Clearing Desktop Report – Short Form

1. PROPOSAL DETAILS

Proposal Name:	Remove dangerous tree - Narrogin Williams Highway (H053) – 23.19 SLK (LHS)		
Region/Directorate:	Wheatbelt		
Local Government Authority:	Narrogin		
Road/Bridge Name and No:	H053 Narrogin Williams Highway		
Proposal Location (SLK):	23.19		
TRIM Link to Spatial Data:	D23#198691		
EOS Number:	2991		
Expected Proposal Start Date:	March 2023		
Project No:	30000921	**Task Code:**	741.06

2. PURPOSE OF CLEARING

Wheatbelt Region has received a complaint regarding the danger to motorists of one tree that may fall across the road in the event of the embankment failing.

The Region proposes to remove a single tree (7m, non DBH York Gum, with no hollows or scars) as it poses a threat to passing motorists. The tree is located on the top of a cut earthen embankment. A recent land slip has exposed the roots of the tree, with another piece and earth ready to fall, potentially resulting in the tree falling towards and onto the road. Refer to photographs and Figures in Appendix 1. The tree canopy has been calculated to be 0.00157 ha (15.7m^2).

The Region advises that the tree will be removed by hand, with no disturbance to adjacent vegetation (work from the road shoulder). An Elevated Work Platform (EWP), Truck and Chipper will be used to remove the tree. The stump will be left insitu as it assists in stabilising the embankment. Mulch will be placed over an area in the near vicinity of the tree location but not over areas with native vegetation understory so as to prevent smothering. The work area (road shoulder) is void of understorey and no vegetation will be impacted from vehicle and machinery movements.

LISC (D23#198698) relates to this proposal.

3. ALTERNATIVES TO CLEARING

As this Proposal is for the removal of one tree on the top of a crumbling batter on the edge of the maintenance zone for safety reasons, then there is limited scope to alter the clearing. Only one tree is proposed to be cleared in Degraded – Completely Degraded condition.

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

There are limited measures to avoid, mitigate clearing impacts, being the removal of one tree due to the safety risk to road users and the location of the tree.

The tree will be removed progressively by hand using an EWP, reducing the potential for impact on surrounding vegetation that would normally be impacted when using other felling techniques. The tree will be mulched with chip being used as mulch on adjacent land if there is no native understorey vegetation in the proposed mulching spread area. Otherwise, the chipped mulch will be removed offsite. The stump will remain insitu as this will assist in stabilising the bank.

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):	0.00157 (canopy)	**No. Trees Cleared:**	1
Species Names:	York Gum		
Easting and Northing:	-32.968758 117.103767		

7. EXISTING ENVIRONMENT AND SITE INFORMATION	
Site Vegetation Description/Association:	Vegetation Association 1023 described as Medium woodland; York gum, wandoo & salmon gum
Site Vegetation Condition:	Degraded – Completely Degraded

Pre-European Extent Remaining (%):	172,857 ha (10.79%) remains at a Statewide level with 21,452 ha (15.98%) remaining at a LGA level

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.	It is proposed to clear one tree (York Gum) located on the top of an embankment on the edge of the maintenance zone, with little to no understorey and considered to be in Degraded to Completely Degraded condition. According to DBCA Threatened and Priority Flora GIS layer, the closest record was *Pultenaea pauciflora* (Narrogin Pea) (T), 2.2 km north east of the Proposal area. It is unlikely this species would occur given the ground is not considered to provide suitable habitat given the current instability. According to DBCA TEC/PEC GIS layer, the Proposal area is located in a mapped PEC/TEC (Eucalypt woodlands of the Western Australian Wheatbelt State PEC/Federal TEC). The tree is located within a 45 ha patch of (predominantly) paddock trees mapped as TEC/PEC. The tree is unlikely to survive given the current and potential instability of the ground in which it sits. While the tree may form part of the TEC/PEC, the understory around the base of the tree is predominantly weeds due to it's location on the outer edge of the vegetated area. A DBCA (un-named) Nature Reserve is located more than 4.3 km west of the Proposal area. The Proposal area is not located within an Environmentally Sensitive Area (ESA) – the closest ESA is 2km to the east of the Proposal area. The methodology proposed to remove the tree will avoid further impacts to the adjacent and surrounding TEC/PEC vegetation. The tree contains no hollows and is considered to provide only low value foraging habitat for black cockatoos with no evidence to support foraging use. Adjacent vegetation would be considered preferential habitat over this unstable roadside tree. Based on the above, the Proposal area has limited biodiversity value and 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.	According to DBCA Fauna GIS layer, the closest records were *Calyptorhynchus banksii naso* (Forest Red-tailed Black Cockatoo) (VU)) and *Calyptorhynchus latirostris* (Carnaby's Cockatoo) (EN) approximately 0.8 km north east of the Proposal area. The Proposal area is within the mapped range of Forest Red-tailed Black Cockatoo and Carnaby's Cockatoo, but outside the range of Baudin's Cockatoo. The York Gum is approximately 7m tall, is non- DBH, and contains no hollows. Although York Gum may be used by Carnaby's Cockatoo for foraging, and roosting (DEC, 2011), it is considered to be low value foraging habitat when using the Bamford (2020) foraging value tool. Further, the tree is located within a larger 45 ha parcel of degraded remnant overstorey species, which would provide similar or better habitat for Black Cockatoos. No evidence of Black Cockatoos were observed by Main Roads staff.

	The single tree is highly unlikely to be significant habitat for fauna indigenous to Western Australia. 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.	According to DBCA Threatened and Priority Flora GIS layer, the closest record was *Pultenaea pauciflora* (Narrogin Pea) (T), xx km north east of the Proposal area. It is unlikely this species would occur given the ground is not considered to provide suitable habitat given the current instability. No impacts on flora are expected. Based on the above, 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.	According to DBCA TEC/PEC GIS layer, the Proposal area is located in a mapped PEC/TEC (Eucalypt woodlands of the Western Australian Wheatbelt State PEC/Federal TEC). The tree is located within a 45 ha patch of (predominantly) paddock trees mapped as TEC/PEC. As the tree to be removed is adjacent to the road in the central area on the periphery of the 45 ha patch of (predominantly) paddock trees, the removal of this tree is unlikely to comprise the whole or a part of, or is necessary for the maintenance of, a Threatened Ecological Community As the trees in this patch appear to be in a Degraded to Completely Degraded condition given the understory around the base of the tree is predominantly weeds, the vegetation condition may not meet the classification requirements for TEC when using the Main Roads Wheatbelt Woodlands TEC Factsheet (D19#584174). The tree is unlikely to survive given the current and potential instability of the ground in which it sits. 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 that has been extensively cleared.	One vegetation association of Beard (1023) has been mapped over the Proposal area, namely: Vegetation Association 1023 described as a Medium woodland; York gum, wandoo & salmon gum. The pre-European extent remaining of this Vegetation Association is 172,857 ha (10.79%) remaining at a Statewide level with 21,452 ha (15.98%) remaining at a LGA level. The removal of one tree (approximately 0.00157 ha) in a Degraded – Completely Degraded condition on the edge of the maintenance zone, equates to 0.000007% of this vegetation association at a LGA level, and is not likely to represent vegetation that is significant as a remnant. The tree is unlikely to survive given the current and potential instability of the ground on which it sits. Based on the above, 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.	York Gum is not representative of riparian vegetation. The closest waterway is approximately 300m south west of the Proposal area. This tree is located on the edge of an unstable embankment and is not considered to be growing in association with a watercourse or wetland. Based on the above, 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.	DPIRD mapping indicates that the area has: • 0% very high to extreme water erosion hazard • 81% high to extreme wind erosion hazard • 0% very poor to poor site drainage potential • 0% moderate salinity hazard

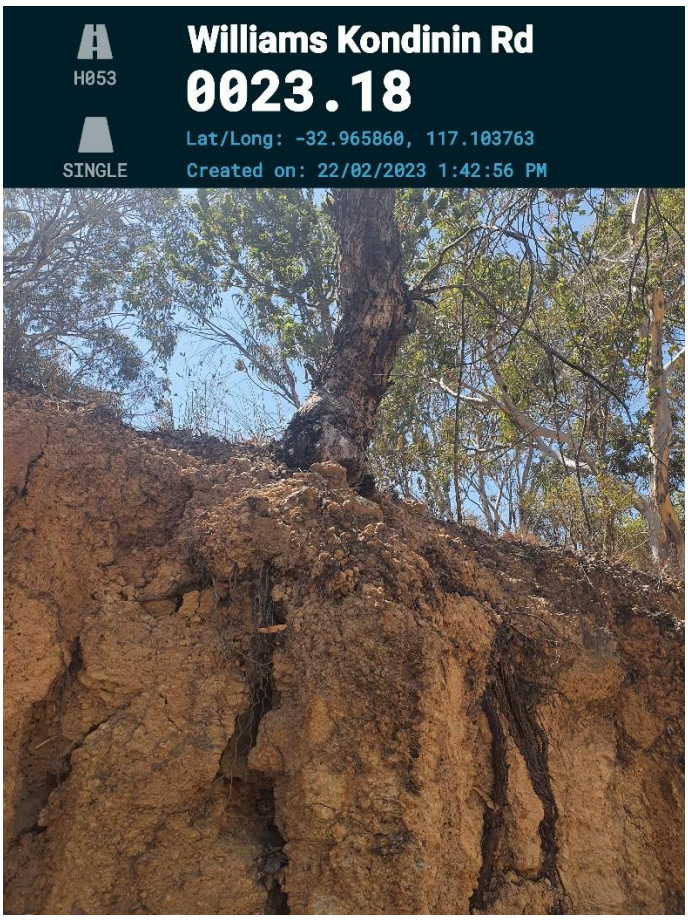
	The Australian Soil Resource Information System (ASRIS) has been used to determine the likelihood of Acid Sulphate Soils (ASS) occurring within the Proposal area. The ASRIS database (accessed 27-Feb-2023) indicates there is a low probability of occurrence within the Proposal area. The removal of a single tree in Degraded to Completely Degraded condition is unlikely to cause appreciable land degradation, especially as the majority of the land where the vegetation is located is covered with road infrastructure and agricultural pursuits. The method of removal will see the stump and roots retained in situ to support bank stability. Based on the above, 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.	A search of Main Roads GIS shapefiles layers indicates that the closest nature reserve, conservation areas or Bush Forever Site is an un-named Nature Reserve, located more than 4.3 km west of the Proposal area. Works will be constrained to the roadside at the tree location and therefore, no impacts to these areas are anticipated. Based on the above, 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 Proposal area is not located within a Public Drinking Water Source Area, groundwater area proclaimed under the Rights in Water and Irrigation Act 1914 (RIWI Act) or catchment proclaimed under the Country Areas Water Supply Act 1947 (CAWS Act). It is located in a surface water proclaimed area under the RIWI Act. The removal of the tree will not require excavation below the surface with the stump and roots to be retained for bank stability. Further, as the work is planned to occur over the summer months, and are limited to surface removal of one tree, no groundwater will be intersected and works will not require dewatering. No change to surface or groundwater level or quality will occur as a result of these works. Based on the above, 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 or intensity of flooding.	The removal of a single tree from the stump up in Degraded to Completely Degraded condition is unlikely to cause, or exacerbate, the incidence or intensity of flooding. DPIRD mapping indicates that the area has: • 0% moderate to high flood hazard, • 0% moderate to very high waterlogging and inundation risk. A review of ArcGIS shapefiles has confirmed that the proposed works will not disturb or interrupt any natural drainage and surface run-off patterns. Based on the above, the proposed clearing is not at variance to this Principle.
Methodology Used and References:	Proposal Area (Figure 1) Contextual photographs of Proposal area (Appendix 1) Australian Soil Resource Information System (ASRIS) Mapping (http://www.asris.csiro.au/mapping/viewer.htm) DPIRD mapping (https://maps.agric.wa.gov.au/nrm-info/) Main Roads GIS Shapefiles

Completed By:	
Job Title	Senior Environment Officer
Date	24-Feb-2023

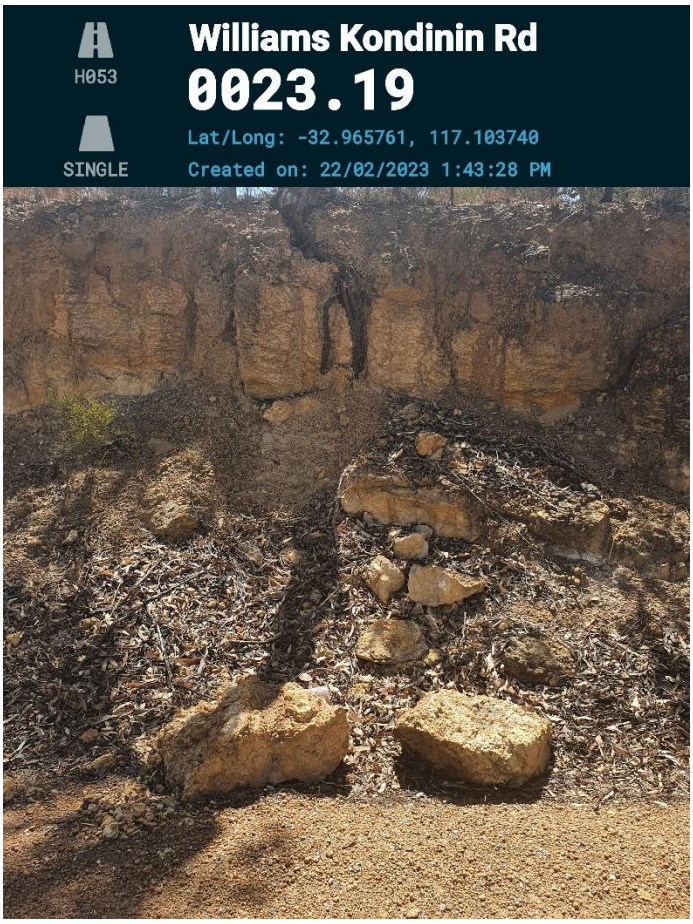
Once all sections are completed, send the form to CRSP for review and endorsement.

DECISION ON CLEARING ASSESSMENT		
Clearing Assessment	**ENDORSED ☒**	**REFUSED ☐**
Comments	The removal of one York Gum at risk of falling due to root exposure as a result of land slide and potential for further land slide is not considered to result in a significant impact. Although the tree is located within the mapped Eucalypt Woodlands of the Western Australian Wheatbelt Federal TEC/ State PEC, the clearing is not considered significant due to the location and condition of the tree, and methodology for removal with no impacts to surrounding vegetation.	
Job Title	Senior Environment Officer	
Date	28/02/2023	

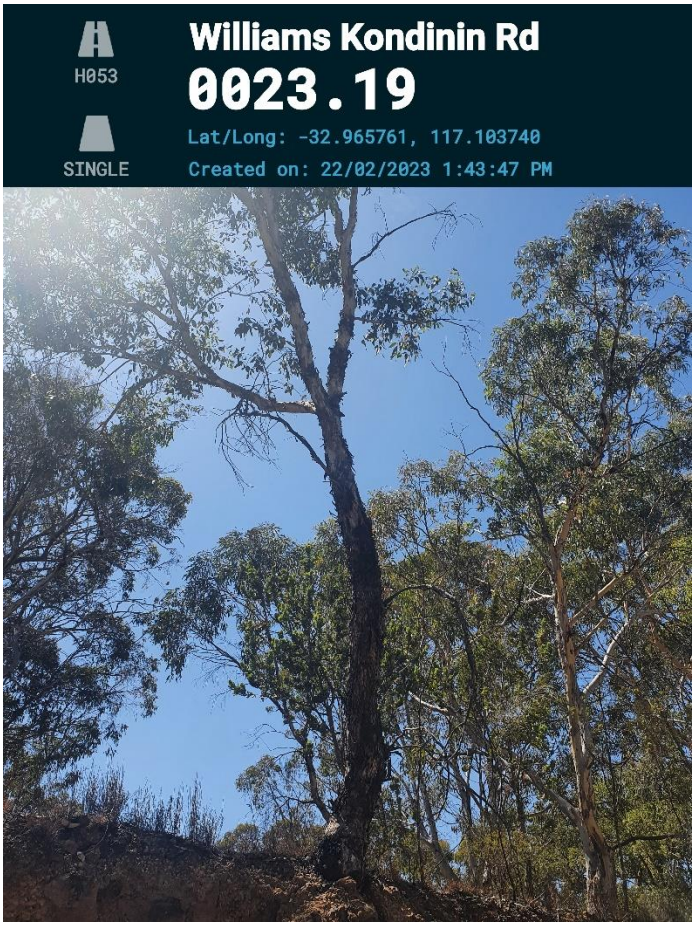
Appendix 1: Photographs and Figures



Loose earth below tree



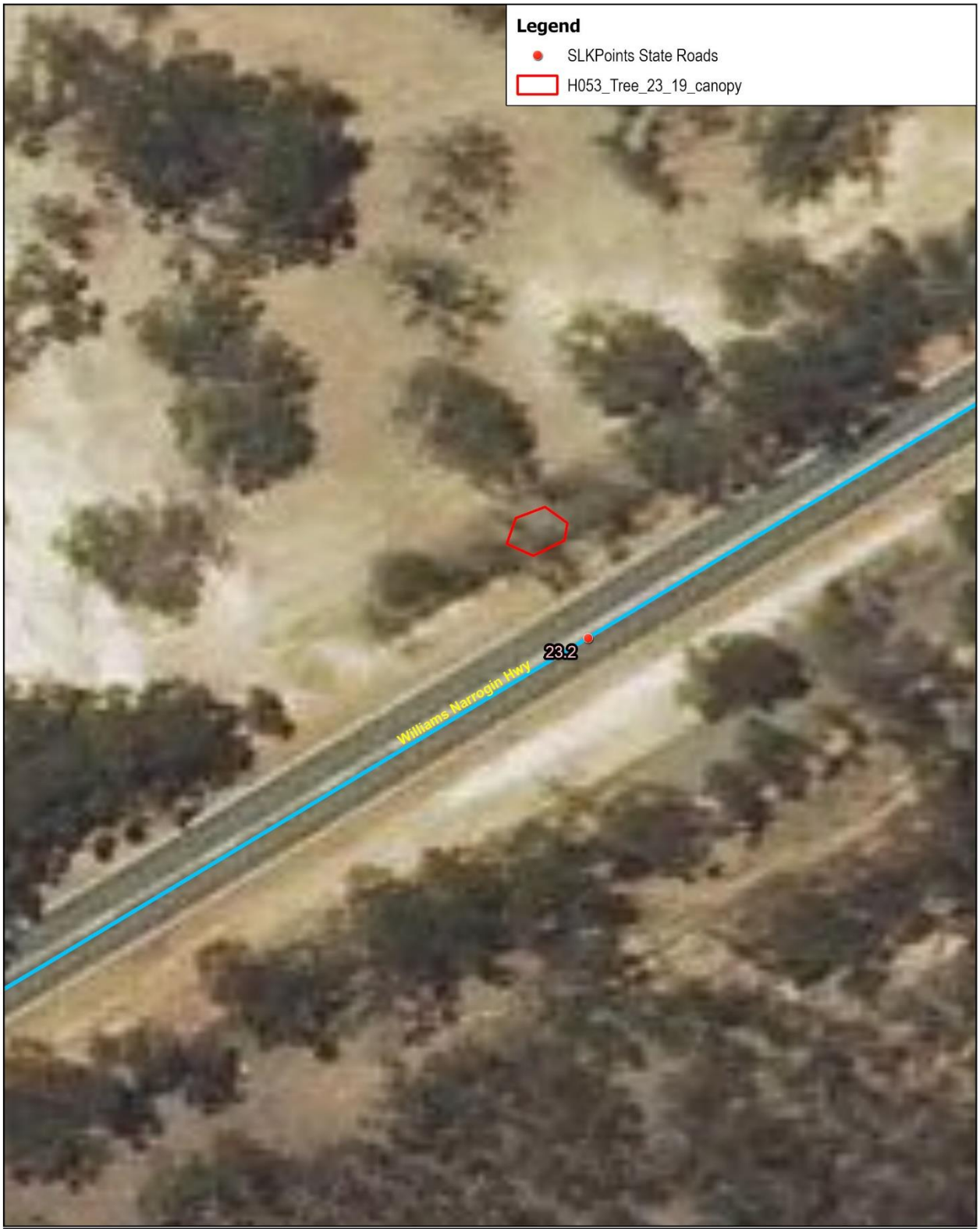
Past earth/rock fall



View of tree

View of tree heading east (Streetview)

View of tree heading west (Streetview)


Legend
SLKPoints State Roads
H053_Tree_23_19_canopy
23.2
Williams Narrogin Hwy
N
Coordinate System: GDA2020
Scale: 1:489 @ A4
Created Date: 24/02/2023
Author: c7691
0 0.01 0.01 0.02 Kilometers
H053 Williams Kondinin
23.19 SLK Dangerous Tree
Proposal Area
mainroads
WESTERN AUSTRALIA
Path: E:\Wheatbelt\STATE\H053 Williams-Narrogin Highway\H053 23.19SLK Dangerous Tree\H053_Tree_23_19.aprx