

Clearing Desktop Report – Short Form



1. PROPOSAL DETAILS

Proposal Name:	Great Eastern Hwy Telstra Relocation SLK 315.98		
Region/Directorate:	Wheatbelt / Regional Management & Operations		
Local Government Authority:	Shire of Yilgarn		
Road/Bridge Name and No:	Great Eastern Hwy (H005)		
Proposal Location (SLK):	SLK 315.98		
TRIM Link to Spatial Data:	D23#538052		
EOS No:	3080		
Expected Proposal Start Date:	July 2023		
Project No:	21111796	Task Code:	19301
LISC TRIM No:	D23#268179	HRA TRIM No:	D23#268220

2. PURPOSE OF CLEARING

Main Roads Wheatbelt Region is upgrading sections of Great Eastern Hwy between Walgoolan and Southern Cross as funding becomes available. In preparation for delivering Package 4B, the existing Telstra network at the intersection with Penton Rd is required to be relocated to outside the construction footprint. The project involves the following activities:

- Main Roads will undertake clearing and site preparation for Telstra.
- Telstra will install a new pit on the south side of GEH and install new underground cables.
- Topsoil and vegetation will be respread over the clearing area.

3. ALTERNATIVES TO CLEARING

Telstra has specified the location for the installation of new infrastructure. Main Roads is required to undertake the clearing as per Telstra 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

Telstra has specified the clearing area required for the installation of new 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 Telstra to reduce the area of clearing required for the works.
- 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 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)

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):	0.02 (permanent)	No. Trees Cleared:	Nil
Species Name:	Various		
Easting and Northing:	118.84195, -31.374150		

7. EXISTING ENVIRONMENT AND SITE INFORMATION

Site Vegetation Description/Association:	The Proposal Area has been previously surveyed by GHD (2016) as part of the biological assessment of a 107 km section of Great Eastern Hwy between Merredin and Southern Cross. 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 60m corridor on both sides of the road.
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	The Proposal Area has been broadly mapped as the following vegetation type (GHD, 2016): VT06 - <i>Acacia acuminata</i>, <i>Acacia ?coolgardiensis</i>, <i>Melaleuca hamata</i>, <i>Melaleuca laxiflora</i> and <i>Melaleuca uncinata</i> tall open shrubland over <i>Ericomyrtus serpyllifolia</i> and <i>Baeckea</i> sp. Bencubbin – Koorda (M.E. Trudgen 5421) sparse shrubland over <i>Amphipogon caricinus</i> var. <i>caricinus</i>, <i>Austrostipa</i> spp. and <i>Rytidosperma caespitosum</i> sparse grassland over <i>Waitzia acuminata</i> var. <i>acuminata</i> and <i>Lawrencella rosea</i> isolated herbs.										
Site Vegetation Condition:	Very Good										
Pre-European Extent Remaining (%):	Vegetation Association 36 - Shrublands; thicket, acacia-casuarina alliance. <table border="1"> <thead> <tr> <th>Scale</th><th>% Remaining</th></tr> </thead> <tbody> <tr> <td>Statewide</td><td>46%</td></tr> <tr> <td>IBRA Region (Avon Wheatbelt)</td><td>24%</td></tr> <tr> <td>IBRA Subregion (Merredin)</td><td>24%</td></tr> <tr> <td>Local Government Area (Shire of Yilgarn)</td><td>54%</td></tr> </tbody> </table>	Scale	% Remaining	Statewide	46%	IBRA Region (Avon Wheatbelt)	24%	IBRA Subregion (Merredin)	24%	Local Government Area (Shire of Yilgarn)	54%
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Local Government Area (Shire of Yilgarn)	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 0.02 ha of native vegetation is proposed to be cleared for the purpose of relocating Telstra infrastructure. The Proposal Area forms part of a linear corridor of vegetation between Great Eastern Hwy and the Goldfields Water Supply Scheme pipeline. A review of existing biological survey information indicates the vegetation ranges between Very Good to Excellent condition (GHD, 2016). A site inspection by Main Roads (2023) observed evidence of historical disturbance including clearing, weeds and rubbish, indicating the vegetation condition is lower than what has been broadly mapped over the area. The Proposal Area comprises one vegetation type, described as <i>Acacia</i> spp. and <i>Melaleuca</i> spp. tall open shrublands (VT06). A total of 60.32 ha of this vegetation type was recorded in the Survey Area. This vegetation type is considered well represented in the local road reserve. According to the desktop assessment, four Priority Ecological Communities (PEC) potentially occur in the Study Area (20 km): • Red Morrel Woodlands of the Wheatbelt (Priority 1). • Eucalypt Woodlands of the Western Australian Wheatbelt (Priority 3). • Gimlet Woodlands of the Wheatbelt (Priority 3). • Salmon Gum Woodlands of the Wheatbelt (Priority 3).

	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 Great Eastern Hwy, this community has not been recorded in the Proposal Area (Astron, 2018). No other TECs or PECs occur in the Proposal Area. According to the desktop assessment, five Threatened and 12 Priority flora species are known to occur in the Study Area, of which two Threatened and seven Priority flora species may occur given the presence of suitable habitat. None of these records occur within the Proposal Area. According to targeted flora surveys undertaken along Great Eastern Hwy, no conservation significant flora have been recorded in the Proposal Area or in adjacent similar habitat (GHD, 2016; Ecologia, 2020). According to the nearest weather station, the Proposal Area receives approximately 320mm of annual rainfall (BOM, 2023). The Proposal Area is not located within a dieback risk area. The Proposal Area comprises one fauna habitat type described as Mixed shrublands. As described in principle (b), the vegetation may provide suitable habitat for malleefowl, tree-stem trapdoor spider and <i>Idiosoma</i> sp. The biological assessment did not record any significant fauna or significant habitat in the Proposal Area at the time of survey (GHD, 2016). Given the minor area of clearing and proximity to a major highway, the vegetation is not likely to contain a relatively higher level of fauna diversity or significant habitat for fauna. 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 comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.	One fauna habitat type has been mapped in the Proposal Area, being Mixed shrublands. This habitat is characterised by differing dominance of <i>Acacia</i>, <i>Melaleuca</i>, <i>Allocasuarina</i> and other shrub species (GHD, 2016). This habitat type is well represented in the Survey Area. According to the desktop assessment, six significant fauna species are known to occur in the Study Area. Based on preferred habitat types, proximity of records and the type and condition of vegetation present, the following species have the potential to occur in the Proposal Area: • <i>Leipoa ocellata</i> (malleefowl – Vulnerable). • <i>Aganippe castellum</i> (tree-stem trapdoor spider – Priority 4). Malleefowl are found in arid and semi-arid areas dominated by mallee eucalypts on sandy soils. They are known to also occur in Mulga (<i>Acacia aneura</i>), Broombush (<i>Melaleuca uncinata</i>), Scrub Pine (<i>Callitris verrucosa</i>), <i>Eucalyptus</i> woodlands and coastal heathlands (DPaW, 2016). Records of this species are scattered throughout the Study Area, including several along GEH. The nearest record is a 2006 opportunistic sighting approximately 540 m east of the Proposal Area (GIS Database). One malleefowl was recorded as roadkill during the fauna survey approximately 10 km west of the Proposal Area (GHD, 2016). The Proposal Area may provide suitable habitat for malleefowl given the vegetation comprises dense shrubs over sandy soils. However, this species is unlikely to nest in close proximity to a major highway given the increased level of noise and disturbance (GHD, 2016). No evidence of malleefowl was recorded in the Proposal Area during the biological assessment, and a recent site inspection by Main Roads found no evidence of breeding activity in the Proposal Area (Main Roads, 2023).

	Habitat for tree-stem trapdoor spider consists of flood-prone depressions and flats which support myrtaceous shrub communities. In particular, those areas supporting Broombrush (<i>Melaleuca uncinata</i>) and Sheoaks (such as <i>Allocasuarina acutivalvis</i>) in sandy loams are critical to the survival of this species (Avon Catchment Council, 2007). The Proposal Area comprises a mix of <i>Melaleuca</i> and <i>Allocasuarina</i> shrubs on sandy soils that may provide suitable habitat for this species, although according to DPIRD flood risk mapping, the site is not flood-prone. Similar habitat extends beyond the Proposal Area and is well represented in the road reserve, therefore the proposed clearing will not reduce the area of suitable habitat for this species in the local area. The desktop assessment also identified one record of <i>Idiosoma intermedium</i> (Coolgardie shield-backed trapdoor spider – Priority 3) approximately 1.1 km north-east of the Proposal Area (GIS Database). A targeted shield-backed Mygalomorph spider survey was conducted for a 16 km section of GEH, which partially covers the Proposal Area, targeting this species and <i>Idiosoma nigrum</i> (shield-backed trapdoor spider - EN) (Biota, 2022). The survey did not record either of these species, however, did record a previously unrecorded species of trapdoor spider belonging to the <i>Idiosoma nigrum</i>-group. Based on the broadscale habitat mapping completed during the survey, the specimens were recorded from tall open <i>Eucalyptus salubris</i> woodland on undulating plains. This species was not recorded in the Proposal Area and is not likely to occur given the absence of suitable habitat. The biological assessment noted scattered proteaceous species (eg. <i>Hakea</i> and <i>Grevillea</i> species) throughout the mixed shrublands may provide foraging resources for Carnaby's cockatoo (GHD, 2016). According to EPA (2019), the Proposal Area is located outside the estimated distribution of Carnaby's cockatoo and there are no records of this species within the Study Area. Given Carnaby's cockatoo is not likely to occur in this area, the vegetation to be cleared is not considered significant habitat for this species. While the Proposal Area contains vegetation that may form suitable habitat for significant fauna species, the minor scale of clearing and extent of native vegetation in the surrounding road reserve, the vegetation is not considered significant habitat. 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, threatened flora.	According to the desktop assessment, five Threatened flora species are known to occur in the Study Area: • <i>Boronia adamsiana</i> • <i>Eremophila resinosa</i> • <i>Eremophila viscida</i> • <i>Eucalyptus crucis</i> subsp. <i>crucis</i> • <i>Gastrolobium diabolophyllum</i> None of these records occur within 10 km of the Proposal Area. The biological assessment did not record any Threatened flora species within the Proposal Area (GHD, 2016). A targeted flora survey of a 16 km section of GEH that partially covers the Proposal Area did not record any Threatened flora in the Proposal Area or nearby similar vegetation (Ecologia, 2020). Given the minimal extent of clearing proposed and no Threatened flora have been previously recorded within the Proposal Area, 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 a part of, or is necessary for the maintenance of, a threatened ecological community.	According to the desktop assessment, no TECs listed under the BC Act or EPBC Act are known to occur within the Proposal Area (GIS Database). As discussed under principle (a), Eucalypt Woodlands TEC (EN under the EPBC Act) is known to occur in the Study Area. According to the biological survey and a targeted TEC assessment, the vegetation in the Proposal Area does not represent Eucalypt Woodlands TEC (GHD, 2016; Astron, 2020). 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.	The vegetation to be cleared has been broadly mapped as the following pre-European vegetation association (GIS Database): • 36: Wattle, casuarina and teatree <i>Acacia-Allocasuarina-Melaleuca</i> alliance. The National Objectives and Targets for Biodiversity Conservation recognise that the retention of 30% or more of the pre-clearing extent of each ecological community is necessary if Australia's biological diversity is to be protected (Commonwealth of Australia, 2001). Vegetation association 36 retains over 30% at the state and local government scales but 24% at the IBRA bioregion and subregion scales. According to statewide vegetation statistics, there is approximately 72,745 ha of vegetation association 36 remaining in the Avon Wheatbelt IBRA bioregion and Merredin subregion respectively (Government of WA, 2019). According to remnant vegetation mapping, there is approximately 9,350 ha of vegetation association 36 remaining in the 20 km surrounding the Proposal Area. The proposed clearing of 0.02 ha of vegetation represents less than 0.001% of this vegetation association in the local and regional area. Therefore, the proposed clearing will not significantly decrease the extent of this vegetation association in the Avon-Wheatbelt and Merredin regions. With regard to impacts to the local native vegetation extent, the proposed clearing is located in the Avon Wheatbelt IBRA bioregion, of which approximately 19% vegetation cover remains. The Study Area retains approximately 24% vegetation cover (approximately 30,205 ha). The Proposal Area is located adjacent to an existing local road and forms part of 40 m wide corridor of vegetation between GEH and the Goldfields water supply pipeline. Based on a review of aerial photography, the clearing will not significantly reduce the extent of native vegetation in the road reserve or reduce ecological connectivity across the landscape. Based on the above, the proposed clearing is not likely to be 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.	There are no watercourses or wetlands within the Proposal Area. No vegetation types growing in association with a watercourse or wetland have been recorded in the Proposal Area (GHD, 2016). 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 Proposal Area has a relatively flat topography (approximately 1%) and an average rainfall of 320 mm per annum (BOM, 2023). According to DPIRD land degradation risk mapping, the Proposal Area has a low risk of land degradation from water erosion, waterlogging, flooding, wind and salinity. Given the low risk of land degradation and small area of clearing, the proposed clearing is unlikely to cause appreciable land degradation. Based on the above, the proposed clearing is not likely to be 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.	The Proposal Area is located in the road reserve and will not directly impact the environmental values of a conservation area. The nearest conservation area is approximately 1.5 km west of the Proposal Area. Given the small area of clearing and distance to the nearest reserve, the proposed clearing is unlikely to affect the environmental values of any conservation areas in the local area. Based on the above, 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 within the Proposal Area. The proposed clearing is unlikely to result in significant changes to surface water flows. The Proposal Area is not located in a Public Drinking Water Source Area. Groundwater salinity in the local area is mapped between 14,000-35,000 milligrams per litre total dissolved solids, which is considered saline. Noting the existing salinity level and the minor extent of the proposed clearing, the proposed clearing is not likely to cause deterioration in the quality of underground water. 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.	The nearest weather station is Noongaar, which is 17 km northeast of the Proposal Area, with an average rainfall of approximately 320 mm per year (BOM, 2023). As discussed in principle (g), the Clearing Area has a low risk of flooding and waterlogging. There are no watercourses or wetlands within the Proposal Area. The proposed clearing is unlikely to increase the incidence or intensity of flooding. Based on the above, the proposed clearing is not likely to be at variance to this principle.

Methodology Used and References:	Astron (2018) Great Eastern Hwy Merredin to Southern Cross SLK 258.5–365.5 Biological Assessment. Unpublished report prepared for Main Roads WA, by Astron Environmental Services. Avon Catchment Council (2007) Tree-stem Trapdoor Spider (<i>Aganippe castellum</i>) Conservation Plan. Avon Catchment Council, Western Australia. Biota Environmental Sciences (2022) Walgoolan to Southern Cross Upgrade Project – Targeted Shield-backed Trapdoor Spider Survey. Memo report prepared for Main Roads, by Biota. Bureau of Meteorology Australia (2023) Climate Averages for Australian Sites – Noongaar – Available online from http://www.bom.gov.au/climate/data/index.shtml DPaW (2016) Fauna Profiles: Malleefowl <i>Leipoa ocellata</i>. Retrieved from http://www.dpaw.wa.gov.au/ Ecologia (2020) Great Eastern Hwy Walgoolan to Southern Cross SLK 311 to 327 Regional Targeted Flora Survey. Unpublished report prepared for Main Roads WA, by Ecologia Environment. Environmental Protection Authority (2019) Carnaby's Cockatoo in Environmental Impact Assessment in the Perth and Peel Region. EPA, Western Australia. GHD (2016) Great Eastern Hwy – Merredin to Southern Cross SLK 258.5–365.5 Biological Assessment. Unpublished report prepared for Main Roads WA, by GHD. 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, Perth. Available online from: https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics Main Roads (2023) Site Inspection Report: Great Eastern Hwy SLK 315.98. 10/05/2023. (D23#536993) 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									
	<table border="1"> <tr> <th colspan="2">Completed By:</th></tr> <tr> <td>Name</td><td>Redacted</td></tr> <tr> <td>Signature</td><td>Redacted</td></tr> <tr> <td>Job Title</td><td>A/Senior Environment Officer</td></tr> <tr> <td>Date</td><td>07/06/2023</td></tr> </table>	Completed By:		Name	Redacted	Signature	Redacted	Job Title	A/Senior Environment Officer	Date
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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 0.02ha of vegetation for the purposes of Telstra services relocation. • There are no significant flora, fauna or vegetation communities in the clearing area.	
Name	Redacted	
Signature	Redacted	
Job Title	Environment Contractor	
Date	8/06/2023	

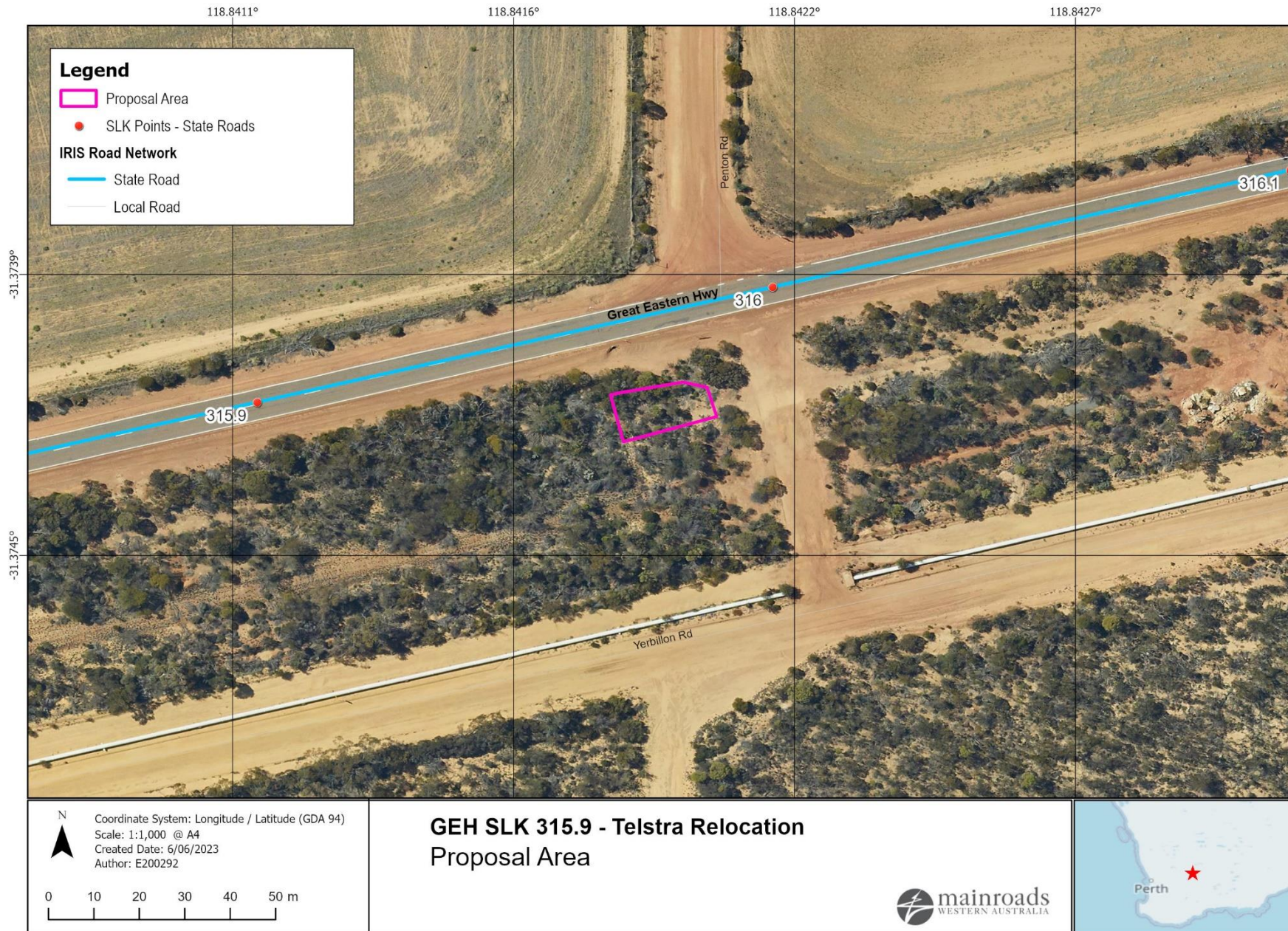


Figure 1 – Proposal Area