

Monday, 8 April 2024



Our Ref: P22.100-LRP-NVCP\_A\_DRAFT

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ATTENTION: Navlika

**SUBJECT: PTA RADIO SYSTEMS REPLACEMENT (RSR) PROJECT – BIOLOGICAL ASSESSMENTS**

### Project Background

Western Environmental Pty Ltd (WEPL) was commissioned by UGL Engineering Pty Limited (the Client) to undertake Environmental Site Assessments (ESA) at several sites associated with the Public Transport Authority (PTA) Radio Systems Replacement (RSR) Project.

In the context of this project clearing permit application CPS 10433/1 was submitted to DWER and is currently under assessment. Since submission four additional sites were identified to require a clearing permit due to required site design changes.

On behalf of UGL and PTA we ask for the four sites listed in Table 1 to be added under the current clearing permit CPS 10433/1. This report presents details of the vegetation present and the impacts associated with the planned works.

**Table 1: Site Identifications and Land Descriptions**

Site Name	Property Details	Landowner
Joondalup Tunnel 3 Site #77	Lot 100 on P019570, WA & Land ID 3785996 (Joondalup Drive Road Reserve), WA Works primarily within Lot 100 on P019570 and small portion within Joondalup Drive Road Reserve. LGA: City of Joondalup	Lot 100: Public Transport Authority of Western Australia Joondalup Drive Road Reserve: City of Joondalup
Mandjoogordap Drive Site #58	Lot 807 on P031126, WA, Lot 2665 on Plan 64444, WA, Land ID 4024435 (Corsican Place Road Reserve)	State of Western Australia

Site Name	Property Details	Landowner
	<p>Works primarily within Lot 2665 and portion of works with Lot 807 and Corsican Place Road Reserve.</p> <p>LGA: City of Mandurah</p>	
<b>Secret Harbour Site #53</b>	<p>Lot 169 on Plan 69127</p> <p>Lot 8060 on Plan 69127</p> <p>Lot 167 on Plan 69126</p> <p>Mandurah Road Reserve</p> <p>LGA: City of Rockingham</p>	<p>Western Australian Planning Commission, Public Transport Authority of Western Australia, Main Roads WA</p>
<b>Canning Bridge Station Site #32</b>	<p>Land ID 3600602 on P ROAD (Road Reserve), WA, Land ID 3329545, City of South Perth</p> <p>Works entirely within Road Reserve.</p> <p>LGA: City of South Perth</p>	<p>Main Roads Western Australia</p>



## Survey Methodology

Flora and vegetation assessments were undertaken between 23 February and 27 March 2024. The following elements were assessed:

- Broad description of vegetation types, including broad species composition and weed invasion.
- Vegetation Condition in consistence with the EPA *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessments* (EPA, 2016).
- Opportunistic sampling of flora species where taxa could not be identified on site.
- Presence of potential black cockatoo habitat values and other significant fauna habitat values.
- Presence of TECs, Threatened and Priority Flora and other Environmentally Sensitive Areas (ESAs).

## Results

The results found on each survey site where clearing will be required are presented in Table 2 to Table 5 below.

**Table 2: Joondalup Tunnel 3 – Site Inspection Form**

Site Inspection Form			
Date	14 March 2024	Site Name	77 – Joondalup Tunnel 3, Joondalup
Coordinates (GDA2020-Z50)	383297.44, 6486270.46 (meter MGA 2020 Zone 50)		Portion No. 7
Environmental Scientist	Lovisa Thambert		
Vegetation present	Yes		
Vegetation description	Mixed native and weedy shrubland including <i>Acacia rosterlifer</i> , <i>Banksia sessilis</i> , <i>Grevillea</i> sp., <i>Allocasuarina</i> sp., <i>Spyridium globulosum</i> and Geraldton Wax ( <i>*Chamelaucium uncinatum</i> ). Geraldton wax was at high density between 40-50%. The southeastern boundary had higher density of native species including <i>Xanthorrhoea preissii</i> , <i>Mesomelaena</i> sp., <i>Dianella</i> sp. and Priority 4 species <i>Jacksonia sericea</i> mixed with weedy grasses.		
Vegetation condition	Degraded		
Weed percentage cover	60%		
Disturbance	Historically cleared and high density of weedy shrubs.		
Wetland mapped	No		
Is vegetation indicative of wetland vegetation?	No		
Does the condition align with MU/RE/CCW?	N/A		
Black cockatoo foraging habitat	Yes – Carnaby’s cockatoos forage on proteaceous species including <i>Banksia sessilis</i> .		
Black cockatoo roosting habitat	No		
Black cockatoo breeding habitat	No		
Fauna evidence	No		
Site Photos	See Appendix A		
General Comments			
<p>The site has been historically cleared. Native species are present, including <i>Banksia sessilis</i> which is foraging resource for Carnaby’s cockatoos. Geraldton wax is at higher density at 40-50%.</p> <p>Five individuals of Priority 4 flora species <i>Jacksonia sericea</i> was recorded from three locations. Vegetation and clearing footprint mapping are presented in Figure 1.</p>			





**Table 3: Mandjoogoordup Drive – Site Inspection Form**

Site Inspection Form – Western Environmental			
Date	27 March 2024	Site Name	58 – Mandjoogoordap Dr, Mandurah
Coordinates (GDA2020-Z50)	383606.06, 6403228.63 (meter MGA 2020 Zone 50)		Portion No. 5
Environmental Scientist	Lovisa Thambert		
Vegetation present	Yes		
Vegetation description	<p>VT01: Cleared with mainly weeds with no native vegetation present. Isolated landscaping plantings <i>Agonis flexuosa</i>, <i>Eucalyptus</i> sp. and one eastern state <i>Banksia</i> sp., all small size young age &lt; 3 years. Ground stratum 100% weeds.</p> <p>VT02: <i>Allocasuarina humilis</i> mid open shrubland over <i>Hibbertia hypericoides</i> low open shrubland over <i>Patersonia occidentalis</i> and <i>Conostylis aculeata</i> low isolated clumps of sedges.</p> <p>VT03: Non-native vegetation, <i>Acacia rostellifera</i> shrubs along the fence line.</p>		
Vegetation condition	Completely Degraded		
Weed percentage cover	75-100%%		
Disturbance	Weeds and cleared.		
Wetland mapped	No		
Is vegetation indicative of wetland vegetation?	No		
Does the condition align with MU/RE/CCW?	N/A		
Black cockatoo foraging habitat	Yes – Tuarts present, no foraging evidence present.		
Black cockatoo roosting habitat	No		
Black cockatoo breeding habitat	No		
Fauna evidence	No		
Site Photos	See Appendix A		
<b>General Comments</b>			
<p>Native species within the site in VT02 are considered native vegetation under the EP Act.</p> <p>One isolated Tuart (<i>Eucalyptus gomphocephala</i>) is located at each end of the proposed clearing footprint which may be impacted by underground works. Avoid trimming, root disturbance and removal of the Tuart.</p> <p>The Tuart is not linked to other Tuart patches and therefore not part of a Tuart TEC.</p> <p>Vegetation and clearing footprint mapping are presented in Figure 2.</p>			



**Table 4: Secret Harbour – Site Inspection Form**

Site Inspection Form – Western Environmental			
Date	23 February 2024	Site Name	53 – Secret Harbour, Mandurah
Coordinates (GDA2020-Z50)	384809.88, 6413971.11 (meter MGA 2020 Zone 50)		Portion No. 5
Environmental Scientist	Lovisa Thambert		
Vegetation present	Yes		
Vegetation description	<p>Vegetation within clearing footprint west of the railway, VT01: Native scattered shrubland over weedy herbs and grasses, dead <i>Eucalyptus gomphocephala</i> (Tuart) present with some hollows &lt;10 cm. One larger broken off branch but appears not to have developed a hollow. One hollow occupied by bees.</p> <p>No upper stratum. Mid stratum included scattered <i>Acacia cochlearis</i>, <i>Acacia rostellifera</i>, <i>Hypocalymma</i> sp., <i>Kunzea glabrescens</i> and *Narrowleaf cottonbush (Declared Pest), over weedy grasses and <i>Scaevola crassifolia</i>. One <i>Eucalyptus</i> sp. seedling.</p> <p>Outside of clearing extent: Parkland cleared, open woodland of <i>Eucalyptus gomphocephala</i> (Tuart) 20-40% canopy cover. No native mid or ground stratum present, ground is weedy grasses.</p> <p>Vegetation east of the railway: *Narrowleaf Cottonbush (Declared Pest) and *<i>Schinus terebinthifolia</i> over scattered *<i>Asphodelus fistulosus</i>, <i>Lepidosperma longitundinale</i> and dead weedy grasses.</p>		
Vegetation condition	Completely Degraded		
Weed percentage cover	70-90%		
Disturbance	Weeds and historic clearing		
Wetland mapped	No		
Is vegetation indicative of wetland vegetation?	No		
Does the condition align with MU/RE/CCW?	N/A		
Black cockatoo foraging habitat	Yes – Tuarts present, no foraging evidence		
Black cockatoo roosting habitat	No		
Black cockatoo breeding habitat	No		
Fauna evidence	No		
Site Photos	See Appendix A		



General Comments

**West of railway**

**Within clearing extent:**

VT01 – Native scattered shrubland over weedy herbs and grasses, tall closed grassland; one dead Tuart with hollows of an unsuitable size to be used for black cockatoo breeding activities. Scattered native shrubs, considered native vegetation under the EP Act. See Figure 3.

**North of clearing extent:**

Parkland cleared with an overstory of Tuarts.

Likely satisfy the criteria for Tuart TEC as the Tuarts in the impact area is <60 m to an intact Tuart woodland >5 ha. Removal or pruning of Tuart is recommended to be avoided.

**East of railway**

**Within Clearing Extent:**

VT02 - Open patch with mainly weeds. Narrow leaf cotton bush (DP) and Japanese pepper. Just outside footprint native sedges and a few native shrubs.

**Outside of Clearing Extent:**

VT03 – Landscaping mix, Regrowth since 2000

Outside the clearing footprint was Tuart woodland with 50% canopy cover over *\*Schinus terebinthifolia* bushes and other weeds. Likely satisfy the criteria for Tuart TEC, removal or pruning of Tuart is recommended to be avoided.

Vegetation and clearing footprint mapping are presented in Figure 3.



Table 5: Canning Bridge Station – Site Inspection Form

Site Inspection Form – Western Environmental			
Date	23 February 2024	Site Name	32 – Canning Bridge Station, Mandurah
Coordinates (GDA2020-Z50)	391931.92, 6457826.36 (meter MGA 2020 Zone 50)		Portion No. 3
Environmental Scientist	Lovisa Thambert		
Vegetation present	Yes		
Vegetation description	<p>Vegetation within clearing footprint:                      Around Monopole location:                      VT02: Weedy and native open shrubland over bare ground. Dominant shrubs include Geraldton wax (<i>Chamelaucium uncinatum</i>), <i>Callitris</i> sp., <i>Calothamnus quadrifidus</i> and <i>Banksia menziesii</i> within 10 m radius from the point.                      Non-native *<i>Eucalyptus</i> sp., scattered shrubs of <i>Hakea</i> sp., <i>Grevillea</i> sp., <i>Callitris</i> sp. over weedy grasses.                      VT01: Planted Geraldton wax along Canning Bridge ramp.</p> <p>Outside clearing footprint: One Tuart (<i>Eucalyptus gomphocephala</i>) to the north of the clearing footprint, One Marri tree (<i>Corymbia calophylla</i>) adjacent to southern boundary.</p>		
Vegetation condition	Degraded		
Weed percentage cover	75-100%%		
Disturbance	Historical clearing, non-native species and invasive weeds		
Wetland mapped	No		
Is vegetation indicative of wetland vegetation?	No		
Does the condition align with MU/RE/CCW?	N/A		
Black cockatoo foraging habitat	No		
Black cockatoo roosting habitat	Yes – Limited to one isolated Tuart tree and one Marri tree outside clearing footprint		
Black cockatoo breeding habitat	Yes – Potential breeding habitat limited to one isolated Tuart tree and one Marri tree; no hollows present		
Fauna evidence	No		
Site Photos	See Appendix A		
<b>General Comments</b>			
<p>One isolated Tuart (<i>Eucalyptus gomphocephala</i>) in the north of the Site, likely planted.                      Avoid impact on Tuart if possible.                      Tuart is not linked to other Tuart patches and therefore not part of a Tuart TEC.                      Vegetation within the clearing footprint is partially native. Regrowth since 1981.                      Vegetation and clearing footprint mapping are presented in Figure 4.</p>			





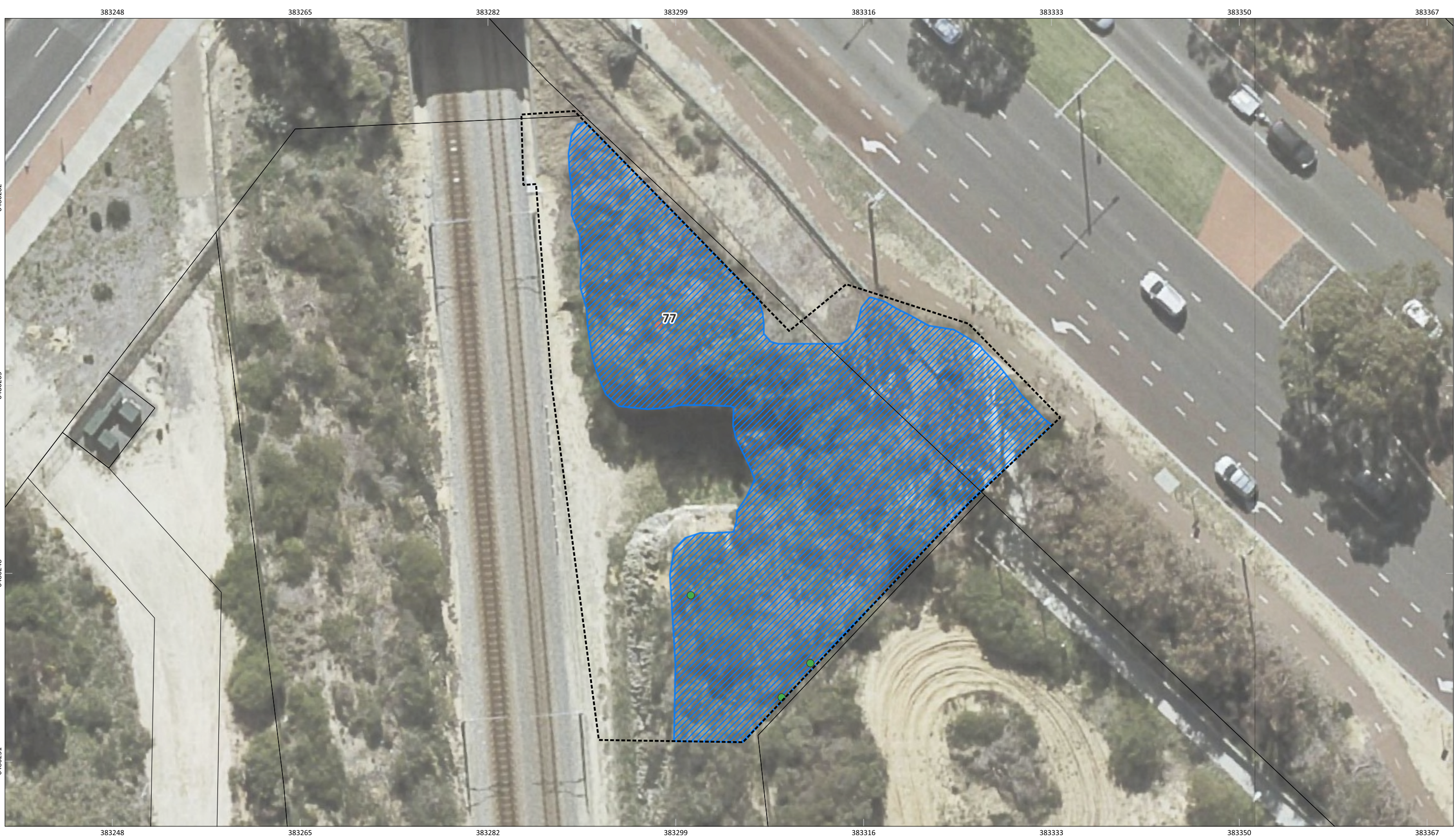


Figure 1: Joondalup Tunnel 3 #77- Biological Assessment

		PROJECT/REPORT NAME Environmental Site Assessment Joondalup Tunnel 3	<b>Legend</b> <ul style="list-style-type: none"> <li><span style="color: red;">●</span> Joondalup Tunnel 3 Site #77</li> <li><span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px; margin-right: 5px;"></span> Cadastre (No Attributes) (LGATE-001)</li> <li><span style="background: repeating-linear-gradient(45deg, transparent, transparent 2px, blue 2px, blue 4px); border: 1px solid blue; display: inline-block; width: 10px; height: 10px; margin-right: 5px;"></span> VT01 – Revegetation and Potential Natural Recruitment Species Mix - Regrowth since 1995</li> <li><span style="color: green;">●</span> Jacksonia sericea (P4)</li> <li><span style="border-bottom: 2px dashed black; display: inline-block; width: 10px; margin-right: 5px;"></span> Clearing Extent</li> </ul>																									
SCALE 1:337	SHEET SIZE A3 COLOUR	CLIENT UGL Engineering Pty Limited																										
COORDINATE REFERENCE SYSTEM GDA2020 / MGA zone 50		PROJECT NUMBER P22.100	VERSION 0																									
DATA SOURCE LANDGATE AERIAL IMAGERY Summer 2023		DRAWN BY / REVIEWED BY MD/JB	DATE 2/4/2024																									
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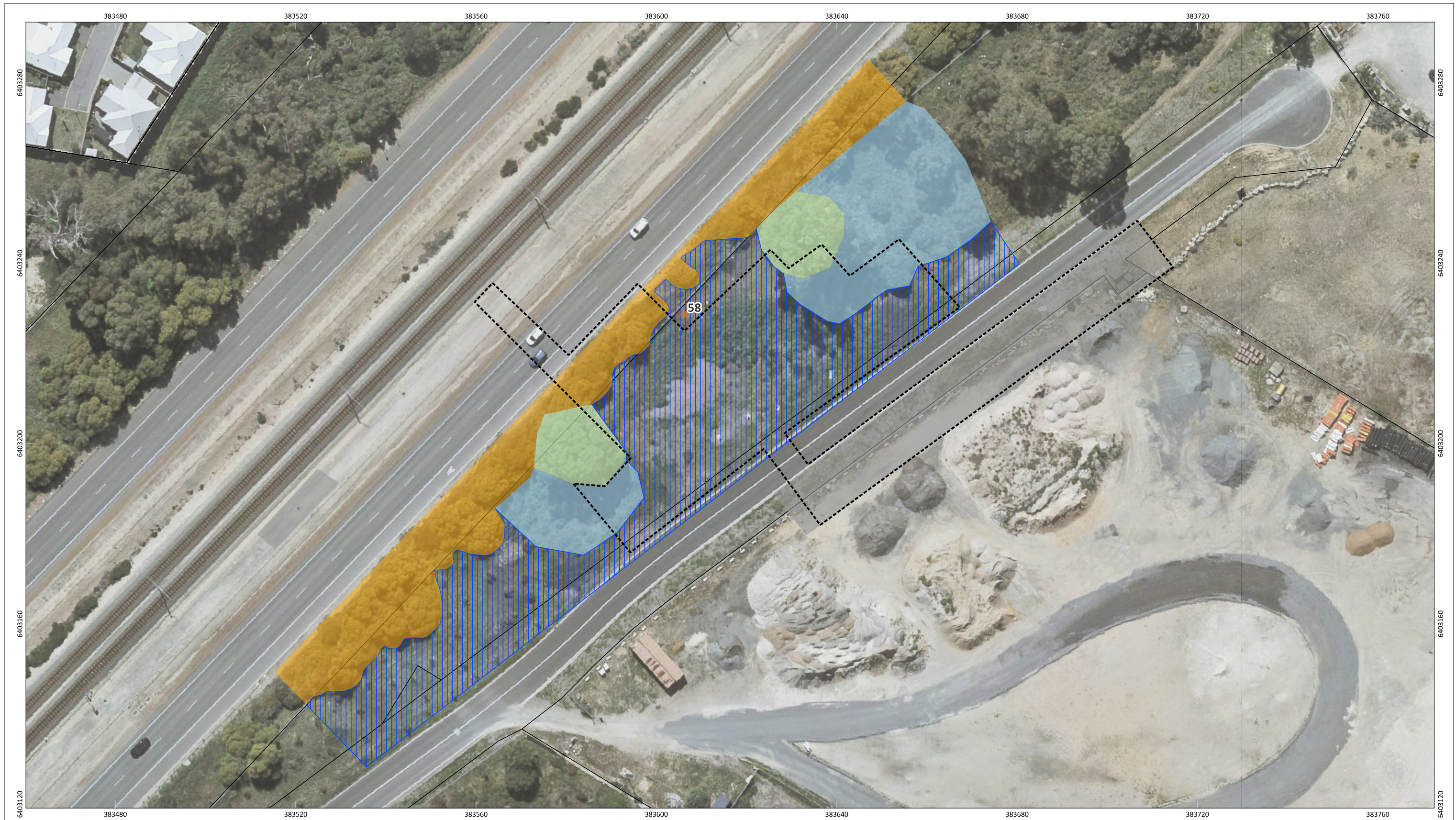




Figure 2: Mandjoogordup Dr #58 – Biological Assessment

 	PROJECT/REPORT NAME Environmental Site Assessment Mandjoogordup Dr		<b>Legend</b> <ul style="list-style-type: none"> <li><span style="color: red;">●</span> Mandjoogordup Dr Site #58</li> <li><span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> Cadastre (No Attributes) (LGATE-001)</li> <li><span style="background-color: lightgreen; display: inline-block; width: 10px; height: 10px;"></span> Tuart tree</li> <li><span style="border: 1px dashed blue; display: inline-block; width: 10px; height: 10px;"></span> VT01 – Revegetation mix, isolated <i>Agonis flexuosa</i> and non-native species</li> <li><span style="background-color: lightblue; display: inline-block; width: 10px; height: 10px;"></span> VT02 - <i>Allocasuarina humilis</i> mid open shrubland over <i>Hibbertia hypericoides</i> low open shrubland</li> <li><span style="background-color: yellow; display: inline-block; width: 10px; height: 10px;"></span> VT03 – Non-native vegetation</li> <li><span style="background-color: grey; display: inline-block; width: 10px; height: 10px;"></span> Cleared areas – not native vegetation</li> <li><span style="border-bottom: 1px dashed black; display: inline-block; width: 10px;"></span> Mandjoogordup Drive Clearing Extent</li> </ul>	<table border="1"> <thead> <tr> <th>No</th> <th>Description</th> <th>Drawn</th> <th>Approved</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Original issue</td> <td>MD</td> <td>JB</td> <td>5/4/2024</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No	Description	Drawn	Approved	Date	A	Original issue	MD	JB	5/4/2024															
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COORDINATE REFERENCE SYSTEM GDA2020 / MGA zone 50		DRAWN BY / REVIEWED BY MD/JB	DATE 5/4/2024																										
DATA SOURCE LANDGATE AERIAL IMAGERY Summer 2023		NOTES: Cadastral boundary from LANDGATE 2022. Label corresponds to the vegetation association number.																											





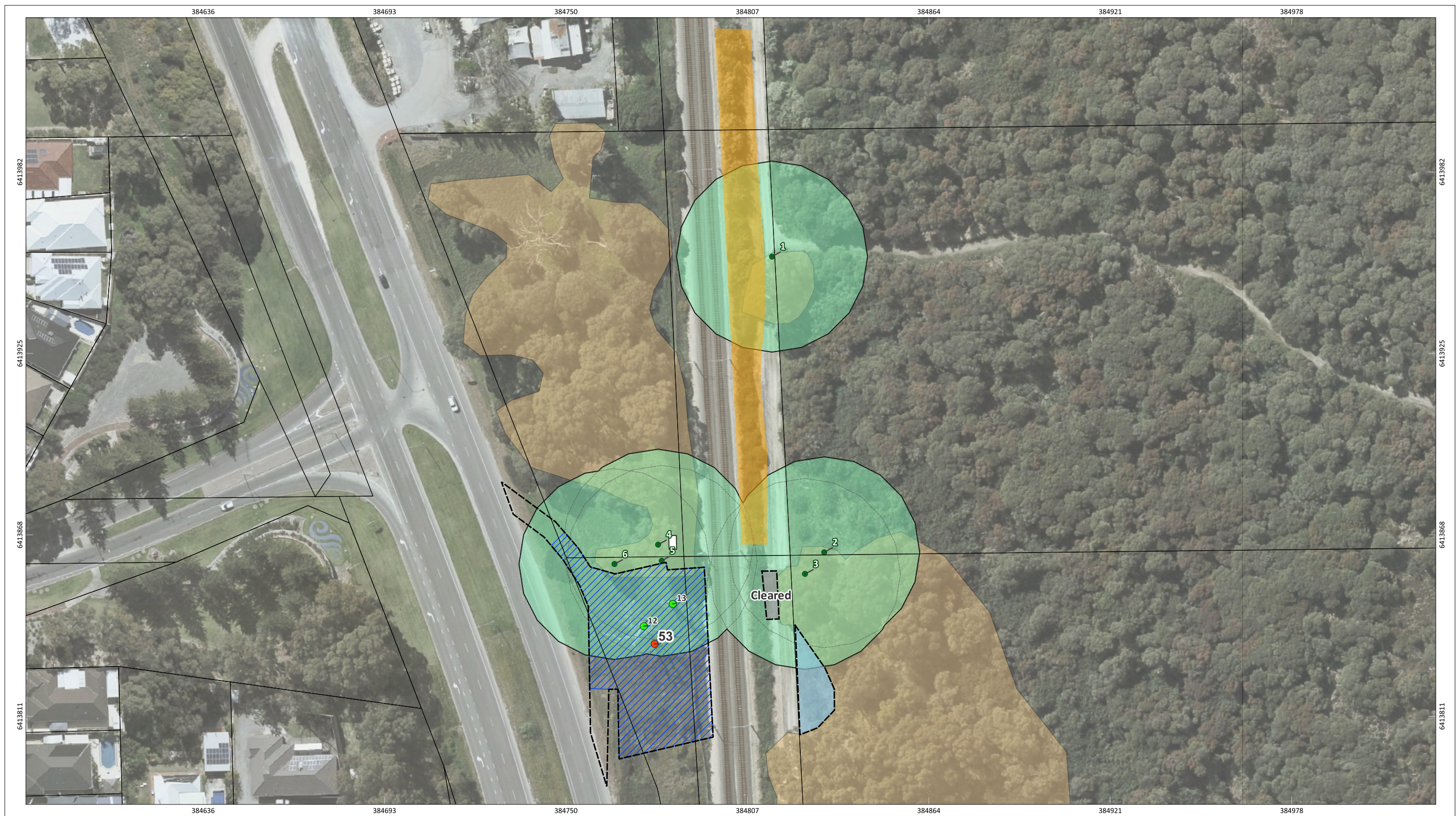


Figure 3: Secret Harbour #53- Biological Assessment




 	PROJECT/REPORT NAME Environmental Site Assessment Secret Harbour		<b>Legend</b> <ul style="list-style-type: none"> <li><span style="color: red;">●</span> Secret Harbour Site #53</li> <li> Cadastre (No Attributes) (LGATE-001)</li> <li> Secret Harbour Clearing Extent</li> <li> Proposed New WP Pillar, SMSB &amp; Iso/Tx</li> <li> 30m Buffer</li> <li> Commonwealth TEC Tuart Woodlands and Forests (as per DSEWPaC 2018)</li> <li> Estimated Tuart Woodland TEC Patch</li> <li><span style="color: green;">●</span> Tuart</li> <li><span style="color: green;">●</span> Dead Tuart</li> <li> VT01 - Native scattered shrubland over weedy herbs and grasses, tall closed grassland</li> <li> VT02 - Open patch of non-native vegetation, scattered <i>Lepidosperma longitudinale</i> on the edge</li> <li> VT03 - Landscaping mix, Regrowth since 2000</li> <li> Cleared</li> </ul>	<table border="1"> <thead> <tr> <th>No</th> <th>Description</th> <th>Drawn</th> <th>Approved</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Original issue</td> <td>MD</td> <td>JB</td> <td>5/4/2024</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No	Description	Drawn	Approved	Date	A	Original issue	MD	JB	5/4/2024															
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DATA SOURCE LANDGATE AERIAL IMAGERY Summer 2023	DRAWN BY / REVIEWED BY MD/JB	DATE 5/4/2024																											





Figure 4: Canning Bridge Station #32 – Biological Assessment

 	PROJECT/REPORT NAME Environmental Site Assessment Canning Bridge Station	<b>Legend</b> <ul style="list-style-type: none"> <li><span style="color: red;">●</span> Canning Bridge Station #32</li> <li><span style="color: blue;">●</span> Banksia tree</li> <li><span style="border-bottom: 1px dashed black; width: 20px; display: inline-block;"></span> Clearing Extent</li> <li><span style="border: 1px solid black; width: 20px; height: 10px; display: inline-block;"></span> Cadastre (No Attributes) (LGATE-001)</li> </ul>	<b>Vegetation</b> <ul style="list-style-type: none"> <li><span style="border: 1px dashed blue; width: 20px; height: 10px; display: inline-block;"></span> VT01 – Not Native Vegetation</li> <li><span style="background-color: yellow; width: 20px; height: 10px; display: inline-block;"></span> VT02 – Landscape mix and regrowth since 1981</li> <li><span style="background-color: lightgreen; width: 20px; height: 10px; display: inline-block;"></span> Eucalyptus gomphocephala (Tuart) Tree</li> </ul>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>No</th> <th>Description</th> <th>Drawn</th> <th>Approved</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Original issue</td> <td>MD</td> <td>JB</td> <td>5/4/2024</td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	No	Description	Drawn	Approved	Date	A	Original issue	MD	JB	5/4/2024															
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COORDINATE REFERENCE SYSTEM GDA2020 / MGA zone 50		DRAWN BY / REVIEWED BY MD/JB	DATE 5/4/2024																										

NOTES:  
 Cadastral boundary from LANDGATE 2022. Label corresponds to the vegetation association number.





## Impact Mitigation Measures

Due to the already existing alignment of the Perth railway system, opportunities to implement mitigation measures were limited for this Project.

For sites where TECs were present or potentially present, the disturbance footprint was adjusted, resulting in no impact to TECs and therefore an overall less significant impact caused by the Project.

At sites where clearing was inevitable, the clearing extent has been limited to areas where clearing is required for site access and the installation of monopoles or WP pillars. No additional clearing is proposed.

## Summary of Residual Clearing Impact and Significance Assessment

A summary of the clearing necessitated by the Project is presented in Table 6. The impact significance was assessed in accordance with the EPBC Act *Significant impact guidelines 1.1 – Matters of National Environmental Significance* (DoE, 2013).

**Table 6: Clearing Impact for Each Applicable Site**

Site	Impacted Vegetation - Description	Clearing Impact (ha)	Significance Assessment under the EPBC Act
Joondalup Tunnel 3	<ul style="list-style-type: none"> <li>Mixed native and non-native shrubland, predominately Geraldton Wax (<i>Chamelaucium uncinatum</i>), scattered shrubs of <i>Banksia sessilis</i> and other native species present.</li> <li>Regrowth since 1995 and therefore considered native under the EP Act.</li> <li>The vegetation is in Degraded condition.</li> <li>Five individuals of <i>Jacksonia sericea</i> (P4) are estimated to be removed.</li> <li>No other Threatened or Priority Flora, TECs or other ESAs will be impacted.</li> </ul>	0.10	Not significant
Mandjoogoordap Drive	<ul style="list-style-type: none"> <li>VT01 and VT03 are non-native vegetation.</li> <li>VT02 is regrowth since 2011 and therefore considered native under the EP Act.</li> <li>The vegetation is in Completely Degraded condition.</li> <li>Two isolated Tuarts (<i>Eucalyptus gomphocephala</i>) are located at each end of the proposed clearing footprint which may be impacted by underground works. The Tuarts have not been identified as part of a Tuart TEC and there will be no impact to canopy or stems. Portions of</li> </ul>	0.04	Not significant



Site	Impacted Vegetation - Description	Clearing Impact (ha)	Significance Assessment under the EPBC Act
	<p>the understory will be cleared as per current site reference design.</p> <ul style="list-style-type: none"> <li>No TECs, Threatened or Priority Flora or other ESAs will be impacted.</li> </ul>		
Secret Harbour	<ul style="list-style-type: none"> <li>The vegetation type TV01 within the clearing footprint is comprised by scattered native shrubs over weedy grasses. The following species have been recorded within the clearing footprint as shown in Figure 15: <ul style="list-style-type: none"> <li>One dead <i>Eucalyptus gomphocephala</i> (Tuart) present with some hollows &lt;10 cm. One larger broken off branch but appears not to have developed a hollow. One hollow occupied by bees.</li> <li>Mid stratum <i>Acacia cochlearis</i>, <i>Acacia cyclops</i>, <i>Hypocalymma sp.</i>, <i>?Kunzea sp.</i>, Narrow leaf cotton bush (DP), over weedy grasses, <i>Scaevola sp.</i></li> </ul> </li> <li>VT01 is considered native under the Environmental Protection Act 1986 (EP Act) as per advice by DWER.</li> <li>VT02 is located within the clearing footprint and considered non-native vegetation, comprised by weedy understory.</li> <li>VT03 on the eastern side of the rail corridor is comprised by a landscaping mix and regrowth since 2000.</li> <li>Tuart Woodland TEC is present adjacent to the clearing extent.</li> <li>VT01 and VT02 are located within the 60 m buffer of Tuart Woodland TEC. No Tuarts are impacted by the clearing activities. The vegetation within the clearing extent is in Completely Degraded condition. Therefore, the extent and condition of the present Tuart Woodland TEC is not going to be reduced.</li> </ul>	0.21	Not significant
Canning Station	<p>Bridge</p> <ul style="list-style-type: none"> <li>Vegetation constitutes partially native vegetation, regrowth since 1981 and therefore considered native under the EP Act.</li> <li>Impacted vegetation is in Degraded condition.</li> <li>No TECs, Threatened or Priority Flora or other ESAs will be impacted.</li> </ul>	0.12	Not significant



Site	Impacted Vegetation - Description	Clearing Impact (ha)	Significance Assessment under the EPBC Act
<b>Total</b>	<ul style="list-style-type: none"> <li>• Impacted vegetation is in Good to Completely Degraded condition: <ul style="list-style-type: none"> <li>○ Degraded – 0.22 ha.</li> <li>○ Completely Degraded – 0.25 ha.</li> </ul> </li> <li>• 5 individuals of <i>Jacksonia sericea</i> (P4) are estimated to be impacted.</li> <li>• No other Threatened or Priority Flora, TECs or other ESAs will be impacted.</li> </ul>	<b>0.47</b>	Not significant

## Conclusions

The Project however necessitates clearing of 0.47 ha of native vegetation and the potential removal of five individuals of one Priority 4 Flora species (*Jacksonia sericea*). It therefore appears to require a NVCP.

This report should be read in conjunction with the Schedule - Statement of Limitations. Should you have any queries regarding the above, please contact the undersigned on (08) 6162 8980.

Yours sincerely,  
Western Environmental Approvals Pty Ltd



Dale Newsome  
Director

### Schedule

- Statement of Limitation

### Appendices

- Appendix A: Site Photos



## **Statement of Limitations**

### **Copyright Statement**

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### **Scope of Services**

This environmental report (“this report”) has been prepared for the sole benefit and exclusive use of the Client for the purpose for which it was prepared in accordance with the agreement between the Client and WEPL (“the Agreement”). However, in addressing the requirements of the Contaminated Sites Act 2003, an Accredited Contaminated Sites Auditor may be engaged by the Client to undertake review of this report, prior to its submission to the DWER. The report shall be made available and can be relied upon for the purposes of the Contaminated Sites Act.

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In particular, it should be noted that this report is based on a scope of services defined by the Client, and is limited by budgetary and time constraints, the information supplied by the Client (and its agents) and, in some circumstances, access and/or site disturbance constraints.

The scope of services did not include any assessment of the title to or ownership of the properties, buildings and structures referred to in this report, or the application or interpretation of laws in the jurisdiction in which those properties, buildings and structures are located.

### **Reliance on Data**

In preparing this report, WEPL has relied on data, surveys, analyses, designs, plans and other information provided by the Client (or its agents), other individuals and organisations (“the data”).

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The conclusions must also be considered in light of the agreed scope of services (including any constraints or limitation therein) and the methods used to carry out those services, both of which are as stated or referred to in this report.

### **Environmental Conclusions**

In accordance with the scope of services, WEPL has conducted environmental field monitoring and/or testing in the preparation of this report. The nature and extent of monitoring and/or testing conducted is described in this report.

On all sites, varying degrees of non-uniformity of vertical and horizontal conditions in media (soil, water, air, waste or other media as described in the report) are encountered. Hence no monitoring, common testing or sampling technique can eliminate the possibility that monitoring or testing results/samples are not totally representative of media conditions encountered. The conclusions are based on the data and the environmental field monitoring and/or testing actually undertaken, and are therefore merely indicative of the environmental condition of the site at the time of preparing this report, including the presence or otherwise of contaminants or emissions. It should be recognised that site conditions, including the extent and concentration of contaminants, can change.

Within the limitations imposed by the scope of services, the monitoring, testing, sampling and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. To the maximum extent permitted by law, no other warranty, express or implied, is made.

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If an Auditor is engaged by the Client to undertake review of this report, it shall be made available subject to the terms and conditions of the agreement between the Client and WEPL and the caveats in this statement.

### **Other Limitations**

This report is intended to be read in its entirety, and sections or parts of this report should therefore not be read and relied on out of context.

WEPL will not be liable to update or revise this report to take into account any events or circumstances or facts becoming apparent after the date of this report.



## References

Department of the Environment (DoE). (2013). *Significant impact guidelines 1.1 – Matters of National Environmental Significance*. Accessed on 1 November from [https://www.dcceew.gov.au/sites/default/files/documents/nes-guidelines\\_1.pdf](https://www.dcceew.gov.au/sites/default/files/documents/nes-guidelines_1.pdf)

Metronet. (2023). *High Capacity Signalling: Radio Systems Replacement Fact Sheet*. Retrieved on 1 November 2023 from <https://metronet.wa.gov.au/Portals/31/Project%20Documents/High%20Capacity%20Signalling/Radio%20Systems%20Replacement%20Fact%20Sheet.pdf>.

# Appendix A

## Site Photos







**Photo 1**

Joondalup Tunnel 3

Date: 14 March 2024

**Description:** Vegetation within clearing footprint – Southeast boundary.



**Photo 2**

Joondalup Tunnel 3

Date: 14 March 2024

**Description:** Vegetation within clearing footprint – Northern corner.







**Photo 3**

Mandjoogordap Drive

Date: 17 July 2023

**Description:** Vegetation within proposed monopole fold direction (VT01)



**Photo 4**

Mandjoogordap Drive

Date: 17 July 2023

**Description:** Vegetation within VT02 patch







**Photo 5**

Secret Harbour

Date: 17 July 2023

**Description:** Vegetation east of the railway



**Photo 6**

Secret Harbour

Date: 17 July 2023

**Description:** Vegetation west of the railway







**Photo 7**

Canning Bridge Station

Date: 7 July 2023

**Description:** Vegetation within proposed monopole fold direction

