Clearing Desktop Report – Short Form



I. PROPOSAL DETAILS			
Proposal Name:	Toodyay Road Section 5 – Relocation of Western Power Network		
Region/Directorate:	Wheatbelt / Regional Operations		
Local Government Authority:	Shire of Toodyay		
Road/Bridge Name and No:	Toodyay Road (M026) Sandplain Road (Local)		
Proposal Location (SLK):	32.38 – 32.54 SLK		
TRIM Link to Spatial Data:	D23#508003		
EOS No:	2990		
Expected Proposal Start Date:	June 2023		
Project No:	30001965	Task Code:	20106
LISC TRIM No:	D23#194294	HRA TRIM No:	D23#194304
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1. PROPOSAL DETAILS

2. PURPOSE OF CLEARING

Main Roads is upgrading Toodyay Rd between 12 – 40 SLK in sections as funding becomes available. In preparation for delivering Section 5, existing Western Power assets are required to be relocated to outside the construction footprint.

The project comprises the following activities:

- Main Roads will undertake vegetation clearing and site preparation prior to network relocation works, which will be undertaken by Western Power.
- Clearing will be undertaken in four areas. Three areas are adjacent to Toodyay Road, and one area adjacent to Sandplain Road (see Figure 1).
- Following clearing, vegetation and topsoil will be respread over disturbed areas.

The proposal will involve the clearing of 0.052 ha native vegetation, broken down into four areas (based on Western Power plan numbers):

- Area B 0.012 ha
- Area C 0.024 ha
- Area D 0.009 ha
- Pole Removal 0.007 ha

3. ALTERNATIVES TO CLEARING

Western Power has specified the clearing area required for the installation of new power infrastructure. Main Roads is required to undertake the clearing as per Western Power requirements, therefore alternative locations or construction methodologies to avoid clearing are not feasible for this project.

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

Western Power has specified the clearing area required for the installation of new power infrastructure. Consequently, Main Roads has limited ability to avoid native vegetation. Therefore, Main Roads proposes to minimise and mitigate clearing impacts through the following measures:

- Main Roads has obtained agreement from Western Power to reduce the clearing area from 0.1 ha to 0.052 ha.
- Demarcate the clearing area prior to clearing;
- Utilise existing access tracks and fire breaks to avoid clearing new access.
- Avoiding mature trees.
- Inspect and verify all vehicles and machinery are free of plant and soil material prior to entering site, and prior to leaving site.
- Avoid importing weed or dieback infested fill, mulch or other soil materials into the clearing area.
- Undertake clearing in dry conditions to reduce the risk of introducing or spreading dieback.
- Respread vegetation and topsoil following the works.

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 510 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)

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):	0.052	No. Trees Cleared:	0
Species Name:	Various		
Easting and Northing:	50J 447720 6503164		
7. EXISTING ENVIRONMENT A	ND SITE INFORMATION		
Site Vegetation Description/Association:	 The Proposal Area was surveyed by AECOM (2016) as part of a biological assessment of a 52 km section of Toodyay Road between the Red Hill Waste Facility and Toodyay. The biological assessment involved desktop assessments, flora and vegetation survey, ecological community mapped, targeted flora survey, level 1 fauna survey and black cockatoo habitat assessment within a 100-200 m corridor on both sides of Toodyay Road. The proposal area has been broadly mapped as comprising the following vegetation types (AECOM, 2016): EaXpBe - <i>Eucalyptus accedens, Eucalyptus wandoo</i> subsp. <i>wandoo</i> and <i>Corymbia calophylla</i> mid open forest over <i>Xanthorrhoea preissii, Banksia squarrosa</i> subsp. <i>squarrosa</i> and <i>Acacia pulchella</i> var. <i>pulchella</i> mid to tall isolated clumps of shrubs over <i>Bossiaea eriocarpa, Petrophile divaricata</i> and <i>Astroloma epacridis</i> low open shrubland. EwGtAl - <i>Eucalyptus wandoo</i> subsp. <i>wandoo</i>, <i>Corymbia calophylla</i> and <i>Eucalyptus accedens</i> mid open forest over <i>Gastrolobium truncatum, G. parviflorum</i> and <i>Xanthorrhoea preissii</i> mid open shrubland over <i>Acacia lasiocarpa</i> var. <i>sedifolia, Opercularia vaginata</i> and <i>Hakea lissocarpha</i> mid open heath shrubland. The proposed clearing avoids mature trees such as <i>Eucalyptus accedens, Eucalyptus accedens, Eucalyptus aclophylla</i>. 		
Site Vegetation Condition:	Degraded, Very Good		
Pre-European Extent Remaining (%):	Vegetation Association 4 - Jarrah, marri and wandoo (Eucalyptus marginata, Corymbia calophylla and E. wandoo)State27%IBRA Region (Jarrah Forest)18%IBRA Subregion32%(Northern Jarrah Forest)1Local Government Area54%(Shire of Toodyay)54%		

8. ASSESSMENT OF PROPOSAL 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.	A total of 0.052 ha of native vegetation is proposed to be cleared across four separate areas for the purpose of relocating Western Power infrastructure.		
	A review of existing biological surveys along Toodyay Road (AECOM, 2016) indicates the vegetation ranges between 'Degraded' and 'Very Good' condition. A recent Main Roads inspection (2023) found evidence of historical disturbance in each area, including clearing and weed control activities associated with maintenance of the existing Western Power network, weeds and rubbish.		
	The Proposal Area comprises two vegetation types, being EaXpBe and EwGtAl. The biological survey recorded a total of 39.91 ha and 55.15 ha of each vegetation type in the survey area respectively.		
	 According to the desktop assessment, two Priority Ecological Communities (PEC) potentially occur in the Study Area: Eucalypt Woodlands of the Western Australian Wheatbelt (Priority 3) York Gums Woodlands of the Wheatbelt (Priority 3). 		
	Both of these communities are synonymous with the EPBC Act-listed Eucalypt Woodlands of the Western Australian Wheatbelt Threatened Ecological Community (TEC). According to an existing targeted Eucalypt Woodlands TEC assessment for Toodyay Road (Woodman, 2018), this community has not been recorded in the Proposal Area.		
	According to the desktop assessment, one Threatened and 15 Priority flora species are known to occur in the Study Area. None of these records occur in the Proposal Area.		
	Based on the preferred habitat of these species, the Proposal Area may be suitable for four Priority flora species. No Threatened or Priority flora species have been recorded in the Proposal Area (AECOM, 2016). The survey did record one individual of Sector in the Proposal Area, which at the time of the survey was listed by DBCA as a Priority 4 species. This species has since been removed from the Priority flora list (WA Herbarium, 2023). Given the minor scale of the clearing and results of existing surveys, the proposed clearing is unlikely to affect conservation significant flora.		
	According to the DBCA fauna database, no significant fauna species are known to occur in the Proposal Area. A level 1 fauna survey conducted for Toodyay Rd did not record any significant fauna in the Proposal Area at the time of the survey (AECOM, 2016). The Proposal Area is minor in scale and contiguous with surrounding vegetation, and therefore not considered to contain a relatively higher level of fauna diversity than surrounding vegetation.		
	The clearing area is located in a <i>phytophthora</i> dieback risk area. The spread of dieback has the potential to impact biodiversity by reducing species diversity and fauna habitat. According to an existing dieback survey undertaken along this section of Toodyay Rd, the vegetation is uninterpretable due to the lack of indicator species (Glevan, 2023). The risk of introducing or spreading dieback will be managed by Main Roads standard vehicle hygiene practices.		
	Based on the above, the proposed clearing is not likely to be at variance to this principle.		

Principle (b) – Native vegetation should not be cleared if it	Existing fauna surveys along Toodyay Rd indicate the Proposal Area contains one fauna habitat type, being Eucalypt Woodlands. This habitat type is described as mixed eucalypt native shrublands and grasslands of varying condition and structure. Soil varies between
comprises the whole or	sandy, loam, laterite and emergent granite (AECOM, 2016).
a part of, or is	
necessary for the maintenance of, a significant habitat for fauna indigenous to	According to DBCA fauna records, 22 significant species are known to occur within the Study Area. Based on the available habitat in the Proposal Area and proximity of fauna records, the following significant fauna species identified in the desktop assessment may utilise the Proposal Area:
Western Australia.	 Baudin's cockatoo (Calyptorhynchus baundinii – EN)
	 Carnaby's cockatoo (Calyptorhynchus latirostris – EN)
	Forest red-tailed black cockatoo (FRTBC) (<i>Calyptorhynchus banksii naso</i> - VU) Chuditch (Daswurus apoffroii - VU)
	Chuditch (<i>Dasyurus geoffroii</i> - VU).
	 Western brush wallaby – (Notamacropus irma – Priority 4)
	The fauna survey did not record any of these species, or any other significant fauna in the Proposal Area (AECOM, 2016). Within the larger survey area, AECOM recorded direct and indirect evidence of Carnaby's cockatoo and FRTBC.
	The Proposal Area is located within the known distribution for Carnaby's cockatoo and on the north-eastern edge of the distribution of forest FRTBC (DAWE, 2022). The Proposal Area is outside the typical distribution of Baudin's cockatoo, however four records occur 10 km from the Proposal Area. Carnaby's Cockatoo was recorded 21 times throughout the survey area during the field survey, including evidence of foraging (chewing) along Sandplain Road and an active breeding tree on Toodyay Road approximately 800 m west of the Proposal Area. FRTBC was observed flying over the survey area and indirect evidence such as chew markings and tail feathers belonging to this species were recorded at four locations, the closest being 27 km west of the Proposal Area. Baudin's cockatoo was not recorded during the survey.
	According to AECOM (2016), the Eucalypt Woodlands habitat type may provide suitable foraging, breeding and roosting habitat for black cockatoos.
	No suitable DBH trees occur within the Proposal Area, and AECOM did not observe any roosting trees in the survey area. Accordingly, the proposed clearing will not impact breeding or roosting habitat for black cockatoos.
	Foraging requirements between the species generally include the following (DAWE, 2022):
	• Baudin's cockatoo - Primarily seeds of Marri, rarely Jarrah, in woodlands and forest, and seeds of native proteaceous plant species (for example, <i>Banksia</i> spp. (includes former <i>Dryandra</i> spp.) and <i>Hakea</i> spp.). During the breeding season feed primarily on native vegetation, particularly Marri (seeds, flowers, nectar and grubs). Also insects and insect larvae; pith of Kangaroo Paw (<i>Anigozanthos flavidus</i>); tips of <i>Pinus</i> spp.; <i>Macadamia</i> spp., almonds and pecans; seeds of apples and pears; and persimmons.
	• Carnaby's cockatoo - Native shrubland, kwongan heathland and woodland on seeds, flowers and nectar of native proteaceous plant species (<i>Banksia</i> spp., <i>Hakea</i> spp.) as well as <i>Callistemon</i> spp. and Marri. Also seeds of introduced species including <i>Pinus</i> spp., <i>Erodium</i> spp., wild radish, canola, almonds, macadamia and pecan nuts; insects and insect larvae; occasionally apples and persimmons; and liquidambar.
	• FRTBC - Primarily seeds of Jarrah and Marri in woodlands and forest, and edges of Karri forests, including Wandoo and Blackbutt. Forages on <i>Allocasuarina</i> cones, fruits of Snottygobble (<i>Persoonia longifolia</i>) and Mountain Marri (<i>C. haematoxylon</i>). Other

less important foods include Blackbutt, Bullich, *Allocasuarina fraseriana, Hakea* spp., Tuart, Redheart Moit (*E. decipiens*) and Bushy Yate (*E. lehmanni*). Also some introduced eucalypts such as River Red Gum (*E. camaldulensis*) and Rose Gum (*E. grandis*). On the Swan Coastal Plain, often feeds on introduced Cape Lilac (*Melia azedarach*), *E. caesia*, *E. erythrocorys*, Lemon-scented Gum and Kaffir Plum (*Harpephyllum caffrum*).

A black cockatoo habitat assessment undertaken as part of the fauna survey (AECOM, 2016) broadly mapped vegetation along Toodyay Rd and Sandplain Road as good to moderate quality Carnaby's cockatoo foraging habitat and moderate quality Baudin's cockatoo foraging habitat. The vegetation was assessed as not suitable foraging habitat for FRTBC.

A site inspection by Main Roads (2023) has been undertaken to assess the foraging values within each of the proposed clearing areas. Within the Proposal Area, species such as Banksia and Hakea (eg. *Banksia squarrosa* subsp. *squarrosa*, *Hakea lissocarpha* and *Hakea undulata*) may provide a suitable foraging resource, however according to the inspection, each clearing area comprises no more than two to three individual plants suitable for foraging, which would not significantly contribute to the overall foraging resource in the local area. The inspection by Main Roads recorded foraging evidence in the form of chewed marri nuts along Sandplain Road opposite Area D, and along a firebreak between Areas C and B, indicating marri is the main foraging resource in the local area. The proposed clearing is targeted to only impact understory vegetation and avoid mature trees. Accordingly, mature marri trees will be avoided. One clearing area (Area D) contains marri regrowth. This vegetation is not be considered a sustainable foraging resource given the vegetation occurs beneath powerlines and will be required to be continuously pruned within the powerline corridor, preventing any marri tree in this area reaching maturing and becoming a viable foraging resource.

According to EPA (2019), foraging habitat within 7 km of a breeding site is important to adequately support breeding cockatoos. Although a breeding tree was recorded m west of the Proposal Area during the field survey, the Proposal Area is not likely to provide significant foraging habitat that supports black cockatoo breeding. The local study area (10 km) comprises approximately 9,000 ha of Jarrah, Marri and Wandoo woodlands, based on DPIRD remnant vegetation mapping (GIS Database). The black cockatoo habitat assessment also recorded approximately 77 ha of moderate to good quality foraging habitat within 2 km of the breeding tree. The proposed clearing of 0.052 ha represents less than 0.1% of suitable habitat near Toodyay Road, and less than 0.001% of suitable habitat in the local area.

Given the small area of targeted clearing within an existing powerline corridor, which does not contain suitable breeding or roosting habitat and marginal foraging habitat, and noting the extent of suitable habitat that occurs in the surrounding area, the Proposal Area is not likely to comprise significant habitat for black cockatoos.

Chuditch is known from two records in the Study Area, the closest being 3.4 km west of the Proposal Area. Withing the Proposal Area, Chuditch is considered likely to utilise the EwGtAl vegetation community. Chuditch was not recorded during the initial fauna survey (AECOM, 2016). A subsequent targeted survey of suitable habitat for this species along the Wheatbelt portion of Toodyay Road also did not record evidence of this species. This species is not likely to occur in the Proposal Area.

Western brush wallaby is known from one record in the Study Area approximately three kilometres north of the Proposal Area. This species is found in larger areas of mallee and heathland in the Wheatbelt and may utilise the Eucalypt Woodlands habitat within the Proposal Area. This habitat is well represented in the local area and is not considered to form significant habitat for this species.

	Based on the above, the proposed clearing is not likely to be 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.	 According to the desktop assessment, one Threatened flora species is known to occur in the Study Area: <i>Caladenia huegelii</i> (EN) No records of this species occur in the Proposal Area.
	<i>Caladenia huegelii</i> is found in the Swan Coastal Plain and Jarrah Forest IBRA regions, and is typically found in well-drained, deep sandy soils in low mixed woodlands of Coastal Banksia (<i>Banksia attenuata</i>), Firewood Banksia (<i>B. menziesii</i>), Holly-leaved Banksia (<i>Banksia ilicifolia</i>), Western Sheoak (<i>Allocasuarina fraseriana</i>) and Jarrah (<i>Eucalyptus marginata</i>). It tends to favour areas of lush undergrowth (Department of the Environment and Heritage, 2006). The vegetation to be cleared is not considered suitable habitat for this species.
	Based on an existing flora survey of Toodyay Rd (AECOM, 2016), No Threatened flora have been recorded in the Proposal Area or in any nearby roadside vegetation.
	Given the minimal extent of clearing proposed and no Threatened flora have been previously recorded within the Proposal Area or in nearby similar vegetation, the proposed clearing is unlikely to include, or is required for the maintenance of, Threatened flora.
	Based on the above, the proposed clearing is not likely to be at variance to this principle.
Principle (d) – Native vegetation should not be cleared if it comprises the whole or	As discussed in Principle (a), Eucalypt Woodlands TEC is known to occur in the Study Area, however a targeted TEC assessment along Toodyay Rd has not recorded this community in the Proposal Area (Woodman, 2018).
a part of, or is necessary for the	The desktop assessment did not identify any other TECs likely to occur in the Proposal Area.
maintenance of, a threatened ecological community.	Based on the above, 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	The mapped vegetation association retains approximately 27% of pre-European extent in the state and 18% of pre-European extent in the Jarrah Forest bioregion, which is less than the national target of 30% retention of pre-European extent for biodiversity conservation. However, the vegetation association retains over 30% in the Northern Jarrah Forest subregion and in the Shire of Toodyay (32% and 54% respectively). The local area retains approximately 32% of native vegetation extent (10,425 ha).
that has been extensively cleared.	Noting the minimal extent of clearing (0.052 ha) which will occur in four separate areas, and the vegetation does not include significant habitat for flora, fauna or ecological communities, or forms part of a significant ecological linkage, the vegetation is not considered a significant remnant in an extensively cleared landscape. Therefore, 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	There are no watercourses or wetlands mapped within the clearing area. The proposed clearing is not at variance to this principle.
associated with a	

watercourse or wetland.	
Principle (g) – Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land	According to DPIRD land degradation risk mapping, the clearing area is highly susceptible to wind erosion. However, noting the minimal area of clearing and cleared vegetation and topsoil will be respread following completion of the works, the clearing is unlikely to cause appreciable land degradation. The proposed clearing is not likely to be at variance to this principle.
degradation.	
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.	The clearing is located within the Toodyay Rd road reserve. The nearest conservation area is approximately 1.2 km north of the clearing area. Noting the distance between the clearing area and this reserve, the proposed clearing is unlikely to affect the environmental values of any nearby conservation areas. The proposed clearing is not likely to be 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.	There are no watercourses or wetlands mapped in the Proposal Area. The clearing does not occur in a Public Drinking Water Source Area (PDWSA). The minimal area of clearing is unlikely to affect surface or ground water quality. The proposed clearing is not likely to be 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 or intensity of flooding.	There are no watercourses or wetland mapped in the clearing area. The minimal extent of clearing is unlikely to cause, or exacerbate, the intensity of flooding. The proposed clearing is not likely to be at variance to this principle.
Methodology Used and References:	 AECOM (2016) Toodyay Road Widening Metro and Wheatbelt Regions Biological Surveys. Unpublished report prepared for Main Roads, by AECOM. AECOM (2017) Targeted Chuditch Survey Toodyay Road Widening Wheatbelt Survey Area. Unpublished report prepared for Main Roads, by AECOM. DAWE (2022) Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black-cockatoo. Department of Agriculture, Water and the Environment, Canberra. Environmental Protection Authority (EPA) (2019) Carnaby's Cockatoo in Environmental Impact Assessment in the Perth and Peel Region. EPA, Western Australia. Glevan (2023) Toodyay Road Upgrade Section 5 Phytophthora Dieback Survey Report. Unpublished report prepared for Main Roads, by Glevan Consulting. Main Roads (2023) Site Inspection Report: Toodyay and Sandplain Roads, 23/03/2023. (D23#524069). WA Herbarium (2023) Florabase-the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <u>https://florabase.dpaw.wa.gov.au/</u>. Woodman (2018) Toodyay Road Widening and Upgrade Works Wheatbelt Woodland Threatened Ecological Community Survey. Unpublished report prepared for Main Roads, by Woodman Environmental.

	GIS Database:-DBCA Legislated Lands and Waters-DBCA Threatened and Priority Fauna-DBCA Threatened and Priority Flora-Directory of Important Wetlands in Australia-DPIRD Risk datasets-Hydrology South-Native Vegetation Extent-Pre-European Vegetation-Public Drinking Water Source Areas-RAMSAR Wetlands-Threatened and Priority Ecological Communities-WA Herbarium	
Completed B	y:	
Name	[REDACTED]	
Signature	[REDACTED]	
Job Title	A/Senior Environment Officer	
Date	02/06/2023	

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

DECISION ON CLEARING ASSESSMENT			
Clearing Assessment	ENDORSED 🖂	REFUSED 🗆	
Comments	 I note the following: The proposal is for the clearing of 0.052ha of native vegetation over four areas for the purpose of relocation of existing western power assets No threatened or priority flora species are located in the proposal area No threatened or priority communities are located in the proposal area The proposal area provides limited fauna habitat and is located in a broader vegetated landscape An assessment of the proposal areas revealed there is limited to no black cockatoo foraging resources present. 		
Name	[REDACTED]		
Signature	[REDACTED]		
Job Title	Environment Contractor		
Date	6/6/2023		



Figure 1 – Proposal Area