



Tuesday, 15 October 2024

Our Ref: A23.033-MEM-FSR\_A10\_Larego\_FINAL

(08) 6162 8980

PO Box 437, Leederville, WA 6903

enquiries@westenv.com.au

Alcoa of Australia  
Marmion St & Davy St  
576 Marmion St  
Booragoon  
WA 6154

ATTENTION: Sarah Boys

**SUBJECT: TECHNICAL MEMO BLACK COCKATOO TARGETED ASSESSMENT, LAREGO JUNE – JULY 2024**

Western Environmental Approvals Pty Ltd (WEPL) presents the following letter report in relation to the Black Cockatoo targeted nest and habitat assessment surveys.

### Project Background

Alcoa of Australia Limited (Alcoa) has committed to undertaking pre-clearance ecological surveys as part of its Mining Management Plan (MMP) assessment and other state assessment processes. Alcoa commissioned Western Environmental Pty Ltd (WEPL) to undertake targeted pre-clearance black cockatoo assessments for the Larego region of the Willowdale bauxite mine. The project requires surveys of conceptual clearing alignments, with the survey program divided across five years (2024-2028). This report presents results for surveys undertaken between June and July 2024. The Survey Area is located in the Larego region of Willowdale Bauxite mine, 20 km southeast of the town of Waroona

The black cockatoo habitat field survey methodology primarily followed the Commonwealth Referral Guidelines (DAWE, 2022) for identifying breeding, foraging and roosting habitat. Consideration was also given to survey requirements under the Alcoa (2023) Fauna Management Plan (Version 1). Surveys were undertaken by WEPL ecologists across a combined 29 person days between June 2024 and July 2024.

### Scope of Work

The objective of the survey was to identify key black cockatoo habitat values within the Survey Area.

The Survey Area comprised approximately 515 Hectares of bushland within the Larego Mine Site.

The Survey Area was subdivided by Alcoa into the following areas presented in Table 1

**Table 1: Survey Areas**

Alcoa Survey subdivision name	Area (Hectares)
WDL_BC_Survey_WE_2024_Priority_1	6
WDL_BC_Survey_WE_2024_Priority_2	153

Alcoa Survey subdivision name	Area (Hectares)
WDL_BC_Survey_WE_2024_Priority_3	132
Willowdale_BC_Survey_July	147
WDL_BC_Survey_WE_2024_Priority_4	77

The scope of works included a black cockatoo habitat assessment as per DAWE (2022) *Referral guideline for 3 WA threatened black cockatoo species* (the Referral Guidelines) and marking of Significant Trees as per the Alcoa (2023) *Fauna Management Plan Huntly and Willowdale Mines* (the Fauna Management Plan).

The scope of 2023 black cockatoo surveys included two phases:

**Phase 1:** WEPL ecologists undertake a ground-based assessment recording, suitable or known nesting trees (as defined by DAWE (2022), scoring foraging habitat quality and recording observation/ evidence of roosting and presence of species.

**Phase 2:** Follow up assessment of trees identified in Phase 1 as potential suitable nesting trees or known nesting trees by recognised cockatoo expert (Tony Kirkby) via drone, pole camera or telephoto lens, where necessary. Trees with a diameter at breast height (DBH) qualifying as Alcoa Significant Trees were also confirmed by Surveyors in Phase 2. The current results of the Phase 2 assessment have been incorporated into this report. At the time of submission of this report, all Phase 1 trees have received a Phase 2 follow up survey.

## Survey Limitations and constraints

Limitations and constraints of the fauna survey as outlined in the Fauna Technical Guidance are detailed below in Table 2

**Table 2: Fauna Survey Limitations and constraints**

Possible Limitation	Degree of Limitation (Significant, Moderate or Negligible)	Potential Constraints on Survey Outcomes
Survey Level/ Scope	Negligible	A targeted assessment for black cockatoos was considered suitable.
Availability of contextual information	Negligible	All data required to complete the scope of works including regional and local contextual information was available.
Site Access	Negligible	The entire Survey Area was traversed on foot.
Survey Intensity and Extent	Negligible	Survey effort for black cockatoos was suitable to adequately sample habitats present. A total of 29 person days of effort was allocated to Phase 1. Assessment of potential black cockatoo nesting hollows was ground-based in Phase 1 (undertaken by WEPL).



Possible Limitation	Degree of Limitation (Significant, Moderate or Negligible)	Potential Constraints on Survey Outcomes
		<p>Certain areas within potential Black cockatoo habitat adjacent to the material conveyor belt could not be completely accessed on the grounds of risk to health and safety and unviability of survey method within dense understory foliage.</p> <p>The inaccessible areas above were instead surveyed from vantage points overlooking the trees. Although not all angles/ aspects of potential trees within these areas could be fully viewed, the trees architecture, senescence and likelihood of hollow formation was considered by experienced observers. This was not considered to likely pose a significant constraint to survey.</p> <p>Survey Methodology was modified from the Referral Guidelines. Not all trees with suitable DBH were GPS marked under the Phase 1 survey methodology. Only trees with a potential Bamford class of 1-3 were fully assessed under the Phase 1 survey methodology. An exception was made for Alcoa Known Nesting Trees and trees classified as Alcoa Significant DBH trees. This is not considered a significant limitation as the purpose of the survey was to locate and identify Known and Suitable nesting trees.</p>
Experience	Negligible	<p>Phase 1 lead ecologist Andrew Fry has been conducting biological surveys in Western Australia for over 10 years, with over 5 years' experience undertaking targeted habitat assessments for black cockatoos.</p> <p>Phase 2 lead zoologist Tony Kirkby has extensive experience in black cockatoo nesting habitat with over 25 years' experience as a researcher and consultant, including long-term black cockatoo studies with the West Australian Museum.</p>
Timing, weather, season	Negligible	<p>Phase 1 and 2 Surveys undertaken between May and June 2024</p> <p>The surveys were undertaken within the recommended timing for both foraging and breeding habitat for forest red-tailed black cockatoo (year-round); and partially for Baudin's cockatoo (foraging Feb/March to September, breeding August-January) (DAWE, 2022) and within the recommended timing for breeding and foraging Carnaby's black cockatoo (July to December); . The majority of survey work occurred outside of the core breeding periods. Assessment of hollow suitability based on dimensions are not seasonally restricted.</p> <p>Targeted searches were undertaken for secondary evidence of the species presence (e.g. foraging evidence from marri and jarrah nuts which can be done at any time of year).</p> <p>No survey days were called off or halted due to adverse weather conditions.</p>
Proportion of the fauna recorded, and any identification issues	Negligible	<p>Targeted survey focused on three readily identifiable species only. No identification constraints were encountered.</p>
Disturbances (fire, flood etc.)	Negligible	<p>No recent fires or clearing disturbances posed a constraint to surveys. Long term changes due to modification of fire regime, historical and ongoing logging and</p>



Possible Limitation	Degree of Limitation (Significant, Moderate or Negligible)	Potential Constraints on Survey Outcomes
---------------------	--	--

bauxite mining are considered representative of contemporary habitat and are not considered constraints in the context of the scope of the surveys.

## Methodology

The black cockatoo habitat field survey methodology primarily followed the Commonwealth Referral Guidelines (DAWE, 2022) for identifying breeding, foraging and roosting habitat.

Consideration was also given to survey requirements under the Alcoa (2023) Fauna Management Plan (Revision 1).

## Field Survey Timing and Team

**Table 3: Survey Effort Summary**

Survey Phase	Team Position and Experience	Survey Effort and Timing
Phase 1 (2024)	Senior Ecologist-13 years Consultant Ecologist- 3 years Graduate Ecologist- 1 year Graduate Ecologist- 1 year	29 person days- June-July 2024
Phase 2 (2024)	Black cockatoo specialist- 25 years	August- September 2024

## Breeding Habitat Assessment

The Commonwealth defines breeding habitat as trees species, known to support breeding, within the range of the species, which either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) (1.3 m from the ground) to develop a hollow (DAWE, 2022). Terminology used in this report for trees comprising breeding habitat follows that defined in glossary of DAWE (2022) as shown in Table 4.

**Table 4: Breeding Habitat Terminology**

Breeding Habitat Term	Definition (DAWE, 2022)
Known nesting trees	Trees (live or dead but still standing) which contains a hollow where black cockatoo breeding has been recorded or which demonstrates evidence of breeding (i.e. showing evidence of use through scratches, chew marks or feathers).
Suitable nesting trees	Trees with suitable nesting hollows present, although no evidence of use.
Suitable nesting hollows	Any hollow with dimensions suitable for use for nesting by black cockatoos. See Table 4 for further discussion on nesting hollow characteristics.
Potential nesting trees	Trees that have a suitable DBH to develop a nest hollow, but do not currently have hollows.



In 2024 the breeding habitat assessment included two phases. The survey methodology of these phases is discussed in detail below. Portions of the breeding habitat Survey Area have been subject to prior survey efforts by Tony Kirkby and Alcoa to identify breeding habitat.

## Phase 1

WEPL ecologists recorded every suitable tree (Marri, Jarrah, blackbutt, bullich, flooded gum, wandoo and powderbark wandoo) which presented a hollow with a <10cm diameter point of entry. All suitable trees were recorded using a mobile GIS field data collector platform. The following data was recorded for each tree:

- Species
- DBH (approximately 1.3 m from the ground)
- Coordinates
- Size of entry.
- Hollow type (knot, fissure, spout, vertical/chimney)
- Comments on likelihood of suitable nesting hollow formation based on factors including tree/branch architecture, branch diameter, tree species, appearance and thickness of entry rim, cracking in wood, presence of leaves/ sticks, blackening from burning etc...
- Evidence of use including chew marks or wear.
- Presence of other birds or bees.
- Images of each hollow and overall tree.

In addition to Commonwealth guidelines for assessing potential breeding trees, a scoring system based on that developed by Dr Mike Bamford (referred to as Bamford Class) was applied to class potential breeding habitat. This system and the Bamford Class alignment with DAWE (2022) breeding habitat definitions are shown in Table 5.

**Table 5: Black cockatoo Potential Breeding Tree Bamford Class System**

Bamford Class	Description of Tree and Hollows/Activity	Alignment with DAWE (2022) Breeding Habitat Definitions
1	Active nest observed; adult (or immature) bird seen entering or emerging from hollow, eggs present.	Known Nesting Tree
2	Hollow of suitable size and angle visible with chew marks around entrance.	Known Nesting Tree
3	Potentially suitable hollow visible but no chew marks present; or potentially suitable hollow present (as suggested by structure of tree, such as large, vertical trunk broken off at a height of >10m).	Suitable Nesting Tree (If confirmed hollow with suitable dimensions present in Phase 2);



Bamford Class	Description of Tree and Hollows/Activity	Alignment with DAWE (2022) Breeding Habitat Definitions
		Potential Nesting Tree (if confirmed hollow with suitable dimensions not present or highly unlikely to be present in Phase 2)
4	Tree with hollows or broken branches that might contain hollows, but hollows or potential hollows are not of a suitable size, or are aligned or obstructed so as to prevent access	Potential Nesting Tree
5	Tree lacking large hollows or broken branches that might have large hollows; a tree with more or less intact branches and a spreading crown.	Potential Nesting Tree

### Reassessment of Known Alcoa Nest Trees

The Larego mine Site is large and complex, due to this, a number of trees within the Survey Area had been assessed through previous survey effort to constitute Known Nesting Trees (See table above). Alcoa provided GPS locations for all trees previously recorded as Known Nesting Trees. Where previously recorded Known Nesting Trees occurred within the Survey Area, they were re-recorded by WEPL ecologists and their status as Know Nest Trees was reassessed.

### Phase 2

Tony Kirkby verified the presence of any suitable nesting trees or known nesting trees by revisiting trees scored by WEPL ecologist during Phase 1 as Bamford Class 1-3. The Phase 2 assessment utilised a drone, pole camera and/ or telephoto lens. Assessment confirmed if hollows are / have been used previously, are not suitable, currently suitable or potentially suitable in the future. Tony Kirkby has been conducting black cockatoo surveys throughout the south-west of Western Australia for the past 25 years and locating black cockatoo breeding trees for Alcoa Australia for the past ten years. Tony has extensive experience in hollow assessment having been involved in many long-term black cockatoo studies with the Western Australian Museum including a 17-year study undertaken into the breeding biology of forest red-tailed black cockatoos (Johnstone, Kirkby and Sarti 2013).

### Alcoa Significant DBH Trees

Under the Alcoa Fauna Management Plan, Significant Trees are defined as the following:

- jarrah trees with a diameter of no less than 2000mm at a height of 1300mm above ground level.
- marri trees with a diameter of no less than 1500mm at a height of 1300mm above ground level.

And

- Is healthy (i.e. retaining majority of limbs, with high percentage leaf cover on remaining limbs) and may provide roosting habitat for black cockatoos, as determined by a suitably qualified and experienced person.



Potential significant trees were identified from Phase 1 WEPL survey data. They were then subject to follow up assessment by Tony Kirkby during Phase 2 assessment.

## Results

### Breeding Habitat Assessment

Breeding habitat comprises trees species, known to support breeding, within the range of the species, which either have a suitable nest hollow or are of a suitable DBH to develop a hollow (DAWE, 2022). Breeding typically occurs in native eucalypt species however many species of eucalypt including non-endemic species may develop suitable hollows for breeding (DAWE, 2022). In the Huntley mine region tree species, which may provide hollows for black cockatoos as per Tony Kirkby (2023 pers. comm.) are:

- Jarrah- *Eucalyptus marginata*
- Marri- *Corymbia calophylla*
- Bullich- *Eucalyptus megacarpa*
- Blackbutt-*Eucalyptus patens*
- Flooded Gum-*Eucalyptus rudis*
- Wandoo-*Eucalyptus wandoo*
- Powderbark Wandoo-*Eucalyptus accedens*

The most frequently utilised tree species for breeding in the Northern Jarrah Forest region is marri (T. Kirkby, pers. comm. 2023). A long-term study of suitable nesting trees being utilised by forest red-tailed black cockatoo identified that that marri accounted for 91% of known nest trees when comparing marri against jarrah (Johnstone *et al*, 2013). Other tree species such as blackbutt, bullich and flooded gum (particularly bullich) while good hollow providers are restricted within their range to stream zones and are far less abundant than jarrah and marri. Wandoo and powderbark wandoo are also good hollow providers however are very uncommon in the Larego region (T. Kirkby, pers. comm. 2023).

Black cockatoo hollows are located throughout the landscape but tend to be clustered in stands of old growth marri (T. Kirkby, pers. comm. 2023).

A summary of understood suitable nesting hollow characteristics for the three species is provided below in Table 6.



**Table 6: Black Cockatoo Nesting Hollow Characteristics**

Species	Baudin's black cockatoo	Carnaby's black cockatoo	Forest red-tailed black cockatoo
<b>Tree species and hollow characteristic</b>	Nesting mainly in karri, marri, jarrah, wandoo, bullich, and tuart  Preferred hollow dimensions have not been specifically studied but are considered likely to be similar to that of the Carnaby's black cockatoo	Nesting mainly in salmon gum, wandoo, tuart, jarrah, flooded gum, karri and marri.  Utilise hollows with entry diameter of 10-65 cm, internal chamber floor diameter of 15-70 cm and depths of 30-300cm. (mean 26 cm entry, 33 cm floor and 130 cm depth).	Nesting mainly in jarrah, marri, karri, wandoo, bullich, blackbutt and tuart  Utilise hollows with entry diameters from 12-150 cm, internal floor diameter of 17-54 cm and depths of 30-820 cm. (mean 30 cm entry, 33 cm floor and 140 cm depth).
<b>Sources</b>	DAWE, 2022	DAWE, 2022, Saunders <i>et al</i> 2014a, Saunders <i>et al</i> 2014b	DAWE, 2022, Johnstone and Storr 1998, Johnstone <i>et al</i> 2013

### Phase 1 Survey Results

A combined total of 140 suitable or known nesting trees were recorded during Phase 1 of the survey. A breakdown of nesting trees by Bamford Class is shown below in Table 7.

**Table 7 Summary of Potential, Suitable and Known Nesting Trees recorded in Phase 1**

Bamford Class	Class 1	Class 2	Class 3	Class 4 or 5	Totals (tree species)
<b>DAWE, 2022 Terminology</b>	Known Nesting Tree		Suitable Nesting Tree (pending Phase 2 inspection)	No nest feature detected but suitable DBH or marked habitat tree	
<b>Tree species</b>					
<b>Bullich</b>	-	-	1	-	1
<b>Blackbutt</b>	-	-	1	-	1
<b>Dead</b>	-	-	10	-	10
<b>Jarrah</b>	-	1	21	5	27
<b>Marri</b>	1	11	81	8	101
<b>Total (Bamford Class)</b>	1	12	114	13	140

It should be noted as Phase 1 survey were undertaken from the ground with the use of Binoculars, without closer inspection it could be difficult to determine the origin of chew marks (potentially from other species i.e. galah, ring necked parrot) on potential nest hollows. As a result of this, records of Bamford class 2 trees may be higher than what was actually present.



### Phase 1 Suitable Nesting Trees

There were 114 Bamford Class 3 trees recorded. These were recorded by WEPL ecologist in Phase 1 and either appeared to have a potentially suitable nesting hollow visible (opening entry >10cm); or potentially suitable hollow present as suggested by structure of tree, such as large, vertical trunk broken off at a height of >10m which could not be confirmed from ground assessment.

### Phase 1 Known Nesting Trees

A single Bamford Class 1 tree was recorded within the survey area. A male/female pair of forest red tailed black cockatoos were observed on multiple occasions entering and leaving both of the hollows in the marri tree.

12 Bamford Class 2 trees which show signs of chew marks indicating they are a known breeding tree were recorded within the Survey Area.

### Phase 1 Resurveyed Alcoa Known Nest Trees.

Eight trees that had been previously recorded in historic surveys by Tony Kirkby as known nesting trees within the Larego Site were revisited and reassessed by WEPL ecologists. Suitable nesting hollows for black cockatoo were not detected in one (1) of the resurveyed trees. The reassessed Alcoa Known Nest trees are presented in Table 8

**Table 8: Resurveyed Alcoa Known Nesting Trees**

WEPL Tree Number	Species	DBH (cm)	Bamford Class	Coordinate (AGD/84 Zone 50)		WEPL Comments
				Easting	Northing	
15	Marri	90	3	411744.0506	6350385.324	Listed as Alcoa Potential nest tree. (Tag missed) Potential chimney hollow at 15m in main trunk. Can't confirm. Needs drone
16	Marri	80	2	412282.1789	6350546.087	Alcoa nest tree 1837, 1x 25cm upwards angled to side entry or knot. At 10m in main trunk. Has fresh minor chew marks and abundant older chew marks.
38	Marri	70	2	411149.6878	6349805.35	Alcoa nest tree 1862, Chimney, 15m up, chewed
39	Marri	100	2	411161.7936	6349797.275	Alcoa nest tree 1858, Side entrance well chewed.
53	Marri	150	4	409807.7976	6349020.373	Dead with open top, Alcoa nest tree 2218, notes say chewed top opening, but



WEPL Tree Number	Species	DBH (cm)	Bamford Class	Coordinate (AGD/84 Zone 50)		WEPL Comments
				Easting	Northing	
						feature may have broken since, hollow not evident
87	Marri	80	2	415349.814	6355081.899	Alcoa nest tree 1835, 1x 30cm chimney hollow at 12m in main trunk. Abundant older chew marks on rim.
106	Marri	80	2	412356.4045	6350246.563	Alcoa nest tree 1861, Top entrance, 20cm diameter, 16m up, well chewed
112	Marri	80	2	411828.5815	6349082.073	Alcoa nest tree 1855, chimney, 30cm opening, 12 m up, chewed rim

## Phase 2 Survey Results

All of the 140 Potential, Suitable or Known nesting trees identified in Phase 1 were subject to follow up assessment during Phase 2 of the survey. A breakdown of nesting trees by Bamford Class is shown below in Table 9.

**Table 9 Summary of Potential, Suitable and Known Nesting Trees recorded in Phase 2**

Bamford Class	Class 1	Class 2	Class 3	Class 4 or 5	Totals (tree species)
<b>DAWE, 2022 Terminology</b>	Known Nesting Tree		Suitable Nesting Tree	No nest feature detected but suitable DBH or marked habitat tree	
<b>Tree species</b>					
Bullich	-	-	-	1	1
Blackbutt	-	-	-	1	1
Dead	-	-	-	10	10
Jarrah	-	-	-	27	27
Marri	4	10	5	82	101
<b>Total (Bamford Class)</b>	4	10	5	121	140

### Phase 2 Known Nesting Trees

There were four (4) trees recorded as Bamford Class 1 during Phase 2 of the Survey. Black cockatoos were recorded as present within the nesting hollows of all of these trees. There were 10 trees recorded as Bamford



class 2 during Phase 2 of the survey. Both Bamford Class 1 and 2 trees are categorised as Known Nesting Trees. Details of these trees are presented below in Table 10

**Table 10 Phase 2 Known Nesting Trees**

WEPL Tree Number	Species	DBH (cm)	Bamford Class	Coordinate (AGD/84 Zone 50)		T.Kirkby Comments
				Easting	Northing	
51	Marri	60	1	409634.3379	6349001.653	Nest tree numbered 2147
55	Marri	95	1	410011.7229	6349426.521	Nest tree numbered 2130. Female at nest
112	Marri	80	1	411828.5815	6349082.073	Nest tree 1855. Female flushed
122	Marri	85	1	411056.2462	6349591.836	Nest tree numbered 2120. Female flushed
16	Marri	80	2	412282.1789	6350546.087	Tree 1837
38	Marri	70	2	411149.6878	6349805.35	Nest tree 1862
39	Marri	100	2	411161.7936	6349797.275	Nest tree 1858
42	Marri	120	2	409869.004	6349169.413	Nest tree numbered 2127
43	Marri	95	2	409832.4677	6349164.469	New nest number 2154
52	Marri	60	2	409814.2415	6349017.483	Nest tree numbered 2123. SB note- please use existing number
69	Marri	75	2	408626.6602	6349409.921	Nest tree numbered 2125
71	Marri	60	2	411420.512	6350354.558	Numbered 2149
87	Marri	80	2	415349.814	6355081.899	Good condition and well chewed at entrance. Nest tree 1835
106	Marri	80	2	412356.4045	6350246.563	Nest tree 1861

### *Phase 2 Suitable Nesting Trees*

There were five (5) trees confirmed as Bamford class 3 during Phase 2 of the survey. Details of these trees are presented below in Table 11.

**Table 11: Phase 2 Suitable Nest Trees**

WEPL Tree Number	Species	DBH (cm)	Bamford Class	Coordinate (AGD/84 Zone 50)		T.Kirkby Comments
				Easting	Northing	
2	Marri	110	3	413725.5255	6350921.872	Healthy possible nest tree.
15	Marri	90	3	411744.0506	6350385.324	Now numbered 2151
29	Marri	100	3	413848.0361	6355283.099	Suitable nest tree numbered 2152



WEPL Tree Number	Species	DBH (cm)	Bamford Class	Coordinate (AGD/84 Zone 50)		T.Kirkby Comments
				Easting	Northing	
84	Marri	150	3	410479.4093	6350091.709	Suitable nest tree. Forming hollows. Numbered 2135
88	Marri	105	3	412940.3581	6352910.166	Numbered 2159. Possible

*Phase 2 Potential Nesting Trees*

Of the 140 trees assessed during Phase 2, 119 of the trees were determined to not possess suitable hollows and were downgraded to potential nesting tree only (equivalent of Bamford class 4 and 5).





**Figure 1A: Phase 2 Survey: Potential, Suitable and Known Black Cockatoo Nest Trees**

	PROJECT/REPORT NAME Alcoa Black Cockatoo Potential Nesting Tree Interim Data Report Larego Mine Site, near Waroona	<b>Legend</b>	● Jarrah ● Marri	<b>Potential, Suitable and Known Nest Trees</b> ● Dead ○ Potential		<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>JR</td> <td>11/10/2024</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	JR	11/10/2024															
No	Description	Drawn	Approved	Date																											
A	Original issue	MD	JR	11/10/2024																											
SCALE 1:25,000	SHEET SIZE A3 COLOUR	CLIENT Alcoa	PROJECT NUMBER A23.033		VERSION 0																										
COORDINATE REFERENCE SYSTEM GDA2020 / MGA zone 50		DRAWN BY / REVIEWED BY MD/JR	DATE 11/10/2024		<p style="font-size: small;">Western Environmental Pty Ltd 08 6244 2310   enquiries@western.com.au Level 3/25 Prowse St, West Perth WA 6005 western.com.au</p>																										
DATA SOURCE LANDGATE AERIAL IMAGERY Summer 2023		PROJECT NUMBER A23.033		DATE 11/10/2024																											

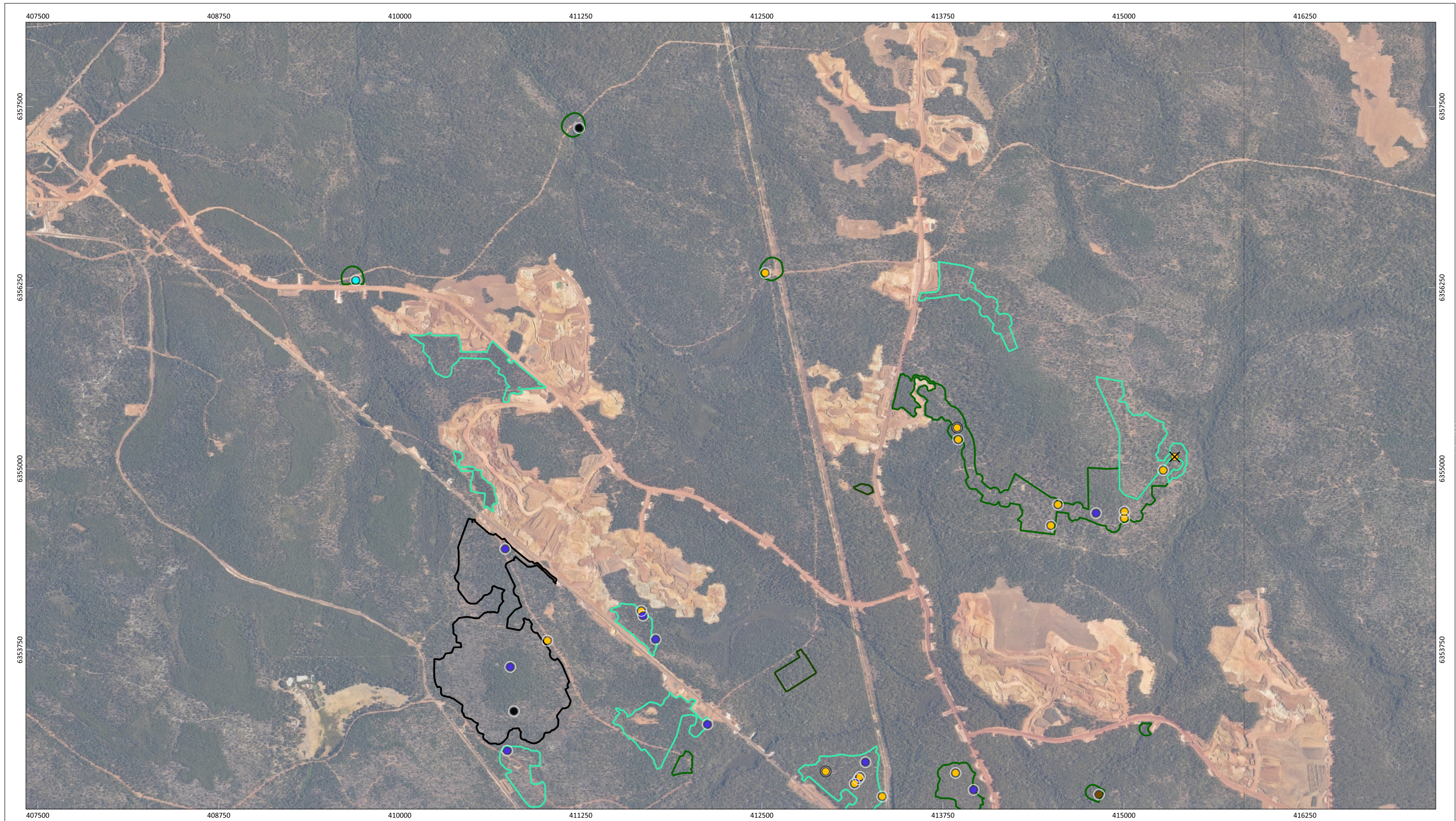


Figure 1B: Phase 2 Survey: Potential, Suitable and Known Black Cockatoo Nest Trees

	PROJECT/REPORT NAME Alcoa Black Cockatoo Potential Nesting Tree Interim Data Report Larego Mine Site, near Waroona		<b>Legend</b> <b>Survey Area</b> Priority 1 (Yellow outline) Priority 2 (Green outline) Priority 4 (Cyan outline) Priority 5 (Black outline)	<b>Tree Species</b> Jarrah (Blue dot) Marri (Yellow dot) Bullich (Cyan dot) Blackbutt (Black dot) Dead (Black circle)	<b>Potential, Suitable and Known Nest Trees</b> Known (Black X) Potential (White circle) Suitable (White circle)		<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>JR</td> <td>11/10/2024</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	JR	11/10/2024															
	No	Description					Drawn	Approved	Date																							
A	Original issue	MD	JR	11/10/2024																												
SCALE 1:25,000	SHEET SIZE A3 COLOUR	CLIENT Alcoa	PROJECT NUMBER A23.033	VERSION 0	NOTES: Cadastral boundary from LANDGATE 2022. Label corresponds to the vegetation association number.	<p>Western Environmental Pty Ltd          08 6244 2310   enquiries@western.com.au          Level 3/25 Prowse St, West Perth WA 6005          western.com.au</p>																										
COORDINATE REFERENCE SYSTEM GDA2020 / MGA zone 50	DATA SOURCE LANDGATE AERIAL IMAGERY Summer 2023	DRAWN BY / REVIEWED BY MD/JR	DATE 11/10/2024	DESIGNED AND AUTOMATED BY AC																												

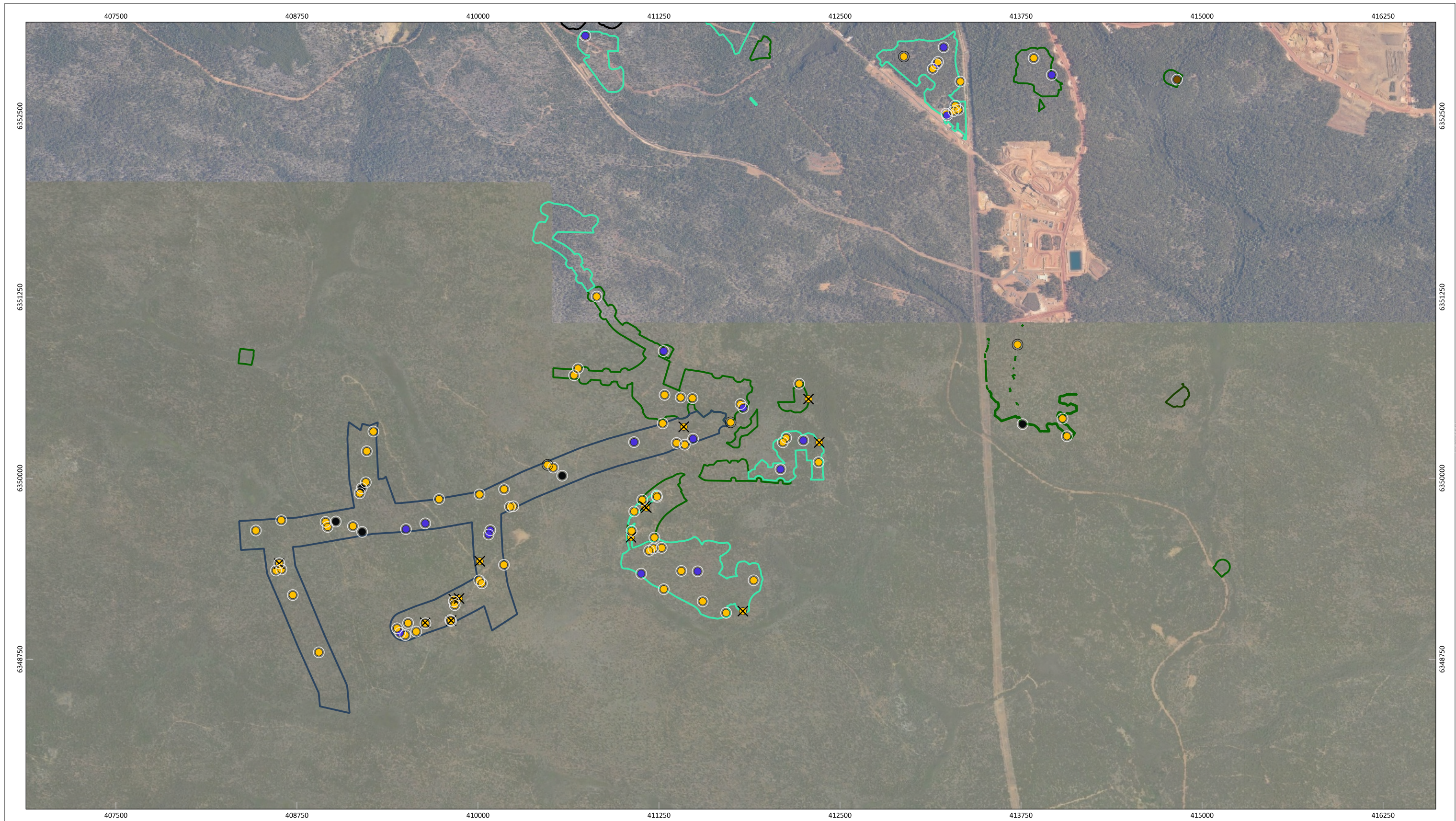


Figure 1C: Phase 2 Survey: Potential, Suitable and Known Black Cockatoo Nest Trees

	<p>PROJECT/REPORT NAME Alcoa Black Cockatoo Potential Nesting Tree Interim Data Report Larego Mine Site, near Waroona</p>	<p><b>Legend</b></p> <p><b>Survey Area</b></p> <ul style="list-style-type: none"> <li><span style="border: 1px solid green; display: inline-block; width: 10px; height: 10px; margin-right: 5px;"></span> Priority 1</li> <li><span style="border: 1px solid blue; display: inline-block; width: 10px; height: 10px; margin-right: 5px;"></span> Priority 2</li> <li><span style="border: 1px solid cyan; display: inline-block; width: 10px; height: 10px; margin-right: 5px;"></span> Priority 3</li> <li><span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px; margin-right: 5px;"></span> Priority 4</li> <li><span style="border: 1px solid black; display: inline-block; width: 10px; height: 10px; margin-right: 5px;"></span> Priority 5</li> </ul> <p><b>Tree Species</b></p> <ul style="list-style-type: none"> <li><span style="color: brown;">●</span> Blackbutt</li> </ul>	<ul style="list-style-type: none"> <li><span style="color: black;">●</span> Dead</li> <li><span style="color: blue;">●</span> Jarrah</li> <li><span style="color: yellow;">●</span> Marri</li> </ul> <p><b>Potential, Suitable and Known Nest Trees</b></p> <ul style="list-style-type: none"> <li><span style="color: black;">X</span> Known</li> <li><span style="border: 1px solid black; border-radius: 50%; width: 10px; height: 10px; display: inline-block; margin-right: 5px;"></span> Potential</li> <li><span style="border: 1px solid black; border-radius: 50%; width: 10px; height: 10px; display: inline-block; margin-right: 5px;"></span> Suitable</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>JR</td> <td>11/10/2024</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> </tbody> </table> <p>NOTES: Cadastral boundary from LANDGATE 2022. Label corresponds to the vegetation association number.</p>	No	Description	Drawn	Approved	Date	A	Original issue	MD	JR	11/10/2024											<p><b>WESTERN ENVIRONMENTAL</b></p> <p>Western Environmental Pty Ltd 08 6244 2310   enquiries@western.com.au Level 3/25 Proove St, West Perth WA 6005 western.com.au</p>
No	Description	Drawn	Approved	Date																						
A	Original issue	MD	JR	11/10/2024																						

## Figure 1: Potential, Suitable or Known Nesting Trees Phase 2

### *Alcoa Significant DBH trees*

As per the Alcoa Fauna Management Plan, three Significant Trees (jarrah DBH>200cm; marri DBH>150cm) were confirmed from Phase 1 WEPL survey data by Phase 2 surveys. Significant trees recorded from the Survey Area are identified in Table 12.

**Table 12: Alcoa Significant DBH Trees**

WEPL Tree Number	Species	DBH (cm)	Coordinate (AGD/84 Zone 50)	
			Easting	Northing
108	Marri	160	412104.7665	6350247.57
125	Jarrah	250	412246.2868	6350260.485
126	Jarrah	240	412088.5161	6350061.589

## Conclusions and Recommendations

High quality black cockatoo habitat is present within the jarrah-marri forest of the Survey Area. All three species (forest red-tailed, Baudin's and Carnaby's black cockatoos) were either recorded during the survey or are known to occur from previous survey effort, with forest red-tailed black cockatoo being most frequently recorded. Forest red-tailed black cockatoo and Baudin's black cockatoo breeding is also known to occur within the Larego region.

### *Breeding Habitat*

A combined total of 140, suitable or known nesting trees were recorded during Phase 1 of the survey.

Fourteen Known Nesting Trees were confirmed within the Survey Area during Phase 2 of the Survey.

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



Jack Rogers  
Environmental Consultant

Schedule

- Statement of Limitation

Appendices

- Appendix A: Phase 1 Survey Results
- Appendix B: Phase 2 Survey Results



## **Statement of Limitations**

### **Copyright Statement**

© Western Environmental Approvals Pty Ltd (WEPL). All rights reserved. No part of this work may be produced in any material form or communicated by any means without the permission of the copyright owner. The unauthorised copying or reproduction of this report or any of its contents is prohibited.

### **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.

WEPL disclaims any and all liability with respect to any use of or reliance upon this report for any other purpose whatsoever.

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”).

Except as otherwise stated in this report, WEPL has not verified the accuracy or completeness of the data. WEPL does not represent or warrant that the data is true or accurate and disclaims any and all responsibility or liability with respect to the use of the data.

To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in this report (“conclusions”) are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data.



WEPL does not accept any responsibility or liability for any incorrect or inaccurate conclusions should any data be incorrect, inaccurate or incomplete or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WEPL.

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.

### **Report for Benefit of Client**

This report is confidential. Neither the whole nor any part of this report, or any copy or extract thereof, may be disclosed or otherwise made available to any third party without the prior written approval of WEPL.

WEPL accepts no liability or responsibility whatsoever in respect of any use of or reliance upon this report, by any person or organisation who is not a party to the Agreement. Reliance on this report by any person who is not a party to the Agreement is expressly prohibited. Any representation in this report is made only to the parties to the Agreement.

WEPL assumes no responsibility and disclaims any and all liability to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in this report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in this report (including without limitation matters arising from any negligent act or omission of WEPL or for any loss or damage suffered by any other party using or relying on the matters dealt with or conclusions expressed in this report, even if WEPL has been advised of the possibility of such use or reliance).

Other parties should not rely on this report, or the accuracy or completeness of any conclusions contained in this report, and should make their own enquiries and obtain independent advice in relation to such matters.

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.





## APPENDIX A: Phase 1 Survey Results

Date	Species	Bamford class	DBH	Hollow Data	Easting	Northing	Comments	Tree Number
17/06/2024	Marri	3	110	1 potential side spout type hollow, 15cm diameter, clear opening, no chew marks, 13m height	413260.5625	6354864.866		1
17/06/2024	Marri	3	110	1x 30cm side entry hollow in knot of main trunk at 12m. Well formed entry. Potential for 40cm chimney hollow in snapped main trunk at 15m.	413725.5255	6350921.872	Mapped by as Alcoa possible nest tree.	2
17/06/2024	Marri	3	105	Low potential for an upwards facing opening in v of trunk at 12m. Also, low potential of 30cm opening in spout at 14m. Think unlikely but needs drone to determine.	414035.9556	6350411.452		3
17/06/2024	Marri	3	110	1x 40cm side entry hollow at 8m. 1x short spout 20cm entry upwards facing. Both in main trunk. Both well forming.	414066.1926	6350289.523		4
17/06/2024	Marri	3	70	1x 30cm chimney hollow at 11m in snapped main trunk. Rim thin, hollow looks well developed.	413837.1438	6352899.837		5
17/06/2024	Jarrah	3	140	1 side entrance spout. With 35 cm entry. Mid canopy, 15 m from ground. Think just burnt jarrah. No chew.	413961.6507	6352783.727	Burnt jarrah	6
17/06/2024	Dead	3	105	2 knots upward facing. One mid truck, one mid canopy. Top hollow has 15 cm opening and 10m from ground. Other hollow has 10-15 cm hollow and 6m from ground. Both have defined rims. No chew.	413760.3703	6350373.1		7
18/06/2024	Jarrah	2	100	1 knot type hollow, 15cm diameter, 18m height, well rounded opening, chew marks present	411281.66	6350877.055		8
18/06/2024	Marri	3	95	1 side spout type hollow, 12cm diameter, 9m height, entrance curves around no chew marks	410819.3231	6351253.776	Spider webs present	9
18/06/2024	Marri	3	90	1 potential side sprout hollow, 10cm diameter, 10m height, no chew marks	411287.9868	6350574.645	Mostly hollow trunk	10
18/06/2024	Marri	3	75	1x 30cm chimney hollow at 8m in dead snapped main trunk. Burnt out, rim thin but very burnt.	410690.1548	6350757.196	Dead poor condition	11
18/06/2024	Marri	3	95	1x side entry 30cm diameter at 18m in main trunk. Angled slightly upwards. Is heavily fire blackened, may be shallow, can't tell from ground	411399.2109	6350556.744		12
18/06/2024	Marri	3	130	1x side entry hollow at 20m in main trunk. Tree living and in good condition. Hollow well defined. Looks good potential	411480.7046	6350552.261		13

Date	Species	Bamford class	DBH	Hollow Data	Easting	Northing	Comments	Tree Number
18/06/2024	Marri	3	120	1x 50cm chimney hollow at 12m. Very blackened. Think unlikely suitable	411274.743	6350378.055		14
18/06/2024	Marri	3	90	Potential chimney hollow at 15m in main trunk. Can't confirm. Needs drone	411744.0506	6350385.324	Listed as Alcoa Potential nest tree.	15
18/06/2024	Marri	2	80	1x 25cm upwards angled to side entry on knot. At 10m in main trunk. Has fresh minor chew marks and abundant older chew marks. Is a used nest tree.	412282.1789	6350546.087	Alcoa tree tag id 1837	16
18/06/2024	Marri	2	100	1x 30cm side entry at 15m in main trunk. Hollow well defined, has chew marks on left side. Nest tree.	412217.4634	6350651.815	Alcoa habitat tree nearby but not listed as a nest tree. New nest tree	17
18/06/2024	Marri	3	90	1 side entry spout with 15-20 cm entrance. 10m from ground in mid to upper canopy. Burnt marri. unsure if developed to depth. No chew. Rim is damaged. May be unsuitable for BC.	410663.2159	6350710.319		18
18/06/2024	Marri	3	50	1 side entry spout with 15-20 cm entrance. Mid canopy. 8m from ground. Unsure if developed to depth. No chew.	411811.9718	6350511.295		19
18/06/2024	Jarrah	3	140	2 hollows. 1 Spout with side entry and 1 spout with upwards facing entry. Approx. 20 cm entries. Mid canopy. Approx 10 m from ground. May just be burnt. No chew.	411831.5073	6350485.051		20
19/06/2024	Dead	3	80	Very large side spout 10m up, 40cm diameter, no chew	406878.9957	6357412.171	Dead marri	21
19/06/2024	Dead	3	100	Small knot, midtrunk, 10cm diameter, 18m up, northern aspect, no chew	406824.1996	6357426.015	Dead Jarrah	22
19/06/2024	Jarrah	3	95	1 potential chimney type hollow, 20cm diameter, 15m height, no chew marks	401616.2169	6358193.119		23
19/06/2024	Jarrah	3	65	1 side spout hollow, 12cm diameter, 17m height, no chew marks, scorch marks on entrance	401485.0124	6358197.624		24
19/06/2024	Marri	3	95	1 potential chimney type hollow, and 1 hollow side spout, 20cm diameter for chimney and 10cm for spout, 15m height, no chew marks,	402531.8671	6358056.425		25
19/06/2024	Dead	3	100	Chimney, 18 m up, 50cm diameter, no chew	402567.0904	6358109.617	Observed from afar, (conveyer road) measurements may be inaccurate, not taped	26
19/06/2024	Blackbutt	3	135	1 side entrance knot hollow. 20 cm side entry appears hollowing. Charcoal inside. 10 m from ground. Mid canopy. No chew.	414827.1731	6352751.499		27

Date	Species	Bamford class	DBH	Hollow Data	Easting	Northing	Comments	Tree Number
19/06/2024	Marri	3	110	1 large 50 cm entry upward facing chimney/spout. Mid canopy. 12 m from ground.no chew.	413855.2867	6355201.771		28
19/06/2024	Marri	3	100	1x 20cm side entry in vertical branch at 20m. hollow looks well defined. Second recently snapped side branch may have created another entry.	413848.0361	6355283.099		29
19/06/2024	Marri	3	120	1 knot, upwards facing entry. Approx 10-15 cm opening. Defined lip. Unsure if wide enough due to visible angles. 8 m from ground, mid canopy. No chew.	414495.1511	6354607.892		30
19/06/2024	Marri	3	105	1 chimney, upward facing entry. Think 30 cm or more opening. Unsure of depth. 12m from ground. Mid canopy. No chew	415271.1422	6354989.764		31
19/06/2024	Marri	3	130	1x chimney hollow 25-30cm at 2525in snapped main trunk. Rim thin hollow looks well defined. 1x 50cm opening in near vertical spout in large snapped dead branch at 15m. Rim looks blackened inside.	414544.1931	6354752.342		32
19/06/2024	Marri	3	75	Potential for chimney hollow 40cm entry at 8m in snapped dead tree. Rim looks smooth and well defined, some blackening inside. Tree is poor condition dead and near collapse	415002.675	6354658.342		33
19/06/2024	Jarrah	3	165	Potential for 40cm opening spout type hollow 60-degree angle in large, snapped branch. Rim looks thin, small hollow entrances suggest some cavity present.	414807.2078	6354693.236		34
19/06/2024	Marri	3	120	1x chimney hollow 40cm diameter opening. After 20m in snapped main trunk. Rim looks thin and well defined.	415003.4145	6354703.838		35
19/06/2024	Jarrah	4	200	Alcoa Significant tree	414751.6029	6350521.4	New Alcoa significant tree	36
19/06/2024	Marri	2	100	Chimney, just off from centre. 50 cm entry. 12 m from ground. Chew present.	411133.5848	6349850.467		37
19/06/2024	Marri	2	70	Chimney, 15m up, chewed	411149.6878	6349805.35	Alcoa nest tree 1862	38
19/06/2024	Marri	2	100	Side entrance well chewed.	411161.7936	6349797.275	Alcoa marked nest tree 1858	39
19/06/2024	Marri	3	120	Chimney 45-degree, top canopy, 25 m up, no chew.	411217.874	6349590.047		40
20/06/2024	Marri	3	105	1 potential chimney type hollow, 16cm diameter, 30m height, unable to determine chew marks	405641.7289	6357613.64	Surveyed from edge of polygon closest to road, unable to access dense vegetation	41
20/06/2024	Marri	3	120	2 in total. 1 side spout hollow, 20cm diameter, 12m height, no chew marks, hollow has side entrance. 1 chimney type hollow, 15cm diameter, 20m height, no chew marks	409869.004	6349169.413		42

Date	Species	Bamford class	DBH	Hollow Data	Easting	Northing	Comments	Tree Number
20/06/2024	Marri	3	95	1 chimney type hollow, 15cm diameter, 15m height, no chew marks. Have previously been marked with arrow	409832.4677	6349164.469		43
20/06/2024	Marri	3	60	1 chimney type hollow, 15cm diameter, 13m height, no chew marks, unable to estimate depth. Previously marked with H	409832.0528	6349149.529		44
20/06/2024	Marri	3	125	1 potential chimney, 15cm diameter, 15m height, no mark. Previously marked H	409839.0695	6349123.775		45
20/06/2024	Bullich	3	75	Connected 20 cm chimney and 15 cm side entry hollows in snapped main trunk at 12m. Trunk section only 30-40cm diameter. Likely too narrow for BC size breeding hollow	409694.9701	6356300.322	Bullich tree	46
20/06/2024	Marri	3	75	1x chimney hollow at 12. 30 cm entry rim thin and well defined. Fire blackened inside. Trunk dead	412522.691	6356351.787		47
20/06/2024	Marri	3	110	Potential chimney 70 cm diameter opening in snapped dead trunk at 10m. Think unlikely to be suitable, too large.	410007.8211	6349294.965		48
20/06/2024	Marri	3	105	Connected 20cm spout with 20cm side entry below. Hollow in spout type large branch with 60-degree angle. Hollow well defined.	410178.658	6349401.741		49
20/06/2024	Marri	3	80	1x chimney hollow 30cm at 15 m in snapped main trunk. Side entry hollow 25cm at 12m in main trunk. Rin well defined. Think internally connective. Good hollow tree	410026.3682	6349273.997		50
20/06/2024	Marri	1	60	One Chimney, 20cm across, 15m up, one know 15cm width, 12 m up, bird seen on multiple occasions entering and exiting both hollows	409634.3379	6349001.653	Black cockatoo seen entering	51
20/06/2024	Marri	2	60	Chimney, 20cm opening, 15m up, chew marks, 2 cockatoos seen potentially leaving the hollow	409814.2415	6349017.483		52
20/06/2024	Marri	4	150	Comments on Alcoa nest tree say chewed top opening, feature may have broken since, hollow not evident	409807.7976	6349020.373	Dead with open top, Alcoa nest tree 2218	53
20/06/2024	Dead	3	65	1 upward facing knots, approx. 20 cm entry. Upper canopy, 12m from ground. No chew. May just be burnt out, unsure if developed to depth.	411237.1678	6357352.079		54
20/06/2024	Marri	3	95	2 hollows, both approximately 13 m from ground. 1 knot is side facing entry with 10-15 cm opening. Has defined rim, no chew. 1 spout with 20 cm opening and upward facing entrance. No chew. Definitely hollow marri, very thin	410011.7229	6349426.521		55
20/06/2024	Jarrah	3	70	1 knot upwards facing entry. Approx cm 15cm opening. 8m from ground mid trunk. No chew.	410084.5114	6349641.059		56

Date	Species	Bamford class	DBH	Hollow Data	Easting	Northing	Comments	Tree Number
20/06/2024	Jarrah	3	75	1 large hollow, side entrance knot, approx. 20-30 cm opening. 10 m from ground, between y of broke branch and remaining. No chew, defined rim.	410072.767	6349610.921		57
21/06/2024	Marri	4	145	No hollows, recording as DBH is close to significant tree size	411370.9281	6350242.838	Significant tree size marri	58
21/06/2024	Marri	3	110	1 side spout type hollow, 10cm diameter, 13m height, no chew marks, foraging evidence under tree. Canopy is tangled with adjacent marri Tree	411427.414	6350230.859		59
21/06/2024	Jarrah	4	195	No hollow. Significant tree size	411484.8248	6350272.149	Significant tree size	60
21/06/2024	Marri	3	120	1 potential chimney type hollow, 20cm diameter, 17m height, no chew marks, unable to determine depth.	408947.4248	6349697.942		61
21/06/2024	Marri	3	130	2 hollows in total, both side spouts, 15cm diameter, 13m height, no chew marks, scorch marks on entrance	408961.3284	6349663.172		62
21/06/2024	Marri	3	110	Potential 40cm opening chimney in snapped trunk at 10m think hollow probably not well developed	410243.1337	6349805.987		63
21/06/2024	Marri	3	120	1x 40cm opening spout hollow going into 60-degree angled branch. Hollow well defined, may continue into vertical main trunk.	410220.3847	6349802.7		64
21/06/2024	Marri	3	130	Potential 40cm chimney hollow snapped trunk at 10m. Inside blackened and burnt out may not continue to depth. Think low potential for suitable hollow	409730.8815	6349855.644		65
21/06/2024	Marri	3	105	Potential 50cm opening chimney hollow at 15m in snapped dead main trunk. Think likely too open to be suitable.	410009.938	6349887.818	Tree is dead	66
21/06/2024	Marri	3	80	30cm opening chimney hollow at 10m in dead main trunk. Rim well defined, hollow looks well formed.	410179.6432	6349923.605		67
21/06/2024	Marri	3	90	40cm opening chimney hollow at 8m in snapped main trunk. Rim is thin with vertices cracking. Think hollow is well delivered. May be too open.	408604.5949	6349362.332		68
21/06/2024	Marri	3	75	1x 25cm chimney hollow in dead main trunk at 12. Hollow looks well defines but burnt inside.	408626.6602	6349409.921		69
21/06/2024	Marri	3	70	1x 10cm upwards facing side entry at 15m in dead branches. Hollow well defines but think branch too narrow at 30cm diameter for BC hollow formation	408627.7193	6349412.962		70
21/06/2024	Marri	3	60	2 hollows, chimney and spout. Chimney is 15 cm diameter, 13 m up, no chew. Spout is 15cm diameter, 7m up no chew	411420.512	6350354.558		71

Date	Species	Bamford class	DBH	Hollow Data	Easting	Northing	Comments	Tree Number
21/06/2024	Jarrah	3	100	2 chimneys. Very similar, 20 cm diameter, m 14up, no chew	411077.0834	6350248.827		72
21/06/2024	Marri	3	115	Short spout, 13 m up, 15 cm across, no chew	409813.3262	6349014.582		73
21/06/2024	Marri	3	70	30cm chimney, 15 m up, no chew	409636.889	6348998.198		74
21/06/2024	Marri	2	120	Low chimney/ spout on huge tree, 30cm diameter, 13m up, chewed edges	409573.2225	6348940.925		75
21/06/2024	Marri	3	95	Crook between Y in branches, hard hollow to spot, 15m up, no chew	409497.635	6348916.734		76
21/06/2024	Jarrah	3	160	Knot. 16m up, 15cm diameter no chew	409461.911	6348932.365		77
21/06/2024	Marri	3	75	Chimney with small spout on Side, 12m up cm 20cm wide no chew	409440.7864	6348963.893		78
21/06/2024	Marri	2	70	Knot in crook of branches, vertical. Maybe 20cmd, 10m up, edges chewed	409517.0287	6349000.176		79
21/06/2024	Marri	3	100	Chimney, 25cm d, 12m up, no chew	409135.9126	6349668.622		80
21/06/2024	Dead	3	80	Spout, in canopy, 15 m up, 12cm d, no chew	409017.4965	6349700.462	Marri	81
21/06/2024	Dead	3	160	2 spout on 45-degree angle. 10-15 m from ground. Approx 15-20 cm entry.	410580.893	6350016.751	Jarrah	82
21/06/2024	Marri	3	150	1 knot, 10 cm entry, upwards facing mid canopy. Potentially too small for BC. Defined No rim chew.	410518.9902	6350072.815	Significant tree marri 1.5 m	83
21/06/2024	Marri	3	150	10cm upward facing hollow knot. Approx 15m from. Ground. Defined smooth rim. Need more time to formation, think will be a good nesting tree for BC. No chew.	410479.4093	6350091.709	Significant tree marri 1.5 m	84
21/06/2024	Marri	3	55	1knot with 10cm entry. Side entrance, approx. 8m from ground mid canopy. No chew. Think unsuitable due to size of tree may be too small	408900.5705	6348797.922		85
21/06/2024	Marri	3	75	2 hollows. 1 spout at 45-degree angle. Upwards facing entry. 15 cm hollow burnt inside. 9m from ground. No chew. Defined rim at bottom of hollow. 1 chimney with small spout below. Approx 25 cm opening 10m from ground. No chew.	408720.6464	6349193.207		86
2/07/2024	Marri	2	80	1x 30cm chimney hollow at 12m in main trunk. Abundant older chew marks on rim.	415349.814	6355081.899	Alcoa nest tree tag 1835	87
2/07/2024	Marri	3	105	1x 30cm chimney hollow at 13m in snapped living main trunk. Has minor chew marks from BC on edges. Looks like hollow well formed.	412940.3581	6352910.166		88
2/07/2024	Jarrah	3	130	1x 20 by 60cm slit entry into main trunk at 10m. Hollow looks well defined	413165.1856	6352857.19	Tree is recently dead	89

Date	Species	Bamford class	DBH	Hollow Data	Easting	Northing	Comments	Tree Number
2/07/2024	Marri	3	90	1x 25cm upwards facing knot hollow, going into vertical trunk section. At 12m in main trunk. Hollow rim well defined	413176.5319	6352873.405		90
2/07/2024	Jarrah	3	150	3 x hollows. One knot with side facing entrance Approx 15 cm opening.13 m from ground. No chew. one spout with upwards facing entry. approx. 30 cm opening. 14m from ground, defined rim. No chew. 1 chimney with rough edges, think unsuitable. 30m entry.	413215.1771	6352974.289	Partially Burnt jarrah	91
3/07/2024	Jarrah	3	120	2 hollows. 1 spout with upwards facing side entry. Approx 15m from ground. No chew. Think burnt. One knot with 10m from ground and approx. 20-25 cm entry.	411765.776	6353822.581	Burnt jarrah	92
4/07/2024	Marri	3	75	1 knot with upward facing entry. 10 cm entrance. 8m from ground. Wear marks present around rim. Rim is well defined. May be slightly too small. Unsure of depth.	413139.7593	6352826.068		93
4/07/2024	Jarrah	3	85	1 knot with 10-15 cm opening. Defined rim. 10 m from ground, no chew. Some bark around hollow may suggest lack of use. Possibly too small. Think unsuitable for BC	410726.782	6354446.997		94
1/07/2024	Dead	3	110	3 spouts all 10cm wide, starting from. 12 m up, dead tree with burnt branch tips	409199.6511	6349629.235	Marri	95
1/07/2024	Jarrah	4	220	No hollows evident, but large burnt branches	409502.0571	6349648.456	Alcoa significant dbh tree	96
1/07/2024	Jarrah	3	150	Burnt spout, 18m up. No chew	409635.6226	6349687.898	Almost dead	97
1/07/2024	Marri	3	55	Chimney, looks burnt but potential for hollow, 20cm diameter, 16m up, no chew	409277.3892	6350321.91	Mostly dead, not market with blue tape	98
1/07/2024	Marri	3	100	Chimney, 12 m up, 30cm diameter, no chew	409231.5979	6350186.248		99
1/07/2024	Marri	3	55	Spout in top canopy, 20c across, 10m up, thin rim but no chew	409224.9455	6349971.663		100
1/07/2024	Dead	3	60	Whole trunk hollow, 2 knot entrances,19 m up, no chew	409196.8384	6349930.903	Marri	101
1/07/2024	Marri	3	65	Spout, upper canopy, 30cm across no chew	409182.7483	6349895.603		102
2/07/2024	Marri	3	110	2 spouts, one 6m up, other 8m up, 20cm each, burnt no chew	411060.3432	6349635.958		103
2/07/2024	Marri	3	90	Chimney, top canopy, frayed edges but no chew, 20cm across, 13 m up	411078.3272	6349770.148		104
2/07/2024	Marri	3	55	Chimney, top flat, thin rim no chew, 20c diameter approx., 10m up	412351.7905	6350110.054		105
2/07/2024	Marri	2	80	Top entrance, 20cm diameter, 16m up, well chewed	412356.4045	6350246.563	Alcoa nest tree 1861	106
2/07/2024	Marri	3	150	Spout, 20cm opening 14m up, no chew, potential chimney at canopy too, but unable to get good view	412127.7463	6350277.456	Alcoa significant dbh	107

Date	Species	Bamford class	DBH	Hollow Data	Easting	Northing	Comments	Tree Number
2/07/2024	Marri	4	160	No hollows apparent, but massive and tall, may have chimneys	412104.7665	6350247.57	Alcoa significant dbh tree	108
2/07/2024	Jarrah	3	90	Short spout, 15cm opening, 14 m up, no chew	411126.6843	6349341.052		109
2/07/2024	Jarrah	3	110	Spout, top canopy, multiple entrances, most about 25cm across, 16m up, no chew	411516.4394	6349356.988		110
3/07/2024	Marri	3	140	3 spouts, all in upper canopy, all three about 20cm diameter, 18 m up, thin rimmed on one bur, chew not evident on all	411902.9977	6349294.958	Significant dbh tree	111
3/07/2024	Marri	2	80	chimney, 30cm opening, 12 m up, chewed rim	411828.5815	6349082.073	Alcoa nest tree 1855	112
3/07/2024	Marri	3	80	Top canopy spout, 15 cm opening, 16m up, chew not evident but worn edges	411713.3834	6349070.096		113
3/07/2024	Marri	3	70	Chimney, 20cm opening, thin rim but chew not evident, 12m up,	411551.3132	6349149.587		114
3/07/2024	Marri	3	70	Chimney potential, scraggly top, 25cm opening, 12m up, no chew apparent	411282.44	6349233.831		115
4/07/2024	Marri	3	80	Potential top opening, would be about 35cm diameter 16m up, no obvious chew	413330.6151	6352737.804		116
5/07/2024	Marri	3	100	2 spouts, one top canopy, 15 cm opening, 16m up, one mid trunk 30cm opening, 10m up, no chew evident	411018.9242	6353813.758		117
5/07/2024	Dead	3	110	2 hollows, one knot, 6m up, 40cm across, no chew, one spout, 30cm across, 19m up, no chew	410787.2252	6353326.141	Presumably jarrah	118
1/07/2024	Marri	3	100	2 potential side spout, 12cm diameter, 10m and 12m height, no chew marks.	408641.1702	6349709.64	Glary observation	119
1/07/2024	Marri	5	145	No hollows	408465.5573	6349638.64	No hollows, significant tree size	120
1/07/2024	Marri	3	80	1 side knot hollow, 13cm diameter, 9m height, no chew marks. Good opening	408642.5702	6349369.881		121
2/07/2024	Marri	3	85	1 potential chimney type hollow, 15cm diameter, 24m height. Unable to see into hollow, no sign of use or chew	411056.2462	6349591.836		122
2/07/2024	Marri	4	180	Potential developing chimney but looked not fully rotted out. Alcoa sig tree size	411233.4425	6349879.858	new significant tree size	123
2/07/2024	Marri	3	85	1 potential chimney, 14cm diameter, 8m height, no signs of use. Unable to determine depth	411236.1462	6349871.135		124
2/07/2024	Jarrah	5	250	No hollows	412246.2868	6350260.485	Significant tree size 230cm DBH	125

Date	Species	Bamford class	DBH	Hollow Data	Easting	Northing	Comments	Tree Number
2/07/2024	Jarrah	5	240	No hollow	412088.5161	6350061.589	Significant tree size	126
2/07/2024	Marri	3	95	1 potential chimney hollow, 12cn diameter, 13m height, no chew marks, unable to determine depth	411268.176	6349518.836		127
2/07/2024	Marri	3	90	1 potential side spout hollow, 12cm diameter, 10m height. Maybe very old chew marks	411211.169	6349514.814		128
2/07/2024	Marri	3	0	1 side spout, 15cm diameter, 12m height, definitely hollowed out can see light and vertical cracking. No sign of use.	411181.0745	6349498.918	DBH not recorded	129
2/07/2024	Marri	3	80	1 spout type hollow, 10cm diameter, 9m height, no chew marks	411403.7816	6349359.75		130
3/07/2024	Jarrah	3	100	Chimney, open top, 20cm across, worn but no chew, 16m up,	410740.6302	6353054.035		131
3/07/2024	Jarrah	3	220	Massive tree, small burnt-out hollow in upper canopy, 20cm across, 20m up, no chew	412124.5276	6353235.238		132
3/07/2024	Marri	3	130	3 hollows, chimney, 25cm opening 16m up, 2 spouts, both 20cm opening, both about 14m up, no chew evident	411667.1766	6354018.809		133
3/07/2024	Jarrah	3	70	Knot, very good shape and size, 30cm across, 10m up, but no chew evident	411678.7893	6353985.884		134
4/07/2024	Marri	4	70	No observed features, potentially forming future hollow.	413295.5887	6352571.339		135
4/07/2024	Marri	3	80	1 spout type hollow, 10cm diameter, 8m height, very degraded entrance. No signs of use	413233.7301	6352516.456		136
4/07/2024	Jarrah	3	100	2 potential side spout hollow, 15cm diameter, 10m height, potential old chew marks.	413238.3965	6352504.37		137
4/07/2024	Marri	4	95	No observed features. Potential forming future hollows	413283.4887	6352533.03		138
4/07/2024	Marri	4	80	No observed features.	413316.7363	6352543.151	Rechecking habitat tree	139
5/07/2024	Jarrah	3	110	1 potential side spout hollow, 15cm diameter, 15m height, unable to see other side of hollow due to dense bush	410761.9551	6353631.896		140

## APPENDIX B: Phase 2 Survey Results

Species	Phase 2 Bamford Class	Suitable Potential or Known Nesting Tree	DBH	Easting	Northing	Tony Kirkby Hollow Comments	Tree Number
Marri	4	Potential	110	413260.5625	6354864.866	Completely blocked and photo taken	1
Marri	3	Suitable	110	413725.5255	6350921.872	Healthy possible nest tree.	2
Marri	4	Potential	105	414035.9556	6350411.452	Blocked	3
Marri	4	Potential	110	414066.1926	6350289.523	Blocked	4
Marri	4	Potential	70	413837.1438	6352899.837	Blocked	5
Jarrah	4	Potential	140	413961.6507	6352783.727	Not a hollow	6
Dead	4	Potential	105	413760.3703	6350373.1	Blocked	7
Jarrah	4	Potential	100	411281.66	6350877.055	Blocked	8
Marri	4	Potential	95	410819.3231	6351253.776	Not a nest hollow. Almost horizontal	9
Marri	4	Potential	90	411287.9868	6350574.645	Too small	10
Marri	4	Potential	75	410690.1548	6350757.196	Blocked	11
Marri	4	Potential	95	411399.2109	6350556.744	Blocked	12
Marri	4	Potential	130	411480.7046	6350552.261	Not a hollow	13
Marri	4	Potential	120	411274.743	6350378.055	Blocked	14
Marri	3	Suitable	90	411744.0506	6350385.324	Now numbered 2151 from	15
Marri	2	Known	80	412282.1789	6350546.087	Tree 1837	16
Marri	4	Potential	100	412217.4634	6350651.815	Not a nest. Chew narks are rotten wood	17
Marri	4	Potential	90	410663.2159	6350710.319	Not a nest hollw. Almost horizontal	18

Species	Phase 2 Bamford Class	Suitable Potential or Known Nesting Tree	DBH	Easting	Northing	Tony Kirkby Hollow Comments	Tree Number
Marri	4	Potential	50	411811.9718	6350511.295	Blocked	19
Jarrah	4	Potential	140	411831.5073	6350485.051	Blocked	20
Dead	4	Potential	80	406878.9957	6357412.171	Blocked	21
Dead	4	Potential	100	406824.1996	6357426.015	Too small	22
Marri	4	Potential	95	401616.2169	6358193.119	Blocked. Marri not Jarrah	23
Jarrah	4	Potential	65	401485.0124	6358197.624	Too small	24
Marri	4	Potential	95	402531.8671	6358056.425	Blocked	25
Dead	4	Potential	100	402567.0904	6358109.617	Blocked	26
Blackbutt	4	Potential	135	414827.1731	6352751.499	Blocked	27
Marri	4	Potential	110	413855.2867	6355201.771	Blocked	28
Marri	3	Suitable	100	413848.0361	6355283.099	Possible/potential nest tree numbered 2152	29
Marri	4	Potential	120	414495.1511	6354607.892	Blocked	30
Marri	4	Potential	105	415271.1422	6354989.764	Blocked	31
Marri	4	Potential	130	414544.1931	6354752.342	Blocked	32
Marri	4	Potential	75	415002.675	6354658.342	Blocked	33
Jarrah	4	Potential	165	414807.2078	6354693.236	Blocked	34
Marri	4	Potential	120	415003.4145	6354703.838	Blocked	35
Jarrah	4	Potential	200	414751.6029	6350521.4	Not actually of significant DBH to class as Alcoa Significant Tree	36
Marri	4	Potential	100	411133.5848	6349850.467	No hollows. Chew marks are expansion marks	37

Species	Phase 2 Bamford Class	Suitable Potential or Known Nesting Tree	DBH	Easting	Northing	Tony Kirkby Hollow Comments	Tree Number
Marri	2	Known	70	411149.6878	6349805.35	Nest tree 1862	38
Marri	2	Known	100	411161.7936	6349797.275	Nest tree1858	39
Marri	4	Potential	120	411217.874	6349590.047	Blocked . Rotten	40
Marri	4	Potential	105	405641.7289	6357613.64	Blocked	41
Marri	2	Known	120	409869.004	6349169.413	Nest tree numbered 2127	42
Marri	2	Known	95	409832.4677	6349164.469	New nest number 2154	43
Jarrah	4	Potential	60	409832.0528	6349149.529	No hollows. H is old forestry mark	44
Marri	4	Potential	125	409839.0695	6349123.775	Blocked	45
Bullich	4	Potential	75	409694.9701	6356300.322	Was probably a nest hollow but now has large hole at floor level	46
Marri	4	Potential	75	412522.691	6356351.787	Blocked	47
Marri	4	Potential	110	410007.8211	6349294.965	Blocked	48
Marri	4	Potential	105	410178.658	6349401.741	Blocked	49
Marri	4	Potential	80	410026.3682	6349273.997	Blocked	50
Marri	1	Known	60	409634.3379	6349001.653	Nest tree numbered 2147	51
Marri	2	Known	60	409814.2415	6349017.483	Nest tree numbered 2123.	52
Marri	4	Potential	150	409807.7976	6349020.373	Tree present but hollow lost to fire	53
Dead	4	Potential	65	411237.1678	6357352.079	Blocked	54
Marri	1	Known	95	410011.7229	6349426.521	Nest tree numbered 2130. Female at nest	55
Jarrah	4	Potential	70	410084.5114	6349641.059	Blocked	56

Species	Phase 2 Bamford Class	Suitable Potential or Known Nesting Tree	DBH	Easting	Northing	Tony Kirkby Hollow Comments	Tree Number
Jarrah	4	Potential	75	410072.767	6349610.921	Blocked	57
Marri	4	Potential	145	411370.9281	6350242.838	135 dia. Too small	58
Marri	4	Potential	110	411427.414	6350230.859	Hollow too small	59
Jarrah	4	Potential	195	411484.8248	6350272.149	Poor condition	60
Marri	4	Potential	120	408947.4248	6349697.942	Blocked	61
Marri	4	Potential	130	408961.3284	6349663.172	Blocked	62
Marri	4	Potential	110	410243.1337	6349805.987	Blocked	63
Marri	4	Potential	120	410220.3847	6349802.7	Blocked	64
Marri	4	Potential	130	409730.8815	6349855.644	Blocked	65
Marri	4	Potential	105	410009.938	6349887.818	Blocked	66
Marri	4	Potential	80	410179.6432	6349923.605	Blocked	67
Marri	4	Potential	90	408604.5949	6349362.332	Blocked	68
Marri	2	Known	75	408626.6602	6349409.921	Nest tree numbered 2125	69
Marri	4	Potential	70	408627.7193	6349412.962	Not a hollow	70
Marri	2	Known	60	411420.512	6350354.558	Numbered 2149	71
Jarrah	4	Potential	100	411077.0834	6350248.827	Blocked	72
Marri	4	Potential	115	409813.3262	6349014.582	Blocked	73
Marri	4	Potential	70	409636.889	6348998.198	Blocked	74
Marri	4	Potential	120	409573.2225	6348940.925	Blocked	75

Species	Phase 2 Bamford Class	Suitable Potential or Known Nesting Tree	DBH	Easting	Northing	Tony Kirkby Hollow Comments	Tree Number
Marri	4	Potential	95	409497.635	6348916.734	No hollows	76
Jarrah	4	Potential	160	409461.911	6348932.365	Blocked	77
Marri	4	Potential	75	409440.7864	6348963.893	Blocked	78
Marri	4	Potential	70	409517.0287	6349000.176	Too small	79
Marri	4	Potential	100	409135.9126	6349668.622	Blocked but badly split	80
Dead	4	Potential	80	409017.4965	6349700.462	Too small	81
Dead	4	Potential	160	410580.893	6350016.751	Blocked	82
Marri	4	Potential	150	410518.9902	6350072.815	Too small	83
Marri	3	Suitable	150	410479.4093	6350091.709	Potential nest tree. Forming hollows. Numbered 2135	84
Marri	4	Potential	55	408900.5705	6348797.922	Too small	85
Marri	4	Potential	75	408720.6464	6349193.207	Blocked	86
Marri	2	Known	80	415349.814	6355081.899	Good condition and well chewed at entrance	87
Marri	3	Suitable	105	412940.3581	6352910.166	Numbered 2159. Possible/potential	88
Jarrah	4	Potential	130	413165.1856	6352857.19	Blocked	89
Marri	4	Potential	90	413176.5319	6352873.405	Blocked	90
Jarrah	4	Potential	150	413215.1771	6352974.289	Blocked	91
Jarrah	4	Potential	120	411765.776	6353822.581	Blocked	92
Marri	4	Potential	75	413139.7593	6352826.068	Too small	93
Jarrah	4	Potential	85	410726.782	6354446.997	Blocked	94

Species	Phase 2 Bamford Class	Suitable Potential or Known Nesting Tree	DBH	Easting	Northing	Tony Kirkby Hollow Comments	Tree Number
Dead	4	Potential	110	409199.6511	6349629.235	No hollows	95
Jarrah	4	Potential	220	409502.0571	6349648.456	Poor condition	96
Jarrah	4	Potential	150	409635.6226	6349687.898	Blocked	97
Marri	4	Potential	55	409277.3892	6350321.91	Top of tree now lost	98
Marri	4	Potential	100	409231.5979	6350186.248	Blocked	99
Marri	4	Potential	55	409224.9455	6349971.663	Too small	100
Dead	4	Potential	60	409196.8384	6349930.903	Blocked	101
Marri	4	Potential	65	409182.7483	6349895.603	Blocked	102
Marri	4	Potential	110	411060.3432	6349635.958	Blocked	103
Marri	4	Potential	90	411078.3272	6349770.148	Blocked	104
Marri	4	Potential	55	412351.7905	6350110.054	Blocked	105
Marri	2	Known	80	412356.4045	6350246.563	Nest tree 1861	106
Marri	4	Potential	150	412127.7463	6350277.456	1200mm dia	107
Marri	4	Potential	160	412104.7665	6350247.57	Numbered 2156. Sig tree	108
Jarrah	4	Potential	90	411126.6843	6349341.052	Top of tree recently fallen	109
Jarrah	4	Potential	110	411516.4394	6349356.988	Too small	110
Marri	4	Potential	140	411902.9977	6349294.958	Wrong angles. Almost horizontal	111
Marri	1	Known	80	411828.5815	6349082.073	Nest tree 1855. Female flushed	112
Marri	4	Potential	80	411713.3834	6349070.096	Not a hollow	113

Species	Phase 2 Bamford Class	Suitable Potential or Known Nesting Tree	DBH	Easting	Northing	Tony Kirkby Hollow Comments	Tree Number
Marri	4	Potential	70	411551.3132	6349149.587	Blocked and rotten	114
Marri	4	Potential	70	411282.44	6349233.831	Blocked and rotten	115
Marri	4	Potential	80	413330.6151	6352737.804	Blocked	116
Marri	4	Potential	100	411018.9242	6353813.758	No suitable hollows	117
Dead	4	Potential	110	410787.2252	6353326.141	Blocked	118
Marri	4	Potential	100	408641.1702	6349709.64	Hollow too small	119
Marri	4	Potential	145	408465.5573	6349638.64	Too small for sig tree	120
Marri	4	Potential	80	408642.5702	6349369.881	Blocked. Wrong angle. Almost horizontal	121
Marri	1	Known	85	411056.2462	6349591.836	Nest tree numbered 2120. Female flushed	122
Marri	4	Potential	180	411233.4425	6349879.858	Poor condition. Blocked hollow	123
Marri	4	Potential	85	411236.1462	6349871.135	Blocked	124
Jarrah	4	Potential	250	412246.2868	6350260.485	Tree numbered 2155	125
Jarrah	4	Potential	240	412088.5161	6350061.589	Tree numbered 2153	126
Marri	4	Potential	95	411268.176	6349518.836	Small blocked	127
Marri	4	Potential	90	411211.169	6349514.814	Blocked	128
Marri	4	Potential	0	411181.0745	6349498.918	Blocked	129
Marri	4	Potential	80	411403.7816	6349359.75	Blocked	130
Jarrah	4	Potential	100	410740.6302	6353054.035	Blocked	131
Jarrah	4	Potential	220	412124.5276	6353235.238	Hollow s too small	132

Species	Phase 2 Bamford Class	Suitable Potential or Known Nesting Tree	DBH	Easting	Northing	Tony Kirkby Hollow Comments	Tree Number
Marri	4	Potential	130	411667.1766	6354018.809	Blocked	133
Jarrah	4	Potential	70	411678.7893	6353985.884	Blocked	134
Marri	4	Potential	70	413295.5887	6352571.339	Blocked	135
Marri	4	Potential	80	413233.7301	6352516.456	Spout too small	136
Jarrah	4	Potential	100	413238.3965	6352504.37	Blocked. Tree 1412 nearby and in good condition	137
Marri	4	Potential	95	413283.4887	6352533.03	Good condition. Previously marked hab tree	138
Marri	4	Potential	80	413316.7363	6352543.151	Poor condition. Previously marked hab tree	139
Jarrah	4	Potential	110	410761.9551	6353631.896	Blocked	140