79</td></tr> <tr> <td>IBRA Bioregion Avon Wheatbelt</td><td>6.79</td></tr> <tr> <td>IBRA Subregion Katanning</td><td>8.06</td></tr> <tr> <td>Local Government Authority Shire of Wongan-Ballidu</td><td>12.96</td></tr> </tbody> </table> <p>Bridge 0776: Guangan 1024</p> <p>VA 1024 (Shrublands; mallee & casuarina thicket)</p> <table border="1"> <thead> <tr> <th>Levels</th><th>% Remaining</th></tr> </thead> <tbody> <tr> <td>Statewide:</td><td>11.74</td></tr> <tr> <td>IBRA Bioregion Avon Wheatbelt</td><td>11.45</td></tr> <tr> <td>IBRA Subregion Katanning</td><td>10.57</td></tr> <tr> <td>Local Government Authority Shire of Wongan-Ballidu</td><td>5.91</td></tr> </tbody> </table>	Levels	% Remaining	Statewide:	6.79	IBRA Bioregion Avon Wheatbelt	6.79	IBRA Subregion Katanning	8.06	Local Government Authority Shire of Wongan-Ballidu	12.96	Levels	% Remaining	Statewide:	11.74	IBRA Bioregion Avon Wheatbelt	11.45	IBRA Subregion Katanning	10.57	Local Government Authority Shire of Wongan-Ballidu	5.91
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8. ASSESSMENT OF PROJECT AGAINST CLEARING PRINCIPLES

Is Vegetation to be cleared at variance with:	Justification or Evidence:
<p>Principle (a) – Native vegetation should not be cleared if it comprises a high level of biological diversity.</p>	<p>A biological survey did not identify any Threatened or Priority flora species in the Proposal Areas for Bridges 0775, 0776 or 0778. The vegetation was assessed as being in 'Degraded and Completely degraded', through to 'Completely degraded' condition; with some vegetation at Bridge 0776 being in 'Degraded – Good' condition. The surveys did not identify any Threatened Ecological Communities (TECs) or Priority Ecological Communities (PECs) within and in the immediate vicinity of the Proposal Areas.</p> <p>No significant fauna species were recorded as occurring in any of the Proposal Areas and none are considered likely or possible to occur. The biological survey identified possible foraging habitat for black cockatoos, but no breeding or nesting habitat. Four potential black cockatoo suitable DBH Trees (with no suitable hollows to support breeding) are located within the Proposal Areas; however, no signs of foraging or breeding activity were recorded during the field survey and no trees considered suitable for roosting were identified.</p> <p>Four Suitable DBH Trees (with no suitable hollows) are proposed to be removed for the bridge replacements at Bridges 0775, 0776 and 0778. As vegetation in the Proposal Areas is largely Degraded to Completely degraded, comprises no suitable roosting habitat and no known or suspected nesting trees are proposed to be removed, the proposed clearing of up to 0.5193 ha (across all three bridges) under Main Roads state-wide clearing permit (CPS 818/15) is not likely to be at variance to this Principle.</p>
<p>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.</p>	<p>No significant fauna species were recorded as occurring in any of the Proposal Areas for Bridges 0775, 0776 or 0778. With the exception of Black Cockatoo species (discussed below), no significant fauna species are expected to occur.</p> <p>The site does not support high quality foraging habitat for the Black Cockatoos due to the Degraded through to Completely degraded condition vegetation over exotic grasses. Biological surveys also did not identify any trees considered suitable for roosting within the Proposal Areas.</p> <p>Four suitable DBH Trees will be removed to accommodate the bridge replacement works at Bridges 0775, 0776 and 0778. At Bridge 0775, three trees (WP1, WP2 and WP3) are located within the Proposal area, but two (WP1 and WP3) will not be cleared. None of the four trees are known or suspected nesting/breeding trees for Carnaby's Cockatoo and do not contain any suitable hollows for breeding opportunities. The Proposal Areas at Bridge 0775, 0776 and 0778 contain highly degraded fauna habitat including up to 0.10 ha of 'Degraded-Good' mapped vegetation at Bridge 0776.</p> <p>Based on the above, the proposed works are not likely to be at variance to this Principle.</p>
<p>Principle (c) – Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.</p>	<p>No Threatened Flora were identified in any of the Proposal Areas for Bridges 0775, 0776 or 0778 and it is considered highly unlikely that any would occur.</p> <p>Based on the above, the proposed works are not at variance to this Principle.</p>

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.	<p>There are no mapped TECs or vegetation considered representative of a TEC in any of the Proposal Areas for Bridges 0775, 0776 or 0778.</p> <p>Based on the above, the proposed works are not at variance to this Principle.</p>																												
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.	<p>The Proposal Area for Bridges 0775 and 0778 falls within Vegetation Association 1049 (Medium woodland; wandoo, York gum, salmon gum, morrel & gimlet); and the Proposal Area for Bridge 0776 falls within Vegetation Association 1024 (Shrublands; mallee & casuarina thicket). While there is less than 30% of the Pre-European extent of these associations remaining at a statewide, bioregion and local government level, the majority of vegetation to be cleared is in Degraded condition, having been subject to edge effects from the existing road. The proposed clearing area is not considered to be part of a significant ecological linkage, is not biologically diverse and is not considered important for the maintenance of ecosystem services or to compensate for a high degree of fragmentation. Therefore, the proposed clearing is not considered likely to have a significant impact on vegetation extent and is not likely to be at variance to this Principle.</p>																												
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.	<p>No riparian vegetation will be cleared using CPS 818/15.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>																												
Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	<p>The vegetation condition ranges from ‘Degraded to Good, Degraded and Completely degraded’ therefore driving or any other disturbance works associated with the bridge replacements over the vegetation will not cause appreciable land degradation.</p> <table><tr><th>Aspect</th><th colspan="3">Risk</th></tr><tr><th></th><th>Bridge 0775</th><th>Bridge 0776</th><th>Bridge 0778</th></tr><tr><td>Flood Risk</td><td><3%</td><td><3%</td><td><3%</td></tr><tr><td>Salinity</td><td><3%</td><td><3%</td><td><3%</td></tr><tr><td>Waterlogging</td><td><3%</td><td><3%</td><td><3%</td></tr><tr><td>Water Erosion</td><td>3-10%</td><td><3%</td><td><3%</td></tr><tr><td>Wind Erosion</td><td>10-30%</td><td>30 – 50%</td><td>30 – 50%</td></tr></table> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>	Aspect	Risk				Bridge 0775	Bridge 0776	Bridge 0778	Flood Risk	<3%	<3%	<3%	Salinity	<3%	<3%	<3%	Waterlogging	<3%	<3%	<3%	Water Erosion	3-10%	<3%	<3%	Wind Erosion	10-30%	30 – 50%	30 – 50%
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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.	<p>There are no reserves or conservation areas located within and in the vicinity of the Proposal Areas for Bridges 0775, 0776 or 0778.</p> <p>Based on the above, the proposed clearing is not at variance to this Principle.</p>																												

<p>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.</p>	<p>The Proposal areas are mapped to occur within a Proclaimed Surface Water Area (Avon River Catchment Area) under the RIWI Act, but not within a Public Drinking Water Source Area or Proclaimed Groundwater Area.</p> <p>Cratton Creek, Hornsby Creek, and Kalguddering Creeks are minor, non-perennial watercourses located next to the Proposal areas.</p> <p>The proposed native vegetation clearing for the bridge replacements on Northam Pithara is not likely to impact surface or underground water flows or quality. Drainage design will maintain flows similar to those currently in place. The minor scale and linear nature of the clearing is unlikely to result in excessive levels of surface runoff that adversely effects surface or underground water flows or quality</p> <p>The proposed clearing is not likely to be at variance to this Principle.</p>
<p>Principle (j) – Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.</p>	<p>The Proposal area lies within a Proclaimed Surface Water Area. Three minor non-perennial watercourses intersect the Proposal Areas (Kalguddering Creek, Hornsby Creek and Gratton Creek). Drainage design will maintain flows similar to those currently in place for this length of road. The relatively minor scale and linear nature of the proposed clearing is unlikely to cause excessive surface runoff that will adversely affect surface water flows or quality.</p> <p>There are no Public Drinking Water Source Areas within or in proximity to any of the Proposal Areas. The proposed native vegetation clearing of 0.5193 ha along an existing major road (M032) is not likely to alter groundwater quality in the area.</p> <p>The proposed clearing is not likely to be at variance to this Principle.</p>
<p>Methodology Used and References:</p>	<p>Main Roads Site Inspection Report (Bridge 0775): August 2021 D21#457840</p> <p>Main Roads Site Inspection Report (Bridge 0776): August 2021 D21#460308</p> <p>Main Roads Site Inspection Report (Bridge 0778): August 2021 D21#464860</p> <p>Shapefile of Proposal Areas: D21#1094267 (updated with amended Bridge 0775 footprint)</p>
<p>Completed By:</p>	
<p>Name</p>	
<p>Signature</p>	
<p>Job Title</p>	Senior Environment Officer
<p>Date</p>	26/10/2021
<p>Name</p>	
<p>Signature</p>	
<p>Job Title</p>	Senior Environment Officer
<p>Date</p>	16-Aug-2022

DECISION ON CLEARING ASSESSMENT

Clearing Assessment

ENDORSED ☒

REFUSED ☐

Comments	
Name	
Signature	
Job Title	Environment Officer
Date	30/11/2021

Clearing Assessment	ENDORSED <input checked="" type="checkbox"/>	REFUSED <input type="checkbox"/>
Comments	<p>Four suitable DBH trees (none with suitable hollows for black cockatoos) across three bridge locations in areas where the majority of vegetation is in Completely Degraded to Degraded condition (with the exception of a small area in Degraded to Good condition at Bridge 0776).</p> <p>Justification has been provided to demonstrate the removal of these trees will result in a low impact and is not likely to be at variance with the clearing principles.</p>	
Name		
Signature		
Job Title	Senior Environment Officer	
Date	19/08/2022	