



MINUTES

Ordinary Council Meeting

18 October 2022

CONFIRMATION OF MINUTES

These Minutes have been CONFIRMED by Council as the official record for the Shire of Gingin's Ordinary Council Meeting held on 18 October 2022.



**Councillor C W Fewster
PRESIDENT**

Date of Confirmation: 15 November 2022

DISCLAIMER

Members of the public are advised that Council agendas, recommendations, minutes and resolutions are subject to confirmation by Council and therefore, prior to relying on them, one should refer to the subsequent meeting of Council with respect to their accuracy.

No responsibility whatsoever is implied or accepted by the Shire of Gingin for any act, omission or statement or intimation occurring during Council meetings or during formal/informal conversations with staff.

The Shire of Gingin disclaims any liability for any loss whatsoever and howsoever caused arising out of reliance by any person or legal entity on any such act, omission or statement or intimation occurring during Council meetings or discussions. Any person or legal entity who acts or fails to act in reliance upon any statement does so at that person's or legal entity's own risk.

Applicants and other interested parties should refrain from taking any action until such time as written advice is received confirming Council's decision with respect to any particular issue.

ACKNOWLEDGEMENT OF COUNTRY



The Shire of Gingin would like to acknowledge the Yued people who are the traditional custodians of this land. The Shire would like to pay respect to the Elders past, present and emerging of the Yued Nation and extend this respect to all Aboriginal people. The Shire also recognises the living culture of the Yued people and the unique contribution they have made to the Gingin region.

TABLE OF CONTENTS

1	DECLARATION OF OPENING	5
2	RECORD OF ATTENDANCE, APOLOGIES AND LEAVE OF ABSENCE	5
2.1	ATTENDANCE	5
2.2	APOLOGIES.....	5
2.3	LEAVE OF ABSENCE.....	5
3	DISCLOSURES OF INTEREST	5
4	PUBLIC QUESTION TIME	5
4.1	RESPONSES TO PUBLIC QUESTIONS PREVIOUSLY TAKEN ON NOTICE	5
4.2	PUBLIC QUESTIONS.....	6
5	PETITIONS.....	6
6	APPLICATIONS FOR LEAVE OF ABSENCE.....	6
7	CONFIRMATION OF MINUTES.....	6
8	ANNOUNCEMENTS BY THE PRESIDING MEMBER.....	6
9	UNRESOLVED BUSINESS FROM PREVIOUS MEETINGS	7
10	QUESTIONS BY MEMBERS OF WHICH DUE NOTICE HAS BEEN GIVEN	7
11	REPORTS - OFFICE OF THE CEO	8
12	REPORTS - CORPORATE AND COMMUNITY SERVICES	8
12.1	MONTHLY FINANCIAL REPORT FOR PERIOD ENDING 30 SEPTEMBER 2022.....	8
12.2	LIST OF PAID ACCOUNTS SEPTEMBER 2022	23
13	REPORTS - REGULATORY AND DEVELOPMENT SERVICES	26
13.1	APPLICATION FOR DEVELOPMENT APPROVAL - PROPOSED RECEPTION CENTRE AT LOT 24 (145) BARAMBA ROAD, KARAKIN	26
13.2	APPLICATION FOR DEVELOPMENT APPROVAL - EXTRACTIVE INDUSTRY (GRAVEL) ON LOT 1 WANNAMAL ROAD WEST, BOONANARRING.....	133
13.3	SOUTH WEST NATIVE TITLE SETTLEMENT - LAND BASE CONSULTATION 901.358	
13.4	APPLICATION FOR AMENDED DEVELOPMENT APPROVAL - RESTAURANT (TAKE- AWAY COFFEE OUTLET) ON LOT 1 (86A) GINGIN ROAD, LANCELIN	391
13.5	APPLICATION FOR DEVELOPMENT APPROVAL - PROPOSED STORAGE SHED ON LOT 13 PT 10 (35) GINGIN BROOK ROAD, COONABIDGEE.....	403
13.6	APPLICATION FOR DEVELOPMENT APPROVAL - PROPOSED TELECOMMUNICATIONS FACILITY ON LOT 451 (15) KING STREET, LANCELIN	420
13.7	APPLICATION FOR DEVELOPMENT APPROVAL - CANCELLATION OF EXISTING APPROVAL FOR AGRICULTURE INTENSIVE (PERENNIAL HORTICULTURE) AND ACKNOWLEDGEMENT OF A RURAL PURSUIT ON LOT 103 (863) COWALLA ROAD, WANERIE	513

**MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022**



13.8 APPLICATION FOR AMENDED DEVELOPMENT APPROVAL - PROPOSED COMPOSTING FACILITY AND ASSOCIATED INFRASTRUCTURE ON LOT 10 (1340) WANNAMAL ROAD WEST, BOONANARRING.....	533
14 REPORTS - OPERATIONS AND ASSETS	579
14.1 UNBUDGETED EXPENDITURE - REPAIR OF FLOODWAY CROSSINGS ON MARIA AND LAURA ROADS, WANERIE	579
15 MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN	582
16 COUNCILLORS' OFFICIAL REPORTS.....	582
16.1 JOINT DEVELOPMENT ASSESSMENT PANEL MEETING – 11 OCTOBER 2022.....	582
16.2 POWER OUTAGES DURING TOTAL FIRE BANS	582
16.3 MOST ACCESSIBLE COMMUNITY AWARDS WA.....	582
17 NEW BUSINESS OF AN URGENT NATURE.....	583
18 MATTERS FOR WHICH MEETING IS TO BE CLOSED TO THE PUBLIC	583
18.1 CUNLIFFE STREET DEVELOPMENT	583
19 CLOSURE.....	585

ORDER OF BUSINESS

1 DECLARATION OF OPENING

The Shire President declared the meeting open at 3:13 pm and welcomed all in attendance.

2 RECORD OF ATTENDANCE, APOLOGIES AND LEAVE OF ABSENCE

2.1 ATTENDANCE

Councillors – C W Fewster (Shire President), J K Rule (Deputy Shire President), L Balcombe, F J Johnson, E Sorensen, R Kestel, and F J Peczka.

Staff – A Cook (Chief Executive Officer), L Crichton (Executive Manager Corporate and Community Services), R Kelly (Executive Manager Regulatory and Development Services), V Crispe (Executive Manager Operations and Assets), K Bacon (Coordinator Strategic Planning and Projects), J Bayliss (Coordinator Statutory Planning), N Jurmann (Statutory Planning Officer), L Burt (Coordinator Governance), and E Mackey (Governance Support Officer/Minute Officer)

Gallery – There were 11 members of the public and 1 member of the Press present in the Gallery.

2.2 APOLOGIES

Cr A Vis

2.3 LEAVE OF ABSENCE

Nil

3 DISCLOSURES OF INTEREST

Nil

4 PUBLIC QUESTION TIME

4.1 RESPONSES TO PUBLIC QUESTIONS PREVIOUSLY TAKEN ON NOTICE

Nil

4.2 PUBLIC QUESTIONS

Nil

5 PETITIONS

Nil

6 APPLICATIONS FOR LEAVE OF ABSENCE

Nil

7 CONFIRMATION OF MINUTES

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson

SECONDED: Councillor Balcombe

That Council confirm the Minutes of the Ordinary Council Meeting held on 21 September 2022 as a true and accurate record.

**CARRIED UNANIMOUSLY
7 / 0**

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*

8 ANNOUNCEMENTS BY THE PRESIDING MEMBER

Deputations

Four deputations were received by Council prior to the meeting commencement, the details of which are as follows:

Item 13.1 **Application for Development Approval - Proposed Reception Centre at Lot 24 (145) Baramba Rd, Karakin**

Speaker/s: Ryan Djanegara

The Deputation was in opposition to the Officer's Recommendation.

Item 13.1 **Application for Development Approval - Proposed Reception Centre at Lot 24 (145) Baramba Rd, Karakin**

Speaker/s: Dawn & Paul Turner

The Deputation was in opposition to the Officer's Recommendation.

Item 13.8 Application for Amended Development Approval - Proposed Composting Facility and Associated Structure on Lot 10 (1340) Wannamal Road West, Boonanarring

Speaker/s: Neil Ferguson

The Deputation was in opposition to the Officer's Recommendation.

Item 13.2 - Application for Development Approval - Extractive Industry (Gravel) on Lot 1 Wannamal Road West, Boonanarring

Speaker/s: Travis Dykstra (Harley Dykstra)

The Deputation was in writing and in support of the Officer's Recommendation.

9 UNRESOLVED BUSINESS FROM PREVIOUS MEETINGS

Nil

10 QUESTIONS BY MEMBERS OF WHICH DUE NOTICE HAS BEEN GIVEN

Nil

11 REPORTS - OFFICE OF THE CEO

Nil

12 REPORTS - CORPORATE AND COMMUNITY SERVICES

12.1 MONTHLY FINANCIAL REPORT FOR PERIOD ENDING 30 SEPTEMBER 2022

File	FIN/25
Author	Karina Leonhardt - Coordinator Corporate Services
Reporting Officer	Les Crichton - Executive Manager Corporate and Community Services
Refer	Nil
Appendices	1. Monthly Financial Report for the period ending 30 September 2022 [12.1.1 - 12 pages]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To present for Council endorsement the Monthly Statements of Financial Activity for the period ending 30 September 2022.

BACKGROUND

The Financial Statements are presented to Council in accordance with the *Local Government Act 1995* and *Local Government (Financial Management) Regulations 1996*.

COMMENT

The Financial Statements for the months ending 30 September 2022 present the financial performance of the Shire for the 2022/23 financial year and compare year to date expenditure and revenue against the corresponding year-to-date budget.

A break-up of the **\$(442,021)** variance in the Financial Statement for month ending 30 September 2022 is summarised across operations, investing and financing below with a detailed explanation of variations within each area contained within **Appendix 12.1.1**

Under Budget

Operating Fund Surplus / Deficit	\$(491,734)
Operating Revenue	\$(206,066)

Operating Expenditure	\$811,606
Investing Activities – Revenue	\$(1,786,958)
Investing Activities – Expenditure	\$1,231,269
Financing Activities – Revenue	\$(0)
Financing Activities – Expenditure	\$(138)

It should be noted that while the 2021/22 year-end processes have largely been finalised, further changes may be identified as part of the final audit and may affect the operating fund surplus/deficit.

Investments

As required by Council Policy 3.2 Investments - at this time, there are no investments to report on.

STATUTORY/LOCAL LAW IMPLICATIONS

Local Government Act 1995

Part 6 – Financial Management

Division 3 – Reporting on activities and finance

Section 6.4 – Financial Report

Local Government (Financial Management) Regulations 1996

Part 4 – Financial Reports

Reg 34 – Financial activity statement required each month

Shire of Gingin Delegation Register – Delegation 1.1.10 Power to Invest and Manage Investments

POLICY IMPLICATIONS

Policy 3.2 – Investments

A monthly report will be provided to Council detailing the investments portfolio in terms of performance, percentage exposure, maturity date and changes in market value.

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	4. Excellence & Accountability - Deliver Quality Leadership and Business Expertise
Strategic Objective	4.2 Effective Governance - Apply systems of compliance which assists Council to make informed decisions within a transparent, accountable and principled environment

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Kestel

SECONDED: Councillor Balcombe

That Council endorse the Statements of Financial Activity for the period ending 30 September 2022.

CARRIED UNANIMOUSLY
7 / 0

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*



MONTHLY FINANCIAL REPORT

(Containing the Statement of Financial Activity)

FOR THE PERIOD 1 JULY 2022 to 30 SEPTEMBER 2022

LOCAL GOVERNMENT ACT 1995

LOCAL GOVERNMENT (FINANCIAL MANAGEMENT) REGULATION 1996

Table of Contents

Key Information	1
Statement of Financial Activity by Program	2-3
Statement of Financial Activity by Nature & Type	4
Acquisition of Assets & Other Non-Capital Expenditure	5
Disposal of Assets	6
Information on Borrowings	7
Cash-Backed Reserves	8
Net Current Assets	9
Rating Information	10
Trust Funds	11



Shire of Gingin Statement of Financial Activity
FOR THE PERIOD 1 JULY 2022 to 30 SEPTEMBER 2022

Key Information

Report Purpose:

This report is prepared to meet the requirements of Local Government (Financial Management) Regulations 1996, Regulation 34.

Items of Significance:

The material variance adopted by the Shire of Gingin for the 2022/23 year is \$20,000 or 10% whichever is the greater. The following selected items have been highlighted due to the amount of the variance to the budget or due to the nature of the revenue/expenditure.

Note: The Statements are prepared based on all transactions recorded at the time of preparation and may vary due to transactions being processed for the reporting period after the date of preparation.

Prepared by: Karina Leonhardt
Reviewed by: Ziggy Edwards
Date Prepared: 13/10/2022

MINUTES ORDINARY COUNCIL MEETING 18 OCTOBER 2022

APPENDIX 12.1.1



Shire of Gingin Statement of Financial Activity FOR THE PERIOD 1 JULY 2022 to 30 SEPTEMBER 2022

Statement of Financial Activity by Program

	Current Annual Budget	Current YTD Budget	YTD Actual	Var. \$	Var. %	Comments
OPENING FUNDING SURPLUS (DEFICIT)	2,640,221	2,640,221	2,148,487	(491,734)	(19%)	Recognition of grant income / contract liability; movement in employee provisions; late accounts payable invoices received; 21/22 depreciation and asset batches; reserve transfers;
Revenue from operating activities						
General Purpose Funding	518,989	311,940	160,599	(151,341)	(49%)	Timing of Financial Assistance Grants; timing of interest earnings; timing of reimbursement of debt collection costs.
General Purpose Funding - Rates	9,416,965	9,416,965	9,415,145	(1,820)	0%	No comment required.
Governance	8,560	2,142	-	(2,142)	(100%)	Timing of memorial plaque reimbursements, and health and wellbeing program reimbursements from LGIS.
Law, Order, Public Safety	602,705	150,675	76,345	(74,330)	(49%)	Timing of grants and reimbursements for emergency management positions; timing of recognition of Ledge Point Off Road Area grant.
Health	58,545	36,136	36,045	(91)	(0%)	No comment required.
Education and Welfare	9,500	2,376	15,869	13,493	568%	Recognition of grant funds for cancelled Youth Website project to be refunded.
Housing	123,718	30,927	29,605	(1,322)	(4%)	No comment required.
Community Amenities	1,909,903	477,480	481,376	3,896	1%	No comment required.
Recreation and Culture	131,005	32,667	11,729	(20,938)	(64%)	Timing of aquatic centre opening and income; timing of local hall hire.
Transport	447,580	111,894	282,373	170,479	152%	Timing of parking fines income and income from parking meters ; timing of recognition of direct road grants.
Economic Services	1,690,575	462,603	335,715	(126,888)	(27%)	Timing of caravan park income due to off peak season.
Other Property and Services	130,321	32,538	17,476	(15,062)	(46%)	Timing of diesel fuel tax rebate received, and other reimbursements.
	15,048,366	11,068,343	10,862,277	(206,066)	(2%)	
Expenditure from operating activities						
Governance	(2,239,694)	(559,947)	(483,399)	76,548	(14%)	Timing of legal expenses; timing of Councillor training expenses; timing of audit expenses.
General Purpose Funding	(469,441)	(169,858)	(142,860)	26,998	(16%)	Timing of valuation expenses.
Law, Order, Public Safety	(1,457,290)	(364,317)	(250,346)	113,971	(31%)	Depreciation; timing of fire related expenditure; timing of recoverable fire break contractor fees; timing of contributions relating to crime prevention: police accommodation & lower coastal neighbourhood watch.
Health	(554,748)	(139,951)	(95,823)	44,129	(32%)	Depreciation; timing of Medical Centre maintenance and operations; timing of pest control programs.
Education and Welfare	(163,687)	(40,926)	(29,317)	11,609	(28%)	Depreciation; timing of education based grants - Gingin DHS and Lancelin Primary School; timing of use of Community Development Fund; off set by unbudgeted return of grant funds for Youth Website project.
Housing	(131,386)	(25,179)	(12,630)	12,549	(50%)	Timing of building operation expenditure for staff housing and building maintenance and operations for seniors housing;
Community Amenities	(3,320,327)	(853,535)	(452,983)	400,552	(47%)	Depreciation; timing of cemetery maintenance and operations; timing of payments for public conveniences maintenance; timing of completion of Coastal Hazard Risk Management Plan and coastal monitoring activities; timing of environmental projects: Grace Darling Park to Edward Island Point Sand Nourishment, Seabird North Sand Nourishment and Seabird Seawall Maintenance; timing of use planning consultants; timing of the Review of Local Planning Strategy completion; timing of maintenance at tip sites.
Recreation & Culture	(3,478,382)	(859,019)	(323,362)	535,657	(62%)	Depreciation; timing of library expenses; timing of building operations and maintenance of recreation facilities; timing of aquatic centre operations and season opening.
Transport	(4,997,854)	(1,249,494)	(511,702)	737,792	(59%)	Depreciation; timing of roads and bridge maintenance;
Economic Services	(1,429,899)	(357,704)	(269,374)	88,330	(25%)	Depreciation; timing of Tourism Outcomes grants to Lancelin and Gingin CRCs; timing of caravan park maintenance and operations, and payments for management contractors; timing of festival and events contributions/expenditure.
Other Property and Services	(963,342)	(336,879)	(350,783)	(13,904)	4%	No comment required.
	(19,206,050)	(4,956,809)	(2,922,580)	2,034,229	(41%)	
Operating activities excluded from budget						
(Profit)/Loss on Asset Disposals	-	-	-	-	0%	
Depreciation on Assets	4,922,951	1,230,738	8,115	(1,222,623)	(99%)	Post 21/22 audit process
Non cash Adjustment	-	-	-	-	0%	
Amount attributable to operating activities	765,267	7,342,272	7,947,813	605,540	8%	

MINUTES ORDINARY COUNCIL MEETING 18 OCTOBER 2022

APPENDIX 12.1.1



Shire of Gingin Statement of Financial Activity FOR THE PERIOD 1 JULY 2022 to 30 SEPTEMBER 2022

Statement of Financial Activity by Program

	Current Annual Budget	Current YTD Budget	YTD Actual	Var. \$	Var. %	Comments
Investing Activities						
Non operating grants, subsidies & contributions	8,088,343	2,022,087	311,872	(1,710,215)	(85%)	Timing of grant recognition inline with associated project spend and as per accounting standards.
Purchase Land Held for Resale	-	-	-	-	0%	
Purchase Land and Buildings	(1,584,228)	(276,711)	(245,064)	31,647	(11%)	Timing of capital purchases
Purchase Infrastructure Assets - Roads	(4,865,059)	(1,182,513)	(304,387)	878,126	(74%)	Timing of capital purchases
Purchase Infrastructure Assets - Parks	(1,290,146)	(322,539)	-	322,539	(100%)	Timing of capital purchases
Purchase Infrastructure Assets - Other	(526,831)	(56,712)	(25,500)	31,212	(55%)	Timing of capital purchases
Purchase Infrastructure Assets - Footpaths	(20,000)	-	(25,119)	(25,119)	0%	Timing of capital purchases
Purchase Infrastructure Assets - Sewerage	-	-	-	-	0%	Timing of capital purchases
Purchase Plant and Equipment	(5,074,200)	-	(7,136)	(7,136)	0%	Timing of capital purchases
Proceeds from Disposal of Assets	307,000	76,743	-	(76,743)	(100%)	Timing of change over of vehicles/plant
Self-Supporting Loan Principal Income	13,252	0	-	0	0%	Timing of loan repayments
	(4,951,869)	260,355	(295,334)	(555,689)	(213%)	
Financing Activities						
Repayment of Debentures	(250,520)	(66,930)	(66,930)	-	0%	No comment required
Proceeds from New Debentures	550,000	-	-	-	0%	Timing of Cunliffe Street Foreshore Redevelopment and Guilderton Caravan Park Waste Water projects.
Proceeds from New Self-Supporting Loans	-	-	-	-	0%	
Payment of Principal Portion of Lease Liabilities	(32,001)	(8,001)	(8,139)	(138)	2%	No comment required
Transfers to Reserves - Cash Backed Reserves	(539,595)	-	-	-	0%	End of year process
Transfers from Reserves - Cash Backed Reserves	1,818,497	-	-	-	0%	End of year process
	1,546,381	(74,931)	(75,069)	(138)	0%	
Net Current Assets Year to Date	-	10,167,917	9,725,897	(442,021)	(4%)	

This statement is to be read in conjunction with the accompanying notes.

MINUTES ORDINARY COUNCIL MEETING 18 OCTOBER 2022

APPENDIX 12.1.1



Shire of Gingin Statement of Financial Activity FOR THE PERIOD 1 JULY 2022 to 30 SEPTEMBER 2022

Statement of Financial Activity by Nature & Type

	Current Annual Budget	Current YTD Budget	YTD Actual	Var. \$	Var. %
OPENING FUNDING SURPLUS (DEFICIT)	2,640,221	2,640,221	2,148,487	(491,734)	(19%)
Revenue from operating activities					
Rates	9,422,765	9,416,965	9,415,145	(1,820)	0%
Grants & Subsidies (Operating)	1,332,638	535,486	444,220	(91,266)	(17%)
Fees & Charges	3,941,679	1,050,432	903,330	(147,102)	(14%)
Interest Earnings	113,775	-	8,453	8,453	0%
Other Revenue	237,509	65,460	91,129	25,669	39%
Profit on Sale of Assets	-	-	-	-	0%
	15,048,366	11,068,343	10,862,277	(206,066)	(2%)
Expenditure from operating activities					
Employee On Costs	(6,254,772)	(1,563,243)	(1,520,057)	43,186	(3%)
Materials & Contracts	(6,649,869)	(1,757,301)	(963,311)	793,990	(45%)
Utilities (Gas, Water etc)	(474,691)	(113,778)	(88,406)	25,372	(22%)
Insurances	(350,872)	(87,744)	(187,906)	(100,162)	114%
Depreciation of Assets	(4,922,951)	(1,230,738)	(8,115)	1,222,623	(99%)
Interest Expenses	(92,430)	(17,905)	(17,950)	(45)	0%
Other Expenditure	(460,465)	(186,100)	(136,835)	49,265	(26%)
Loss on Sale of Assets	-	-	-	-	0%
	(19,206,050)	(4,956,809)	(2,922,580)	2,034,229	(41%)
Operating activities excluded from budget					
Adjust Profit/Loss on asset disposals	-	-	-	-	0%
Depreciation on Assets	4,922,951	1,230,738	8,115	(1,222,623)	(99%)
Non cash Adjustment	-	-	-	-	0%
Amount attributable to operating activities	765,267	7,342,272	7,947,813	605,540	8%
Investing Activities					
Non operating grants, subsidies & contributions	8,088,343	2,022,087	311,872	(1,710,215)	(85%)
Purchase Land Held for Resale	-	-	-	-	0%
Purchase Land and Buildings	(1,584,228)	(276,711)	(245,064)	31,647	(11%)
Purchase Infrastructure Assets - Roads	(4,865,059)	(1,182,513)	(304,387)	878,126	(74%)
Purchase Infrastructure Assets - Parks	(1,290,146)	(322,539)	-	322,539	(100%)
Purchase Infrastructure Assets - Other	(526,831)	(56,712)	(25,500)	31,212	(55%)
Purchase Infrastructure Assets - Footpaths	(20,000)	-	(25,119)	(25,119)	100%
Purchase Infrastructure Assets - Sewerage	-	-	-	-	0%
Purchase Plant and Equipment	(5,074,200)	-	(7,136)	(7,136)	100%
Proceeds from Disposal of Assets	307,000	76,743	-	(76,743)	(100%)
Self-Supporting Loan Principal Income	13,252	-	-	-	0%
	(4,951,869)	260,355	(295,334)	(555,689)	(213%)
Financing Activities					
Repayment of Debentures	(250,520)	(66,930)	(66,930)	-	0%
Proceeds from New Debentures	550,000	-	-	-	0%
Proceeds from New Self-Supporting Loans	-	-	-	-	0%
Payment of Principal Portion of Lease Liabilities	(32,001)	(8,001)	(8,139)	(138)	2%
Transfers to Reserves - Cash Backed Reserves	(539,595)	-	-	-	0%
Transfers from Reserves - Cash Backed Reserves	1,818,497	-	-	-	0%
	1,546,381	(74,931)	(75,069)	(138)	0%
Net Current Assets Year to Date	-	10,167,917	9,725,897	(442,021)	(4%)

This statement is to be read in conjunction with the accompanying notes.



Shire of Gingin Statement of Financial Activity
FOR THE PERIOD 1 JULY 2022 to 30 SEPTEMBER 2022

*Acquisition of Assets & Other Capital Expenditure
By Program*

	Capital Expenditure Actual 22/23	Capital Expenditure Original Budget 22/23
GENERAL PURPOSE FUNDING	-	-
LAW ORDER PUBLIC SAFETY	223,442	4,157,803
EDUCATION & WELFARE	5,129	167,670
HEALTH	16,630	163,309
COMMUNITY AMENITIES	21,391	607,809
RECREATION & CULTURE	33,263	2,011,774
TRANSPORT	336,642	6,300,259
ECONOMIC SERVICES	24,551	80,080
GOVERNANCE	-	31,184
HOUSING	-	558,357
OTHER PROPERTY & SERVICES	21,226	104,335
TOTAL	682,275	14,182,580

By Account Type

	Capital Expenditure Actual 22/23	Capital Expenditure Original Budget 22/23
LOAN LIABILITY - SHIRE	66,930	250,520
RIGHT OF USE ASSETS - LEASE LIABILITY	8,139	32,001
LAND - FREEHOLD	-	-
BUILDINGS - SPECIALISED & NON SPECIALISED	245,064	1,584,228
INFRASTRUCTURE - BRIDGES	-	-
INFRASTRUCTURE - FOOTPATHS AND CYCLEWAYS	25,119	20,000
INFRASTRUCTURE - SEWERAGE	-	-
INFRASTRUCTURE - PARKS & OVALS	-	1,290,146
INFRASTRUCTURE - ROADS	304,387	4,730,059
INFRASTRUCTURE - OTHER	25,500.00	526,831
INFRASTRUCTURE - DRAINAGE	-	135,000
INFRASTRUCTURE - AIRPORTS	-	-
PLANT & EQUIPMENT	7,136.37	5,074,200
ACCUMULATED SURPLUS	-	539,595
TOTAL	682,275	14,182,580

**Shire of Gingin Statement of Financial Activity
FOR THE PERIOD 1 JULY 2022 - 30 SEPTEMBER 2022**

Disposal of Assets

Disposal of Assets	Annual Budget	Actuals
Law, Order & Public Safety		
150502500 - ANIMAL - Proceeds on Disposal of Assets	45,000	0
150507500 - EM - Proceeds on Disposal of Assets	10,000	0
Total Sale of Assets	55,000	0
Health		
150706500 - PREV OTH - Proceeds on Disposal of Assets	10,000	0
150704500 - HEALTH - Proceeds on Disposal of Assets	15,000	0
Total Sale of Assets	25,000	0
Community Amenities		
151006500 PLAN - Proceeds on Disposal of Assets MUN	33,000	0
Total Sale of Assets	33,000	0
Recreation and Culture		
151103500 REC - Proceeds on Disposal of Assets MUN	46,000	0
Total Sale of Assets	46,000	0
Transport		
151203500 PLANT - Proceeds on Disposal of Assets MUN	112,000	0
Total Sale of Assets	112,000	0
Economic Services		
151302500 - TOUR - Proceeds on Disposal of Assets	21,000	0
Total Sale of Assets	21,000	0
Other Property Services		
151402500 ADMIN - Proceeds on Disposal of Assets MUN	15,000	0
Total Sale of Assets	15,000	0
TOTAL SALE OF ASSETS	307,000	0
TOTAL PROFIT ON SALE OF ASSETS	0	0
TOTAL LOSS OF SALE OF ASSETS	0	0
Law, Order & Public Safety		
150502500 - GG073 - Isuzu D-Max Utility	15,000	0
150502500 - GG073 - Isuzu D-Max Utility	15,000	0
150502500 - GG074 - Isuzu D-Max Utility	15,000	0
150507500 - GG09 - Isuzu D-Max Utility	10,000	0
	55,000	0
Health		
150706500 - GG098 - LA CATS Vehicle	10,000	0
150704500 - 3GG - Isuzu MUX 4x4	15,000	0
	25,000	0
Community Amenities		
151006500 4GG - Isuzu M-UX 4x4	18,000	0
151006500 8GG - Isuzu D-Max Utility	15,000	0
	33,000	0
Recreation and Culture		
151103500 GG034 Kubota Mower	7,000	0
151103500 GG041 Kubota Mower	7,000	0
151103500 GG017 Isuzu D-Max Utility	16,000	0
151103500 GG033 Isuzu D-Max Utility	16,000	0
	46,000	0
Transport		
151203500 GG006 - Loader	40,000	0
151203500 GG6017 - Side Tip Semi Trailer	20,000	0
151203500 - Slasher	5,000	0
151203500 GG013 Isuzu D-Max Utility	15,000	0
151203500 GG049 Isuzu D-Max Utility	15,000	0
151203500 GG050 Isuzu D-Max Utility	16,000	0
151203500 GG6015 Variable Message Board Trailer	1,000	0
	112,000	0
Economic Services		
151302500 GG044 Guilderton Caravan Park Utility	16,000	0
151302500 Guilderton Caravan Park Mower	5,000	0
	21,000	0
Other Property and Services		
151402500 6GG - Isuzu M-UX 4x4	15,000	0
	15,000	0

Total Proceeds on Disposal of Assets \$ 307,000.00 \$ -

MINUTES ORDINARY COUNCIL MEETING 18 OCTOBER 2022

APPENDIX 12.1.1

Shire of Gingin Statement of Financial Activity FOR THE PERIOD 1 JULY 2022 - 30 SEPTEMBER 2022

Information on Borrowings

Loan	Loan Term (Yrs)	Start Date	Remaining Term (Yrs)	Opening Balance Altus	New Loan	Principal (Actuals)	Principal (Budget)	Principal Outstanding (Actual)	Principal Outstanding (Budget)	Interest (Actuals)	Interest (Budget)
LN-100 GG Medical Centre	20	30/07/04	2	69,891		16,630	16,630	53,261	53,261	2,275	2,275
LN-111 Wannamal West Road	20	15/02/07	4	396,226		10,523	10,522	385,703	385,704	12,858	12,858
LN-114 Guilderton Country Club (Hall) Extensions	20	20/11/08	6	296,111		-	-	296,111	296,111	-	-
LN-120 Regional Hardcourt Facility	20	21/12/09	7	218,300		-	-	218,300	218,300	-	-
LN-123 Lot 44 Weld St	20	16/10/08	6	135,491		-	-	135,491	135,491	-	-
LN-124A Regional Hardcourt Facility	16	4/12/14	8	211,539		-	-	211,539	211,539	-	-
LN-126 Gingin Aquatic Centre Tiling	10	3/08/16	4	65,583		7,763	7,763	57,820	57,820	1,017	1,017
LN-127 Seabird Seawall Extension	10	27/01/17	4	102,875		10,869	10,869	92,006	92,006	1,291	1,291
LN-128 Lancelin Caravan Park Assets	5	16/02/18	0	21,146		21,146	21,146	-	-	266	266
LN-130 Ledge Point Country Club Coolroom	10	22/11/19	7	17,023		-	-	17,023	17,023	-	-
LN-131 - Upgrade of Financial Systems Platform to Altus Financials	15	20/12/21	14	148,587		-	-	148,587	148,587	-	-
LN-132 - Gingin Outdoor Activity Space	10	20/12/21	9	160,415		-	-	160,415	160,415	-	-
TOTAL				1,843,185	-	66,930	66,930	1,776,255	1,776,256	17,707	17,707

**MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022**

APPENDIX 12.1.1



**Shire of Gingin Statement of Financial Activity
FOR THE PERIOD 1 JULY 2022 - 30 SEPTEMBER 2022**

Reserves Cash-Backed

	Reserve	Original Budget Opening Balance	Opening Balance	Original Budget Interest Earned	Actual Interest Earned	Original Budget Transfers In (+)	Actual Transfers In (+)	Original Budget Transfers-Out (-)	Actual Transfers Out (-)	Original Budget Closing Balance	Actual YTD Closing Balance
1	LSL Annual Sick Leave and Staff Contingency	429,670	429,670	2,912	-	-	-	-	-	432,582	429,670
2	Office Equipment Reserve	-	-	69	-	-	-	-	-	69	-
3	Plant and Equipment Reserve	1,593,152	1,593,152	8,985	-	-	-	987,200	-	614,937	1,593,152
4	Lancelin Lookout Reserve	-	-	-	-	-	-	-	-	-	-
5	Land and Buildings Reserve	916,407	916,407	4,976	-	-	-	590,097	-	331,286	916,407
6	Guilderton Caravan Park Reserve	34,018	34,018	246	-	-	-	-	-	34,264	34,018
7	Shire Recreation Development Reserve	515,566	474,614	518	-	-	-	-	-	516,084	474,614
8	Redfield Park Reserve	31,469	31,469	217	-	-	-	-	-	31,686	31,469
9	Ocean Farm Recreation Reserve	31,160	31,161	215	-	-	-	-	-	31,375	31,161
10	Tip Rationalisation Reserve	1,973,829	1,973,829	7,621	-	20,439	-	55,000	-	1,946,889	1,973,829
11	Lancelin Community Sport and Recreation Reserve	98,640	103,513	425	-	-	-	-	-	99,065	103,513
13	Community Infrastructure	148,884	148,883	15	-	36,000	-	-	-	184,899	148,883
14	Staff Housing Reserve	33,560	33,560	-	-	-	-	-	-	33,560	33,560
15	Future Infrastructure Reserve	567,840	529,306	-	-	-	-	-	-	567,840	529,306
16	Guilderton Country Club Reserve	19,157	27,237	-	-	-	-	-	-	19,157	27,237
17	Coastal Management Reserve - Coastal Inundation	292,391	292,391	-	-	-	-	40,200	-	252,191	292,391
18	Guilderton Foreshore Reserve	121,076	121,076	-	-	69,520	-	-	-	190,596	121,076
19	Unspent Grants Reserve	5,014	5,014	-	-	-	-	-	-	5,014	5,014
21	Seniors Housing Reserve	162,145	162,145	-	-	80,957	-	146,000	-	97,102	162,145
22	Gingin Railway Station Reserve	5,747	5,747	-	-	-	-	-	-	5,747	5,747
23	Subdivisions Reserve	14,672	14,672	-	-	-	-	-	-	14,672	14,672
24	Contributions to Roads Reserve	764,556	764,557	-	-	300,000	-	-	-	1,064,556	764,557
25	Public Open Space	26,050	26,050	-	-	-	-	-	-	26,050	26,050
26	Guilderton Trailer Parking Reserve	26,745	26,744	-	-	6,480	-	-	-	33,225	26,744
		7,811,748	7,745,215	26,199	-	513,396	-	1,818,497	-	6,532,846	7,745,215



Shire of Gingin Statement of Financial Activity
FOR THE PERIOD 1 JULY 2022 to 30 SEPTEMBER 2022

Net Current Assets

	Actual YTD	Balance Forwarded
CURRENT ASSETS:		
Cash - Unrestricted	5,824,820	5,853,103
Cash - Restricted Reserves	7,745,215	7,745,215
Cash - Restricted General	0	0
Rates - Current	8,493,172	550,274
Sundry Debtors	234,760	1,424,052
Self-Supporting Loan Debtors	4207	4,207
Inventories	118,252	48,891
Total Current Assets	22,420,425	15,625,743
LESS: CURRENT LIABILITIES		
Payables	(379,557)	(2,703,289)
Employee Provisions	(930,057)	(930,057)
Contract Liability	(2,965,249)	(1,410,754)
Accrued interest	(19,425)	(19,425)
Right of Use Assets - Lease Liability	(23,863)	(32,002)
Long Term Borrowings (Current)	(183,591)	(250,521)
Bonds & Deposits	(650,819)	(664,309)
Total Current Liabilities	(5,152,560)	(6,010,357)
Total Net Assets	17,267,865	9,615,386
Less: Cash - restricted reserves	(7,745,215)	(7,745,215)
Less: Self Supporting Loan Debtors	(4,207)	(4,207)
Add: Long Term Borrowings (Current)	183,591	250,521
Add: Lease Liability	23,863	32,002
NET CURRENT ASSET POSITION	9,725,897	2,148,487



**Shire of Gingin Statement of Financial Activity
FOR THE PERIOD 1 JULY 2022 - 30 SEPTEMBER 2022**

Rating Information

Rating Information	Rates - Property Count	Rateable Value	General Rate	Minimum Rate	Interim Rate	Other	TOTAL
Grv - Townsites 8.6993	1582	30,278,696	2,634,035				2,634,035
Grv - Other 8.6993	958	17,774,825	1,546,286				1,546,286
Uv - Rural 0.5380	505	319,813,000	1,720,594				1,720,594
Uv - Other 0.5380	3	2,191,000	11,788				11,788
Uv - Intensive 0.8157	143	85,994,000	701,453				701,453
Grv - Townsites @ \$1,166	1045	9,808,395		1,218,470			1,218,470
Grv - Other @ \$1,166	765	4,322,930		891,990			891,990
Uv - Rural @ \$1,350	299	56,218,700		403,650			403,650
Uv - Other @ \$1,350	35	266,028		47,250			47,250
Uv - Intensive @ \$2,300	104	17,648,437		239,200			239,200
Interim Rates					351		351
Interims - Back Rates					78		78
TOTAL	5439	544,316,011	6,614,155	2,800,560	429	0	\$ 9,415,145
						Ex Gratia Rates	0
							\$ 9,415,145



Trust Funds

**Shire of Gingin Statement of Financial Activity
FOR THE PERIOD 1 JULY 2022 - 30 SEPTEMBER 2022**

Trust Type	Opening Balance	Amount Received	Amount Paid	Closing Balance
Public Open Space	11,326	-	-	11,326
TOTAL	11,326	-	-	11,326

12.2 LIST OF PAID ACCOUNTS SEPTEMBER 2022

File	FIN/25
Author	Tania Ladner – Accounts Payable / Administration Support Officer
Reporting Officer	Les Crichton - Executive Manager Corporate and Community Services
Refer	Nil
Appendices	Nil

DISCLOSURES OF INTEREST

Nil

PURPOSE

For Council to note the payments made in September 2022.

BACKGROUND

Council has delegated authority to the Chief Executive Officer (CEO) to exercise the power to make payments from the Municipal Fund (Delegation 1.1.13 Payments from the Municipal or Trust Funds). The CEO is required to present a list to Council of those payments made since the last list was submitted.

COMMENT

Accounts totalling \$2,078,548.12 were paid during the month of September 2022.

A detailed payment schedule has been provided to Councillors and can be made available to the public for viewing at the Shire's Gingin Administration Centre and Lancelin Office upon request. The schedule covers:

- Municipal Fund electronic funds transfers (EFT) \$1,451,638.75
- Municipal Fund cheques \$581.25
- Municipal Fund direct debits \$626,328.12

Total Municipal Expenditure \$2,078,548.12

Total Trust Fund Expenditure \$0

Total Expenditure \$2,078,548.12

All invoices have been verified, and all payments have been duly authorised in accordance with Council's procedures.

STATUTORY/LOCAL LAW IMPLICATIONS

Local Government Act 1995

s.6.4 – Financial Report

Local Government (Financial Management) Regulations 1996

Reg. 13 – Payments from municipal fund or trust by CEO

Shire of Gingin Delegation Register – Delegation 1.1.13 Payments from the Municipal or Trust Funds

POLICY IMPLICATIONS

Nil

BUDGET IMPLICATIONS

Resource requirements are in accordance with existing budgetary allocations.

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	4. Excellence & Accountability - Deliver Quality Leadership and Business Expertise
Strategic Objective	4.4 Strategic & Sustainable Financial Planning - Undertake long-term resource planning and allocation in accordance with the Integrated Planning and Reporting Framework

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson

SECONDED: Councillor Sorensen

That Council note all payments made by the Chief Executive Officer under Delegation 1.1.13 for September 2022 totalling \$2,078,548.12 as detailed in the schedule provided to Councillors comprising:

- | | |
|---------------------------------------------------|----------------|
| • Municipal Fund electronic funds transfers (EFT) | \$1,451,638.75 |
| • Municipal Fund cheques | \$581.25 |
| • Municipal Fund direct debits | \$626,328.12 |
| • Trust Fund | \$0 |

CARRIED UNANIMOUSLY

7 / 0

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*

13 REPORTS - REGULATORY AND DEVELOPMENT SERVICES

13.1 APPLICATION FOR DEVELOPMENT APPROVAL - PROPOSED RECEPTION CENTRE AT LOT 24 (145) BARAMBA ROAD, KARAKIN

File	BLD/7323
Applicant	Developed Property Pty Ltd
Location	Lot 24 (145) Baramba Road, Karakin
Owner	JCR Management
Zoning	General Rural
WAPC No	NA
Author	James Bayliss – Coordinator Statutory Planning
Reporting Officer	Bob Kelly - Executive Manager Regulatory and Development Services
Refer	NA
Appendices	<ol style="list-style-type: none"> 1. Aerial Map - Lot 24 (145) Baramba Road, Karakin [13.1.1 - 1 page] 2. Location Map - Lot 24 (145) Baramba Road, Karakin [13.1.2 - 1 page] 3. Applicant's Proposal [13.1.3 - 20 pages] 4. 1 Schedule of Submissions and Recommended Responses [13.1.4 - 10 pages] 5. 2 Schedule of Submissions and Recommended Responses [13.1.5 - 4 pages] 6. Bushfire Management Plan [13.1.6 - 47 pages] 7. Bushfire Consultants response to DFES referral advice v 1.0 [13.1.7 - 9 pages]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider an Application for Development Approval for a proposed Reception Centre on Lot 24 (145) Baramba Road, Karakin.

BACKGROUND

The subject property is bound by Baramba Road to the north, Moore River to the south and general rural (GR) land to the east and west. The site has a total area of 15 hectares and currently contains a single house and two outbuildings, one of which is intended to be used as part of the reception centre.

The applicant seeks approval to develop a 'Reception Centre' which consists of hiring out the property for events (i.e. weddings or formal occasions etc).

It should be noted that since this application was lodged, it has undergone two rounds of public consultation due to community concerns raised and flaws with the original proposal. In response to those concerns, the applicant submitted a revised application which was subsequently referred out for public comment.

The information provided as part of this report relates to the revised application and comprises of the following:

- The proposal seeks 'temporary' approval to operate as a reception centre for a period of two years;
- The venue will be hired out to any event organisers that are interested in using the site to host weddings or formal occasions;
- The use will cater for a maximum of 100 guests;
- The use is proposed to operate a maximum of 1 day per week. The venue will be available to be booked on either Friday, Saturday or Sunday, however there will be a minimum 5 day gap between each booking so that the venue will only be used a maximum 1 day within a week. The operating hours for respective days are outlined in the table below:

Day	Time
Friday	12pm – 12am
Saturday	9am – 12am
Sunday	9am – 3pm

- The venue will make provision for both live and recorded music to be played during the reception. Music will cease being played as specified in the table below:

Type of Music	Time
Live music	4:00pm – 10:00pm
Recorded music	4:00pm to 11:00pm

- The landowner intends to rent out the venue itself, with guests/event organisers being responsible for providing their own services in relation to catering, car parking and toilets (i.e. portaloos);
- Catering will likely take the form of a food truck or the like;
- Waste will be collected on site within rubbish bin bags that will be appropriately stored so as to not result in any odour or amenity issues to adjoining properties. The landowner will dispose of the accumulated waste at the Shire's landfill sites in either Gingin, Seabird or Lancelin.

The development is proposed to primarily operate within the existing farm shed, which contains an upper floor balcony and skillion roof design. The shed will however be required to be retrofitted to comply with AS3959 standards to BAL-29 standard, which would be formalised through a building permit.

The officer notes that the application does not seek to provide accommodation for up to 100 guests, as this would not be permitted. However it raises the question of where 100 guests will ultimately reside, as the locality is somewhat isolated.

Aerial imagery and a location plan are provided as **Appendix 13.1.1** and **Appendix 13.1.2** respectively.

The applicant's proposal, including an 'Operation Management Plan', is provided as **Appendix 13.1.3**.

COMMENT

Stakeholder Consultation

The application was advertised to the surrounding landowners for a period of 14 days in accordance with clause 64 of the *Planning and Development (Local Planning Schemes) Regulations 2015*. This included providing letters to surrounding landowners and those that abut Baramba Road, a development sign being placed on the verge of the intersection between Baramba Road/Cowalla Road and a notification being placed on the Shire's website.

As outlined above, this application underwent two rounds of consultation. On that basis the officer has provided two Schedules of Submissions for Council's information, noting that the second schedule relates to the revised application.

The first round of consultation resulted in eight ratepayers' submissions comprising six objections and two in support of the development.

The second round of consultation resulted in two objections being received.

The following table provides an overview of concerns raised during the consultation process and the officer's comments in response.

Issue Raised	Officer's comments
Amenity Impacts <ul style="list-style-type: none"> - Zoning - Noise - Traffic/road related 	<p>Noted.</p> <ol style="list-style-type: none"> 1. The officer is mindful that the land is zoned 'General Rural' and that submitters suggest that the nature and intensity of the development is not aligned with the tranquil lifestyle currently enjoyed within the locality. The officer generally concurs with the comments raised. 2. It is generally accepted that land uses that will cause noise impacts on adjoining properties that exceed the maximum noise permitted by the <i>Environmental Protection (Noise) Regulations 1997</i> are not acceptable in the context of development control. This is a difficult application to consider, given that the potential repetition (weekly) usage that may occur, notwithstanding adherence to the Noise Regulations, may result in an adverse impact on the amenity of neighbouring owners by way of noise. <p>Adherence to the Noise Regulations does not automatically equate to a suitability in a planning land use sense. The officer does have concerns that the development will create adverse noise/amenity impacts on the locality.</p>
Road <ul style="list-style-type: none"> - Dust - Safety - Standard 	<ol style="list-style-type: none"> 3. The applicant has provided parking for up to 65 vehicles. Baramba Road is unsealed. The officer does not anticipate that vehicle movements will be so significant that the current road configuration is inappropriate or unsafe.

The application was also advertised to the Department of Fire and Emergency Services (DFES) for a period of 42 days in accordance with clause 66 of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

DFES outlined concerns in relation to the Bushfire Management Plan (BMP) lodged, with those comments subsequently being responded to by the Applicant's bushfire consultant.

The first schedule of submissions and officer's responses are provided as **Appendix 13.1.4**.

The first schedule of submissions and officer's responses is provided as **Appendix 13.1.5**.

A copy of the Bushfire Management Plan (BMP) is provided as **Appendix 13.1.6**.

The Applicant's Bushfire Consultant's response to the comments from DFES is provided at **Appendix 13.1.7.**

PLANNING FRAMEWORK

Local Planning Scheme No. 9 (LPS 9) Planning Assessment

The subject lot is zoned General Rural (GR). The objectives of the zone are to:

- a) *manage land use changes so that the specific local rural character of the zone is maintained or enhanced;*
- b) *encourage and protect broad acre agricultural activities such as grazing and more intensive agricultural activities such as horticulture as primary uses, with other rural pursuits and rural industries as secondary uses in circumstances where they demonstrate compatibility with the primary use;*
- c) *maintain and enhance the environmental qualities of the landscape, vegetation, soils and water bodies, to protect sensitive areas especially the natural valley and watercourse systems from damage; and*
- d) *provide for the operation and development of existing, future and potential rural land uses by limiting the introduction of sensitive land uses in the General Rural zone.*

Objective a) above is of particular relevance and will be addressed in the report below.

A 'Reception Centre' is defined as follows:

means premises used for functions on formal or ceremonial occasions but not for unhosted use for general entertainment purposes;

It is also relevant to outline that the 'Model Provisions' of the *Planning and Development (Local Planning Schemes) Regulations 2015* define a 'Reception Centre' as follows:

means premises used for hosted functions on formal or ceremonial occasions;

It should be noted that the definitions expressly state 'hosted' functions. This is a component of the development that has been revised, with a commitment from the landowner to be present onsite during events.

A reception centre is an 'A' use in the General Rural zone which means that the use is not permitted unless the local government has exercised its discretion by granting development approval after giving special notice in accordance with clause 64 of the Deemed Provisions. As outlined above, appropriate stakeholder consultation has been undertaken.

The assessment has been formulated around the objectives of the GR zone and clause 67 (matters to be considered) of the Deemed Provisions.

Planning and Development (Local Planning Schemes) Regulations 2015

In accordance with Schedule 2, Part 9, Clause 67 of the Deemed Provisions, the local government is to have due regard to a range of matters to the extent that, in the opinion of the local government, those matters are relevant to the development the subject of the application. In this instance, the following matters are considered to be relevant to the proposal.

- (a) the aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;*
- (m) the compatibility of the development with its setting, including –*
 - (i) the compatibility of the development with the desired future character of its setting; and*
- (n) the amenity of the locality including the following –*
 - (ii) the character of the locality;*
 - (iii) social impacts of the development;*

The officer is of the view that it is also pertinent to outline objective a) of the GR zone as it is complementary to the above conditions:

- (a) manage land uses so that the specific local rural character of the zone is maintained or enhanced.*

Officer comment

The relevant objective requires the ‘specific local rural character’ to be maintained or enhanced.

The existing locality is defined from the intersection of Baramba Road and Cowalla Road to the east, extending to the termination of Baramba Road to the west. Land on the southern side extending to Nabaroo Road also consists of rural small holdings, with land to the north transitioning to larger broadacre farm landholdings.

The majority of surrounding properties contain a dwelling with no other associated use or intensification of the land.

Rural small holdings typically offer a rural lifestyle for residents. In this instance, as expressed by submitters, the idyllic rural lifestyle experienced within the locality was a specific drawcard for occupants, in some instances to specifically enjoy retirement.

The officer forms the view that the 'specific local rural character' comprises predominantly of rural lifestyle properties with limited commercial uses, and the amenity comprises of tranquil rural properties with a residential use that have limited exposure to traffic and intensified commercial land uses.

Given the character of the locality mentioned, the officer notes that a commercial/tourism development of this nature challenges the existing character/amenity of the area with the potential to create adverse impacts that detract and depart from the specific local rural character of the locality.

The officer therefore forms the view that the proposed development does not 'maintain' or 'enhance' the 'specific local rural character' and is therefore inconsistent with the objectives of LPS 9.

The compatibility of the development within its setting is aligned with the officer's comments above in relation to the specific local rural character of the area. The desired future character is largely the same as it is currently, being rural smallholdings offering a rural lifestyle adjacent to the Moore River. It is not anticipated that the area will become further intensified or accommodate tourism related uses. The officer is not satisfied that the development is compatible within its setting.

Amenity is defined under the Deemed Provisions as:

All those factors which combine to form the character of an area and include the present and likely future amenity.

The existing character and amenity of the locality are described above and give further weight to the officer's concerns in relation to inconsistency with the objectives of the zone, as the current amenity and character enjoyed by residents in the locality will likely be adversely impacted due to this development.

The development is proposed to operate until midnight on a Friday or Saturday. The development may therefore have social impacts arising from increased vehicle and pedestrian activity by those departing the property at midnight, notwithstanding that music may be turned off at 10pm or 11pm. For this to occur frequently (i.e. weekly) is viewed as being inconsistent with the character of the locality and will likely create adverse social impacts for existing residents.

Noise

Noise impacts can also be described as amenity impacts.

The regulatory regime relating to noise control and management in Western Australia is established by the *Environmental Protection Act 1986* (EP Act) and, in particular, the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations).

The Noise Regulations set out the maximum permissible noise levels for land uses based on levels, frequency and matters such as impulsiveness and tonality. It is generally accepted that exceeding the maximum noise levels permitted by the Noise Regulations is not acceptable in the context of development control. There are also some examples where adherence to the Noise Regulations does not adequately ameliorate noise amenity impacts in a land use planning sense.

The proximity of the proposed development to surrounding properties, in the context of the rural lifestyle character of the area, requires the Council as decision-maker to have a high level of confidence that the development will not create adverse impacts. The officer does not hold such confidence in this instance.

The submission does contain a 'Noise Impact' section. However, this does not substantiate that the Noise Regulations can be adhered to, and even in the event that this is the case, it may still be that the development is inappropriate within this setting.

Deemed Provisions

- (q) *the suitability of the land for the development taking into account the possible risk of flooding, tidal inundation, subsidence, landslip, bush fire, soil erosion, land degradation or any other risk;*
- (r) *the suitability of the land for the development taking into account the possible risk to human health or safety;*

Officer comment

This consideration goes hand in hand with 'State Planning Policy 3.7 – Planning in Bushfire Prone Areas' (SPP 3.7) and the Department of Planning, Lands and Heritage's 'Position Statement: Tourism Land Uses in Bushfire Prone Area'.

SPP 3.7 provides a foundation for land use planning to address bushfire risk management, with the position statement providing further guidance in instances such as this. Tourism land uses are considered vulnerable land uses under SPP 3.7 and the preparation of a Bushfire Management Plan (BMP) and an Emergency Evacuation Plan (EEP) should be undertaken in accordance with the Guidelines for a vulnerable land use.

The applicant has submitted a BMP which is provided as Appendix 13.1.4.

It should be noted that the BMP outlines that a 'shelter onsite' is required due to inadequacies of the local road network to fulfil provisions of the Guidelines and DPLH position statement.

The BMP outlines:

The subject lot is serviced by Baramba Road, which offers a single direction of travel to the east for 1.37km before two-way access is available. Two-way access is reached at Cowalla Road, with continuous routes to the north and south to low threat areas. These routes abut extreme bushfire risk vegetation in the Moore River National Park and Namming Nature Reserve (Class A Forest) for a significant portion of their length. The road network does not meet the requirements of the Bushfire Protection Criteria outlined in the Guidelines or the Position Statement: Tourism land uses in bushfire prone areas WAPC November 2019.

The DPLH Position Statement requires a provision of two access routes where:

- *The proposal is within a residential built-out area; or*
- *The access route abuts moderate or low threat vegetation (i.e. bushfire hazard level as per the Guidelines), and*
- *Where it is demonstrated that secondary access (including an emergency access way) cannot be achieved, and*
- *The access route is not travelling towards vegetation with an extreme bushfire hazard level.*

The single access route of Baramba Road to Cowalla Road abuts low and moderate bushfire hazard level vegetation. However, the route does travel toward extreme bushfire hazard level vegetation (Class A Forest) within the Moore River National Park and Namming Nature Reserve. It could also be argued that the locality does not comprise of a 'residential built out area'.

As such, 'Clause 5.3 - Contingency Measures' of the position statement states:

This position statement recognises that for different landscape risk scenarios, a range of strategies including sheltering on-site, sheltering off-site (evacuation) and closure of facilities will need to be developed. The declaration of a total fire ban by the emergency services is an appropriate trigger for the activation of the EEP arrangements.

This is relevant as the BMP requires a 'shelter on-site' and potential closure of the facility during a total fire ban.

It should be noted that the existing 'shed' onsite, proposed to be used as part of the 'Reception Centre' is intended to be the shelter on-site location. This would require retrofitting the structure to a BAL-29 standard. It should be noted that an on-site shelter should be provided with sufficient space for the maximum number of employees and visitors that could be on-site at any given time. This has not been demonstrated.

The BMP also outlines that:

The business manager of the facility will be required to liaise with the Shire requesting approval to operate during the Prohibited Burning Period, designated within the Shire of Gingin Fire Break Order, annually or as agreed.

The reasoning for this restriction is as follows:

- Prohibited Burning Periods vary annually based on the weather conditions of that year, as rainfall and surface/near-surface moisture is the primary cause of lessening fire risk and intensity. Late or early rains may modify the Prohibited Burning Period. This increases confidence in the effectiveness of the restriction against changing climate conditions.*
- Total Fire Bans or Fire Danger Ratings are not known sufficiently in advance for bookings. The Prohibited Burning Period is set annually within the Shire of Gingin Fire Break Order and can thus be integrated into the annual booking period.*
- Where the facility is closed to events during the Prohibited Burning Period, it can be considered that the route does not travel towards or abut extreme bushfire hazard vegetation.*
- The extreme BHL rating of the Class A Forest to the east is due to the likelihood and intensity of bushfires which could occur in the vegetation, but does not consider lessened fire weather conditions. Considering the vegetation only outside the Prohibited Burning Period, it is reasonable to consider the Class A Forest as having a BHL of moderate rather than extreme. Therefore, the route would not be travelling toward/through vegetation with an extreme BHL to comply with A2.1 of the Tourism Position Statement.*

This suggests that specific authorisation must be provided from the Shire to the event manager to operate during the Prohibited Burning Period. This scenario may result in weddings/events being cancelled with minimal notice, notwithstanding a burden being placed on the Shire's Community Emergency Services Manager/Chief Bush Fire Officer. The officer is unsure what potential liability issues this may create for the Shire.

On balance of the information, the officer has formed the view that the development does not satisfy this clause q and r of the Deemed Provisions, SPP 3.7 or the DPLH Position Statement - Tourism Land Uses in Bushfire Prone Area.

(s) *the adequacy of –*

- (i) the proposed means of access to and egress from the site; and*
- (ii) arrangements for the loading, unloading, manoeuvring and parking of vehicles;*

Officer comment

As noted above, the site is serviced via Baramba Road. The onsite vehicle maneuvering and car parking area caters for up to 65 vehicles. The site has ample room to cater for the number of vehicles.

The officer does not anticipate that vehicle movements will be so significant that the current road configuration is inappropriate or unsafe. This notwithstanding, it may be inappropriate for up to 65 vehicles to depart the property at midnight on route to their accommodation, which is assumed to be in the nearest towns of Lancelin and Ledge Point.

(y) any submissions received on the application;

Officer comment

The community submissions received during the advertising process outline concerns which generally have planning merit and have been afforded a degree of weight.

The officer is mindful that the amenity of the submitters, and their reasons for residing in the locality, are an important consideration and inform the officer's understanding of what the existing amenity and character of the locality entails.

(zb) any other planning consideration the local government considers appropriate

Officer comment

The proposal outlines an obligation for the event manager to arrange portable toilets. It is not clear what mechanism is available to the Shire to ensure that an adequate provision of toilets proportionate to the number of guests is provided for each event. It is also unclear how the landowner intends to ensure that event organisers fulfil their obligations to provide such a service, as any condition that may be imposed to this effect may result in the landowner being held responsible for the failings of the event organiser.

Should Council's support be forthcoming, permanent toilets should be considered as a prerequisite to issuing an approval.

Local Planning Policy 3.1 – Tourist Development in Rural Areas (LPP 3.1)

LPP 3.1 applies to the General Rural zone. The objective of the policy is to 'provide guidelines for the development of tourist facilities in General Rural areas to strengthen the economic base while enhancing the rural character of the area.'

The provisions of the Policy are listed below with officer comments.

3.1 Tourist developments in rural areas will be considered in either one of two categories:

- (a) high impact proposals involving significant capital investment or having the potential to conflict with surrounding land uses; and*
- (b) low impact proposals not involving significant capital investment and unlikely to conflict with adjoining land uses.*

Officer comment

The development could arguably fall under either category, as the officer has formed the view that there is potential for land use conflict. This notwithstanding, should the development have been proposed on a large GR property that would have no impact on anyone, it is likely to be classified as 'low impact'.

Given the above assessment, it may not be critical to establish in this instance.

General Comments

The officer is mindful that the applicant/landowner has attempted to appease the community/Shire concerns by submitting revised information and has gone to considerable expense to do so. It is inevitably the case that costs are incurred by landowners when preparing applications to the point of demonstrating compliance with the planning framework in a manner which can be properly understood and considered by decision makers. The fact that a landowner incurs such a cost does not mean that approval will be forthcoming, and the submitted documents were necessary in order for the feasibility of the proposal to be considered against the planning framework.

While the officer is of the view to not support the proposal, the use class is capable of approval in the GR zone. The GR zone consists of land of varying lot sizes, and perhaps larger lot sizes are more appropriate for a use such as a reception centre, as larger lots are capable of containing potential impacts within the confines of the property.

The following points do not favour support for the application:

- The 'specific local rural character' of the locality comprises rural smallholdings offering a rural lifestyle for residents. As expressed by submitters, the idyllic rural lifestyle offered within the locality was a specific drawcard for occupants. This development is likely to adversely impact that specific local rural character by way of noise and increased vehicle and pedestrian activity during inappropriate times, on a repetitive basis.
- The future amenity is unlikely to transition towards tourism/commerce-based uses and this potential is not outlined in the Local Planning Strategy. The officer therefore is of the view that the proposed development does not maintain or enhance the specific local rural character of the locality and is therefore inconsistent with the objectives of LPS 9 and various considerations under the Deemed Provisions.

- It is assumed that events will involve the supply of liquor, however the proposal is largely silent on the type of liquor license that will be applied for, which will need to be consistent with any approval issued by the Shire of Gingin. The application is insufficient in this regard.
- The proposal does not provide the Shire with a high level of confidence that noise is able to be adequately ameliorated to avoid adverse amenity impacts on surrounding properties.
- The obligation on the Shire of Gingin to provide consent to operate during the Prohibited Burning Period is viewed as being unacceptable, particularly given that the Shire's decision may result in cancellation of a wedding/event on short notice.
- The proposal does not provide the Shire with a high level of confidence that the provisions of the BMP are able to be translated to a suitable Bushfire Emergency Evacuation Plan (BEEP) or that the 'shelter onsite' facility is able to accommodate the number of persons likely to be on site at any one time.
- The proposal does not provide the Shire with a high level of confidence that events will be serviced by an adequate number of portable toilets and would be burdensome to the Shire should each event need to be reviewed by the Shire's Environmental Health Services.
- The submissions received during the advertising process generally oppose development on grounds that have planning merit. The officer is mindful that the amenity of the submitters and their reasons for residing in the locality are an important consideration.

The following point does favour support for the application:

- The use is capable of approval within the GR zone. The proposal has been revised to be 'temporary' and to apply for a limited period of 2 years. This 2-year period would provide the landowner/operators with an opportunity to demonstrate to residents and the Shire that adverse impacts will not arise, and if they did, an extension to the temporary approval would not be forthcoming at the time of renewal. Council may view this as a reasonable compromise and a basis to issue conditional approval.

Summary

In view of the above assessment, the officer recommends refusal of the development.

STATUTORY/LOCAL LAW IMPLICATIONS

Planning and Development (Local Planning Schemes) Regulations 2015

Local Planning Scheme No. 9

POLICY IMPLICATIONS

State Planning Policy 3.7 – Bushfire Prone Areas

Position Statement: Tourism Land Uses in Bushfire Prone Area

Local Planning Policy 3.1 – Tourist Development in Rural Areas

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	1. Attractions & Economy - Actively Pursue Tourism and Economic Development
Strategic Objective	1.6 Attractions & Events - Host/support iconic community events and attractions that will entice residents and visitors throughout the year

VOTING REQUIREMENTS - SIMPLE MAJORITY

OFFICER RECOMMENDATION

MOVED: Councillor Kestel

SECONDED: Councillor Johnson

That Council refuse Development Approval for a Reception Centre on Lot 24 (145) Baramba Road, Karakin for the following reasons:

1. The development is inconsistent with objective (a) of Clause 3.2.7 of Local Planning Scheme No. 9. The development is inconsistent with the specific local rural character of the locality.
2. The development is inconsistent with Clause 67 (2) (m) and (m) (i) of the Deemed Provisions, as the development is not viewed as being compatible within its setting.

3. The development is inconsistent with Clause 67 (2) (n) (i) and (ii) of the Deemed Provisions, as the development is viewed as having adverse amenity, character and social impacts on the locality.
4. The development is inconsistent with Clause 67 (2) (c) of the Deemed Provisions, as the development does not demonstrate compliance with State Planning Policy 3.7 – Planning in Bushfire Prone Areas or Position Statement: Tourism Land Uses in Bushfire Prone Area.
5. The development is inconsistent with Clause 67 (2) (q) and (r) of the Deemed Provisions, as the development does not demonstrate that the land is suitable to mitigate bushfire risk which subsequently may create a possible risk to human safety.

Advice Notes

Note 1: If you are aggrieved by the conditions of this approval, you have the right to request that the State Administrative Tribunal (SAT) review the decision, under Part 14 of the *Planning and Development Act 2005*.

PROCEDURAL MOTION

MOVED: Councillor Kestel **SECONDED:** Councillor Sorensen

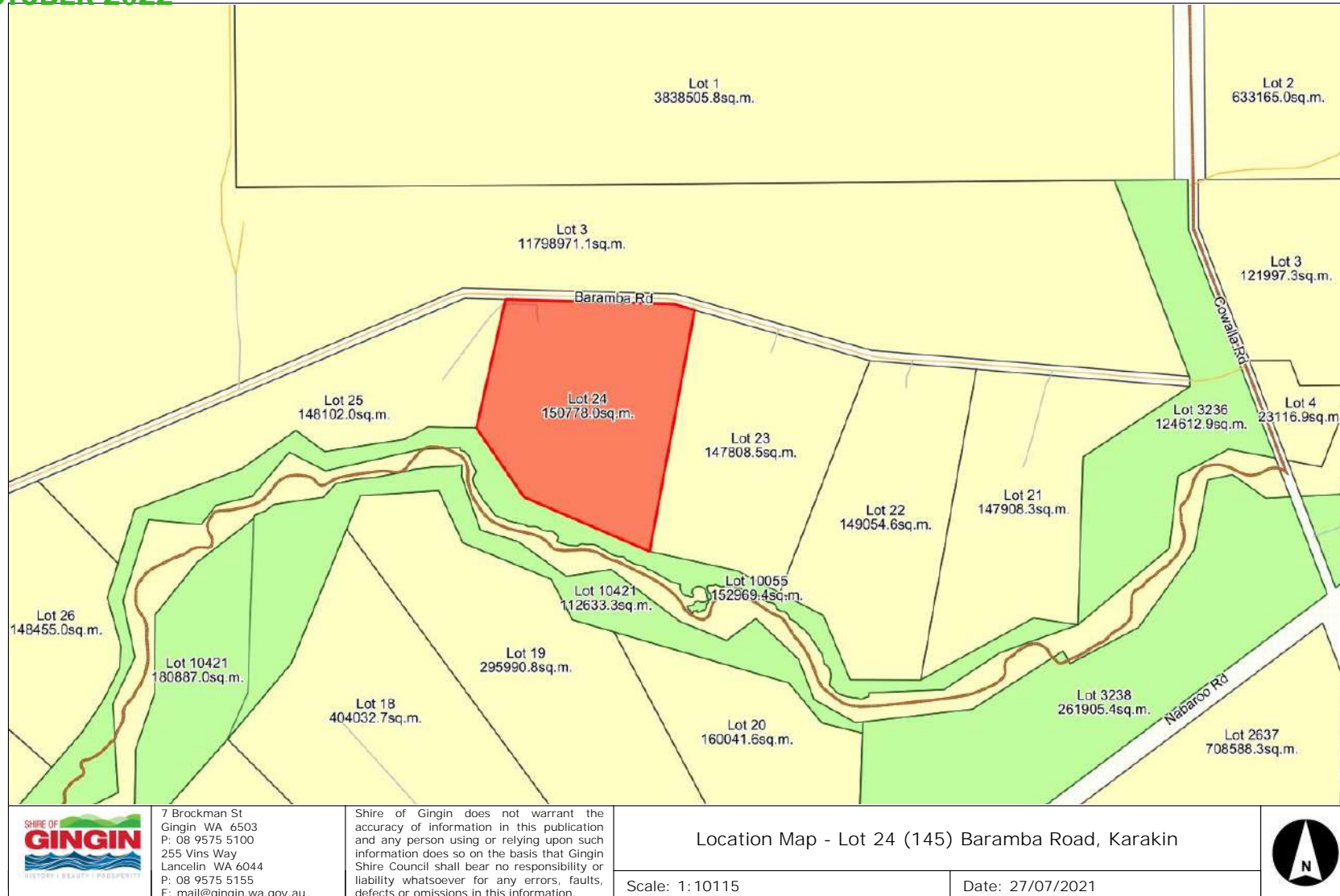
That the matter be deferred until the Ordinary Council Meeting on 15 November 2022 to allow for preparation of a revised development application.

CARRIED UNANIMOUSLY
7 / 0

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*





DEVELOPE^D

The Art And Science Of People And Property

Planning Report

145 Baramba Road, Karakin



Prepared for
Shire of Gingin on behalf of the landowner of 145 Baramba Road
Date: 10/02/2022



**MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022**

APPENDIX 13.1.3

DEVELOPE^D

The Art And Science Of People And Property

Developed Property Pty Ltd

ABN: 62 624 180 310

Office: 315 Rokeby Road
Subiaco WA 6008

Postal: PO Box 662
Subiaco WA 6008

planning@developedproperty.com.au

www.developedproperty.com.au

Our Reference: DP21751

Address: 145 Baramba Road, Karakin

Enquiries: Ryan Djanegara

Date: 18/08/2022

Dear Sir / Madam,

Developed Property Pty Ltd acts on behalf of the proponents of 145 Baramba Road, Karakin, in preparing the planning report for your consideration.

Should you have any questions or queries regarding the proposed report please do not hesitate to contact me on planning@developedproperty.com.au or (08) 6119 9175

Yours sincerely,



**Ryan Djanegara
Planning Consultant**



Table of Contents

1.0 Introduction	2
2.0 Proposal	3
3.0 Background Information & Environmental Considerations	4
3.1 Heritage	4
3.2 Land Contamination	4
3.3 Bushfire	5
3.3 Noise Impact	5
4.0 Planning Framework.....	6
4.1 Shire of Gingin Town Planning Scheme No.9	6
4.1.1 Zoning	6
4.1.2 Parking	8
4.2 Local Planning Policy 1.4 - Foreshore Reserves Along Water Course	8
4.3 Local Planning Policy 3.1 - Tourist Development in Rural Areas	8
4.4 State Planning Policy 2.5 – Rural Planning	9
4.5 State Planning Policy 3.7 – Planning in Bushfire Prone Areas.....	9
5.0 Conclusion	10

Copyright Statement 2022© Developed Property Pty Ltd

All rights reserved. Other than for the purposes of and subject to the conditions prescribed under the Copyright Act 1968 (Cth), no part of this report may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic or otherwise, without the prior written permission of Developed Property Pty Ltd.

No express or implied warranties are made by Developed Property Pty Ltd regarding the information and analysis contained in this report. In particular, but without limiting the preceding exclusion, Developed Property Pty Ltd will not verify, and will not assume responsibility for, the accuracy and completeness of information provided to us. This report has been prepared with particular attention to our Client's instructions and the relevant features of the subject site. Developed Property Pty Ltd accepts no liability whatsoever for:

- i. a third party's use of, or reliance upon, this report;
- ii. use of, or reliance upon, this report in relation to any land other than the subject site; or
- iii. the Client's implementation, or application, of the strategies recommended in this report.



1.0 Introduction

This report has been prepared by Developed Property Pty Ltd in support of a development application to use 145 Baramba Road (the subject site) as a temporary, hosted 'Reception Centre'. The intent of this application is to enable the landowner to hire out their property to host wedding receptions. The proposal does not include a works component and relates solely to the use of the site. We are seeking a temporary approval of 24 months.

This report provides the details of the site, the proposed development, and operational details as well as a detailed planning assessment which addresses all the relevant planning framework, including statutory and policy requirements, and the planning merit and management considerations.

As part of the application and planning report, an Operations Management Plan (OMP) has been prepared outlining the operational details of the proposal. The OMP will be implemented by the event organisers and strictly enforced by the landowner who will be present onsite at the time the venue is booked. A copy of the OMP will be provided to each event organiser upon successful booking of the venue.

2.0 Proposal

The landowners of the subject site are seeking development approval to change the land use to allow for a temporary Reception Centre. The venue will be hired out to any event organisers that are interested in using this site to host weddings and the reception.

As outlined in the OMP, the use will operate a maximum of once a week and allow for a maximum of 100 guests. This will ensure the site maintains its Rural context and character.

Figure 1 shows a typical event site plan that could be adopted by event organisers.

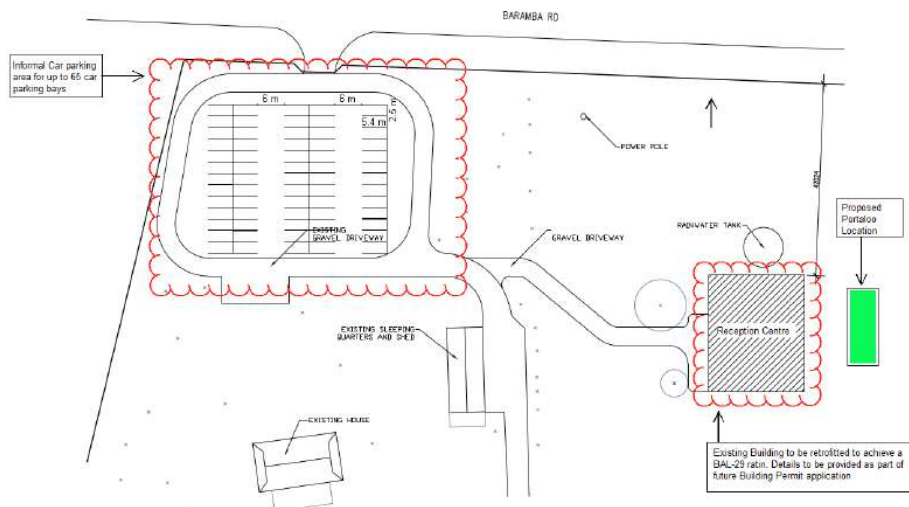


Figure 1- Proposed Site Plan

3.0 Background Information & Environmental Considerations

Lot 24 (No. 145) Baramba Road, Karakin is located within the Shire of Gingin and is bound by Baramba Road to the north, Moore River to the south and Rural land to the east and west. The site has a total area of 150,797m² and is largely vacant with an existing single house and outbuilding on the site. The site is primarily underdeveloped and consists of vegetation scattered throughout the site.



Figure 2- Aerial Photograph of the Site

3.1 Heritage

A desktop search of the Department of Planning Lands and Heritage's Aboriginal heritage Inquiry System indicates that there are no places of Aboriginal heritage on or within the site.

3.2 Land Contamination

A desktop assessment of the Department of Water and Environmental Regulations Contaminated Sites database indicated the site is not identified as contaminated.

3.3 Bushfire

A desktop search of the Department of Fire and Emergency Services' Map of Bushfire Prone Areas indicated the site is within bushfire prone land.

A Bushfire Management Plan (BMP) dated February 2022 and DFES response dated July 2022 has been prepared by Bushfire Prone Planning. The BMP outlines a number of solutions to manage the bushfire risk following extensive consultation with the Planning Department at the Shire of Gingin. A copy of the document has been submitted and forms part of this application.



Figure 3 (left)- Map of Bushfire Prone Areas on Site (Department of Fire and Emergency Services)

3.4 Noise Impact

The venue and associated additional services (such as catering and portaloos) will be limited to a designated area on the property. This will provide a setback of more than 200m away to the nearest dwelling. There is scattered vegetation between the venue area and the neighbouring dwellings, which provides an additional acoustic buffer between the neighbouring properties. While this would assist in the amelioration of noise emissions, there will be additional management strategies implemented (as part of the OMP) to further assist in reducing any potential noise impacts to any adjoining dwelling. These measures will include:

- limiting hosted events to a maximum of once a week with a minimum 5 day gap between each event,
- restricting the playing of live music to 10.00pm and restricting the playing of recorded music to 11.00pm, and
- the booking ends at 12.00am.

Based on these noise management strategies and the infrequency of the use, there will be minimal noise impacts to the adjoining residential properties.

4.0 Planning Framework

An assessment has been undertaken against the relevant local planning policies and any relevant state planning instruments.

4.1 Shire of Gingin Town Planning Scheme No.9

The development proposal is best defined as a 'Reception – Centre' by the Shire of Gingin's Town Planning Scheme No.9 (TPS9). This use is defined as:

'Reception Centre – Means premises used for functions on formal or ceremonial occasions but not for unhosted use for general entertainment purposes."

This use is listed as an 'A' use by the Shire's Local Planning Scheme, which means that the use is not permitted unless the local government has exercised its discretion by granting development approval after giving special notice in accordance with clause 64 of the deemed provisions.

It is for this reason that a development application has been prepared and lodged for the Shire's consideration.

4.1.1 Zoning

The subject site is zoned 'General Rural' (GR20) by TPS9. As with the adjoining land to the north, east and west. The land abutting the site to the south is reserved as 'Parks and Recreation'.



Figure 4 - Shire of Gingin's Town Planning Scheme No.9 - Zoning

Clause 3.2.7 of the Shire's local planning scheme sets out the overall zone objectives for a 'General Rural' zone with the below Table providing an assessment against these provisions.

Table 2- Zone Objectives Assessment

General Rural Zone Objective Assessment:	
<i>a) Manage land use changes so that the specific rural character of the zone is maintained and enhanced;</i>	The proposed application is not seeking approval for a works component and will therefore not increase the number of structures that are presently on the site. The required services for the site to operate as a 'Reception – Centre' will be temporary in nature and will therefore ensure the rural character for the site and locality is maintained.
<i>b) Encourage and protect broad acre agricultural activities such as grazing and more intensive agricultural activities such as horticulture as primary uses, with other rural pursuits and rural industries as secondary uses in circumstances where they demonstrate compatibility with the primary use.</i>	The subject site is not presently operating for agricultural purposes with the proposed use being incidental to the existing Single House. Agricultural uses would likely not be supported from an environmental point of view due to the impacts this may have to Moore River that is located immediately south of the subject site.
<i>c) Maintain and enhance the environmental qualities of the landscape, vegetation, soils and water bodies, to protect sensitive areas especially the natural valley and watercourse systems from damage</i>	The proposed application is not seeking approval for any works component with there being no construction proposed. The operation of use will occur primarily to the north of the site to ensure there is minimal impact to Moore River and there being no requirement to remove any vegetation located within the site.
<i>d) Provide for the operation and development of exiting, future and potential rural land uses by limiting the introduction of sensitive land uses in the General Rural Zone</i>	The proposed change of use will not set a precedence for sensitive land uses within the General Rural Zone due to the temporary nature of the use and the infrequency of the use.

4.1.2 Parking

Clause 4.7.2.8 of the Shire's Local Planning Scheme sets out minimum requirements for car parking based on the land use proposed. This clause does not refer to a 'Reception-Centre' use with there being no guiding Local Planning Policy for the provision of car parking.

Despite this, Figure 1 has provided a designated area that will provide for guest carparking wholly within the site. This car parking space will be informal with no works being proposed. Access to this parking space will be provided off the existing crossover from Baramba Road.

4.2 Local Planning Policy 1.4 - Foreshore Reserves Along Water Course

The Shire of Gingin's Local Planning Policy 1.4 provides guidance on the management and protection of foreshores and water courses within the Shires jurisdiction. Clause 3.1 sets out the requirement that development located on a lot abutting a water course shall be setback 50m from the top of the bank of the water course.

This application is not seeking approval for any permanent structures with the anticipated temporary structures being in the northern section of the site. This will ensure that the proposed use is setback from Moore River in accordance with Clause 3.1 of LPP 1.4.

4.3 Local Planning Policy 3.1 - Tourist Development in Rural Areas

This Local Planning Policy is applicable to all General Rural zoned land. The overall objective of this policy is to provide guidelines for the development of tourist facilities in this zone that will strengthen the economic base while enhancing the rural character of the area.

The policy identifies tourism developments as either high impact proposals or low impact with these being defined as:

High Impact Proposals – Proposal involving significant capital investment or having the potential to conflict with surrounding land uses.

Low Impact Proposals – Proposals not involving significant capital investment and unlikely to conflict with adjoining land uses.

As the proposed use will not result in any capital investment for the construction of a development, the proposal is deemed to satisfy the definition of a low impact proposal. The proposed cost of the development would rely solely on hiring costs of services such as catering, portaloos etc.

The accommodation of event patrons will also have a direct effect on the Shire's tourism industry with patron accommodation occurring in the surrounding townsites of Lancelin and Ledge Point.

Based on this, the proposal would be consistent with the policy objective of LPP 3.1 as the use would strengthen the economic base of these localities.

4.4 State Planning Policy 2.5 – Rural Planning

As the subject site is currently zoned 'General Rural', any application to develop or use the site would be subject to the policy objectives and measures set out in State Planning Policy 2.5 – Rural Planning (SPP 2.5). This policy has been prepared to protect and preserve WA's rural land assets due to the importance of their economic, natural resource, food production, environmental and landscape values.

The policy sets out provisions to ensure that agricultural land is protected and used for the purposes of agriculture instead of allowing ad hoc development and subdivision to diminish the supply of rural land.

The Shires Local Planning Strategy designates the subject site as a Rural small holding with these sites having greater flexibility in subdivision control and use permissibility due to the relatively smaller lot area. This ensures other rural sites are preserved for the intended rural land uses. Based on this the proposed change of use would be consistent with SPP 2.5 and the Shires overall strategic plan.

4.5 State Planning Policy 3.7 – Planning in Bushfire Prone Areas

SPP 3.7 sets out provisions and guidelines for planning in bushfire prone areas with the overall objectives of the policy being to avoid any increase in the threat of bushfire to people, property, and infrastructure. And reduce the vulnerability of bushfire through the identification and consideration of bushfire risks in the planning and development process.

As highlighted above, a BMP has been prepared by Bushfire Prone Planning to address the requirements of SPP 3.7 and its supporting guidelines following extensive consultation with the Planning Department at the Shire of Gingin. As per these discussions, a Bushfire Emergency Evacuation Plan will be provided as a condition of the Development Approval.

5.0 Conclusion

Based on the above assessment, the proposal is consistent with the Shire's local planning framework and is capable of approval. The proposed change in use is consistent with the zone objectives of a General Rural Zone and will not detract from the existing rural context and character.

This report in association with the operations strategy demonstrates that all the servicing and amenity considerations relevant to this application can be addressed and any impacts associated with the proposed use will not have any adverse impacts on the site or its surroundings.

Based on this it is respectfully requested that the proposal is considered for approval. Should any additional information be required please do not hesitate to contact myself.



Ryan Djanegara
Planning Consultant

DEVELOPE^D

The Art And Science Of People And Property

Operation Management Plan

145 Baramba Road, Karakin



Prepared for
Shire of Gingin on behalf of the landowner of 145 Baramba Road, Karakin
Date: 10/02/2022

Property Advisory | Town Planning | Project Management | Surveying | Strata Advisory | www.developedproperty.com.au

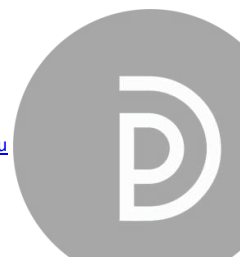


Table of Contents

1.0 Introduction	2
2.0 Nature of the Reception Centre	3
2.1 Operating Hours	3
2.2 Music and Noise.....	3
3.0 Services:	4
3.1 Catering:.....	4
3.2 Car Parking	4
3.3 Effluent Disposal:.....	5
4.0 Waste Management	6
5.0 Complaints Procedure	6
6.0 Conclusion	6
APPENDIX A – COMPLAINTS REGISTER.....	7

Copyright Statement 2022© Developed Property Pty Ltd

All rights reserved. Other than for the purposes of and subject to the conditions prescribed under the Copyright Act 1968 (Cth), no part of this report may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic or otherwise, without the prior written permission of Developed Property Pty Ltd.

No express or implied warranties are made by Developed Property Pty Ltd regarding the information and analysis contained in this report. In particular, but without limiting the preceding exclusion, Developed Property Pty Ltd will not verify, and will not assume responsibility for, the accuracy and completeness of information provided to us. This report has been prepared with particular attention to our Client's instructions and the relevant features of the subject site. Developed Property Pty Ltd accepts no liability whatsoever for:

- i. a third party's use of, or reliance upon, this report;
- ii. use of, or reliance upon, this report in relation to any land other than the subject site; or
- iii. the Client's implementation, or application, of the strategies recommended in this report.



1.0 Introduction

The Operations Management Plan (OMP) has been prepared in support of a temporary change of use application for a 'Reception-Centre' at 145 Baramba Road, Karakin. The OMP provide an outline on how the venue will be managed by the event organisers and enforced by the landowner to ensure there are no impacts on the adjoining neighbours and the rural amenity of the locality is protected.

All events will be hosted, with the landowner present to ensure that the venue is used in accordance with the OMP. A site map will be provided that shows the required location for services such as car parking, catering, and effluent disposal system.

A copy of this OMP and site map will be provided to all guests accordingly.

2.0 Nature of the Reception Centre

The landowner is seeking approval for a 'Reception Centre' use so that the subject site can be rented out as a wedding venue. These events are intended to have a maximum of 100 guests at any one time with the venue intending to be rented out once a week and will be managed as outlined below.

2.1 Operating Hours

The intended operates a maximum of 1 day per week. The venue will be available to be booked on either Friday, Saturday or Sunday, however there will be a minimum 5 day gap between each booking so that the venue will only be used a maximum 1 day during within that week. The operating hours for those days are outlined in the table below:

Day	Time
Friday	12pm till 12am
Saturday	9am till 12am
Sunday	9am – 3pm

Event setup will occur between 9am – 5pm the day before the event is to be used. to minimise nuisance to any adjoining neighbours. Event organisers will be encouraged to clean up prior to 12pm close, however there will be allowances for additional clean up to happen the following day.

2.2 Music and Noise

The venue will make provision for both live and recorded music to be played during the reception. To protect the amenity of the rural location and mitigate noise concerns, it is proposed that music will cease being played as specified in the table below:

Type of music played	Time
Live music	4.00pm to 10.00pm
Recorded music	4.00pm to 11.00pm

Guests and patrons will be notified of the time restrictions prior to any bookings and will be reminded by the landowner 15 minutes before the designated time. It is expected that as the music stops playing, guests will begin to leave, and the venue cleaned prior to closing at the time as specified.

3.0 Services:

The landowner intends to rent out the venue itself with guests providing their own services in relation to catering, car parking and waste services. This will ensure that the site maintains its rural context with no proposed permanent construction occurring as a result of the use operation.

3.1 Catering:

Catering will not be provided as part of the venue hire and will be arranged by the venue patrons. This is likely to take the form of a temporary structure such as a food truck service however this will vary from booking to booking.

Catering services will be required to access the site prior to the event start time. Such services will occur during standard delivery operation times (9am to 5pm subject to booking times and event start times). There will be no permanent commercial kitchen facilities provided onsite.

3.2 Car Parking

The designated car parking area has been shown on the proposed site plan with a breakdown of access to the site provided below:

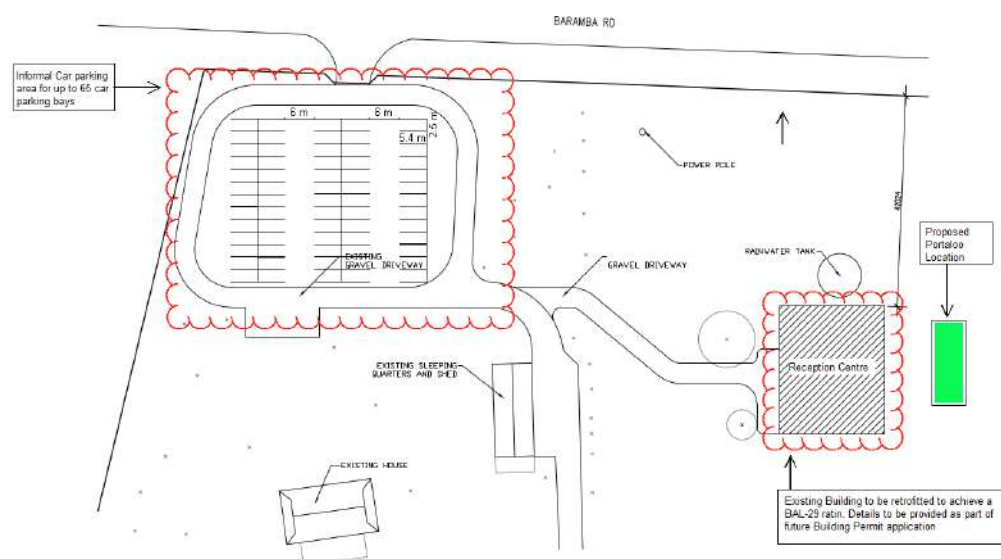


Figure 2: Proposed Car Parking Area (Highlighted Red)

The proposed parking area will take the form of a levelled grassed area that will utilise the existing gravel driveway and crossover to Baramba Rd. As a result, there will not be a requirement to develop additional vehicular access points.

3.3 Effluent Disposal:

The site presently has an existing septic system servicing the single house on site. The landowner is not proposing to install any new septic systems for this change of use application as the event organisers will be responsible for sourcing non-permanent portaloos like Figures 3 and 4 (below). These portaloos will be installed and removed by a trained professional who will dispose of the waste in line with the required provisions and health standards.

The portaloos will not be located within 30m of the southern lot boundary to ensure there is an appropriate separation of the proposed use and the existing watercourse. This is to meet the provisions set out in the Shires LPS No.9 Schedule 10. Due to the temporary nature of the portaloos and the proposed setback of the toilets from Moore River, there will be no impact to the surrounding environment.

The number of portaloos that will be provided by the event organisers will be in accordance with the *Guidelines on the Application of the Health (Public Buildings) Regulations* with a breakdown of these requirements provided below:

Total Attendance	Male	Female	Universal	Hand Basins	Total Requirement
1-50	Toilet – 1 Urinal -1	Toilet – 1	1 Unisex	1 Basin	3 Toilets 1 Urinal 1 Basin
50-100	Toilet – 1 Urinal – 1	Toilet – 2	1 Unisex	1 Basin	4 Toilets 1 Urinal 1 Basin



**Figure 3: Example Portable
Effluent Disposal**



**Figure 4: Example Universal
Access Portaloo**

4.0 Waste Management

Waste will be collected and stored on site within rubbish bin bags that will be appropriately stored to not result in any odour or amenity issues to adjoining properties. The landowner will dispose of the accumulated waste at the Shires landfill sites at either Gingin, Seabird and Lancelin. The three mentioned facilities are capable of adequately servicing the proposed use as they are within proximity to the site and operate seven days a week between 8:30am to 5:30pm.

Site Name	Location	Open Times	Open Days
Gingin Landfill Site	Cockram Road, Gingin	8:30am – 5:30pm	Thursday to Monday
Seabird Landfill Site	Seabird Road, Seabird	8:30am – 5:30pm	Saturday to Wednesday
Lancelin Landfill Site	Lancelin Road, Lancelin	8:30am – 5:30pm	Thursday to Monday

Waste will be transported from 145 Baramba Road to the landfill site via private vehicle. The landowner will utilise the Shire's containers for change scheme for any eligible containers.

5.0 Complaints Procedure

The Event holders will be responsible to ensure that all guests behave in accordance with the requirements of the OMP and Code of Conduct. Notwithstanding this, however, should there be any issues that arise (such as live or recorded music played beyond the approved hours), the adjoining neighbours will be able to contact the landowner who will respond immediately.

All complaints will be recorded in the complaints register (see Appendix A), which will be available to the Shire upon request.

Upon approval of the application the Landowner will correspond with all immediate neighbours providing relevant contact details, including after-hours contacts.

6.0 Conclusion

The measures as contained within this OMP will be implemented by the landowner, and strictly enforced. This will ensure that the land use for the "Reception – Centre" will not cause any amenity impacts to the adjoining neighbours and protect the rural amenity of the locality.

**MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022**

APPENDIX A – COMPLAINTS REGISTER

APPENDIX 13.1.3

DEVELOPED

The Art And Science Of People And Property

DATE	TIME	WHO MADE THE COMPLAINT	NATURE OF COMPLAINT	HOW THE MATTER WAS RESOLVED



SCHEDULE OF SUBMISSIONS AND RECOMMENDED RESPONSES (1)

DEVELOPMENT APPLICATION: PROPOSED RECEPTION CENTRE ON LOT 24 (145) BARAMBA ROAD, KARAKIN

No.	Submitter	Submission details	Recommended response
1	Ratepayer	The submitter supports the proposal. No comment	Noted.
2.	Ratepayer	The submitter supports the proposal and provides the following general comment: <i>"I think that this is a fantastic idea, I wish the business owners the best of luck."</i>	Noted.
3.	Ratepayer	The submitter does not support the proposal and provides the following comment: <i>"Noise. Loss of rural lifestyle. Increased chance of damage and theft. We live out in this remote location for the peace and tranquil surroundings of what nature can provide. Please don't break this bond by bringing the city to our doorstep."</i>	Noted. Refer to Council Report for officer comments.
4.	Ratepayer	The submitter does not support the proposal and provides the following comment: <i>"We bought our rural property for a peaceful retirement not to be surrounded by commercial or business activities and strongly oppose this entity. This is not what I envisaged my retirement to be on our rural property. If I wanted to live next to this type of entity I would have bought a property on Hay Street, Subiaco."</i>	Noted. Refer to Council Report for officer comments.
5.	Ratepayer	The submitter does not support the proposal and provides the following general comment: <i>"We bought our property 45 years ago as a retirement investment as a rural retreat. Baramba Road is all gravel, there is no control or supervision or current traffic cutting up the road with speed and donuts. Sound travels</i>	Noted. Refer to Council Report for officer comments.

		<p><i>from the Cowla Rd bridge mornings and evenings, this proposal is half that distance.</i></p> <p><i>If this goes ahead and it impacts the price, saleability of our property we reserve the right to recoup these losses from the owners and/or the Shire. The development of a religious based business in our road is totally unacceptable."</i></p>	
6.	Ratepayer	<p>The submitter does not support the proposal and provides the following general comment:</p> <p><i>"I have been frequenting the property next door to the proposed reception centre for the last 36 years. My parents were so upset when they heard their retirement plan could be changes and interrupted. I will be one day the co-owner of that land and in no way do I support having a party next door multiple times per week.</i></p> <p><i>The noise travels out there and I can hear at night noises kilometres away. The fact that they will not disturb us 200m away is absurd.</i></p> <p><i>The parking lot on the fence line is going to devalue the other areas surrounding. The road being used so much will be a cause for concern and I fear the safety of the elderly surrounding neighbours driving on it.</i></p> <p><i>Putting up temporary structures is going to have more chances of catching alight if there is a bushfire. The people coming in/hiring out the venue will come in and out and not respect the land and surroundings.</i></p> <p><i>They will not boost the economy in the area as most things will be cheaper to get from Perth or just drive back to Perth (accommodation).</i></p> <p><i>If this does go ahead, there will be a strong resistance against it from my family and surrounding neighbours. I will be trying to limit the time it can be used and regular police involvement if the noise is disruptive to landowners.</i></p> <p><i>In closing I do NOT agree to this proposal."</i></p>	<p>Noted. Refer to Council Report for officer comments.</p>

7.	Ratepayer	<p>The submitter does not support the proposal and provides the following general comment:</p> <p><i>"INTRODUCTION</i> <i>Thirty-eight years ago we bought our rural property as a peaceful escape from our busy city lives. We have spent those years enjoying the property and the surrounds because of the slow pace and what the land has to offer. When we received the proposal for the Reception Centre at 145 Baramba Road we were gutted and believe that this serenity and way of life will come to a halt. We strongly object to the proposal for the following reasons:</i></p> <p><i>NOISE</i> <i>The noise from the proposed reception centre will be of an unreasonable nature and will have a hugely disruptive impact on us and severely limit our ability to use and enjoy our land. It will affect the area in such a way as to completely transform the current character and essence of the land and how it is presently used by the surrounding owners.</i></p> <p><i>The proposal itself seems to deliberately downplay the noise impact and is often contradictory and misleading with regards to the noise and frequency of events. For example, the Planning Report under 3.3 Noise Impact says that the venue will have 'infrequent use' yet the Operations Strategy under 2.0 Proposed Use states that the venue is 'intending to be rented out once a week depending on interest'. Once a week is not infrequent. The proposal states that music will run from 6pm until midnight on event days. That's six hours of loud music in a rural setting once per week on land that is used by aged people for the peace and tranquillity it offers. Music stops at midnight but the event can continue 'until late' and 'at the discretion of the owner' on public holidays. On top of this, there still needs to be time after the event officially finishes for guests to vacate, traffic and car noises from parking lot and pack down and vacating by organisers. This could easily be run until 1-2 in the morning.</i></p> <p><i>It is misleading and irrelevant for the developers to state (in 3.3 of the Planning Report) that the nearest dwelling is 200m away, as noise impact is measured from the boundary of the neighbouring property as specified in the Environmental Protection (Noise) Regulations 1997. At night, trucks can be heard down-gearing on Cowalla and Orange Springs Road from our property 1.8km away and, from consultation with other property owners, on properties 3km away. Given the nature of the rural landscape and lack</i></p>	<p>Noted. Refer to Council Report for officer comments.</p>
----	-----------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------

		<p><i>of build up in the area, music at a distance of 200m will be unbearably disruptive, especially given the extended nature of it (six hours) and the unreasonableness of the time (during sleep hours). This is not acceptable. Not only is it complete and utter disregard for the adjoining property owners but it also majorly impacts on our rights to usage and enjoyment of our land.</i></p> <p><i>It should also be noted that urban councils, for example the City of Joondalup, consider that more than four parties a year is unreasonable and what is proposed here is 52 parties a year in a rural and quiet area where noise carries much further. A party involves alcohol, loud music, numerous people at a minimum, all of which are inherent in a wedding reception. By this standard, the proposed usage is indisputably unreasonable. In addition, there is the setting up which can take place anywhere from 9am on Thursdays through until Sunday. That's four days out of a week from 9am until 'late' that we are possibly to be enduring disturbance and disruption to our lives and ability to enjoy our land.</i></p> <p>PARKING LOT AND INCREASED TRAFFIC</p> <p><i>The parking lot is placed on the property line and will be an eyesore for us. We firmly object to this and are outraged at the prospect of having it on our property line. The fencing along the property line is not up to the standard to prevent people from trespassing onto our land, which having people consistently entering and leaving the area would dramatically increase. The use of alcohol which is standard at wedding receptions would make this more likely and will greatly increase the risk of anti-social behaviour.</i></p> <p><i>Vehicles, specifically buses as mentioned in the proposal, will cause a great disturbance when they have to pick up 80-100 inebriated passengers late into the night, which will be clearly heard on our property. As there will also be private vehicles of an undisclosed number, this is going to cause degradation to the road along Baramba which has not been prepared for increased traffic, particularly from large vehicles such as buses, catering and other trucks bringing in the food, toilets, structures that are needed every time an event takes place.</i></p> <p>CONFLICT WITH SURROUNDING LAND USE</p> <p><i>The Reception Centre would be a stand-alone venue in the area and does not compliment the lifestyle, agriculture or horticulture of the land. It is not a restaurant additional to land already used for horticultural purposes such as a winery but is a project completely unrelated or interdependent</i></p>	
--	--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

		<p><i>with the land in question, or the other land in the surrounding area, and is primarily a party venue. The number of people ferried in and out, loud music and noise, smoking and drinking is completely against the rural nature and laidback lifestyle of the area as described in the Vision Statement of the Strategic Community Plan.</i></p> <p><i>The surrounding properties on Baramba Road are occupied by people over the age of 50. The area would be considered as an aged population, using the land for retreat style rural life. The addition of the Reception Centre would completely destroy the amenity of the land for the surrounding owners. Weekends are primarily the times when the properties are used for retreat purposes to escape the noise and hustle of urban life. Having large scale parties at this time and late into the night is going to majorly impact on the rights of the surrounding property owners to the enjoyment of their land without unreasonable intrusion, in particular for us as the adjoining land owners.</i></p> <p>FIRE RISK</p> <p><i>The proposal does not appear to have been given the appropriate and adequate foresight, understanding or regard for the seriousness of fire risk in this vulnerable area. I have personally seen a bushfire wipe out my whole property and most of the surrounding neighbours from illegal camping close by. Having temporary structures instead of building permanent structures that meet the high standards imposed by the Gingin Shire for an area that is prone to large scale destructive fires is of great concern. The fact that the land will be hired out primarily to people unfamiliar with the fire protocols and safety for rural areas combined with the lack of supervision and oversight from the owner who will not even be present during the events and the character of the events being party style with alcohol, outside smoking and groups of 80-100 people is opening up the area to an unnecessary fire risk.</i></p> <p>CONCLUSION</p> <p><i>The proposal is completely against the interests of the surrounding property owners and will have a huge negative impact on their right to enjoyment of their property. It is inconsistent with the use of the surrounding land as a peaceful retreat in which the majority of property owners are weekend users of an advanced age who greatly value the solitude and tranquillity of the rural area. The increased and reckless risk of fire is of great concern. The loud and constant noise running late into the evening from events will be of such a nature as to make it impossible</i></p>	
--	--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

		<i>for us to enjoy our land and will result in a complete alteration to the nature of the area as it has been so far. Additionally, should this proposal go ahead, there will be the possibility of legal action in private nuisance and increased workload for the police if having to respond to noise complaints and anti-social behaviour, an outcome which it is irresponsible to expose the surrounding landowners and community to by approval of this plan."</i>	
8.	Ratepayer	<p>The submitter does not support the proposal and provides the following general comment:</p> <p><i>"Baramba Road is currently a gravel road, our concerns are as follows.</i></p> <ul style="list-style-type: none"> <i>a. Under the current proposal, allowing parking for 65 vehicles and no onsite accommodation has the potential of 130+ vehicles per day passing our property.</i> <i>b. Catering is at the discretion of the venue guests/patron; this potentially may include food trucks and/or other catering vehicles once again increasing traffic on the road.</i> <i>c. Portable toilets are required to be provided by event organisers this would mean trucks (heavy vehicles) would also be using the road on a regular basis for delivery and pickups.</i> <i>d. Additional power requirements are not mentioned in the proposal, will the current transformer be sufficient to supply additional power requirement for entertainment, lighting, catering and portable toilets.</i> <p><i>1. Dust</i> <i>Our home has solar panels on the roof which faces north it is also in close proximity to the road. Currently we have issues with the amount of dust being produced by existing traffic reducing the efficiency of panels and requiring them to be cleaned regularly. With the additional traffic, cleaning would need to be carried out more often with additional cost to ourselves.</i></p> <p><i>2. Noise</i> <i>As the venue will be operating until late with no accommodation patrons will be leaving the venue producing traffic noise all throughout the night and early morning.</i></p> <p><i>3. Portable toilets / Catering Facilities</i></p>	<p>Noted. Refer to Council Report for officer comments.</p>

		<p><i>As the current application is for a reception centre that can operate three days a week and public holidays, it would be impractical for hygiene, cleaning and maintenance or all catering and toilet facilities to be of a temporary nature.</i></p> <p><i>Recommendations:</i></p> <ol style="list-style-type: none"> <i>1. Bitumen the road reducing both dust and noise.</i> <i>2. Introduce speed limit along road. This would reduce both issues slightly but only if patrons comply with limit. Difficult to enforce.</i> <i>3. To have permanent toilets and some kitchen facilities located within or near the existing structure. Reducing traffic.</i> <i>4. Combination of both 1, 2 & 3.</i> <p><i>Generally, we support the application and believe it will be good for the area and other local business, our main concern is traffic."</i></p>	
9.	DFES	<p>The submitter does not support the proposal and provides the following general comment:</p> <p><i>"This advice relates only to State Planning Policy 3.7: Planning in Bushfire Prone Areas (SPP 3.7) and the Guidelines for Planning in Bushfire Prone Areas (Guidelines). It is the responsibility of the proponent to ensure the proposal complies with relevant planning policies and building regulations where necessary. This advice does not exempt the applicant/proponent from obtaining approvals that apply to the proposal including planning, building, health or any other approvals required by a relevant authority under written laws</i></p> <p>.</p> <ul style="list-style-type: none"> <i>• DFES acknowledge that the building is currently used as an 'Outbuilding' and that the development application seeks to change the use to 'Reception Centre'.</i> <i>• The decision maker has confirmed this to be intensification of development and the application of SPP 3.7 is triggered.</i> <i>• However, it is critical the BMP and Bushfire Emergency Management Plan (BEEP) address any non-compliance for the existing development.</i> <i>• Further clarification is required within the BMP of the requirements of SPP 3.7 and the supporting Guidelines as outlined in our assessment below."</i> 	Noted.

1. Policy Measure 6.5 a) (i) Preparation of a BAL assessment		
Issue	Assessment	Action
Vegetation classification	<p>Plot 3 – Class B Woodland</p> <p>Vegetation plot 3 cannot be substantiated as Class B Woodland with the limited information and photographic evidence available. The foliage cover appears to exceed 30% and the potential for revegetation has not been considered.</p> <p>The BMP should detail specifically how the Class B Woodland classification was derived as opposed to Class A Forest.</p> <p>If unsubstantiated, the vegetation classification should be revised to consider the vegetation at maturity as per AS3959:2018, or the resultant BAL ratings may be inaccurate.</p> <p>For the reasons above, the Method 2 calculations have not been validated.</p>	Modification to the BMP is required.
Landscape Management Plan	<p>The BMP has identified that a significant amount of vegetation will need to be modified to achieve an APZ compliant with Schedule 1: Standards for Asset Protection Zones contained in the Guidelines.</p> <p>A Landscape Management Plan should be prepared to remove ambiguity for the landowner and to provide a compliance mechanism for the Shire.</p>	Modification to the BMP is required.
Construction to AS3959 Building Standards	<p>DFES acknowledges that the BMP proposes to retrofit the building to comply with AS3959 construction standards to BAL-29.</p> <p>The decision maker should support upgrading the outbuilding to utilise all of the elements of AS3959 which apply to the appropriate Bushfire Attack Level (BAL). This is consistent with Clause 78E(i) Schedule 2 of the <i>Planning and Development (Local Planning Schemes) Regulations 2015</i> that requires the decision-maker to have regard to the bushfire resistant construction requirements of the Building Code of Australia.</p> <p>This advice is further supported by Clause 5.8.3 of the Guidelines which reads as follows:</p> <p><i>The bushfire construction provisions of the Building Code of Australia do not apply to Class 4 to Class 9 buildings. In these instances the applicant has the discretion to utilise any or all of the elements of AS3959 in the construction of the building that they deem appropriate.</i></p> <p>Although BAL construction standards do not guarantee the survival of the occupants or building, DFES does support the improved bushfire resilience provided by AS 3959-2018 construction standards.</p>	Comment only.

2. Policy Measure 6.5 c) Compliance with the Bushfire Protection Criteria		
Element	Assessment	Action
Siting & Design	A5.13 – not demonstrated The BAL ratings cannot be validated for the reasons outlined in the above table.	Modification to the BMP is required.
Vehicular Access	A5.14/P5xiv – not demonstrated Access in two different directions to two different destinations, in accordance with the acceptable solution, is not available until the intersection of Baramba Road and Cowalla Road approximately 2000 metres from the development site. This exceeds the acceptable maximum length of 200 metres for a dead end road. The BMP has stated that no onsite shelter is proposed, however an onsite shelter is required to meet the Acceptable Solution A5.14d where A5.14a, A5.14b and A5.14c cannot be achieved. The development may propose a maximum capacity of 100 guests and staff if compliance with A5.13b, A5.13c & A5.13d can be demonstrated. A5.14f, A5.14g & A5.14h – insufficient information Internal driveways should comply with the requirements of Table 6, Column 4 of the Guidelines. No signage has been proposed to advise access route details and general information in the event of a bushfire.	Modification to the BMP is required. Please demonstrate compliance or provide substantiated evidence of a performance principle-based solution.
3. Policy Measure 6.6.1 Vulnerable land uses		
Issue	Assessment	Action
Bushfire Emergency Evacuation Plan (BEEP)	The referral has not included a 'Bushfire Emergency Evacuation Plan' for the purposes of addressing the policy requirements. Consideration should be given to the Guidelines Section 5.5.2 'Developing a Bushfire Emergency Evacuation Plan'. This contains detail regarding what should be included in a BEEP and will ensure the appropriate content is detailed when finalising the BEEP to the satisfaction of the Shire.	Comment only.
Refuge Building or Refuge Open Space Area	Please note the bushfire shelter building should be designed to withstand bushfire attack in the form of wind, smoke, embers, radiant heat and flame contact. A refuge building needs to have a sufficient separation distance from the predominant bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 10kW/m². A building designated as a bushfire shelter must comply with ABCB Design and Construction of Community Bushfire Refuges (2014). Sheltering in a compliant refuge must be accepted as being a last resort option when it is no longer safe to evacuate to an area not prone to bushfire risk. It should be emphasised that a refuge is not a standalone solution to mitigating risk to life safety.	Comment only.
<i>Recommendation – not supported modifications required</i>		

		<p><i>It is critical the bushfire management measures within the BMP are refined to ensure they are accurate and can be implemented to reduce the vulnerability of the development to bushfire. The proposed development is not supported for the following reasons:</i></p> <p><i>1. The development design has not demonstrated compliance to Element 5: Vulnerable Tourism Land Uses”</i></p>	
--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

SCHEDULE OF SUBMISSIONS AND RECOMMENDED RESPONSES

DEVELOPMENT APPLICATION: PROPOSED RECEPTION CENTRE ON LOT 24 (145) BARAMBA ROAD, KARAKIN

Submitter	Submission details	Recommended response
Ratepayer	<p>The submitter does not support the proposal and provides the following general comment:</p> <p>“INTRODUCTION <i>Thirty-eight years ago we bought our rural property as a peaceful escape from our busy city lives. My husband, children and grandkids have spent those years enjoying the property and the surrounds because of the slow pace and what the land has to offer. When we received the proposal for the Reception Centre at 145 Baramba Road we were gutted and believe that this serenity and way of life will come to a halt. We strongly object to the proposal for the following reasons:</i></p> <p>NOISE <i>The noise from the proposed reception centre will be of an unreasonable nature and will have a hugely disruptive impact on us and severely limit our ability to use and enjoy our land. It will affect the area in such a way as to completely transform the current character and essence of the land and how it is presently used by the surrounding owners.</i></p> <p><i>The proposal itself seems to deliberately downplay the noise impact and is often contradictory and misleading with regards to the noise and frequency of events. For example, the Planning Report under 3.3 Noise Impact says that the venue will have ‘infrequent use’ yet the Operations Strategy under 2.0 Proposed Use states that the venue is ‘intending to be rented out once a week depending on interest’. Once a week is not infrequent. The proposal states that music will run from 6pm until midnight on event days. That’s six hours of loud music in a rural setting once per week on land that is used by aged people for the peace and tranquillity it offers. Music stops at midnight but the event can continue ‘until late’ and ‘at the discretion of the owner’ on public holidays. On top of this, there still needs to be time after the event officially finishes for guests to vacate, traffic and car noises from parking lot and pack down and vacating by organisers. This could easily be run until 1-2 in the morning.</i></p> <p><i>It is misleading and irrelevant for the developers to state (in 3.3 of the Planning Report) that the nearest dwelling is 200m away, as noise impact is</i></p>	<p>Noted. Refer to Council Report for officer comments.</p>

	<p><i>measured from the boundary of the neighbouring property as specified in the Environmental Protection (Noise) Regulations 1997. At night, trucks can be heard down-gearing on Cowalla and Orange Springs Road from our property 1.8km away and, from consultation with other property owners, on properties 3km away. Given the nature of the rural landscape and lack of build up in the area, music at a distance of 200m will be unbearably disruptive, especially given the extended nature of it (six hours) and the unreasonableness of the time (during sleep hours). This is not acceptable. Not only is it complete and utter disregard for the adjoining property owners but it also majorly impacts on our rights to usage and enjoyment of our land.</i></p> <p><i>It should also be noted that urban councils, for example the City of Joondalup, consider that more than four parties a year is unreasonable and what is proposed here is 52 parties a year in a rural and quiet area where noise carries much further. A party involves alcohol, loud music, numerous people at a minimum, all of which are inherent in a wedding reception. By this standard, the proposed usage is indisputably unreasonable. In addition, there is the setting up which can take place anywhere from 9am on Thursdays through until Sunday. That's four days out of a week from 9am until 'late' that we are possibly to be enduring disturbance and disruption to our lives and ability to enjoy our land.</i></p> <p>PARKING LOT AND INCREASED TRAFFIC</p> <p><i>The parking lot is placed on the property line and will be an eyesore for us. We firmly object to this and are outraged at the prospect of having it on our property line. The fencing along the property line is not up to the standard to prevent people from trespassing onto our land, which having people consistently entering and leaving the area would dramatically increase. The use of alcohol which is standard at wedding receptions would make this more likely and will greatly increase the risk of anti-social behaviour.</i></p> <p><i>Vehicles, specifically buses as mentioned in the proposal, will cause a great disturbance when they have to pick up 80-100 inebriated passengers late into the night, which will be clearly heard on our property. As there will also be private vehicles of an undisclosed number, this is going to cause degradation to the road along Baramba which has not been prepared for increased traffic, particularly from large vehicles such as buses, catering and other trucks bringing in the food, toilets, structures that are needed every time an event takes place.</i></p> <p>CONFLICT WITH SURROUNDING LAND USE</p> <p><i>The Reception Centre would be a stand-alone venue in the area and does not compliment the lifestyle, agriculture or horticulture of the land. It is not a</i></p>	
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

	<p><i>restaurant additional to land already used for horticultural purposes such as a winery but is a project completely unrelated or interdependent with the land in question, or the other land in the surrounding area, and is primarily a party venue. The number of people ferried in and out, loud music and noise, smoking and drinking is completely against the rural nature and laidback lifestyle of the area as described in the Vision Statement of the Strategic Community Plan.</i></p> <p><i>The surrounding properties on Baramba Road are occupied by people over the age of 50. The area would be considered as an aged population, using the land for retreat style rural life. The addition of the Reception Centre would completely destroy the amenity of the land for the surrounding owners. Weekends are primarily the times when the properties are used for retreat purposes to escape the noise and hustle of urban life. Having large scale parties at this time and late into the night is going to majorly impact on the rights of the surrounding property owners to the enjoyment of their land without unreasonable intrusion, in particular for us as the adjoining land owners.</i></p> <p><i>FIRE RISK</i></p> <p><i>The proposal does not appear to have been given the appropriate and adequate foresight, understanding or regard for the seriousness of fire risk in this vulnerable area. I have personally seen a bushfire wipe out my whole property and most of the surrounding neighbours from illegal camping close by. Having temporary structures instead of building permanent structures that meet the high standards imposed by the Gingin Shire for an area that is prone to large scale destructive fires is of great concern. The fact that the land will be hired out primarily to people unfamiliar with the fire protocols and safety for rural areas combined with the lack of supervision and oversight from the owner who will not even be present during the events and the character of the events being party style with alcohol, outside smoking and groups of 80-100 people is opening up the area to an unnecessary fire risk.</i></p> <p><i>CONCLUSION</i></p> <p><i>The proposal is completely against the interests of the surrounding property owners and will have a huge negative impact on their right to enjoyment of their property. It is inconsistent with the use of the surrounding land as a peaceful retreat in which the majority of property owners are weekend users of an advanced age who greatly value the solitude and tranquillity of the rural area. The increased and reckless risk of fire is of great concern. The loud and constant noise running late into the evening from events will be of such a nature as to make it impossible for us to enjoy our land and will result in a complete alteration to the nature of the area as it has been so far.</i></p>	
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

**MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022**

APPENDIX 13.1.5

	<i>Additionally, should this proposal go ahead, there will be the possibility of legal action in private nuisance and increased workload for the police if having to respond to noise complaints and anti-social behaviour, an outcome which it is irresponsible to expose the surrounding landowners and community to by approval of this plan."</i>	
Ratepayer	<p>The submitter does not support the proposal and provides the following general comment:</p> <p><i>"As per my conversation with Aaron Cook on Friday 16 September, 2022. We wish to reaffirm our objections to the proposed community centre as already stated in previous correspondence.</i></p> <p><i>The new structure does not say that it will not be used as a religious centre. Each event will be a 3 day event (disruption) day 1 set up, day 2 the event, day 3 clean up. Rubbish stored in rubbish bags will be destroyed overnight by wildlife and won't even reach the tip.</i></p> <p><i>Nothing is stated about people camping or staying overnight in tents or caravans, as happens now.</i></p> <p><i>We are quiet RURAL COMMUNITY, and we want it to stay that way."</i></p>	Noted. Refer to Council Report for officer comments.

Bushfire management plan/Statement addressing the Bushfire Protection Criteria coversheet

Site address:

Site visit: Yes ☒ No ☐

Date of site visit (if applicable): Day Month Year

Report author or reviewer:

WA BPAD accreditation level (please circle):

Not accredited ☐ Level 1 BAL assessor ☐ Level 2 practitioner ☐ Level 3 practitioner ☒

If accredited please provide the following.

BPAD accreditation number: Accreditation expiry: Month Year

Bushfire management plan version number:

Bushfire management plan date: Day Month Year

Client/business name:

	Yes	No
Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the bushfire protection criteria elements)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Is the proposal any of the following (see [SPP 3.7 for definitions](#))?

	Yes	No
Unavoidable development (in BAL-40 or BAL-FZ)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Strategic planning proposal (including rezoning applications)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
High risk land-use	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Vulnerable land-use	<input checked="" type="checkbox"/>	<input type="checkbox"/>

None of the above ☐

Note: Only if one (or more) of the above answers in the tables is yes should the decision maker (e.g. local government or the WAPC) refer the proposal to DFES for comment.

Why has it been given one of the above listed classifications (E.g. Considered vulnerable land use as the development is for accommodation of the elderly, etc.)?

The proposal is to develop the existing shed for use as a wedding venue. This constitutes a Vulnerable Land Use under State Planning Policy 3.7 and a Vulnerable Day Use under the Position Statement: Tourism land uses in bushfire prone areas.

The information provided within this bushfire management plan to the best of my knowledge is true and correct:

Signature of report author
or reviewer



Date



Bushfire Management Plan

Lot 24 (145) Baramba Road, Karakin

Shire of Gingin

Planning Stage:	Development Application (Standard BMP)
------------------------	----------------------------------------

Planning Development Type:	Change or Addition to a Land Use
-----------------------------------	----------------------------------

Bushfire Policy – Specific Development or Use Type:	Vulnerable Land Use (Tourism)
------------------------------------------------------------	-------------------------------

Job Number:	210762
--------------------	--------

Assessment Date:	1 September 2021
-------------------------	------------------

Report Date:	9 February 2022
---------------------	-----------------

BPP Group Pty Ltd t/a Bushfire Prone Planning
ACN: 39 166 551 784 | ABN: 39 166 551 784
Level 1, 159-161 James Street
Guildford WA 6055
PO Box 388
Guildford WA 6935
08 6477 1144 | admin@bushfireprone.com.au



DOCUMENT CONTROL

PREPARATION				
Author:	Mike Scott (BPAD Level 3 - No. 27795)			
Co-Author:	Neil Stoney			
Review/Authorise:	Select.			
VERSION HISTORY				
Version	Version Details	Date		
1.0	Original	20 January 2022		
1.1	Updated	9 February 2022		
BMP (Standard DA-Tourism) Template v8.6				
DISTRIBUTION				
Destination	Version	No. Copies	Hard Copy	Electronic Copy
Person/Business: Paul Turner Email: paul@smswa.com.au	1.0	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Person/Business: Ryan Djanegara / Developed Property Email: planning@developedproperty.com.au	1.0	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Limitation of Liability: The measures contained in this Bushfire Management Plan, are considered to be minimum requirements and they do not guarantee that a building will not be damaged in a bushfire, persons injured, or fatalities occur either on the subject site or off the site while evacuating. This is substantially due to the unpredictable nature and behaviour of fire and fire weather conditions. Additionally, the correct implementation of the required bushfire protection measures will depend upon, among other things, the ongoing actions of the landowners and/or operators over which Bushfire Prone Planning has no control.</p> <p>All surveys, forecasts, projections and recommendations made in this report associated with the proposed development are made in good faith based on information available to Bushfire Prone Planning at the time. All maps included herein are indicative in nature and are not to be used for accurate calculations.</p> <p>Notwithstanding anything contained therein, Bushfire Prone Planning will not, except as the law may require, be liable for any loss or other consequences whether or not due to the negligence of their consultants, their servants or agents, arising out of the services provided by their consultants.</p> <p>Copyright ©2020 BPP Group Pty Ltd: All intellectual property rights, including copyright, in format and proprietary content contained in documents created by Bushfire Prone Planning, remain the property of BPP Group Pty Ltd. Any use made of such format or content without the prior written approval of Bushfire Prone Planning, will constitute an infringement on the rights of the Company which reserves all legal rights and remedies in respect of any such infringement.</p>				



TABLE OF CONTENTS

EXECUTIVE SUMMARY	2
1 PROPOSAL DETAILS	3
1.1 DESCRIPTION AND ASSOCIATED PLANS AND MAPS.....	3
1.2 THE SPECIFIC 'LAND USE' AND THE BUSHFIRE PLANNING REQUIREMENTS.....	6
2 ENVIRONMENTAL CONSIDERATIONS	7
2.1 NATIVE VEGETATION – RESTRICTIONS TO MODIFICATION AND/OR CLEARING	7
2.2 RETAINED VEGETATION / RE-VEGETATION / LANDSCAPE PLANS (INCLUDING POS)	9
3 POTENTIAL BUSHFIRE IMPACT ASSESSMENT	10
3.1 ASSESSMENT INPUT	10
3.1.1 Fire Danger Index (FDI) Applied	10
3.1.2 Vegetation Classification and Effective Slope	10
3.1.3 Vegetation Separation Distance	18
3.2 ASSESSMENT OUTPUT	19
3.2.1 Bushfire Attack Level Results – Table Format	20
3.2.2 Determined Separation Distances Corresponding to 10kW/m ² of Radiant Heat Flux.....	21
4 IDENTIFICATION OF BUSHFIRE HAZARD ISSUES	23
5 ASSESSMENT AGAINST THE ACCEPTABLE SOLUTIONS (POLICY MEASURES) ESTABLISHED BY THE 'TOURISM LAND USE' POSITION STATEMENT	25
5.1 LOCAL GOVERNMENT VARIATIONS TO APPLY	25
5.2 SUMMARY OF ASSESSMENT AGAINST THE ACCEPTABLE SOLUTIONS FOR TOURISM LAND USE	26
5.3 ASSESSMENT DETAIL	27
Element 1 (Tourism Land Use): Siting and Design of Development.....	27
Element 2 (Tourism Land Use): Vehicular Access.....	29
Element 3 (Tourism Land Use): Provision of Water	30
5.4 ADDRESSING NON-COMPLIANCE WITH APPLICABLE ACCEPTABLE SOLUTIONS	31
5.4.1 Comparative Bushfire Performance Assessment – Retained Residual Risk of Acceptable Solution vs Proposal.....	32
5.5 ADDITIONAL BUSHFIRE PROTECTION MEASURES	33
5.5.1 Additional Measures to Improve Bushfire Performance	33
6 RESPONSIBILITIES FOR IMPLEMENTATION AND MANAGEMENT OF THE BUSHFIRE PROTECTION MEASURES	34
6.1 LANDOWNER (DEVELOPER) - PRIOR TO OCCUPANCY	34
6.2 LANDOWNER/OCCUPIER - ONGOING	36
6.3 LOCAL GOVERNMENT - ONGOING	37
APPENDIX 1: TECHNICAL REQUIREMENTS FOR ONSITE VEGETATION MANAGEMENT	38
APPENDIX 2: TECHNICAL REQUIREMENTS FOR VEHICULAR ACCESS	41
APPENDIX 3: TECHNICAL REQUIREMENTS FOR FIREFIGHTING WATER	43
APPENDIX 4: AS 3959:2018 METHOD 2 INPUT/OUTPUT CALCULATION SUMMARIES	44

LIST OF FIGURES

Figure 1.1: Location Map	4
Figure 1.2: Map of Bushfire Prone Areas (DFES)	5
Figure 3.1: Vegetation classification and topography map.....	17
Figure 3.4: Asset Protection Zone map.....	22



EXECUTIVE SUMMARY

The landowner of the subject Lot 24 (145) Baramba Road, Karakin proposes to develop the existing shed for use as a wedding venue. This constitutes a Vulnerable Land Use under State Planning Policy 3.7 (WAPC 2015) and a Vulnerable Day Use under the Position Statement: Tourism land uses in bushfire prone areas (WAPC 2019). This Bushfire Management Plan has been prepared to support the Development Application with the Shire of Gingin.

The subject site is within a rural region hosting significant tracts of bushfire prone vegetation. The vegetation onsite and in the immediate surrounds generally meets Class B Woodland and Class G Grassland classification with some pockets of Class A Forest. The broader region includes the Nammina Nature Reserve, Moore River National Park, and Nabaroo Nature Reserve to the east which hosts Class A Forest.

The subject building is able to achieve a rating of BAL-12.5 through slashing of onsite grasses, with no modification of native vegetation required. The required APZ has been extended to the dimensions calculated to limit radiant heat flux to 10kW/m² to adhere to the Tourism Position Statement requirements for on-site shelter.

The rural area does not provide a reticulated water supply and a static firefighting water supply will be required. As two other residential dwellings are present on the site, a 50,000L firefighting water tank to service the entire lot is practical.

Baramba Road does not provide two access routes until the intersection with Cowalla Road after 1.37km of travel. This exceeds the maximum 200m distance required in Element 3: Vehicular Access of the Bushfire Protection Criteria and is a legacy concern of the pre-existing road network which cannot be rectified.

Section 5.4 addressed the non-compliance of the proposal with the Element. A risk-based solution is proposed, where:

- The required APZ is extended to 10kW/m² separation distance (calculated at 1200 Kelvin);
- The business manager will be required to liaise with the Shire requesting approval to operate during the Prohibited Burning Period annually or as agreed, and;
- The subject building is retrofitted to comply with AS-3959 standards to BAL-29.

This will reduce the likelihood and consequences of a bushfire event impacting the facility during occupancy to what is considered an acceptable level.



1 PROPOSAL DETAILS

1.1 Description and Associated Plans and Maps

Landowner:	Paul Turner
For Submission To:	Shire of Gingin
Purpose of the BMP:	To accompany a planning application
'Development' Site Total Area:	15.08 hectares

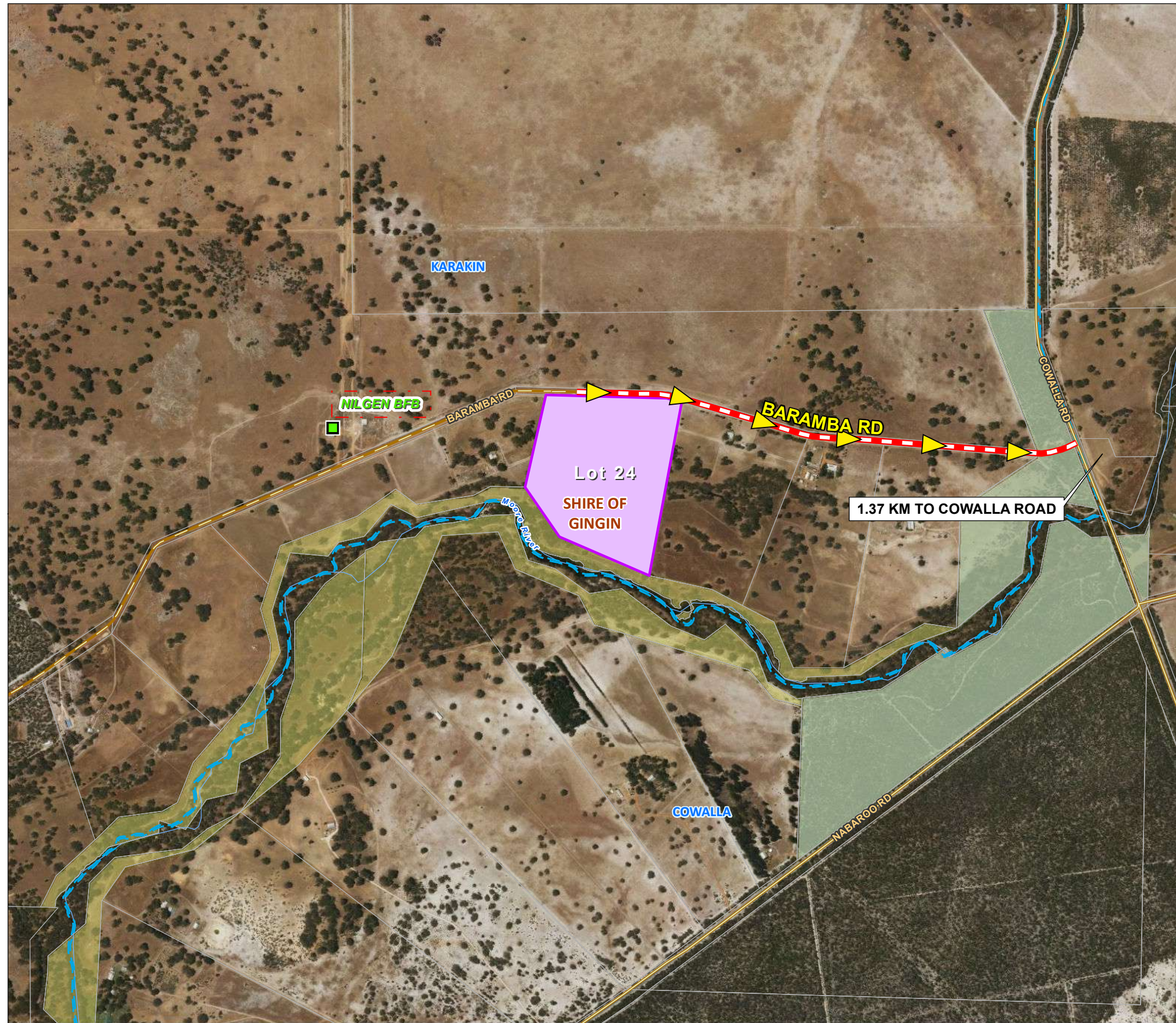
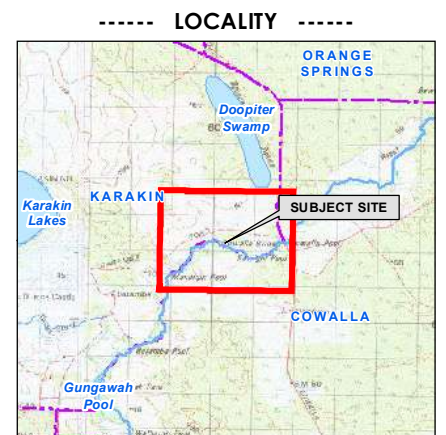


Figure 1.1
Location Plan

Lot 24 on Plan 12641, Area : 15.08 ha
145 Baramba Road
KARAKIN
SHIRE OF GINGIN

- **LEGEND** -----
- Subject Site
 - Other Lots
 - Local Government Authority
 - Locality / Suburb
 - Bush Fire Brigade
 - Evacuation Route
 - Parks and Reserves**
 - Section 5(1)(g) Reserve
 - Reserves

0 100 200 300 400 500
Metres



Aerial Imagery : Landgate/SLIP
Image Date : Dec 2017

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Neil Stoney 10/01/2022
Map updated by: Neil Stoney 10/01/2022
A3 Scale 1:10,000

BUSHFIRE PRONE PLANNING

Disclaimer and Limitation: This map has been prepared for bushfire management planning purposes only. All depicted areas, contours and any dimensions shown are subject to survey. Bushfire Prone Planning does not guarantee that this map is without flaw of any kind and disclaims all liability for any errors, loss or other consequence arising from relying on any information depicted.
Map Document Path / Name: K:\Projects\Jobs 2021\210762 - 145 Baramba Road Karakin (BMP Evac)\210762 - Advice (Stage 1) - Aug 2021\Mapping\MXD\210762_1-2_LOC_145_Baramba_Rd_Karakin.mxd

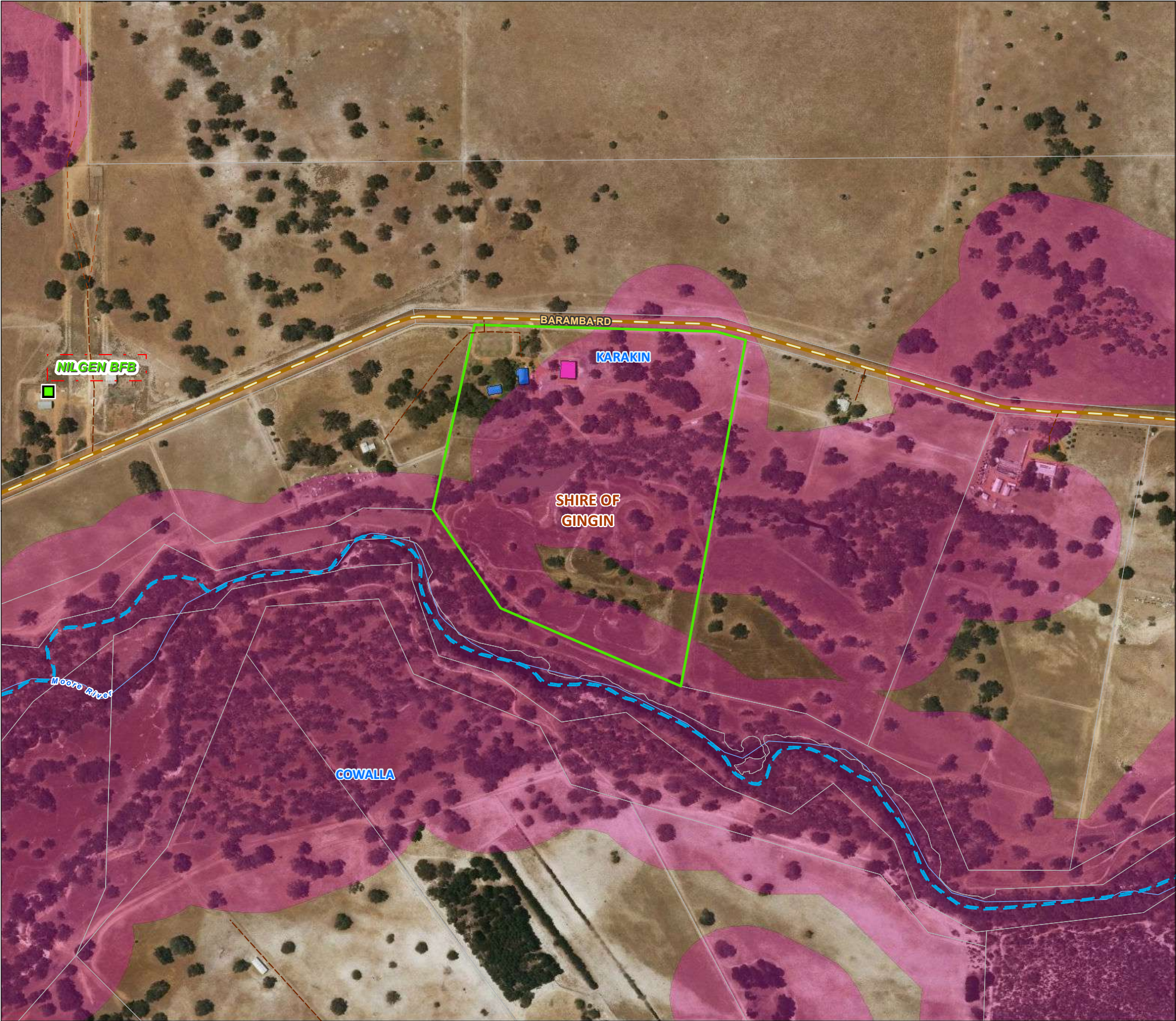
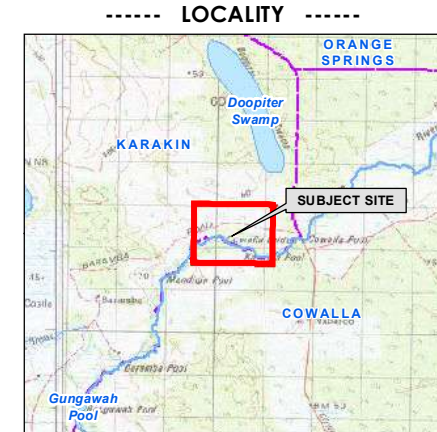


Figure 1.2
Bushfire Prone Area

Lot 24 on Plan 12641, Area : 15.08 ha
145 Baramba Road
KARAKIN
SHIRE OF GINGIN

- **LEGEND** -----
- Subject Site
 - Other Lots
 - Local Government Authority
 - Locality / Suburb
 - Bush Fire Brigade
 - Bushfire Prone Areas (2021)
- Existing Building**
- Dwellings
 - Shed (Proposed Venue)

0 100 200 300
Metres



Aerial Imagery : Landgate/SLIP
Image Date : Dec 2017

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Neil Stoney 10/01/2022
Map updated by: Neil Stoney 10/01/2022
A3 Scale 1:5,000

Disclaimer and Limitation: This map has been prepared for bushfire management planning purposes only. All depicted areas, contours and any dimensions shown are subject to survey. Bushfire Prone Planning does not guarantee that this map is without flaw of any kind and disclaims all liability for any errors, loss or other consequence arising from relying on any information depicted.
Map Document Path / Name: K:\Projects\Jobs 2021\210762 - 145 Baramba Road Karakin (BMP Evac)\210762 - Advice (Stage 1) - Aug 2021\Mapping\MXD\210762_1-3_BPA_145_Baramba_Rd_Karakin.mxd



1.2 The Specific 'Land Use' and the Bushfire Planning Requirements

SPP 3.7, the associated Guidelines and Position Statements, define certain land uses that require additional and/or alternative bushfire related assessment and additional information to be provided. This is necessary to facilitate planning application assessment and for subsequent operational use.

When such a proposal is unable to fully achieve the implementation of all required bushfire protection measures - as established by the 'acceptable solutions' contained in the Guidelines and Position Statements - further assessments and the development of additional protection measures are required.

The land use classification that applies to the proposal is identified in Table 1.2, along with the required additional assessments and information and the form and location in which this is provided.

Table 1.2: The determined land use and assessment/information requirements.

THE PROPOSED LAND USE CLASSIFICATION AND BUSHFIRE PLANNING REQUIREMENTS		
Assessment / Information / Documents Detail		
The proposed land use classification is determined to be:		Vulnerable (Tourism)
Category, type and/or operations of the land use that have determined the classification:		Other Vulnerable Short Term Accommodation or Vulnerable Day Uses
The Policies, Guidelines and Position Statements against which the proposed land use will be assessed, and which guide the information to be provided. ¹	SPP 3.7	<input checked="" type="checkbox"/>
	Guidelines including the BPC	n/a
	Guidelines excluding the BPC	<input checked="" type="checkbox"/>
	Position Statement - BPC Element 1 and 2	<input checked="" type="checkbox"/>
	Position Statement - Tourism	<input checked="" type="checkbox"/>
The documents and the information developed and the format and location in which they are provided.	Bushfire Management Plan (BMP)	<input checked="" type="checkbox"/> Separate Document
	Risk Management Plan (RMP)	n/a
	Risk Assessment and Treatment Plan	n/a
	Vulnerability Assessment - Short Stay Accommodation/Visitation (supporting BEP)	n/a
	Bushfire Emergency Plan (BEP)	<input type="checkbox"/> Separate Document
	BEP Supporting Information	n/a
	Additional bushfire protection measures	<input checked="" type="checkbox"/> In BMP s5.5
	Owner/operator additional responsibilities associated with the land use.	<input checked="" type="checkbox"/> In BMP s6
Note ¹ : State Planning Policy 3.7 Planning in Bushfire Prone Areas; Guidelines for Planning in Bushfire Prone Areas WAPC 2017 v1.3; Bushfire Protection Criteria (BPC) established in the Guidelines; Position Statement: Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design WAPC November 2019; Position Statement: Tourism land uses in bushfire prone areas WAPC November 2019.		



2 ENVIRONMENTAL CONSIDERATIONS

2.1 Native Vegetation – Restrictions to Modification and/or Clearing

Many bushfire prone areas also have high biodiversity values. SPP 3.7 policy objective 5.4 recognises the need to consider bushfire risk management measures alongside environmental, biodiversity and conservation values (Guidelines s2.3).

There is a requirement to identify any need for onsite modification and/or clearing of native vegetation and whether this may trigger potential environmental impact/referral requirements under State and Federal environmental legislation. Confirmation that any proposed native vegetation modification and/or clearing is acceptable, should be received from the relevant agencies by the proponent and provided to the bushfire consultant for inclusion in the Bushfire Management Plan if it will influence the required bushfire planning assessments and outcomes. The following table details any potential environmental restrictions of which the author of this report is aware.

Table 2.2: Native vegetation and potential environmental considerations and restrictions.

NATIVE VEGETATION MODIFICATION / CLEARING - POTENTIAL ENVIRONMENTAL RESTRICTIONS IDENTIFIED				
Environmental Considerations / Features	Potential Mapping Data Source (SLIP / Local Planning)	Relevant to Proposed Development	Data Applied	Action Required
Onsite clearing of native vegetation is required.		No	Relevant Database Reviewed by Bushfire Consultant	None
Environmental impact/referral requirements under State and Federal environmental legislation may be triggered.		No		
National Park / Nature Reserve	DBCA-011	No-Confirmed by Bushfire Consultant	Relevant Database Reviewed by Bushfire Consultant	None
Conservation Covenant	DPIRD-023	No-Confirmed by Bushfire Consultant	Relevant Database Reviewed by Bushfire Consultant	None
Bush Forever Site	DPLH-019	No-Confirmed by Bushfire Consultant	Relevant Database Reviewed by Bushfire Consultant	None
RAMSAR Wetland	DBCA-010	No-Confirmed by Bushfire Consultant	Relevant Database Reviewed by Bushfire Consultant	None
Geomorphic and Other Wetland	DBCA-011-019, 040, 043, 044	Yes-Confirmed by Bushfire Consultant	Relevant Database Reviewed by Bushfire Consultant	None
Threatened and Priority Ecological Communities (TECs or PECs)	DBCA-038	Unlikely	Data Not Readily Available to Bushfire Consultant	None
Threatened and Priority Flora including Declared Rare Flora (DRFs)	DBCA-036	Unlikely	Data Not Readily Available to Bushfire Consultant	None



Land Identified as significant through a Local Biodiversity Strategy	Shire of Gingin District Map	Not Known	Data Not Readily Available to Bushfire Consultant	None
<p>Statement of how the identified environmental feature(s) is dealt with in this Bushfire Management Plan (and the location of relevant information):</p> <p>A section of the subject lot is designated as a Geomorphic Wetland (Artificial Channel), however no modification of vegetation is proposed within this area.</p> <p>Slashing of grasses only will be required to achieve/maintain the stated BAL.</p>				



Development Design Considerations

Establishing development in bushfire prone areas can adversely affect the retention of native vegetation through clearing associated with the creation of lots and/or asset protection zones. Where loss of vegetation is not acceptable or causes conflict with landscape or environmental objectives, it will be necessary to consider available design options to minimise the removal of native vegetation.

Table 2.3: Development design.

MINIMISE THE REMOVAL OF NATIVE VEGETATION	
Design Option	Assessment / Action
Reduction of lot yield	N/A
Cluster development	N/A
Construct building to a standard corresponding to a higher BAL as per BCA (AS 3959:2018 and/or NASH Standard)	N/A
Modify the development location	N/A
No new structures are proposed. The proposal relates to an existing structure on the subject lot.	
IMPACT ON ADJOINING LAND	
Is this planning proposal able to implement the required bushfire protection measures within the boundaries of the land being developed so as not to impact on the bushfire and environmental management of neighbouring reserves, properties or conservation covenants?	Yes

2.2 Retained Vegetation / Re-vegetation / Landscape Plans (including POS)

Riparian zones, wetland/foreshore buffers, road verges and public open space may have plans to re-vegetate or retain vegetation as part of the proposed development. Vegetation corridors may be created between offsite and onsite vegetation and provide a route for fire to enter a development area.

All retained/planned vegetation and its management will be considered in the development of this Bushfire Management Plan.

Is re-vegetation of riparian zones and/or wetland or foreshore buffers and/or public open space a part of this Proposal?	No
Is the requirement for ongoing maintenance of existing vegetation in riparian zones and/or wetland or foreshore buffers and/or public open space a part of this Proposal?	No
Has a landscape plan been developed for the proposed development?	No



3 POTENTIAL BUSHFIRE IMPACT ASSESSMENT

3.1 Assessment Input

3.1.1 Fire Danger Index (FDI) Applied

AS 3959:2018 Table 2.1 specifies the fire danger index values to apply for different regions. The values used in the model calculations are for the Forest Fire Danger Index (FFDI) and for which equivalent representative values of the Grassland Fire Danger Index (GFDI) are applied as per Appendix B. The values can be modified if appropriately justified.

Table 3.1: Applied FDI Value

FDI VALUE			
Vegetation Areas	As per AS 3959:2018 Table 2.1	As per DFES for the Location	Value Applied
1-5	80	N/A	80

3.1.2 Vegetation Classification and Effective Slope

Classification: Bushfire prone vegetation identification and classification has been conducted in accordance with AS 3959:2018 s2.2.3 and the Visual Guide for Bushfire Risk Assessment in WA (DoP February 2016).

When more than one vegetation type is present, each type is identified separately, and the applied classification considers the potential bushfire intensity and behaviour from the vegetation types present and ensures the worst case scenario is accounted for – this may not be from the predominant vegetation type.

The vegetation structure has been assessed as it will be in its mature state (rather than what might be observed on the day). Areas of modified vegetation are assessed as they will be in their natural unmodified state (unless maintained in a permanently low threat, minimal fuel condition, satisfying AS 3959:2018 s2.2.3.2(f) and asset protection zone standards). Vegetation destroyed or damaged by a bushfire or other natural disaster has been assessed on its revegetated mature state.

Effective Slope: Refers to the ground slope under each area of classified vegetation and is described in the direction relative to the view from the building or proposed development site. Effective slope is not the same as 'average slope', rather it is the slope which most significantly influences fire behaviour. This slope has a direct and significant influence on a bushfire's rate of spread and intensity.

Where there is a significant change in effective slope under an area of classified vegetation, that will cause a change in fire behaviour, separate vegetation areas will be identified to enable the correct assessment.



When the effective slope, under a given area of bushfire prone vegetation, will be different relative to multiple proposed development sites, then the effective slopes corresponding to the different locations, are separately identified.



Table 3.2: Vegetation classification and effective slope.

ALL VEGETATION WITHIN 150 METRES OF THE PROPOSED DEVELOPMENT				
Vegetation Area	Identified Vegetation Types ¹ or Description if 'Excluded'	Applied Vegetation Classification ¹	Effective Slope (degrees) ² (AS 3959:2018 Method 1)	
			Assessed	Applied Range
1	Tussock grassland G-22	Class G Grassland	0	upslope or flat
2	Tussock grassland G-22	Class G Grassland	2	downslope >0-5
3	Open woodland B-06	Class B Woodland	2	downslope >0-5
4	Low open forest A-04	Class A Forest	2	downslope >0-5
5	Low threat vegetation and non-vegetated areas	Excluded as per Section 2.2.3.2 (f) Low Threat	N/A	N/A
Representative photos of each vegetation area, descriptions and classification justification, are presented on the following pages. The areas of classified vegetation are defined, and the photo locations identified on Figure 3.1, the vegetation and topography map.				
Note ¹ : Described and classified as per AS 3959:2018 Table 2.3 and Figures 2.3 and 2.4 (A)-(H)				
Note ² : Effective slope measured as per AS 3959:2018 Section 2.2.5 and Appendix B Part B4				







VEGETATION AREA 1	
AS 3959:2018 Vegetation Classification Applied:	Class G Grassland
Vegetation Types Present:	Tussock grassland G-22
Description/Justification:	Unmanaged pasture with varying levels of slashing and grazing.
Post Dev. Assumptions:	A portion of the area will be managed to low threat to establish the BAL-12.5 APZ for the subject building.
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>	
Photo ID: 1	Photo ID: 2



VEGETATION AREA 2	
AS 3959:2018 Vegetation Classification Applied:	Class G Grassland
Vegetation Types Present:	Tussock grassland G-22
Description/Justification:	Unmanaged pasture with varying levels of slashing and grazing.
Post Dev. Assumptions:	A portion of the area will be managed to low threat to establish the BAL-12.5 APZ for the subject building.
	
Photo ID: 3	
	
Photo ID: 4	
	
Photo ID: 5	
	
Photo ID: 6	



VEGETATION AREA 3	
AS 3959:2018 Vegetation Classification Applied:	Class B Woodland
Vegetation Types Present:	Open woodland B-06
Description/Justification:	Trees up to 15m tall with <30% canopy cover and grassy understory. Sections may be dominated by marri or tuart.
Post Dev. Assumptions:	The vegetation area currently has a grassy understory only. The vegetation is highly unlikely to reach Class A Forest classification.
 	
Photo ID: 7	Photo ID: 8
 	
Photo ID: 9	Photo ID: 10



VEGETATION AREA 4	
AS 3959:2018 Vegetation Classification Applied:	Class A Forest
Vegetation Types Present:	Low open forest A-04
Description/Justification:	Dense melaleuca and tuart trees up to 10m tall with understory of rushes and grasses.
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Photo ID: 11</p> </div> <div style="text-align: center;"> <p>Photo ID: 12</p> </div> </div>	



VEGETATION AREA 5	
AS 3959:2018 Vegetation Classification Applied:	Excluded as per Section 2.2.3.2 (f) Low Threat Vegetation
Description/Justification:	Gardens, lawns, slashed grasses and native vegetation maintained in a low-threat, minimal fuel condition.
	
Photo ID: 13	Photo ID: 14
	
Photo ID: 15	Photo ID: 16



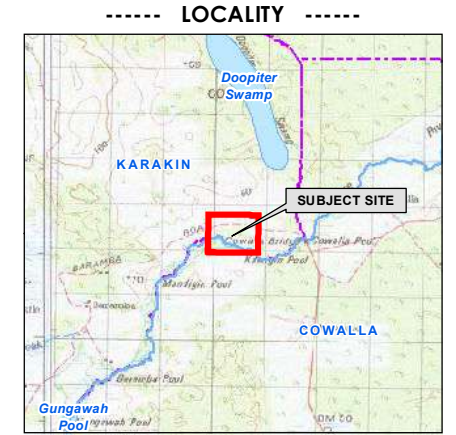
Figure 3.1

**Topography &
Classified Vegetation**

Lot 24 on Plan 12641, Area : 15.08 ha
145 Baramba Road
KARAKIN
SHIRE OF GINGIN

- LEGEND**
- Subject Site
 - Other Lots
 - Photo & Direction
 - Existing**
 - Dwellings
 - Shed (Proposed Venue)
 - Vegetation Assessment**
 - 150m from Subject Site
 - 100m from Subject Site
 - Classified**
 - Class (A) Forest
 - Class (B) Woodland
 - Class (G) Grassland
 - Exclusion 2.2.3.2
 - Vegetation Distance

0 50 100 150 200 Metres



Aerial Imagery : Landgate/SLIP
Image Date : Dec 2017

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Neil Stoney 10/01/2022
Map dated by: Neil Stoney 10/01/2022
A3 Scale 1:3,000

Disclaimer and Limitation: This map has been prepared for bushfire management planning purposes only. All depicted areas, contours and any dimensions shown are subject to survey. Bushfire Prone Planning does not guarantee that this map is without flaw of any kind and disclaims all liability for any errors, loss or other consequence arising from relying on any information depicted.
Map Document Path / Name: K:\Projects\Jobs 2021\210762 - 145 Baramba Road Karakin (BMP Evac)\210762 - Advice (Stage 1) - Aug 2021\Mapping\MXD\210762_3-1_VEG_145_Baramba_Rd_Karakin.mxd



3.1.3 Vegetation Separation Distance

The vegetation separation distance is the horizontal distance measured from the relevant parts of an existing building or a future building's planned location (within a lot), to the determined edge of an area of classified vegetation.

This separation distance applied to determining a Bushfire Attack Level (BAL) can be either:

- The measured distance – for which the location of the building relative to the edge of classified vegetation must be known. This will result in single determined BAL that will apply to a building. (The measured distance is a required calculation input); or
- A calculated minimum and maximum distance (range) that will correspond to each individual BAL. The calculated distances provide an indicative (or achievable) BAL for which the determined BAL will be dependent on the known location of the building relative to the edge of classified vegetation.

The calculated range of distances corresponding to each BAL can be presented in different formats (tables or a BAL contour map), dependent on the form of information that is most appropriate for the proposed development/use. These distance ranges corresponding to BAL(s) will be presented in Section 3.2: 'Assessment Output'.

For the proposed development/use, the applicable vegetation separation distances will be presented within the Bushfire Management Plan in this location:

In Section 3.2 'Assessment Output' as a table containing the calculated ranges of distance corresponding to each BAL and, as applicable, stating the indicative (achievable) BAL's.



3.2 Assessment Output

UNDERSTANDING THE RESULTS OF THE BUSHFIRE IMPACT ASSESSMENT

Bushfire Attack Levels (BALs) – Their Application in the Building Environment is Different to the Planning Environment

In the building environment, a **determined BAL** is required for the proposed construction at the building application stage. This is to inform approval considerations and establish the bushfire construction standards that are to apply. An indicative BAL is not acceptable for a building application.

In the planning environment, through the application of SPP 3.7 and associated Guidelines, the deemed to satisfy requirement for a proposed 'development site' or sites (defined by the LPS Amendment Regulations 2015 as "that part of a lot on which a building that is the subject of development stands or is to be constructed"), is that a BAL-29 or lower rating can be achieved once all works associated with the proposal are completed. For planning approval purposes, an **indicative BAL** can provide the required information.

Determined Bushfire Attack Level

A determined BAL is to apply to an existing building or the 'development site' on which the building is to be constructed and not to a lot or building envelope. Its purpose is to state the potential radiant heat flux to which the building will be exposed, thereby determining the construction standard to be applied.

A determined BAL cannot be given for a future building whose design and position on the lot are unknown or the vegetation separation distance has not been established. It is not until these variables have been fixed that a determined BAL can be stated, and a BAL Certificate can be issued.

The one exception is when a building **of any dimension** can be **positioned anywhere** on a proposed lot (within R-Code building setbacks) or within a defined building envelope, and always remain subject to the same BAL, regardless of the retention of any existing classified vegetation either onsite or offsite.

Indicative Bushfire Attack Level

If a BAL is not able to achieve 'determined' status it will be an indicative BAL. It indicates the BAL that can be achieved by the proposed development/use. However, it is conditional upon an assessment variable(s) being confirmed at a later stage (e.g. the building location is established/changed, or vegetation is modified/removed to establish the vegetation separation distance).

A BAL certificate cannot be issued for an indicative BAL – unless that BAL cannot vary (refer to 'Determined BAL' above).

In table form, a single or a range of indicative BAL(s) may be presented. If a single indicative BAL is stated for a defined area (i.e. the lot or building envelope), this will be the highest indicative BAL impacting the defined area.



3.2.1 Bushfire Attack Level Results – Table Format

Table 3.6: BAL assessment results.

BUSHFIRE ATTACK LEVEL (BAL) ASSESSMENT RESULTS ¹								
The Building Being Assessed (Description)	Vegetation Area	Vegetation Classification	BAL Determination Method Applied (AS 3959:2018)	Effective Slope Under Classified Vegetation (degrees)	Site Slope (degrees)	Separation Distance to Classified Vegetation (metres)	Other Method 2 Inputs Also Applied ¹	Bushfire Attack Level
Existing Shed (Proposed Venue)	1	Class G Grassland	Method 1	Upslope or flat 0	AS 3959 M1 default	3	NO	BAL-FZ
	2	Class G Grassland	Method 1	Downslope >0-5	AS 3959 M1 default	3	NO	BAL-FZ
	3	Class B Woodland	Method 1	Downslope >0-5	AS 3959 M1 default	53	NO	BAL-12.5
	4	Class A Forest	Method 1	Downslope >0-5	AS 3959 M1 default	266	NO	BAL-LOW
	5	Excluded AS3959:2018 2.2.3.2 (f)	-	-	-	-	-	BAL-LOW
	INDICATIVE BUSHFIRE ATTACK LEVEL							
BAL Status Statement:	Onsite vegetation management will be required to achieve the stated BAL. Grasses will require slashing only. Removal of native vegetation is not required.							
Note ¹ All assessment inputs applied are presented in Section 3.1.								
The vegetation area presenting the worst potential bushfire impact to each assessed existing/future building and its associated assessment parameters is identified by the highlighted row.								
The separation distances are also annotated on the relevant site map unless a BAL contour map has also been developed for this BMP.								



3.2.2 Determined Separation Distances Corresponding to 10kW/m² of Radiant Heat Flux

Acceptable solutions with regard to radiant heat exposure during a bushfire emergency event can apply to certain 'vulnerable' land uses. These solutions establish the requirements for safer onsite shelter locations to be subject to radiant heat flux no greater than 10 kW/m² for a building or 2 kW/m² for an open area.

Table 3.7: Specific vegetation separation distances for 'vulnerable land use' application.

SEPARATION DISTANCES CORRESPONDING TO 10 kW/m ² AND 2 kW/m ² OF RADIANT HEAT FLUX			
BAL Determination Methodology Applied ¹		Method 2 as per AS 3959:2018 Appendix B.	
Vegetation Area	Vegetation Classification	Separation Distance Corresponding to 10 kW/m ² (metres)	Separation Distance Corresponding to 2 kW/m ² (metres)
1	Class G Grassland	31.6	-
2	Class G Grassland	33.4	-
3	Class B Woodland	49.6	-
4	Class A Forest	67.7	
<i>Note¹ Assessment inputs applied are presented in Section 3.1. AS 3959:2018 method 2 calculation input/output summary data is presented for reference in Appendix 4.</i>			

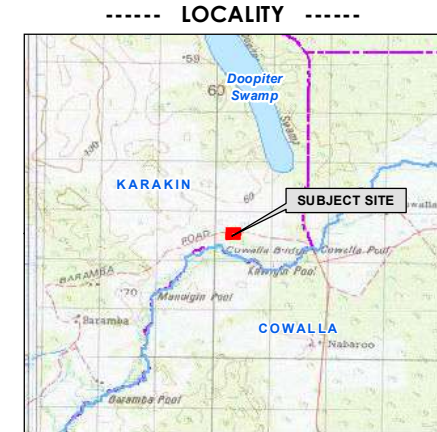


Figure 3.4
Asset Protection Zone Map

Lot 24 on Plan 12641, Area : 15.08 ha
145 Baramba Road
KARAKIN
SHIRE OF GINGIN

- **LEGEND** -----
- Subject Site
 - Other Lots
 - Asset Protection Zone**
 - <10kw APZ
 - APZ Distance
 - Existing Building**
 - Dwellings
 - Shed (Proposed Venue)
 - Vegetation Assessment Area**
 - 150m from Subject Site
 - 100m from Subject Site
 - Classified Vegetation**
 - Class (B) Woodland
 - Class (G) Grassland
 - Exclusion 2.2.3.2

0 5 10 15 20 25 30
Metres



Aerial Imagery : Landgate/SLIP
Image Date : Dec 2017
Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Neil Stoney 11/01/2022
Map dated by: Neil Stoney 11/01/2022
A3 Scale 1:500

Disclaimer and Limitation: This map has been prepared for bushfire management planning purposes only. All depicted areas, contours and any dimensions shown are subject to survey. Bushfire Prone Planning does not guarantee that this map is without flaw of any kind and disclaims all liability for any errors, loss or other consequence arising from relying on any information depicted.
Map Document Path / Name: K:\Projects\Jobs 2021\210762 - 145 Baramba Road Karakin (BMP Evac)\Mapping\MXD\210762_3-4_APZ_145_Baramba_Rd_Karakin.mxd



4 IDENTIFICATION OF BUSHFIRE HAZARD ISSUES

In response to the Bushfire Management Plan requirements established by Appendix 5 of the Guidelines for Planning in Bushfire Prone Areas (WAPC 2017 v1.3), the following statements are made to assist in the understanding of whether the proposal is likely to be able to comply with the bushfire protection criteria now or in subsequent planning stages.

Spatial Context - Broader Landscape Considerations	
Wider road network and access constraints	<p>The subject lot is serviced by Baramba Road, which offers a single direction of travel for 1.37km before two-way access is available. Baramba Road is unsealed but maintained in good condition with clear lines of view and 6 metre minimum trafficable width.</p> <p>Two-way access is reached at Cowalla Road, with continuous routes to the north and south to low threat areas. These routes abut extreme bushfire risk vegetation in the Moore River National Park and Namming Nature Reserve (Class A Forest) for a significant portion of their length. Access options can be limited to a single road in two directions for a significant distance before other options are available.</p> <p>The road network does not meet the requirements of the Bushfire Protection Criteria outlined in the <i>Guidelines</i> or the <i>Position Statement: Tourism land uses in bushfire prone areas WAPC November 2019</i>.</p>
Proximity of settlements and emergency services	<p>The subject site is within a rural area. The Lancelin townsite is 33.5km and 24 minutes travel time.</p> <p>Nilgen Bushfire Brigade is located on Baramba Road, 650m and 1 minute from the subject site.</p>
Bushfire prone vegetation types and extent (including conserved vegetation)	<p>The bushfire prone vegetation onsite and within the immediate locality mostly meets Class G Grassland classification, with some pockets of Class B Woodland and Class A Forest. The land extending west of the site hosts a similar vegetation demographic.</p> <p>Within the broader locality to the north, east and south are substantial tracts of remnant Class A Forest vegetation within the Nammina Nature Reserve, Moore River National Park, and Nabaroo Nature Reserve.</p>
Topography and fire behaviour interactions.	<p>The topography is undulating rather than rugged. Some areas of flat land but most has slopes of zero to five degrees and up to ten degrees over significant areas.</p> <p>Bushfire rates of spread can double for every ten degrees of upslope while downslopes will slow the rate of spread.</p>
Potential for extreme fire behaviour and pyro convective events.	<p>Possible but limited likelihood due to the vegetation demographics onsite and within the immediate area. However, extreme fire behaviour can be expected in the large nature reserves within the broader locality which may impact the site.</p>
Environmental Considerations	
Constraints to implementing required and/or additional bushfire protection measures	<p>No modification of native vegetation is required.</p>
Provision of Access Within the Subject Site	
Potential constraints	<p>No constraints to establishing the required access will exist.</p>
Potential Bushfire Impacts	
Flame and radiant heat and ability to establish an APZ	<p>A well-maintained APZ is currently established around the dwellings onsite. The shed (the proposed venue) can establish an APZ to limit radiant heat flux to 10kW/m² with the slashing of onsite grasses only. This will prevent flame contact and excess radiant heat from the classified vegetation and allow for the building to be used as an on-site shelter.</p> <p>Retrofitting to meet AS-3959 BAL-29 bushfire construction standards will mitigate the risks from residual bushfire impacts to what is considered an acceptable level.</p>



Embers/firebrands, smoke and fire-driven wind	These will be the major impacts to the subject site. The appropriate protection measures of building construction and strict management of the APZ will mitigate the risk to what is considered an acceptable level.
Issues to be Considered at Subsequent Planning Stages (additional assessments/documents)	
Specific land uses to be addressed	N/A
Additional assessments	N/A
Additional documents	A Bushfire Emergency Plan including evacuation procedures will be required for the Vulnerable Land Use. This will be provided at a later stage as a separate document.
Discretionary Decision Making and the Precautionary Principle (SPP 3.7 and Guidelines)	
Does the bushfire consultant consider there are issues that need to be addressed in this space?	No.



5 ASSESSMENT AGAINST THE ACCEPTABLE SOLUTIONS (POLICY MEASURES) ESTABLISHED BY THE 'TOURISM LAND USE' POSITION STATEMENT

For a proposal (application) that is a 'Tourism Land Use' to be considered compliant with SPP 3.7, it must satisfy the requirements established by the *Position Statement: Tourism land uses in bushfire prone areas WAPC November 2019*. The position statement establishes 'tourism land use specific' policy objectives and measures and establishes a set of elements and corresponding acceptable solutions (policy measures) against which a tourism proposal is to be assessed (replacing the bushfire protection criteria established by the Guidelines). Compliance can be achieved by either:

- Meeting all applicable acceptable solutions corresponding to each element (i.e. the minimum bushfire protection measures that are deemed to satisfy planning requirements); or
- Where an acceptable solution cannot be met, conduct a risk based assessment and if necessary, apply additional and/or contingency bushfire protection measures to reduce the risk to an acceptable level (as relevant to the proposed use and its scale and location).

5.1 Local Government Variations to Apply

Local governments may add to or modify the acceptable solutions of the Bushfire Protection Criteria (BPC) and/or apply technical requirements that vary from those specified in the Guidelines for Planning in Bushfire Prone Areas (WAPC). In such instances, this Proposal will be assessed against these variations and/or any specific local government technical requirements for emergency access and water. Refer to Appendices 2 and 3 for relevant technical requirements.

Will local or regional variations (endorsed by WAPC / DFES) to the applicable acceptable solutions established by the <i>Guidelines</i> or the <i>Position Statement: Tourism land uses in bushfire prone areas WAPC November 2019</i> , apply to this Proposal?	Yes
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----



5.2 Summary of Assessment Against the Acceptable Solutions for Tourism Land Use

SUMMARISED OUTCOME OF THE ASSESSMENT AGAINST THE ACCEPTABLE SOLUTIONS (POLICY MEASURES) OF THE TOURISM LAND USE POSITION STATEMENT			
Element (Table 1: Tourism Land Uses - 'Tourism Position Statement')	Basis of Achieving the Intent of the Bushfire Protection Measures Established in Table 1 of the Position Statement: Tourism land uses in bushfire prone areas (WAPC November 2019) and Compliance with SPP 3.7		
	All Applicable Acceptable Solutions (Policy Measures) Are or Can be Fully Met	The Proposal is Supported by a Risk-Based Assessment (in a form that reflects the nature and scale of the development) and The Application of Additional Bushfire Protection Measures as Necessary	
		Comparative Bushfire Performance Assessment (refer to Section 5.4)	The Application of Additional Bushfire Protection Measures
1. Siting and Design	✓		
2. Vehicular Access		✓	✓
3. Provision of Water	✓		
<p>Note: The development proposal has been assessed:</p> <ol style="list-style-type: none"> Against the requirements established by Table 1 of the <i>Position Statement: Tourism land uses in bushfire prone areas</i> (WAPC November 2019) Against the requirements established in Appendix 4 of the <i>Guidelines for Planning in Bushfire Prone Areas</i>, WAPC 2017 v1.3 (<i>Guidelines</i>) but excluding the Bushfire Protection Criteria unless referenced by the above 'Position Statement'. The Guidelines are found at https://www.planning.wa.gov.au/8194.aspx; and Applying the interpretation guidance provided in <i>Position Statement: Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design</i> (WAPC Nov 2019) – to the extent guidance regarding Element 2 may be applied to a development application. 			



5.3 Assessment Detail

Element 1 (Tourism Land Use): Siting and Design of Development												
<p>Tourism Type: Other (vulnerable) Short-Term Accommodation (including motel, serviced apartments, tourist development, holiday accommodation); and</p> <p>Vulnerable Day Uses (including art gallery, brewery, exhibition centre, hotel, reception centre, restaurant/café, small bar, winery).</p>												
<p>Intent: To provide bushfire protection for tourism uses relevant to the characteristics of the occupants and/or surrounding community to preserve life and reduce the impact of bushfire on property and infrastructure.</p>												
<p>Compliance: How the proposed development achieves the intent of Element 1:</p>	<p>By fully meeting all applicable acceptable solutions established by Table 1 of Position Statement: Tourism land uses in bushfire prone areas (WAPC October 2019)</p>											
<p>ASSESSMENT (COMPLIANCE) STATEMENTS</p> <p>For each applicable acceptable solution, the following statements present the results of the assessment of the proposed development/use against the requirements established by the <i>Position Statement: Tourism land uses in bushfire prone areas</i> (WAPC November 2019).</p>												
<p>Acceptable Solution (Policy Measure): 1.1: In accordance with Element 2: 'Siting and Design of Development' A2.1: Asset Protection Zone, contained within the <i>Guidelines for Planning in Bushfire Prone Areas</i>.</p>												
<div><p>THE APZ - DEVELOPMENT SITING AND DESIGN PLANNING REQUIREMENTS</p><p>The necessary outcome of bushfire planning for development siting and design, is to ensure that a building can be located within the developable portion of any lot (i.e. outside those parts of the lot that form the required R-Code building setbacks, or any other excluded area), and be subject to potential radiant heat from a bushfire not exceeding 29 kW/m² (i.e. a maximum BAL of BAL-29).</p><p>This will be achieved when the size of the "low fuel area immediately surrounding a building", the asset protection zone (APZ), is large enough. This requires a certain separation distance to exist between the building and areas of classified vegetation. These are the BAL-29 APZ dimensions and they will vary dependent on site specific parameters.</p><p>The APZ should be contained solely within the boundaries of each lot, except in instances where the neighbouring lot(s) or adjacent public land will be managed in a low-fuel state on an ongoing basis, in perpetuity.</p><p>Where possible, planning for siting and design should incorporate elements that include non-vegetated areas (e.g. roads/parking/drainage) and/or formally managed areas of vegetation (public open space/recreation areas/ services installed in a common section of land), as either part of the required APZ dimensions or to additionally increase separation distances to provide greater protection. These elements create robust and easier managed asset protection zones.</p></div>												
<p>THE ASSESSMENT</p> <p>The required APZ specifications of width, location and management can be achieved.</p> <p>APZ Width: The required APZ dimensions to ensure the subject building is subject to a maximum radiant heat flux of 10kW/m² (measured from any external wall or supporting post or column to the edge of the classified vegetation), has been determined in Section 3.2 of this BMP and are:</p>												
<table><tr><th colspan="3">10kW/m² Radiant Heat Flux APZ Dimensions</th></tr><tr><td rowspan="3">Existing Shed (Proposed Venue)</td><td>Building to Vegetation Area 1</td><td>Minimum 31.6 metres</td></tr><tr><td>Building to Vegetation Area 2</td><td>Minimum 33.4 metres</td></tr><tr><td>Building to Vegetation Area 3</td><td>Minimum 49.6 metres</td></tr></table>			10kW/m ² Radiant Heat Flux APZ Dimensions			Existing Shed (Proposed Venue)	Building to Vegetation Area 1	Minimum 31.6 metres	Building to Vegetation Area 2	Minimum 33.4 metres	Building to Vegetation Area 3	Minimum 49.6 metres
10kW/m ² Radiant Heat Flux APZ Dimensions												
Existing Shed (Proposed Venue)	Building to Vegetation Area 1	Minimum 31.6 metres										
	Building to Vegetation Area 2	Minimum 33.4 metres										
	Building to Vegetation Area 3	Minimum 49.6 metres										



Element 1 (Tourism Land Use): Siting and Design of Development

	Building to Vegetation Area 4	Minimum 67.7 metres
	Building to Vegetation Area 5	N/A

Note that these dimensions exceed the requirements for BAL-12.5. The APZ dimensions are within the subject lot and under the control of the landowner. Establishing the APZ will require slashing of grasses only.

APZ Location: Asset protection zones of the widths stated above can be contained solely within the boundaries of the subject lot (refer to Figure 3.4 for an illustrative map). The required modification of onsite vegetation is slashing of grasses only.

APZ Management: All vegetation that will require modification/removal and future management is onsite and therefore under the control of the landowner.

Retained vegetation will be managed in accordance with the technical requirements established by the Schedule 1: 'Standards for Asset Protection Zones (Guidelines)'. The APZ specifications are also detailed in Appendix 1.

THE APZ – REQUIRED DIMENSIONS TO SATISFY FUTURE BUILDING (AND ONGOING MANAGEMENT)

It is important for the landowner to be aware that the APZ dimensions that will be required to be physically established and maintained on each lot surrounding relevant future buildings, may be different to those stated above for the BAL-29 APZ - which is the minimum dimension a planning proposal needs to show can be established to comply with SPP 3.7.

The actual APZ dimensions to be physically established and maintained, will be based on which of the following establishes the larger APZ dimension:

- The dimensions corresponding to the determined BAL of a building (refer to Section 3.2 for explanation of the 'planning' versus 'building' requirements and 'indicative' versus 'determined' BAL); or
- The APZ dimensions established by the local government's Firebreak Notice.

If the dimensions of the APZ that are to be established are known at this time, they will be stated below.

Acceptable Solution (Policy Measure): 1.2: Where a building is to function as an on-site shelter, there must be sufficient separation distance from the predominant bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 10kW/m² (with an assumed flame temperature of 1200K); or where an open space area is to function as an on-site shelter, there must be sufficient separation distance from the predominant bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 2kW/m² (with an assumed flame temperature of 1200K).

The APZ dimensions to be installed have been calculated in Section 3.2.2 and will limit radiant heat flux to 10kW/m². The calculation outputs are provided in Appendix 4.

The building will comply with the Acceptable Solution.

Acceptable Solution (Policy Measure): 1.3: Buildings identified as suitable on-site shelter shall be designed and constructed in accordance with National Construction Code and the ABCB Community Shelter Handbook.

The subject building is not intended to function as an on-site shelter, excepting as a last resort.



Element 2 (Tourism Land Use): Vehicular Access	
<p>Tourism Type: Other (vulnerable) Short-Term Accommodation (including motel, serviced apartments, tourist development, holiday accommodation); and</p> <p>Vulnerable Day Uses (including art gallery, brewery, exhibition centre, hotel, reception centre, restaurant/café, small bar, winery).</p>	
<p>Intent: To provide bushfire protection for tourism uses relevant to the characteristics of the occupants and/or surrounding community to preserve life and reduce the impact of bushfire on property and infrastructure.</p>	
<p>Compliance: How the proposed development achieves the intent of Element 2:</p>	<p>By meeting all applicable acceptable solutions except A2.1 for which the proposal is assessed as providing an equivalent or superior residual risk outcome compared to the acceptable solution.</p>
<p>ASSESSMENT (COMPLIANCE) STATEMENTS</p> <p>For each applicable acceptable solution, the following statements present the results of the assessment of the proposed development/use against the requirements established by the <i>Position Statement: Tourism land uses in bushfire prone areas</i> (WAPC November 2019).</p>	
<p>Acceptable Solution: 2.1: The provision of one access route can be considered where:</p> <ul style="list-style-type: none"> • The proposal is within a residential built-out area; or • The access route abuts moderate or low threat vegetation (i.e. bushfire hazard level as per the Guidelines), and • Where it is demonstrated that secondary access (including an emergency access way) cannot be achieved, and • The access route is not travelling towards vegetation with an extreme bushfire hazard level. 	
<p>Baramba Road does not provide two access routes. Two directions of continuous travel are available from Cowalla Road, which is reached after 1.37km of travel east from the site.</p> <p>The two routes abut extreme bushfire risk vegetation in the Moore River National Park and Namming Nature Reserve (Class A Forest) for a significant portion of their length. The Acceptable Solution cannot be met as the route travels toward vegetation with an extreme bushfire hazard level.</p> <p>For additional details refer to Section 5.4 'Addressing Non-Compliance with Applicable Acceptable Solutions' and 6 'Responsibilities for Implementation and Maintenance', of this BMP.</p>	
<p>Acceptable Solution: 2.2: Access routes should achieve the requirements of Table 6 in the <i>Guidelines for Planning in Bushfire Prone Areas</i>.</p>	
<p>Baramba Road complies with the construction technical requirements established by the Guidelines. These requirements are set out in Appendix 2.</p>	
<p>Acceptable Solution: 2.3: Acceptable Solution: 2.5: Private driveways longer than 50 metres require:</p> <ul style="list-style-type: none"> • Passing bays every 200 metres with a minimum length of 20 metres and a minimum width of two metres (i.e. the combined width of the passing bay and constructed private driveway to be a minimum six metres); • Turn-around areas designed to accommodate type 3.4 fire appliances and to enable them to turn around safely every 500 metres (i.e. kerb to kerb 17.5 metres) and within 50 metres of a house; and • An all-weather surface (i.e. compacted gravel, limestone or sealed). 	
<p>The existing driveway complies with the construction technical requirements established by the Guidelines and/or the local government.</p>	



Element 3 (Tourism Land Use): Provision of Water	
Tourism Type: Other (vulnerable) Short-Term Accommodation (including motel, serviced apartments, tourist development, holiday accommodation); and Vulnerable Day Uses (including art gallery, brewery, exhibition centre, hotel, reception centre, restaurant/café, small bar, winery).	
Intent: To provide bushfire protection for tourism uses relevant to the characteristics of the occupants and/or surrounding community to preserve life and reduce the impact of bushfire on property and infrastructure.	
Compliance: How the proposed development achieves the intent of Element 3:	By fully meeting all applicable acceptable solutions established by Table 1 of Position Statement: Tourism land uses in bushfire prone areas (WAPC October 2019)
ASSESSMENT (COMPLIANCE) STATEMENTS For each applicable acceptable solution, the following statements present the results of the assessment of the proposed development/use against the requirements established by the <i>Position Statement: Tourism land uses in bushfire prone areas (WAPC November 2019)</i> .	
Acceptable Solution: 3.1: The development or land use is provided with a reticulated water supply in accordance with the specifications of the relevant water supply authority and/or the local government; or Acceptable Solution 3.2 or 3.3.	
The subject site is within a rural region. A reticulated water supply is not currently available.	
Acceptable Solution: 3.2: Provision of a static water supply for firefighting purposes on the lot that has an effective capacity of 10,000 litres per building/structure in addition to any requirements for potable water; or Acceptable Solution 3.3.	
N/A	
Acceptable Solution: 3.3: Provision of a minimum 50,000 litre static water supply for firefighting purposes per 25 buildings/structures, to the satisfaction of the local government.	
The proposal relates to a single structure; however, three buildings are present onsite. The installation of a single 50,000L firefighting water tank is practical to service the lot. The technical requirements established by the Guidelines and/or the local government can and will be complied with. These requirements are set out in Appendix 3.	
Acceptable Solution: 3.4: Dedicated water supplies shall be non-combustible (or suitably shielded) and located such that fire services can readily gain access to appropriate fittings and connect fire fighting vehicles to dedicated water supplies in a safe manner.	
The required water tank will be located and constructed to requirements.	



5.4 Addressing Non-Compliance with Applicable Acceptable Solutions

Where the proposed development/use is unable to fully comply with all required planning elements, for which a corresponding set of acceptable solutions has been established, there are several methodology options that potentially can be applied to progress the proposal for consideration by the decision makers.

These are established by SPP 3.7 (and the associated Guidelines) as risk and merit based assessments, specific DPLH Position Statements or through precedence set by previous planning application cases progressing through relevant State reviewing bodies.

THE ACCEPTABLE SOLUTION(S) UNABLE TO BE COMPLIED WITH	
Acceptable Solution	Brief Description of Non-Compliance
A2.1 Two access routes	Baramba Road is a dead-end road. Two access routes are available after 1.37km of travel.

THE METHODOLOGY APPLIED TO PROGRESS THE ASSESSMENT OF THE PROPOSED DEVELOPMENT /USE		
Methodology Options	Applied	Information location
Develop Performance Principle-Based Solution(s)	<input checked="" type="checkbox"/>	Section 5.4.1 of the BMP



5.4.1 Comparative Bushfire Performance Assessment – Retained Residual Risk of Acceptable Solution vs Proposal

A2.1 of the Position Statement: Tourism land uses in bushfire prone areas (WAPC November 2019) (based on A3.1 of the Guidelines for Planning in Bushfire Prone Areas) requires a provision of two access routes accessing the public road network. The Tourism Position Statement requires:

- The proposal is within a residential built-out area; or
- The access route abuts moderate or low threat vegetation (i.e. bushfire hazard level as per the Guidelines), and
- Where it is demonstrated that secondary access (including an emergency access way) cannot be achieved, and
- The access route is not travelling towards vegetation with an extreme bushfire hazard level.

The single access route of Baramba Road to Cowalla Road abuts low and moderate bushfire hazard level (BHL) vegetation (Class B Woodland and Class G Grassland). However, the route does travel toward extreme BHL vegetation (Class A Forest) within the Moore River National Park and Namming Nature Reserve. Once two-way access has been achieved at Cowalla Road the available routes abut this vegetation for a considerable distance (>5km) before further options are available.

The Tourism Position Statement section 5.3: *Contingency Measures* discusses strategies for bushfire safety. A consideration of these measures is provided below.

5.4.1a: Sheltering on-site

The subject building (the proposed venue) is not intended for use as an on-site shelter. However, the venue can establish an APZ which will limit radiant heat flux to a maximum of 10kW/m² calculated at a flame temperature of 1200 Kelvin. The building will not comply with the ABCB Design and Construction of Community Bushfire Refuges Handbook (Australian Building Codes Board, 2014) as this is not an intended procedure. The building will however be retrofitted to comply with AS3959 standards to BAL-29 (29kW/m² heat flux), which will provide a comparable level of resilience against bushfire impacts. This will be effective against the residual bushfire impacts the building will experience due to the 10kW/m² APZ.

5.4.1b: Early evacuation or closure of a tourism land use

The business manager of the facility will be required to liaise with the Shire requesting approval to operate during the Prohibited Burning Period, designated within the Shire of Gingin Fire Break Order, annually or as agreed.

The reasoning for this restriction is as follows:

- Prohibited Burning Periods vary annually based on the weather conditions of that year, as rainfall and surface/near-surface moisture is the primary cause of lessening fire risk and intensity. Late or early rains may modify the Prohibited Burning Period. This increases confidence in the effectiveness of the restriction against changing climate conditions.
- Total Fire Bans or Fire Danger Ratings are not known sufficiently in advance for bookings. The Prohibited Burning Period is set annually within the Shire of Gingin Fire Break Order and can thus be integrated into the annual booking period.
- Where the facility is closed to events during the Prohibited Burning Period, it can be considered that the route does not travel towards or abut extreme bushfire hazard vegetation.
- The extreme BHL rating of the Class A Forest to the east is due to the likelihood and intensity of bushfires which could occur in the vegetation, but does not consider lessened fire weather conditions. Considering the vegetation only outside the Prohibited Burning Period, it is reasonable to consider the Class A Forest as having a BHL of moderate rather than extreme. Therefore, the route would not be travelling toward/through vegetation with an extreme BHL to comply with A2.1 of the Tourism Position Statement.



5.5 Additional Bushfire Protection Measures

The following bushfire protection measures are to be implemented and maintained. They are additional to those established by the relevant acceptable solutions applied to the proposed subdivision, development or use.

The relevant acceptable solutions are those against which this planning proposal has been assessed in Section 5.3 of this Bushfire Management Plan.

5.5.1 Additional Measures to Improve Bushfire Performance

SUMMARY OF ADDITIONAL BUSHFIRE PROTECTION MEASURES (TREATMENTS) TO BE APPLIED (Detail Contained in Section 5.4)		
Treatment Category	Brief Description	The Relevant Element and its Intent the Treatment Has Been Developed to Help Achieve
Reduced Consequences of Bushfire Event	The subject building (the proposed venue) will be retrofitted to comply with AS-3959 construction standards to BAL-29. The Asset Protection Zone to be established will subject the building to a maximum of 10kW/m ² radiant heat flux (BAL-12.5). The building will thus exceed Building Code of Australia requirements and be resilient against the bushfire impacts it is likely to experience.	A1.3: On-Site Shelter Construction Standards
Increased Confidence Level in Likelihood or Consequence	The business manager will be required to liaise with the Shire requesting approval to operate during the Prohibited Burning Period annually or as agreed.	A2.1: Two Access Routes

SPP 3.7 establishes the requirement for a Bushfire Emergency Plan to be developed and used as a bushfire protection measure for 'vulnerable' land uses. The emergency plan is produced as a separate operational document.

It establishes the required actions corresponding to a set of relevant procedures that are to be followed in preparation for a bushfire emergency event and in response to and recovery from, a bushfire emergency event.

The responsibility for the facility/premises owner/manager to ensure the requirements of Bushfire Emergency Plan are actioned every year, is established in Section 6 of this Bushfire Management Plan.



6 RESPONSIBILITIES FOR IMPLEMENTATION AND MANAGEMENT OF THE BUSHFIRE PROTECTION MEASURES

Table 6.1: BMP Implementation responsibilities prior to occupancy or building.

Landowner (Developer) - Prior to Occupancy																
No.	Implementation Actions															
1	<p>The local government may condition a development application approval with a requirement for the landowner/proponent to register a notification onto the certificate of title and deposited plan.</p> <p>This will be done pursuant to Section 70A <i>Transfer of Land Act 1893</i> as amended ('Factors affecting use and enjoyment of land, notification on title'). This is to give notice of the bushfire hazard and any restrictions and/or protective measures required to be maintained at the owner's cost.</p> <p>This condition ensures that:</p> <ol style="list-style-type: none">1. Landowners/proponents are aware their lot is in a designated bushfire prone area and of their obligations to apply the stated bushfire risk management measures; and2. Potential purchasers are alerted to the Bushfire Management Plan so that future landowners/proponents can continue to apply the bushfire risk management measures that have been established in the Plan.															
2	<p>Prior to sale and post planning approval, the entity responsible for having the BMP prepared should ensure that anyone listed as having responsibility under the Plan has endorsed it and is provided with a copy for their information and informed that it contains their responsibilities. This includes the landowners/proponents (including future landowners where the Plan was prepared as part of a subdivision approval), local government and any other authorities or referral agencies ('Guidelines' s4.6.3).</p>															
3	<p>Establish the Asset Protection Zone (APZ) surrounding the shed (the proposed venue) to the largest dimension as determined by either:</p> <ul style="list-style-type: none">• The dimensions corresponding to the determined BAL of a building (refer to Section 3.2 for explanation of the 'planning' versus 'building' requirements and 'indicative' versus 'determined' BAL); or• The dimensions corresponding to the local government's Firebreak Notice. <table><tr><th colspan="3">10kW/m² Radiant Heat Flux APZ Dimensions</th></tr><tr><td rowspan="5">Existing Shed (Proposed Venue)</td><td>Building to Vegetation Area 1</td><td>Minimum 31.6 metres</td></tr><tr><td>Building to Vegetation Area 2</td><td>Minimum 33.4 metres</td></tr><tr><td>Building to Vegetation Area 3</td><td>Minimum 49.6 metres</td></tr><tr><td>Building to Vegetation Area 4</td><td>Minimum 67.7 metres</td></tr><tr><td>Building to Vegetation Area 5</td><td>N/A</td></tr></table> <p>Establish the APZ to the standards established by the Guidelines (refer to Appendix 1) or as varied by the local government through their Firebreak Notice (refer to the following responsibility).</p> <p>This is the responsibility of the landowner prior to occupancy.</p>		10kW/m ² Radiant Heat Flux APZ Dimensions			Existing Shed (Proposed Venue)	Building to Vegetation Area 1	Minimum 31.6 metres	Building to Vegetation Area 2	Minimum 33.4 metres	Building to Vegetation Area 3	Minimum 49.6 metres	Building to Vegetation Area 4	Minimum 67.7 metres	Building to Vegetation Area 5	N/A
10kW/m ² Radiant Heat Flux APZ Dimensions																
Existing Shed (Proposed Venue)	Building to Vegetation Area 1	Minimum 31.6 metres														
	Building to Vegetation Area 2	Minimum 33.4 metres														
	Building to Vegetation Area 3	Minimum 49.6 metres														
	Building to Vegetation Area 4	Minimum 67.7 metres														
	Building to Vegetation Area 5	N/A														
4	<p>Prior to occupancy, a copy of the Bushfire Emergency Plan must be provided to the occupier and they are to be informed that it contains responsibilities that must be actioned due to the subject Proposal's land use being defined as 'Vulnerable'.</p>															



	This Plan must be read, and the instructions contained in the Plan that require certain information to be displayed and available to all occupants, must be complied with.
5	Prior to occupancy, install the required emergency static water supply (50,000 litre tank within the lot) and associated vehicle access, to the standards stated in the relevant acceptable solution and applying the guidance provided in Appendix 3, or to the specific requirements of the local government.
6	There is an outstanding obligation, created by this Bushfire Management Plan, for a Bushfire Emergency Plan for proposed occupants to be developed and approved for the 'vulnerable' land use.
7	Prior to occupancy, all actions contained within the Pre-Season Procedure established by the Bushfire Emergency Plan, must be completed.
8	Complete retrofitting works on the shed (the proposed venue) to comply with AS-3959 construction standards to BAL-29.
9	<p>Prior to any building work, inform the builder of the existence of this Bushfire Management Plan and the responsibilities it contains, regarding the required construction standards. This will be:</p> <ul style="list-style-type: none"> • The standard corresponding to the determined BAL, as per the bushfire provisions of the Building Code of Australia (BCA); and/or • A higher standard because the BMP establishes that the construction standard is to correspond to a higher BAL as an additional bushfire protection measure.



Table 6.2: Ongoing management responsibilities for the Landowner/Occupier.

Landowner/Occupier - Ongoing																
No.	Ongoing Management Actions															
1	<p>Maintain the Asset Protection Zone (APZ) surrounding the shed (the proposed venue) to the largest dimension as determined by either:</p> <ul style="list-style-type: none">The dimensions corresponding to the determined BAL of a building (refer to Section 3.2 for explanation of the 'planning' versus 'building' requirements and 'indicative' versus 'determined' BAL); orThe dimensions corresponding to the local government's Firebreak Notice. <table><tr><th colspan="3">10kW/m² Radiant Heat Flux APZ Dimensions</th></tr><tr><td rowspan="5">Existing Shed (Proposed Venue)</td><td>Building to Vegetation Area 1</td><td>Minimum 31.6 metres</td></tr><tr><td>Building to Vegetation Area 2</td><td>Minimum 33.4 metres</td></tr><tr><td>Building to Vegetation Area 3</td><td>Minimum 49.6 metres</td></tr><tr><td>Building to Vegetation Area 4</td><td>Minimum 67.7 metres</td></tr><tr><td>Building to Vegetation Area 5</td><td>N/A</td></tr></table> <p>Maintain the APZ to the above dimensions and to the standards established by the Guidelines (refer to Appendix 1) or as varied by the local government through their Firebreak Notice (refer to the following responsibility). by the relevant local government through their Firebreak Notice (refer to the following responsibility).</p>		10kW/m ² Radiant Heat Flux APZ Dimensions			Existing Shed (Proposed Venue)	Building to Vegetation Area 1	Minimum 31.6 metres	Building to Vegetation Area 2	Minimum 33.4 metres	Building to Vegetation Area 3	Minimum 49.6 metres	Building to Vegetation Area 4	Minimum 67.7 metres	Building to Vegetation Area 5	N/A
10kW/m ² Radiant Heat Flux APZ Dimensions																
Existing Shed (Proposed Venue)	Building to Vegetation Area 1	Minimum 31.6 metres														
	Building to Vegetation Area 2	Minimum 33.4 metres														
	Building to Vegetation Area 3	Minimum 49.6 metres														
	Building to Vegetation Area 4	Minimum 67.7 metres														
	Building to Vegetation Area 5	N/A														
2	<p>Comply with the Shire of Gingin Fire Break Order issued under s33 of the Bush Fires Act 1954.</p> <p>This may include specifications for asset protection zones that differ from the Guideline's APZ Standards, with the intent to better satisfy local conditions. When these are more stringent than those created by the Guidelines, or less stringent and endorsed by the WAPC and DFES, they must be complied with. Refer to Appendix 1.</p>															
3	<p>Maintain vehicular access routes within the lot to the required surface condition and clearances as stated in the BMP.</p>															
4	<p>Maintain the emergency water supply tank and its associated fittings and vehicular access in good working condition.</p>															
5	<p>Ensure that any builders (of future structures on the lot) are aware of the existence of this Bushfire Management Plan and the responsibilities it contains regarding the application of construction standards corresponding to a determined BAL.</p>															
6	<p>Ensure all future buildings the landowner has responsibility for, are designed and constructed in full compliance with:</p> <ol style="list-style-type: none">the requirements of the WA Building Act 2011 and the bushfire provisions of the Building Code of Australia (BCA); andwith any identified additional requirements established by this BMP or the relevant local government.															
7	<p>To implement and maintain, the additional bushfire protection measures contained in Section 5.5 of this Bushfire Management Plan, in addition to the measures that are established by the acceptable solutions.</p>															
8	<p>Annually review the Bushfire Emergency Plan and conduct the pre-season preparation procedure.</p>															
9	<p>The business manager will be required to liaise with the Shire of Gingin requesting approval to operate during the Prohibited Burning Period annually or as agreed.</p>															



Table 6.3: Ongoing management responsibilities for the Local Government.

6.3 Local Government - Ongoing	
No.	Ongoing Management Actions
1	Monitor landowner compliance with the Bushfire Management Plan and the annual Shire of Gingin Fire Break Order notice.



APPENDIX 1: TECHNICAL REQUIREMENTS FOR ONSITE VEGETATION MANAGEMENT

A1.1 Requirements Established by the Guidelines – Standards for Asset Protection Zones

(Source: *Guidelines for Planning in Bushfire Prone Areas* - WAPC 2017 v1.3 Appendix 4, Element 2, Schedule 1 and Explanatory Note E2.1)

DEFINING THE ASSET PROTECTION ZONE (APZ)

Description: An APZ is an area surrounding a building that is managed to reduce the bushfire hazard to an acceptable level (by reducing fuel loads). The width of the required APZ varies with slope and vegetation and varies corresponding to the BAL rating determined for a building (lower BAL = greater dimensioned APZ).

For planning applications, the minimum sized acceptable APZ is that which is of sufficient size to ensure the potential radiant heat impact of a fire does not exceed 29kW/m² (BAL-29). It will be site specific.

For subdivision planning, design elements and excluded/low threat vegetation adjacent to the lot(s) can be utilised to achieve the required vegetation separation distances and therefore reduce the required dimensions of the APZ within the lot(s).

Defendable Space: The APZ includes a defendable space which is an area adjoining the asset within which firefighting operations can be undertaken to defend the structure. Vegetation within the defendable space should be kept at an absolute minimum and the area should be free from combustible items and obstructions. The width of the defendable space is dependent on the space, which is available on the property, but as a minimum should be 3 metres.

Establishment: The APZ should be contained solely within the boundaries of the lot on which the building is situated, except in instances where the neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity.

The APZ may include public roads, waterways, footpaths, buildings, rocky outcrops, golf courses, maintained parkland as well as cultivated gardens in an urban context, but does not include grassland or vegetation on a neighbouring rural lot, farmland, wetland reserves and unmanaged public reserves.

[Note: Regardless of whether an Asset Protection Zone exists in accordance with the acceptable solutions and is appropriately maintained, fire fighters are not obliged to protect an asset if they think the separation distance between the dwelling and vegetation that can be involved in a bushfire, is unsafe.]

Schedule 1: Standards for APZ

Fences: within the APZ are constructed from non-combustible materials (e.g. iron, brick, limestone, metal post and wire). It is recommended that solid or slatted non-combustible perimeter fences are used.

Objects: within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.

Fine Fuel Load: combustible dead vegetation matter less than 6 mm in thickness reduced to and maintained at an average of two tonnes per hectare (example below).



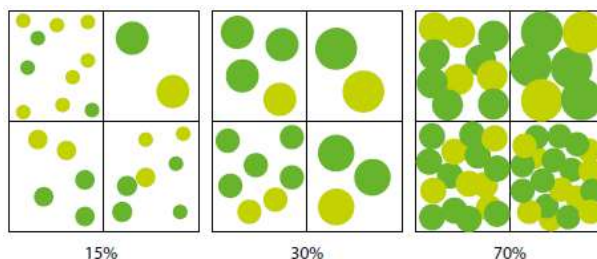
Example: Fine fuel load of 2 t/ha

(Image source: Shire of Augusta Margaret River's Firebreak and Fuel Reduction Hazard Notice)



Trees (> 5 metres in height): trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy. Diagram below represents tree canopy cover at maturity.

Tree canopy cover – ranging from 15 to 70 per cent at maturity



(Source: Guidelines for Planning in Bushfire Prone Areas 2017, Appendix 4)

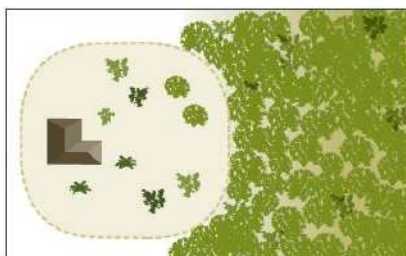
Shrubs (0.5 metres to 5 metres in height): should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m² in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.

Ground covers (<0.5 metres in height): can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors if greater than 100 mm in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.

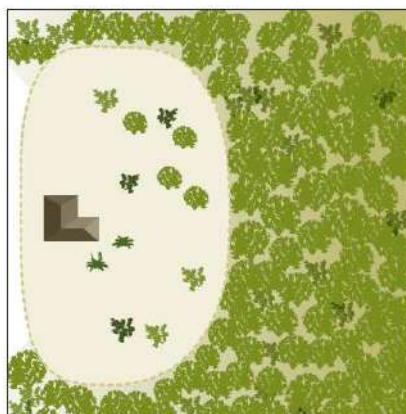
Grass: should be managed to maintain a height of 100 mm or less.

The following example diagrams illustrate how the required dimensions of the APZ will be determined by the type and location of the vegetation.

Hazard on one side
APZ



Hazard on three sides
APZ





A1.2 Requirements Established by the Local Government – the Firebreak Notice

The relevant local government's current Firebreak Notice is available on their website, at their offices and is distributed as ratepayer's information. It must be complied with.

These requirements are established by the relevant local government's Firebreak Notice created under s33 of the Bushfires Act 1954 and issued annually (potentially with revisions). The Firebreak Notice may include additional components directed at managing fuel loads, accessibility and general property management with respect to limiting potential bushfire impact.

If Asset Protection Zone (APZ) specifications are defined in the Firebreak Notice, these may differ from the Standards established by the Guideline's, with the intent to better satisfy local conditions. When these are more stringent than those created by the Guidelines, or less stringent and endorsed by the WAPC and DFES, they must be complied with.

The APZ dimensions to be physically established and maintained, will be based on which of the following establishes the larger APZ dimension:

- The dimensions corresponding to the determined BAL of a building (refer to Section 3.2 explanation of the 'planning' versus 'building' requirements and 'indicative' versus 'determined' BAL(s)); or
- The APZ dimensions established by the local government's Firebreak Notice.

A1.3 Requirements Recommended by DFES – Property Protection Checklists

Further guidance regarding ongoing/lasting property protection (from potential bushfire impact) is presented in the publication 'DFES – Fire Chat – Your Bushfire Protection Toolkit'. It is available from the Department of Fire and Emergency Services (DFES) website.

A1.4 Requirements Established by AS 3959:2018 – 'Minimal Fuel Condition'

This information is provided for reference purposes. This knowledge will assist the landowner to comply with Management Requirement No. 3 set out in the Guidance Panel at the start of this Appendix. It identifies what is required for an area of land to be excluded from classification as a potential bushfire threat.

"Australian Standard - AS 3959:2018 Section 2.2.3.2: Exclusions - Low threat vegetation and non-vegetated areas:

The Bushfire Attack Level shall be classified BAL-LOW where the vegetation is one or a combination of the following:

- a) Vegetation of any type that is more than 100m from the site.
- b) Single areas of vegetation less than 1ha in area and not within 100m of other areas of vegetation being classified vegetation.
- c) Multiple area of vegetation less than 0.25ha in area and not within 20m of the site or each other or other areas of vegetation being classified vegetation.
- d) Strips of vegetation less than 20m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20m of the site or each other, or other areas of vegetation being classified vegetation.
- e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops.
- f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a **minimal fuel condition**, (means insufficient fuel available to significantly increase the severity of a bushfire attack – for example, recognisable as short cropped grass to a nominal height of 100mm), mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks (single row of trees)."



APPENDIX 2: TECHNICAL REQUIREMENTS FOR VEHICULAR ACCESS

Each local government may have their own standard technical requirements for emergency vehicular access, and they may vary from those stated in the Guidelines.

When required, these are stated in Section 5.1 of this bushfire management plan.

Requirements Established by the Guidelines – The Acceptable Solutions

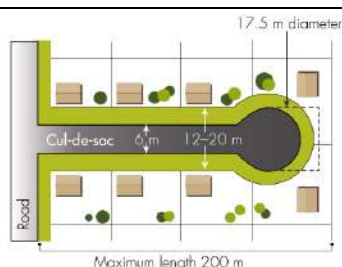
(Source: Guidelines for Planning in Bushfire Prone Areas WAPC 2017 v1.3, Appendix 4)

VEHICULAR ACCESS TECHNICAL REQUIREMENTS - PART 1

Acceptable Solution 3.3: Cul-de-sacs (including a dead-end road)

Their use in bushfire prone areas should be avoided. Where no alternative exists then the following requirements are to be achieved:

- Maximum length is 200m. If public emergency access is provided between cul-de-sac heads (as a right of way or public access easement in gross), the maximum length can be increased to 600m provided no more than 8 lots are serviced and the emergency access way is less than 600m in length;
- Turnaround area requirements, including a minimum 17.5m diameter head to allow type 3.4 fire appliances to turn around safely;
- The cul-de-sac connects to a public road that allows for travel in two directions; and
- Meet the additional design requirements set out in Part 2 of this appendix.



Acceptable Solution 3.5: Private Driveways

The following requirements are to be achieved:

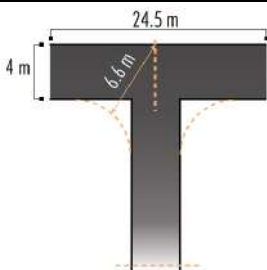
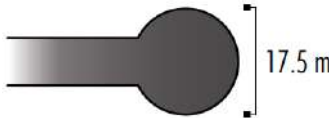
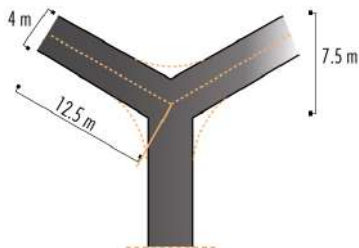
- The design requirements set out in Part 2 of this appendix; and

Where the house site is more than 50 metres from a public road:

- Passing bays every 200 metres with a minimum length of 20 metres and a minimum width of two metres (ie combined width of the passing bay and constructed private driveway to be a minimum six metres);
- Turn-around areas every 500 metres (and within 50 metres of a house, designed to accommodate type 3.4 fire appliances to turn around safely (ie kerb to kerb 17.5 metres);
- Any bridges or culverts are able to support a minimum weight capacity of 15 tonnes; and
- All weather surface (i.e. compacted gravel, limestone or sealed).



VEHICULAR ACCESS TECHNICAL REQUIREMENTS - PART 1

Acceptable Solution 3.8: Firebreak Width

Lots greater than 0.5 hectares must have an internal perimeter firebreak of a minimum width of three meters or to the level as prescribed in the local firebreak notice issued by the local government.

VEHICULAR ACCESS TECHNICAL REQUIREMENTS - PART 2

Technical Component	Vehicular Access Types				
	Public Roads	Cul-de-sacs	Private Driveways	Emergency Access Ways	Fire Service Access Routes
Minimum trafficable surface (m)	6*	6	4	6*	6*
Horizontal clearance (m)	6	6	6	6	6
Vertical clearance (m)	4.5	4.5	4.5	4.5	4.5
Maximum grade <50 metres	1 in 10	1 in 10	1 in 10	1 in 10	1 in 10
Minimum weight capacity (t)	15	15	15	15	15
Maximum cross-fall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius (m)	8.5	8.5	8.5	8.5	8.5

* A six metre trafficable surface does not necessarily mean paving width. It could, for example, include four metres of paving and one metre of constructed road shoulders. In special circumstances, where 8 lots or less are being serviced, a public road with a minimum trafficable surface of four metres for a maximum distance of ninety metres may be provided subject to the approval of both the local government and DFES.



APPENDIX 3: TECHNICAL REQUIREMENTS FOR FIREFIGHTING WATER

Non-Reticulated Areas – Multiple Lot Subdivision

Each local government may have their own standard technical requirements for firefighting water supplies, and they may vary from those stated in the Guidelines.

Table A4.1: Non-reticulated areas – Subdivision (multiple lots) water supply technical requirements.

TECHNICAL REQUIREMENTS FOR STATIC WATER SUPPLY (EXAMPLE ONLY – CHECK WITH LOCAL GOVERNMENT)	
Volume:	50,000 litres per tank
Ratio of tanks to lots:	1 tank per 25 lots (or part thereof)
Location:	No more than two kilometres to the furthestmost house site within the residential development to allow a 2.4 fire appliance to achieve a 20-minute turnaround time at legal road speeds.
Tank Construction:	Above ground tanks constructed using concrete or metal. Stands of raised tanks are constructed using non-combustible materials and heat shielding where applicable (required for metal stands).
Pipe Construction:	Galvanised or copper (PVC if buried at least 300mm below ground).
Access:	Hardstand and turnaround areas suitable for a 3.4 appliance (i.e. kerb to kerb 17.5metres) are provided within three metres of each tank.
Couplings:	Hydrant or standpipe to be provided. Tanks to be fitted with a full flow valve and a 100mm cam-lock coupling of metal/alloy construction (examples below).
Ownership and Responsibility:	Water tanks and associated facilities are vested in the relevant local government. A procedure must be in place to ensure that water tanks are maintained at or above designated capacity always.
[Sources: Guidelines for Planning in Bushfire Prone Areas WAPC 2017 v1.3, Appendix 4, Element 4 with example construction / coupling requirements from various sources including FESA (DFES) Operational Circular 07/2011 and Planning for Bushfire Protection Guidelines WAPC 2010]	
<div style="display: flex; justify-content: space-around;">   </div>	



APPENDIX 4: AS 3959:2018 METHOD 2 INPUT/OUTPUT CALCULATION SUMMARIES

DETERMINING 10 KW/M² SEPARATION DISTANCES

Calculated January 11, 2022, 5:14 pm (MOC v4.9)

Grassland 0

Minimum Distance Calculator - AS3959-2018 (Method 2)

Inputs	Outputs
Grassland Fire Danger Index: 130	Rate of spread: 16.9 km/h
Vegetation classification: Grassland	Flame length: 7.47 m
Understorey fuel load: 4.5 t/ha	Flame angle: 66 °, 72 °, 78 °, 81 °, 82 ° & 85 °
Total fuel load: 4.5 t/ha	Elevation of receiver: 3.41 m, 3.55 m, 3.65 m, 3.68 m, 3.69 m & 3.72 m
Vegetation height: n/a	Fire intensity: 39,292 kW/m
Effective slope: 0 °	Transmissivity: 0.876, 0.884, 0.846, 0.833, 0.811000000000001 & 0.747
Site slope: 0 °	Viewfactor: 0.4054, 0.2973, 0.2008, 0.1358, 0.11 & 0.0298
Flame width: 100 m	Minimum distance to < 40 kW/m²: 6.1 m
Windspeed: n/a	Minimum distance to < 29 kW/m²: 12.4 m
Heat of combustion: 18,600 kJ/kg	Minimum distance to < 19 kW/m²: 18.2 m
Flame temperature: 1,200 K	Minimum distance to < 12.5 kW/m²: 26.3 m
	Minimum distance to < 10 kW/m²: 31.6 m

Rate of Spread - Noble et al., 1980
Flame length - Hurley, 1982
Elevation of receiver - Douglas & Tan, 2005
Flame angle - Douglas & Tan, 2005
Radiant heat flux - Drysdale, 1999; Sullivan et al., 2003; Douglas & Tan, 2005

Calculated January 11, 2022, 5:12 pm (MOC v4.9)

Grassland 2

Minimum Distance Calculator - AS3959-2018 (Method 2)

Inputs	Outputs
Grassland Fire Danger Index: 120	Rate of spread: 19.4 km/h
Vegetation classification: Grassland	Flame length: 8 m
Understorey fuel load: 4.5 t/ha	Flame angle: 66 °, 72 °, 78 °, 81 °, 82 ° & 85 °
Total fuel load: 4.5 t/ha	Elevation of receiver: 3.65 m, 3.8 m, 3.91 m, 3.95 m, 3.96 m & 3.98 m
Vegetation height: n/a	Fire intensity: 45,106 kW/m
Effective slope: 2 °	Transmissivity: 0.877, 0.883, 0.842, 0.82, 0.807000000000001 & 0.748
Site slope: 0 °	Viewfactor: 0.4078, 0.2992, 0.2013, 0.1261, 0.1104 & 0.02
Flame width: 100 m	Minimum distance to < 40 kW/m²: 5.99999999999999
Windspeed: n/a	Minimum distance to < 29 kW/m²: 13.2 m
Heat of combustion: 18,600 kJ/kg	Minimum distance to < 19 kW/m²: 18.5 m
Flame temperature: 1,200 K	Minimum distance to < 12.5 kW/m²: 27.9 m
	Minimum distance to < 10 kW/m²: 33.4 m

Rate of Spread - Noble et al., 1980
Flame length - Hurley, 1982
Elevation of receiver - Douglas & Tan, 2005
Flame angle - Douglas & Tan, 2005
Radiant heat flux - Drysdale, 1999; Sullivan et al., 2003; Douglas & Tan, 2005

Calculated January 11, 2022, 5:15 pm (MOC v4.9)

Woodland 2

Minimum Distance Calculator - AS3959-2018 (Method 2)

Inputs	Outputs
Fire Danger Index: 80	Rate of spread: 1.65 km/h
Vegetation classification: Woodland	Flame length: 13.74 m
Understorey fuel load: 15 t/ha	Flame angle: 65 °, 70 °, 75 °, 78 °, 79 ° & 84 °
Total fuel load: 25 t/ha	Elevation of receiver: 6.22 m, 6.45 m, 6.63 m, 6.72 m, 6.74 m & 6.83 m
Vegetation height: n/a	Fire intensity: 21,352 kW/m
Effective slope: 2 °	Transmissivity: 0.858, 0.84, 0.816999999999999, 0.792, 0.78 & 0.720
Site slope: 0 °	Viewfactor: 0.4155, 0.2891, 0.2081, 0.141, 0.1145 & 0.0307
Flame width: 100 m	Minimum distance to < 40 kW/m²: 18.3 m
Windspeed: n/a	Minimum distance to < 29 kW/m²: 21.8 m
Heat of combustion: 18,600 kJ/kg	Minimum distance to < 19 kW/m²: 31 m
Flame temperature: 1,200 K	Minimum distance to < 12.5 kW/m²: 42.5 m
	Minimum distance to < 10 kW/m²: 49.6 m

Rate of Spread - Marquis, 1979 & Noble et al., 1980
Flame length - NSW Rural Fire Service, 2001 & Noble et al., 1980
Elevation of receiver - Douglas & Tan, 2005
Flame angle - Douglas & Tan, 2005
Radiant heat flux - Drysdale, 1999; Sullivan et al., 2003; Douglas & Tan, 2005

Calculated January 11, 2022, 5:16 pm (MOC v4.9)

Forest 2

Minimum Distance Calculator - AS3959-2018 (Method 2)

Inputs	Outputs
Fire Danger Index: 80	Rate of spread: 2.75 km/h
Vegetation classification: Forest	Flame length: 22.1 m
Understorey fuel load: 25 t/ha	Flame angle: 62 °, 67 °, 72 °, 74 °, 76 ° & 82 °
Total fuel load: 35 t/ha	Elevation of receiver: 9.76 m, 10.17 m, 10.51 m, 10.62 m, 10.72 m & 10.94 m
Vegetation height: n/a	Fire intensity: 49,822 kW/m
Effective slope: 2 °	Transmissivity: 0.838, 0.816999999999999, 0.791, 0.77, 0.76 & 0.707
Site slope: 0 °	Viewfactor: 0.4253, 0.3167, 0.2141, 0.1452, 0.1177 & 0.0316
Flame width: 100 m	Minimum distance to < 40 kW/m²: 15.3 m
Windspeed: n/a	Minimum distance to < 29 kW/m²: 32.8 m
Heat of combustion: 18,600 kJ/kg	Minimum distance to < 19 kW/m²: 44.8 m
Flame temperature: 1,200 K	Minimum distance to < 12.5 kW/m²: 59 m
	Minimum distance to < 10 kW/m²: 67.7 m

Rate of Spread - Marquis, 1979 & Noble et al., 1980
Flame length - NSW Rural Fire Service, 2001 & Noble et al., 1980
Elevation of receiver - Douglas & Tan, 2005
Flame angle - Douglas & Tan, 2005
Radiant heat flux - Drysdale, 1999; Sullivan et al., 2003; Douglas & Tan, 2005



Level 1 159-161 James Street Guildford WA 6055

PO Box 388 Guildford WA 6935

P: 6477 1144

Our Ref: 210762

12 July 2022

Matthew Tallon
Shire of Gingin

Dear Matthew

Re: Bushfire Prone Planning's response to DFES advice referenced D23742 (21 April 2022) regarding Vulnerable Land Use - Lot 24 (no. 145) Baramba Road, Karakin – Proposed Wedding Venue - Development Application BMP.

Please find my response to the DFES advice and our proposed actions in the following tables. Level 3 BPAD Practitioner, Mike Scott performed the original site assessment on 1 September 2021. The current Bushfire Management Plan is version 1.1, prepared on 9th February 2022.

The BMP and revisions were prepared in accordance with the *Guidelines for Planning in Bushfire Prone Areas* version 1.3. The *Guidelines* version 1.4 was released in December 2021 and provided a grace period where version 1.3 was applicable until 13th March 2022, during which the BMP was submitted.

If you wish to discuss these further, please do not hesitate to contact this office.

Yours sincerely



Mike Scott
Bushfire Prone Planning



1. Policy Measure 6.5 a) (i) Preparation of a BAL Assessment

Issue	Assessment	Action	BPP Comment
Vegetation Classification	<p>Plot 3 – Class B Woodland</p> <p>Vegetation plot 3 cannot be substantiated as Class B Woodland with the limited information and photographic evidence available. The foliage cover appears to exceed 30% and the potential for revegetation has not been considered.</p> <p>The BMP should detail specifically how the Class B Woodland classification was derived as opposed to Class A Forest.</p> <p>If unsubstantiated, the vegetation classification should be revised to consider the vegetation at maturity as per AS3959:2018, or the resultant BAL ratings may be inaccurate.</p> <p>For the reasons above, the Method 2 calculations have not been validated.</p>	Modification to the BMP is required.	<p>Vegetation Area 3 has less than 30% canopy coverage. It is difficult to accurately represent canopy cover photographically due to the angle from ground level. Satellite imagery tends to overstate average canopy coverage.</p> <p>4 photo (IDs 7-10) were provided of Area 3. These photos clearly show tall, mature trees and grassy understory with clear separation between the two and no tiered fuel structure. There is no justification for classification as Class B Forest.</p> <p>Any and all vegetation has the potential for revegetation. Vegetation classification must be based on what is <u>most likely</u> to occur. Area 3 is expected to remain as Class B Woodland in perpetuity as:</p> <ul style="list-style-type: none"> • The area is grazed • There are no saplings or shrubs present. • The youngest tree is approximately 15 years old. • Area 3 runs onsite and offsite, and has a consistent structure in all sections. <p>Additional photos attached. Note sparse canopy common for flooded gums.</p> <p>Action</p> <p>No action required.</p>



<p>Landscape Management Plan</p>	<p>The BMP has identified that a significant amount of vegetation will need to be modified to achieve an APZ compliant with Schedule 1: Standards for Asset Protection Zones contained in the Guidelines.</p> <p>A Landscape Management Plan should be prepared to remove ambiguity for the landowner and to provide a compliance mechanism for the Shire.</p>	<p>Modification to the BMP is required.</p>	<p>The existing trees within the APZ are established, under-pruned, and have sufficient canopy separation. The only works required in establishing the stated APZ is slashing of grasses to <10cm height.</p> <p>The existing APZ around the residence is compliant and the landowner need only extend these works to the subject building.</p> <p>A Landscape Management Plan is unnecessary both for the works required and for the clarity of the Shire of Gingin.</p> <p>Action</p> <p>No action required.</p>
<p>Construction to AS3959 Building Standards</p>	<p>DFES acknowledges that the BMP proposes to retrofit the building to comply with AS3959 construction standards to BAL-29.</p> <p>The decision maker should support upgrading the outbuilding to utilise all of the elements of AS3959 which apply to the appropriate Bushfire Attack Level (BAL). This is consistent with Clause 78E(i) Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations 2015 that requires the decision-maker to have regard to the bushfire resistant construction requirements of the Building Code of Australia.</p> <p>This advice is further supported by Clause 5.8.3 of the Guidelines which reads as follows:</p> <p><i>The bushfire construction provisions of the Building Code of Australia do not apply to Class 4 to Class 9 buildings. In these instances the applicant has the discretion to utilise</i></p>	<p>Comment only.</p>	<p>It is unclear what is meant by 'outbuilding.' The subject building is currently noted as a shed, though is more comparable to a dwelling in construction. It is required to be retrofitted to AS3959 construction standards to BAL-29.</p> <p>The other buildings onsite are residential dwellings constructed before SPP3.7. The development application and proposed use does not involve these buildings. The nearest building is approximately 40m from the proposed venue and thus does not directly impact the proposal.</p> <p>Retrofitting these buildings is unnecessary, not relevant to the proposal, and prohibitively expensive.</p> <p>Action</p>



	<p><i>any or all of the elements of AS3959 in the construction of the building that they deem appropriate.</i></p> <p>Although BAL construction standards do not guarantee the survival of the occupants or building, DFES does support the improved bushfire resilience provided by AS 3959-2018 construction standards.</p>		No action required.
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	---------------------

2. Policy Measure 6.5 c) Compliance with the Bushfire Protection Criteria

Element	Assessment	Action	BPP comment
Siting and Design	<p>A5.13 - not demonstrated</p> <p>The BAL Ratings cannot be validated for the reasons outlined in the above table.</p>	Modification to the BMP is required.	<p>Justification for vegetation classifications have been provided in the table above.</p> <p>Action</p> <p>No action required.</p>



Vehicular Access	<p>A5.14/P5xiv – not demonstrated</p> <p>Access in two different directions to two different destinations, in accordance with the acceptable solution, is not available until the intersection of Baramba Road and Cowalla Road approximately 2000 metres from the development site. This exceeds the acceptable maximum length of 200 metres for a dead end road.</p> <p>The BMP has stated that no onsite shelter is proposed, however an onsite shelter is required to meet the Acceptable Solution A5.14d where A5.14a, A5.14b and A5.14c cannot be achieved. The development may propose a maximum capacity of 100 guests and staff if compliance with A5.13b, A5.13c & A5.13d can be demonstrated.</p>	Modification to the BMP is required. Please demonstrate compliance or provide substantiated evidence of a performance principle-based solution.	<p>The BMP was produced in accordance with the Guidelines version 1.3, which did not provide an Acceptable Solution for sheltering on-site or pre-emptive closure. Performance Principle-Based solutions were provided.</p> <p>These Performance Principle-Based solutions would now (under version 1.4) be considered to meet Acceptable Solution A5.13c, A5.14d, A5.14a and A5.14d, excepting that the proposed capacity exceeds 100 persons. It should be noted that the restricted operating period provided within the Performance Principle-Based solution far exceeds that of A5.14a of version 1.4.</p> <p>The proposal should be assessed against the Guidelines version 1.3.</p> <p>Action</p> <p>No action required.</p>
	<p>A5.14f, A5.14g & A5.14h – insufficient information.</p> <p>Internal driveways should comply with the requirements of Table 6, Column 4 of the Guidelines.</p> <p>No signage has been proposed to advise access route details and general information in the event of a bushfire.</p>	Modification to the BMP is required.	<p>The existing driveway meets the specifications provided. The driveway is visible in Photo ID 1.</p> <p>The Guidelines version 1.3 does not require evacuation signage.</p> <p>Version 1.4 A5.14h requires route details be displayed. Travel north or south on Cowalla Road depends on the location of the bushfire so cannot be predetermined.</p> <p>The evacuation route in this instance is 'Turn right onto Baramba Road.'</p>



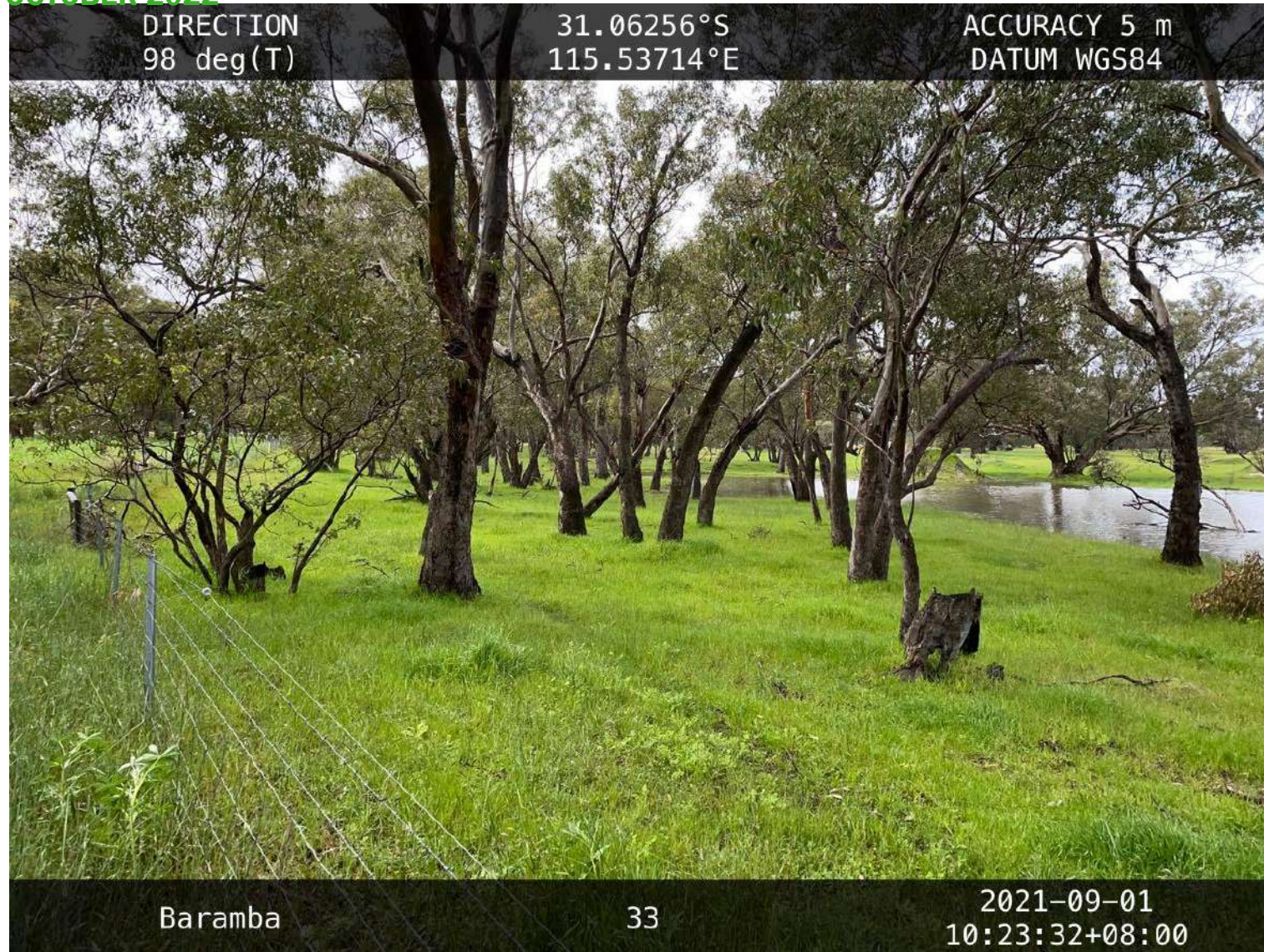
			<p>The Shire of Gingin may place a requirement that this signage may be displayed.</p> <p>Action</p> <p>No action required.</p>
--	--	--	----------------------------------------------------------------------------------------------------------------------------------------

3. Policy Measure 6.6.1 Vulnerable land uses

Element	Assessment	Action	BPP comment
Bushfire Emergency Evacuation Plan (BEEP)	The referral has not included a 'Bushfire Emergency Plan' for the purposes of addressing the policy requirements. Consideration should be given to the Guidelines Section 5.5.2 'Developing a Bushfire Emergency Evacuation Plan'. This contains detail regarding what should be included in a BEEP and will ensure the appropriate content is detailed when finalising the BEEP to the satisfaction of the Shire.	Comment only.	<p>The Bushfire Emergency Plan will be required prior to occupancy/operation.</p> <p>Action</p> <p>No action required.</p>
Refuge Building or Refuge Open Space Area	Please note that the bushfire shelter building should be designed to withstand bushfire attack in the form of wind, smoke, embers, radiant heat and flame contact. A refuge building needs to have a sufficient separation distance from the predominant bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 10kW/m ² . A building designated as a bushfire shelter must comply with ABCB Design and Construction of Community Bushfire Refuges (2014). Sheltering in a compliant refuge must be accepted as being	Comment only.	<p>The DFES comments have thus far referenced the Guidelines version 1.4.</p> <p>Version 1.4 A5.13d allows for on-site shelters to be constructed to BAL-29 and subject to <10kW/m² radiant heat flux.</p> <p>Whilst early evacuation is broadly the safest response to a bushfire, the contingency of sheltering in place must always be considered.</p>



	a last resort option when it is no longer safe to evacuate to an area not prone to bushfire risk. It should be emphasised that a refuge is not a standalone solution to mitigating risk to life safety		Action No action required.
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--------------------------------------





13.2 APPLICATION FOR DEVELOPMENT APPROVAL - EXTRACTIVE INDUSTRY (GRAVEL) ON LOT 1 WANNAMAL ROAD WEST, BOONANARRING

File	BLD/7478
Applicant	Harley Dykstra
Location	Lot 1 Wannamal Road West, Boonanarring
Owner	Alltrack 2 WA Pty Ltd
Zoning	General Rural
WAPC No	N/A
Author	Natasha Jurmann – Statutory Planning Officer
Reporting Officer	Bob Kelly - Executive Manager Regulatory and Development Services
Refer	N/A
Appendices	<ol style="list-style-type: none"> 1. Aerial Map - Lot 1 Wannamal Road West, Boonanarring [13.2.1 - 1 page] 2. Location Map - Lot 1 Wannamal Road West, Boonanarring [13.2.2 - 1 page] 3. Applicant's Proposal [13.2.3 - 189 pages] 4. Schedule of Submissions and Recommended Responses [13.2.4 - 7 pages] 5. Schedule of Submissions and Applicant's Responses [13.2.5 - 8 pages] 6. Responses to Shire [13.2.6 - 4 pages]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider an Application for Development Approval for a proposed Extractive Industry (gravel) on Lot 1 Wannamal Road West, Boonanarring.

BACKGROUND

The subject property is 1,371 hectares (ha) in area and is located on Wannamal Road West across from the Boonanarring Nature Reserve, with 18.74ha proposed to be used for the extractive industry. The site rises gently from 242.5 metres Australian Hight Datum (AHD) in the north west to 262 metres AHD in the south east of the application area, before falling from the knoll back to the road reserve in the south. The extraction pit face is located on the north-western side of the knoll and will follow the rise of the hill in stages 2 and 3.

The land has historically been used for cattle grazing, with native trees including Eucalypts, Jarrah and Banksias present over most of the lot. Several of these trees provide suitable breeding hollows for the endangered Carnaby's Black Cockatoo.

The development proposal seeks to extract up to 86,000 tonnes of gravel per annum. The applicant estimates the footprint of the usable material is in the order of 13.77ha that will produce a 15-year operational period for the development.

The table below outlines development within the immediate area.

Land Use	Proximity to Development Area
Residential	~ 970m west; ~ 1km east on the same property ~ 3.5km west on the same property
Parks and Recreation Reserve	~ 63m south
Agriculture Intense	~ 3.97km west

The development involves crushing and screening operations which requires the proponent to obtain a Works Approval and Works License from the Department of Water and Environmental Regulation (DWER) under section 54 of the *Environmental Protection Act 1984* (EP Act). This does not preclude the Shire's ability to consider the impact of those operations under the planning framework, however the technical assessment undertaken by DWER, given the employment of experts in the related field, addresses emissions control (noise/dust) from those activities.

An aerial map and location plan are provided as **Appendix 13.2.1** and **Appendix 13.2.2** respectively.

The applicant has provided a report in support of the application. The applicant's proposal is provided as **Appendix 13.2.3**. The bundle of documents consists of the following:

- Development Application Report;
- Development Plans; and
- Environmental Reports.

COMMENT

Stakeholder Consultation

The application was advertised to adjoining landowners for a period of 14 days in accordance with clause 64 of the *Planning and Development (Local Planning Scheme) Regulations 2015* and one submission opposing the development was received.

The submitter's main concerns are that the crossover is too close to their property and house, negatively impacting their amenity due to the noise and dust generated by trucks servicing the development.

The application was also advertised to the following State agencies for a period of 42 days in accordance with clause 66 of the *Planning and Development (Local Planning Scheme) Regulations 2015*:

- Department of Water and Environmental Regulation (DWER);
- Department of Mines, Industry Regulation and Safety (DMIRS);
- Department of Planning, Lands and Heritage (DPLH);
- DPLH – Aboriginal Heritage Council;
- Department of Health (DoH);
- Department of Biodiversity, Conservation and Attractions (DBCA);
- The Environmental Protection Agency (EPA); and
- Department of Primary Industries and Regional Development (DPIRD).

The comments received from State agencies reinforce the need to impose conditions relating to rehabilitation, dust management, noise management etc. which are typically applied to extractive industries. The officer notes that no objections have been raised.

A copy of the Schedule of Submissions and Recommended Responses, including correspondence from State agencies, is provided as **Appendix 13.2.4**.

The applicant has provided a response to the Schedule of Submissions, which is provided as **Appendix 13.2.5**.

PLANNING FRAMEWORK

Local Planning Strategy 2012 (the Strategy)

Section 2.5.4 of the Strategy states the following:

The Shire of Gingin is under increasing pressure for extractive industry development as the resource base lessens in the metropolitan area and the urban development front moves northwards.

The availability of basic raw materials for extraction, particularly in areas adjacent to the coast, is enhanced by the containment of urban nodes and limitation on further rural residential development in proximity to the coastal margin. Protection and management of these resources should be in line with WAPC Statement of Planning Policy No 2.4 Basic Raw Materials.

This basic raw material deposit is not expressly identified under the Strategy. However, this does not preclude the Shire from considering the proposal as the Local Planning Scheme No.9 (LPS 9) contemplates the 'Extractive Industry' land use in the General Rural zone.

Local Planning Scheme No. 9 (LPS 9) Planning Assessment

The subject lot is zoned "General Rural (GR)" under LPS 9. The objectives of the GR zone are outlined below with officer comments, given various submissions assert that the development does not satisfy these objectives:

- a) *manage land use changes so that the specific local rural character of the zone is maintained or enhanced;*

Officer comment:

The locality generally consists of rural land that has been predominantly cleared of vegetation to facilitate the grazing of livestock.

Land immediately to the north is used for Agriculture Intensive (annual horticulture) purposes with an existing extractive industry (Shire's) immediately east. Further east there is an existing animal husbandry intensive (Westpork). Land to the south consists of the Boonanarring Nature Reserve.

The character of the area therefore comprises of land uses (farming and extractive industries) of varying scales, within an area that contains minimal residential uses and large swathes of untouched native vegetation.

The officer is of the view that the development may not 'enhance' the character of the locality, but appropriately managed will maintain the existing character of the locality.

- c) *maintain and enhance the environmental qualities of the landscape, vegetation, soils and water bodies, to protect sensitive areas especially the natural valley and watercourse systems from damage; and*

Officer comment:

The State's primary environmental regulator, DWER, noted that removal of vegetation will require a clearing permit and did not provide any further comment in relation to the environmental studies. As the Shire does not have an environmental consultant on staff, the officer assessing the application read the reports and raised some questions with the applicant.

The applicant's responses to the Officer's questions can be seen in **Attachment 13.2.6**.

The Endangered Carnaby's Black Cockatoo is found in this region and 3 nesting trees are found in the proposed extraction area. The applicant proposes a 50-metre buffer zone around the trees to allow for foraging habitat and to avoid impact on the large tuart trees. When the Environmental Protection Agency was requested to comment on this distance, it stated that it wasn't able to provide comment at this time and that it would be commenting on the proposal when it was referred to the agency by DWER as a part of the applicant's clearing permit application process. A similar comment was received from the Department of Biodiversity, Conservation and Attractions.

- d) provide for the operation and development of existing, future and potential rural land uses by limiting the introduction of sensitive land uses in the General Rural zone.*

Officer comment:

This objective seeks to limit land uses (residential) within the GR zone that may prevent the zone from operating as intended (i.e. for primary and secondary agricultural pursuits). The proposed development does not seek to introduce a sensitive land use into the area and therefore is consistent with this objective.

An Extractive Industry is an "A" use within the General Rural zone, which means that the use is not permitted unless the local government has exercised its discretion by granting development approval after giving special notice in accordance with clause 64 of the Deemed Provisions.

It should also be noted that an extractive industry is regulated under an Extractive Industry Licence (EIL) that is issued in accordance with the Shire of Gingin's *Extractive Industries Local Law 2004*, which sets out further operational requirements.

Setbacks

In accordance with 'Table 2 – Site Requirements' of LPS 9, all development shall be set back a minimum 20 metres from all lot boundaries. The proposed extraction area is set back from all lot boundaries adequately.

4.8.10 Extractive Industries

- 4.8.10.1 Local government may consider applications for extractive industries in the General Rural zone where the sites have not been identified within an SCA under clause 5.4.*
- 4.8.10.2 In considering applications for extractive industries, local government will have regard for the zone objectives.*
- 4.8.10.3 Local government will also consider the potential impact of the extractive industry in regard to surrounding land uses (both existing and future) and may apply conditions to manage the potential impacts, such as noise, dust, odour and amenity.*

Comment:

The above provision outlines that resources not identified under the Strategy are still able to be utilised, subject to a planning assessment. The relevant considerations outlined under clause 4.8.10.3 above are duplicated under the Deemed Provisions.

Planning and Development (Local Planning Scheme) Regulations 2015 (Deemed Provisions)

In accordance with Schedule 2, Part 9, Clause 67 of the Deemed Provisions, the local government is to have due regard to a range of matters to the extent that, in the opinion of the local government, those matters are relevant to the development the subject of the application. In this instance, the following matters are considered to be relevant, with the officer comments outlined below:

(c) Any approved state planning policy;

(f) Any policy of the state;

Comment

Various state planning policies and guidance statements are applicable to the development assessment as referenced below:

- State Planning Policy 2.4 - Basic Raw Materials (SPP 2.4);
- State Planning Policy No. 4.1 - State Industrial Buffer Policy (SPP 4.1);
- State Planning Policy 2.5 - Rural Planning (SPP 2.5);
- Guilderton to Kalbarri Sub-Regional Strategy (GKSRS); and
- Guidance for the Assessment of Environmental Factors - Separation Distances between Industrial and Sensitive Land Uses No 3 (EPA Guidance Statement).

The officer notes that the planning framework duplicates relevant considerations. This section focuses on SPP 4.1 and the EPA Guidance Statement which subsequently addresses the other various policies.

The policy measures of SPP 4.1, set out in clause 5, seek to minimise land use conflict by requiring new industries to demonstrate if and how they intend to contain emissions onsite, and that they are located to provide and maintain an appropriate buffer between the proposed industrial uses and sensitive land uses.

SPP 4.1 confirms that proposals that satisfy recommended buffer distances in the EPA Guidance Statement are deemed to comply with the objectives of SPP 4.1. Clause 5.3 of SPP 4.1 establishes that technical analysis is required if a proponent seeks to reduce the buffer from those specified in the EPA Guidance Statement or where cumulative impacts may occur.

Appendix 1 of the EPA Guidance Statement provides the separation distances for 'Extractive Industries – Hard Rock' and outlines a buffer distance of 1000 metres, whereas rock is assessed on a case-by-case basis depending on size and scale of the operation. This buffer excludes crushing/screening activities which are included as part of the development proposal and therefore the buffer distance is expanded to 1000 metres.

Sensitive land uses are defined as follows:

... land uses applied to places where people live or regularly spend time and which are therefore sensitive to emissions from industry. They include residences, hospitals and nursing homes, short stay accommodation, schools, child care facilities, shopping centres, playgrounds, and some public buildings. Some commercial and institutional land uses which require high levels of amenity or are sensitive to particular emissions may also be considered sensitive land uses.

The application is proposing a 970m setback to the nearest sensitive land use, with a significant tree buffer located between the proposed extractive industry and the dwelling. The proposed site will then move further away from the sensitive land use as the development progresses. The proposed access is located 400m from the nearest sensitive land use, with that resident raising concerns in relation to vehicle noise and dust. However, it should be noted that the noise is unlikely to be any greater than that already produced by Wannamal Road West which is only 200m from the dwelling. The applicant has noted that dust will be managed as part of the site management plan. In addition to this the officer is recommending a condition reducing the number of hours that trucks can service the site.

(m) the compatibility of the development with its setting including the relationship of the development to development on adjoining land or on other land in the locality including, but not limited to, the likely effect of the height, bulk, scale, orientation and appearance of the development;

Comment

The officer is of the view that the proposed land use is compatible within the rural environment, mainly due to rural land generally being large in area and best suited to provide adequate set back distances to adjoining properties and sensitive land uses.

(n) The amenity of the locality including the following:
(i) Environmental impacts of the development;
(ii) The character of the locality;

Comment

Amenity is defined under the Deemed Provisions as:

All those factors which combine to form the character of an area and include the present and likely future amenity.

Due to the substantial setback between the proposed extractive industry and the adjoining land uses, no impact on the future amenity of the locality from the extractive industry is likely to occur as a result of the development.

With regard to the neighbouring property owner's concerns about the location of the crossover, the applicant has advised that the crossover location is where it needs to be for safety reasons, and that moving it to the existing crossover location would result in significant additional vegetation clearing.

The officer is of the view that the location of the crossover and driveway 400m from the dwelling on Lot 2 is unlikely to adversely affect the dwelling as the noise is unlikely to be greater than that already produced by Wannamal Road West which is only 200m from the dwelling.

- (o) *The likely effect of the development on the natural environment or water resources and any means that are proposed to protect or to mitigate impacts on the natural environment or the water resource;*

Comment

The application proposes to remove 13.77ha of native bushland containing two DBCA Priority species (*Lasiopetalum venustum* (P3) and *Synaphea grandis* (P4)), which provides breeding grounds for the endangered Carnaby's Black Cockatoo.

The application was referred to the Environmental Protection Agency (EPA), DBCA and DWER, with all three agencies stating that they would assess the application when it came in for a clearing permit.

- (p) *Whether adequate provision has been made for the landscaping of the land to which the application relates and whether any trees or other vegetation on the land should be preserved;*

Comment

The applicant has no intention of providing any additional landscaping to the property during the operation of the extractive industry as the existing vegetation buffer is sufficient. Given the location, distances to other properties and the fact that it is not in the line of sight of any other properties, the officer agrees with this approach around the extraction site.

In the area surrounding the proposed access, the officer is recommending a condition for screening between Lot 2 and the access point to reduce the impact of dust, noise and appearance on the adjoining property.

- (s) *The adequacy of -*
 - (i) *The proposed means of access to and egress from the site; and*
 - (ii) *Arrangements for the loading, unloading, manoeuvring and parking of vehicles;*
- (t) *The amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety;*

Comment

The development will be serviced by a crossover from Wannamal Road West, with all traffic entering and departing the site travelling to and from the west via the intersection between Wannamal Road West and Brand Highway. Although requested to do so, the applicant has not submitted a Traffic Impact Assessment given the vehicle movements are less than 10 per hour.

Despite this, the officer is of the view that the development is of a scale that warrants lodgement of a Traffic Impact Assessment, notwithstanding the applicant's resistance and reference to the Traffic Impact Assessment Guidelines. It would be reasonable for Council to require lodgement of a Traffic Impact Assessment prior to determining the application if it saw fit to do so.

The officer suggests that the proponent be required to install a crossover in accordance with crossover plan (SoG/STD-10 Type B). This includes an asphalt overlay over a portion of Wannamal Road West with relevant conditions recommended.

- (y) *Any submissions received on the application;*
- (za) *The comments or submissions received from any authority consulted under clause 66;*

The officer has addressed the main concerns raised under the stakeholder consultation section above. The officer is of the view that the issues raised can be adequately addressed through conditions of approval and adjustment of the operational hours.

Shire of Gingin - Extractive Industries Local Law 2004 (as amended)

The Local Law guides the formal licensing of extractive industries throughout the Shire to monitor ongoing operational aspects of the use. The officer is of the view that, once revised management plans have been submitted as per suggested conditions of approval, an Extractive Industry Licence can be issued.

Management plans would generally address dust, staging, noise, rehabilitation and traffic management. These components can be conveniently captured in a single Site Management Plan (SMP) for ease of reference.

Summary

The officer is of the view that the subject land can accommodate the proposed extractive industry, provided that appropriate planning conditions and management plans are in place to ensure off site impacts can be controlled in a manner that won't adversely affect the amenity of the locality, and will uphold the objectives of the General Rural zone.

STATUTORY/LOCAL LAW IMPLICATIONS

Planning and Development (Local Planning Scheme) Regulations 2015
Schedule 2 – Deemed provisions for Local Planning Schemes

Local Planning Scheme No. 9

Shire of Gingin Extractive Industries Local Law 2004 (as amended)

POLICY IMPLICATIONS

State Planning Policy 2.4 – Basic Raw Materials
State Planning Policy 2.5 – Rural Planning
Guilderton to Kalbarri Sub - Regional Strategy.

Environmental Protection Authority Guidance Statement No. 3 – Separation Distances between Industrial and Sensitive Land Uses

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	3. Planning & Sustainability - Plan for Future Generations
Strategic Objective	3.3 Planning & Land Use - Plan the use of the land to meet future requirements incorporating economic development objectives and community amenity

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Balcombe

SECONDED: Councillor Rule

That Council grant Development Approval for an Extractive Industry on Lot 1 Wannamal Road West, Boonanarring subject to the following conditions:

1. The land use and development shall be undertaken in accordance with the approved plans and specifications, including the directions written in red ink by the Shire, unless otherwise conditioned in this Approval;
2. All works required to satisfy a condition of this approval are required to be installed/constructed and maintained in accordance with the approved plans and conditions of approval for the life of the development;
3. The approved extraction area is limited to 13.77 hectares as outlined on the approved plans;
4. The extraction depth is limited to a finished level of 238.5 metres AHD to the satisfaction of the Shire of Gingin. The extractive industry shall not at any time intercept the water table;
5. Prior to the commencement of site works, the landowner/operator shall enter into a Deed of Agreement for the upgrade of the intersection between Wannamal Road West and the internal access crossover to the satisfaction of the Shire of Gingin. The applicant/operator shall be responsible for all costs associated with the preparation of the Deed (including all drafts);
6. Prior to the commencement of the approved use, the works specified in the Deed of Agreement for the upgrade of the intersection between Wannamal Road West and the internal access crossover shall be undertaken at the expense of the landowner/operator to the satisfaction of the Shire of Gingin;
7. Prior to the commencement of the approved use, the landowner/operator shall install a new crossover to service the development in accordance with 'Shire of Gingin Crossover Specifications - SoG-STD10_RevB'. The landowner/operator shall be responsible for all costs associated with the crossover installation. The landowner/operator shall maintain the crossover in a good condition thereafter to the satisfaction of the Shire of Gingin;
8. Prior to the commencement of site works, a Landscaping Plan shall be submitted to and approved by the Shire of Gingin. The Landscaping Plan is to provide screening between the dwelling on the adjoining property and the crossover/internal access road;

9. Prior to the commencement of the approved use, the landscaping as detailed in the Landscaping Plan shall be implemented and thereafter maintained to the satisfaction of the Shire of Gingin;
10. Prior to commencement of the approved use, a Site Management Plan (SMP) shall be submitted to and approved by the Shire of Gingin that at a minimum includes the following:
 - a. Rehabilitation Plan – Proposed contouring and rehabilitation works during and at the conclusion of the extraction stages are to be specified. This is to also include decommissioning works should the extraction pit/approved development be suspended for a period of 12 months or longer and/or decommissioned.
 - b. Dust Management Plan that shall incorporate, at a minimum, the following:
 - i. Confirmation that the operator will keep an up-to-date complaints register that is to be made available to the Shire of Gingin within 14 days upon written request;
 - iii. Confirmation that the onsite manager's details will be located at the entrance gate, viewable to the public.
 - iii. Details of the amount of water required to fulfil dust suppression measures.
 - iv. Details of dust suppression measures not only within the excavation pit, but also on the access road to the crossover.
 - c. Staging Plan – The Staging Plan is to outline the staging of the extraction works within the approved area. This is to outline measures proposed to ensure that nesting sites and foraging habitat for Carnaby's Black Cockatoo will be protected accordingly.
 - d. Weed and Disease Management - Detail the management of grasses, weeds and disease nuisances within the development area.
 - e. Stormwater Management – This is to demonstrate that the development is able to manage stormwater onsite and that the extraction pit is able to drain adequately.
 - f. Traffic Management Strategy – This is to detail the route traffic will utilise to service the development.

- g. Noise Management – This is to formalise the acoustic report findings and provide a commitment to comply with the *Environmental Protection (Noise) Regulations 1997*.
11. The approved Site Management Plan (SMP) is to be implemented and adhered to thereafter to the satisfaction of the Shire of Gingin;
 12. Prior to commencement of siteworks, the landowner/operator shall demonstrate to the satisfaction of the Shire of Gingin that an adequate water supply has been secured to service the development and undertake dust suppression measures;
 13. Prior to commencement of each stage of extraction, a Rehabilitation Bond in the amount of \$9,740 is to be paid to the Shire of Gingin;
 14. Topsoil and vegetation stockpiles shall be limited to two in number, and to a height of 5 metres from natural ground level, as indicated on the approved plans;
 15. Gravel stockpiles shall be limited to a maximum of two in number, to a height of five metres from the pit floor ground level and located within the development area as indicated on the approved plans;
 16. The approved development can only operate during the following times:

Monday – Friday: 6:00am – 5:00pm.
Saturday: 6:00am to 12:00pm.
No activities shall occur on public holidays.
 17. Truck movement activities are restricted to the following times:

Monday – Friday: 7:00am - 5:00pm.
Saturday: 8:00am - 12:00pm.
No activities shall occur on public holidays.
 18. In the event dust is disseminating beyond the property boundary as a result of the development being undertaken, the activity shall cease forthwith until such time as either favourable weather conditions enable the activity to recommence, or dust suppression measures are implemented to the satisfaction of the Shire of Gingin; and
 19. Prior to commencing works for each relevant stage, the 50 metre exclusion area around the protected nesting trees and foraging habitat for the Carnaby's Black Cockatoo, as indicated on the approved plans, shall be delineated by onsite bunding/fencing with the installation of signage advising of the protected exclusion area. Removal of vegetation in this exclusion area is prohibited.

Advice Notes:

- Note 1: If you are aggrieved by the conditions of this approval you have the right to request that the State Administrative Tribunal (SAT) review the decision, under Part 14 of the *Planning and Development Act 2005*.
- Note 2: Where an approval has lapsed, no development may be carried out without further approval of the local government having first been sought and obtained.
- Note 3: The development requires an Extractive Industry License to be issued by the Shire of Gingin prior to extraction occurring, which will be subject to periodical renewal in accordance with the Shire's *Extractive Industries Local Law 2004 (as amended)*.
- Note 4: Please be advised that the Shire of Gingin will not issue an Extractive Industry Licence should the annual (or as required) survey plan be inconsistent with the approved plans or accompanying documentation forming part of this approval, or if rehabilitation works are incomplete.
- Note 5: Once rehabilitation works have been finalised, the landowner/operator may apply to the Shire of Gingin for the rehabilitation bond to be returned.
- Note 6: Backfilling of the excavation pits with landfill is prohibited.
- Note 7: In relation to the installation of a crossover, please be advised that the Crossover Specification Type B outlined within the Shire's Crossover Specification Drawing Number SoG/STD-04 dated January 2021 is applicable.
- Note 8: In relation to the upgrade of a new crossover, please note that a crossover application form is to be submitted to the Shire's Operations and Assets Department. The application form can be found on the Shire's website at the following link: <https://www.gingn.wa.gov.au/services/operations.aspx>.
- Note 9: Please be advised that clearing of native vegetation is prohibited in Western Australia, unless the clearing is authorised by a clearing permit obtained from the Department of Water and Environmental Regulation or is of a kind that is exempt in accordance with Schedule 6 of the *Environmental Protection Act 1986* or *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*.
- Note 10: Please be advised that the property may be re-rated to reflect the change in intensification and use approved as part of this application.

**MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022**



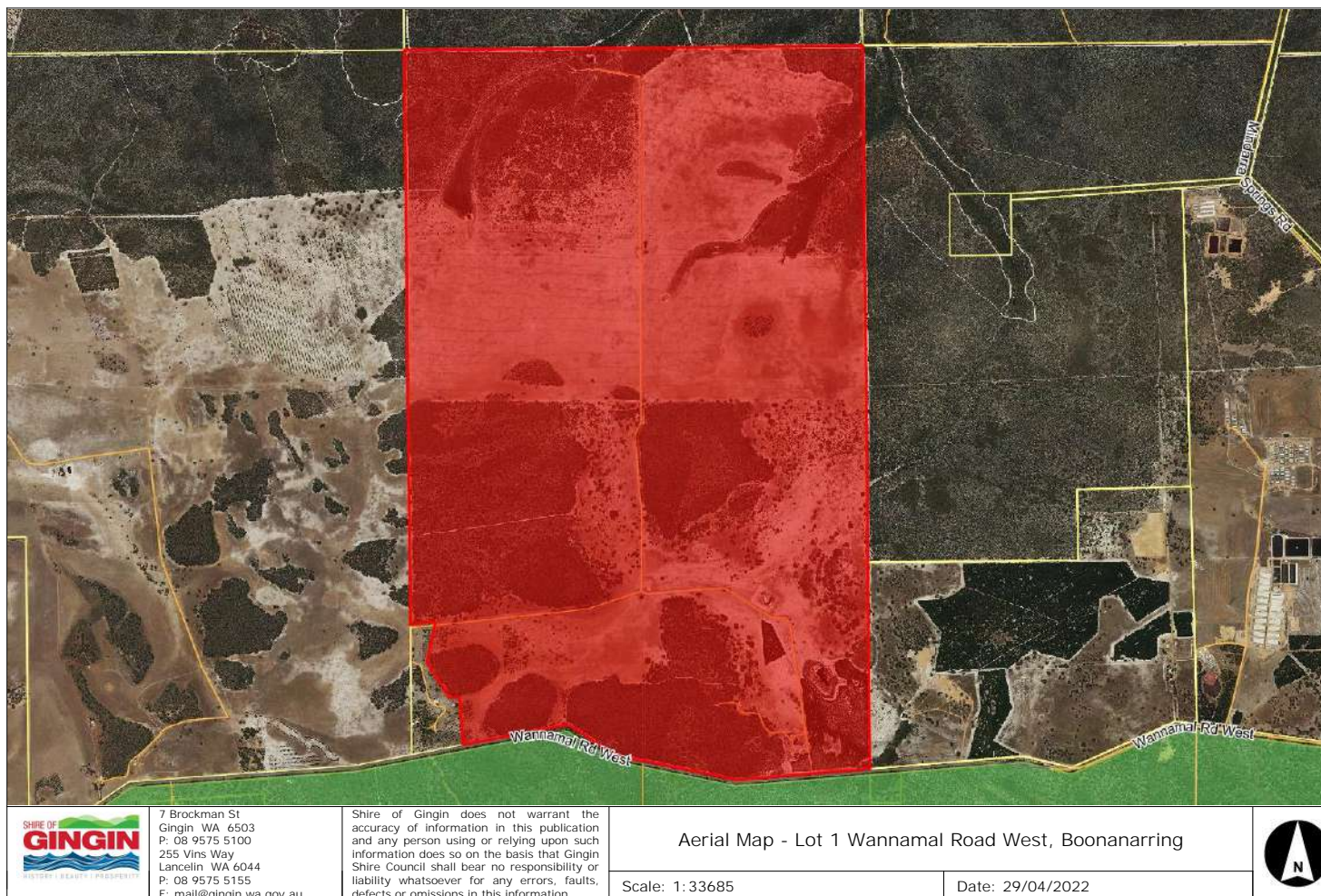
Note 11: If any interception of groundwater occurs, work shall cease and an advice notice be provided to the Department of Water and Environmental Regulation within 48 hours, followed by agreed remedial action.

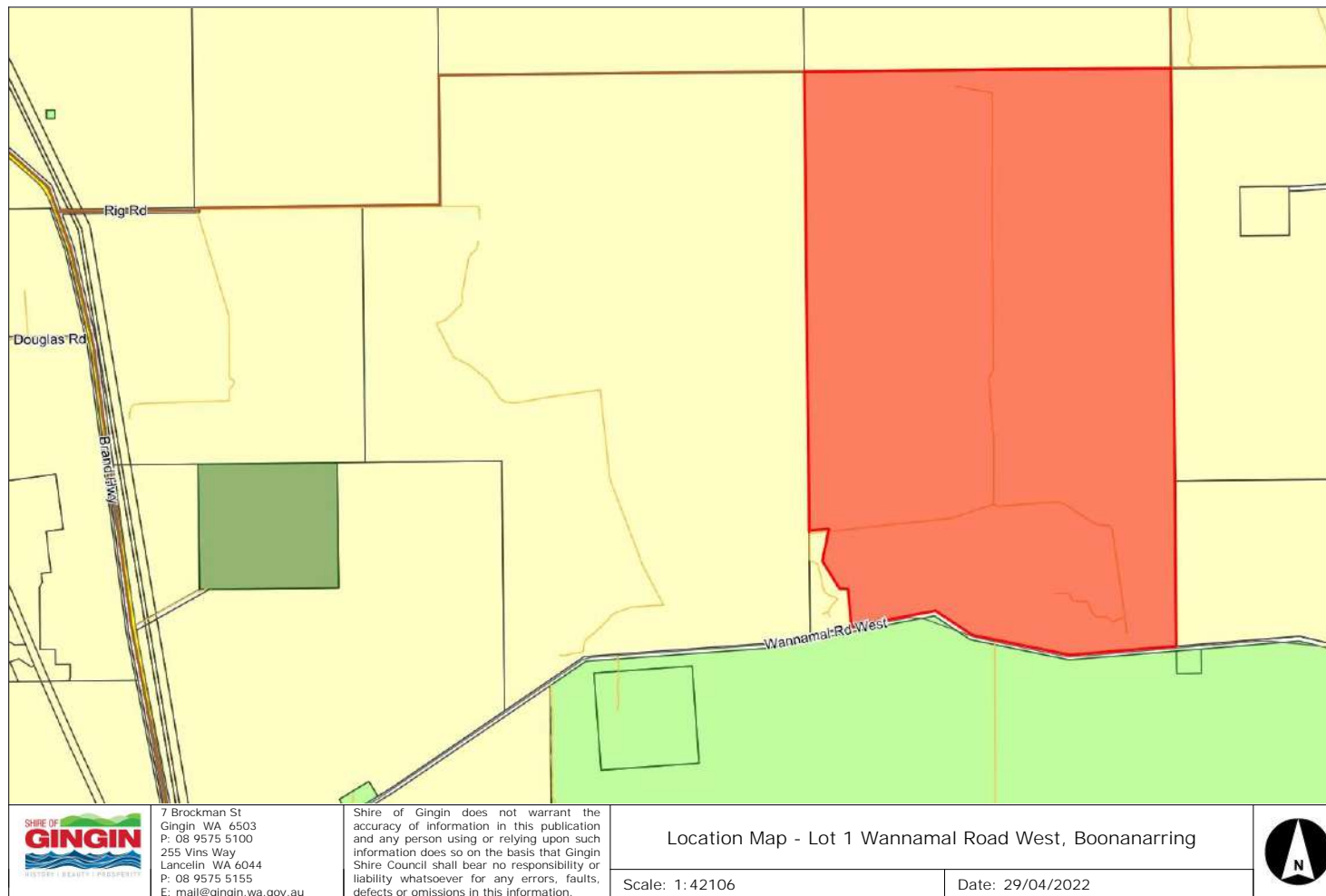
Note 12: The proponent is reminded of obligations under the *Aboriginal Heritage Act 1972* in relation to the discovery of unknown heritage places during excavations.

CARRIED UNANIMOUSLY
7 / 0

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*







Application for Development Approval & Extractive Industry Licence (Gravel Pit)

Lot 1 Wannamal Road West, Boonanarring



DOCUMENT CONTROL

Control Version	Date	Status	Distribution	Comment
A	13/04/2021	Draft	Internal	For QA
B	25/11/2021	Draft	Internal	QA
C	11/04/2022	Draft	Internal	QA
D	20/04/2022	Final Draft	Client	For Client review

Prepared for: Alltrack 2 WA Pty Ltd
Prepared by: TD
Reviewed by: HD

Date: 20 April 2022
Job No: 22303
Ref: D

DISCLAIMER

This document has been prepared by HARLEY DYKSTRA PTY LTD (the Consultant) on behalf of the Client. All contents of the document remain the property of the Consultant and the Client except where otherwise noted and is subject to Copyright. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.

This document has been exclusively drafted. No express or implied warranties are made by the Consultant regarding the research findings and data contained in this report. All of the information details included in this report are based upon the existent land area conditions and research provided and obtained at the time the Consultant conducted its analysis.

Please note that the information in this report may not be directly applicable towards another client. The Consultant warns against adapting this report's strategies/contents to another land area which has not been researched and analysed by the Consultant. Otherwise, the Consultant accepts no liability whatsoever for a third party's use of, or reliance upon, this specific document.

PERTH & FORRESTDAL

Level 1, 252 Fitzgerald Street, Perth
15/2 Hensbrook Loop, Forrestdale
PO Box 316, Kelmscott WA 6991

T: 08 9228 9291

T: 08 9495 1947

E: metro@harleydykstra.com.au

ABN 77 503 764 248

Albany

Bunbury

Busselton

Forrestdale

Perth

www.harleydykstra.com.au





TABLE OF CONTENTS

DOCUMENT CONTROL.....	II
DISCLAIMER	II
APPENDICES INDEX.....	IV
1. INTRODUCTION.....	1
2 SUBJECT SITE	2
2.1 Property Description, Ownership and Locality	2
2.1 Topography and Landform	4
2.2 Geology and Soils	4
2.3 Hydrology	4
2.4 Vegetation	5
2.5 Fauna	5
2.6 Aboriginal Heritage	5
2.7 Bushfire Prone Areas	6
3 PLANNING FRAMEWORK.....	8
3.1 Shire of Gingin Local Planning Scheme No. 9	8
3.2 Shire of Gingin Local Planning Strategy	10
3.3 Guilderton to Kalbarri Sub-Regional Strategy	10
3.4 Wheatbelt Regional Planning and Infrastructure Framework	10
3.5 State Planning Policy 2.4 – Basic Raw Materials	10
3.6 State Planning Policy 2.5 – Rural Planning	11
3.7 Environmental Protection Authority Guidance Statement No. 3	12
3.8 Shire of Gingin Extractive Industries Local Law	12
4 PROPOSED DEVELOPMENT	13
4.1 Development Overview	13
4.2 Scale and Duration of Operations	13
4.3 Stages of Excavation	13
4.1 Depth of Excavation	13
4.2 Method of Excavation	14
4.3 Material Stockpiles	14
4.4 Hours of Operation	14
4.5 Site Access and Traffic Generation	14
4.6 Dust Management	15
4.7 Noise Management	16
4.8 Drainage Management	16
4.9 Protection of Retained Vegetation	16
4.10 Management of Visual Impacts	16
4.11 Employees and Site Management	16
5 REHABILITATION PROGRAM	17
5.1 Objectives	17
5.2 Rehabilitation Activity	17
5.3 Ongoing Monitoring	17
5.4 Final clean-up	17
6 CONCLUSION.....	18



APPENDICIES INDEX

APPENDIX A	Certificate of Title and Letter of Authority
APPENDIX B	Development Plans
APPENDIX C	Environmental Reports



1. INTRODUCTION

This application, for development approval of an Extractive Industry at Lot 1 Wannamal Road West, Boonanarring (the subject site), has been prepared by Harley Dykstra on behalf of Alltrack 2 WA Pty Ltd (Certificate of Title at **Appendix A**).

An application for an Extractive Industry Licence (EIL) also forms part of this submission. Collectively, the application for development approval and EIL is referred to as 'the Application' for the purpose of this report.

Concurrently to this application to the Shire of Gingin for planning approvals, the following applications/reports will be submitted by 360 Environmental in relation to this project:

- Environmental Assessment Report
- Native Vegetation Clearing Permit
- Environmental Protection and Biodiversity Conservation submission
- Application to Department of Water and Environmental Regulation (DWER) for a Works Approval/License

Alltrack 2 WA Pty Ltd wish to gain approval to extract the gravel resource from the site primarily to be used in the construction of roads as road base.

The subject site comprises a 1,371.506ha rural lot which has frontage to Wannamal Road West. The site is zoned 'General Rural' under Local Planning Scheme No. 9 (LPS 9). The application for an Extractive Industry development relates to an 18.74ha portion of the site ('the Application Area') situated along the southern boundary of the subject site. Plans illustrating the nature, location and extent of development are included at **Appendix B**.

The purpose of this report is to provide planning justification for the proposal supported by accurate topographical data and detailed environmental analysis (**Appendix C**) in order to assist the Shire of Gingin to favourably consider this application and grant approval, subject to appropriate conditions.



2 SUBJECT SITE

2.1 Property Description, Ownership and Locality

The subject site is described as Lot 1 Wannamal Road West, Boonanarring, which is located 7km east of the intersection of Wannamal Road West with the Brand Highway. The townsite of Gingin is located approximately 20km directly south of the subject site. Wannamal Rd West is able to accommodate RAV 4 vehicles.

A summary of the land particulars is provided in **Table 1** and copy of the Certificate of Title is included in **Appendix A**.

LOT NO.	PROPERTY ADDRESS	LANDOWNER	AREA	VOL.	FOLIO	PLAN NO.
1	No street address	ALLTRACK 2 WA PTY LTD	1371.506ha	2958	550	DP 415372

TABLE 1 – SUMMARY OF LAND

A Location Plan has been included at **Figure 1** which illustrates the location of the site relative to the surrounding townsites and Brand Highway. **Figure 2** provides an aerial image of the subject site on which the Application Area is situated.

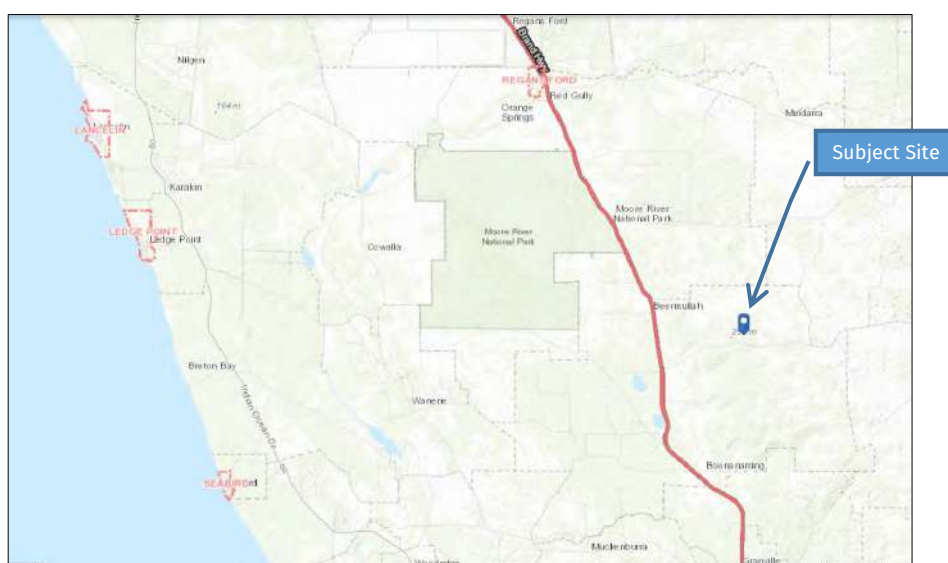


FIGURE 1 –LOCATION PLAN – SUBJECT LAND



FIGURE 2 –AERIAL IMAGE– SUBJECT LAND AND APPLICATION AREA

The subject site is situated clear of sensitive land uses within the immediate locality. The land directly to the south of Wannamal Road West is reserved for 'Parks and Recreation'. The landholdings directly to the north, east and west of the subject site are zoned 'Rural'.

The nearest dwelling is located at 1960 Wannamal Rd West, approximately 970m away from the Application Area.



FIGURE 3 –AERIAL CONTEXT MAP



A Special Use zone (SU8) is contained within 1470 Wannamal Rd West, which is the landholding adjoining the subject site (owned by the Shire of Gingin). SU8 permits the applicable area to be utilised as:

1. *Landfill site for the disposal, recovery and processing of Class I, II and III wastes only, and incidental infrastructure.*
2. *Composting*
3. *Such Land Use Classes as are permitted or permitted subject to the discretion of the Council in Column 7 General Rural Zone of the Zoning Table*

It is our understanding that this site was operated by the Shire of Gingin as a gravel extraction pit.

A Pre-Extraction Site Plan is located under **Appendix B** and details the site contours and boundaries of the Application Area.

A new crossover will be established from Wannamal Road West onto the subject site in the location depicted on the Overall Site Plan (Appendix B). A gravel access track will be constructed and extend from the proposed new crossover location along the firebreak adjoining Wannamal Road West, through to the Application Area.

2.1 Topography and Landform

The Pre-Extraction Site Plan located under **Appendix B**, indicates the Application Area rises gently in a direction from the north west to a knoll in the south east of the Application Area. The contours indicate a slope which rises from 242.5mAH to 262mAH. The contours indicate that the land area falls from the knoll back to the road reserve along the southern boundary of the Application Area.

2.2 Geology and Soils

Soil Landscape mapping indicates that the Application Area is contained within the Capitella System. The Capitella system is characterised as follows:

subdued stripped lateritic plateau, undulating to gently undulating low rises with gently undulating plain including dunes; pale and yellow deep sands, sandy gravels, some duplex; from sandstones plus alluvial and aeolian deposits'

Soil mapping over the Application Area indicates the land contains 'drainage depressions and sand rises. Areas dominated by duricrust (rocky outcrop)'.

Soil tests conducted over the subject site indicated that gravel over the Extraction Area is available at 3-4m in depth.

2.3 Hydrology

There is no surface water expression within the Application Area. A nearby soak indicated ground water levels are at 216m AHD. The lowest point of the site has been surveyed at 242.5mAH and the client is only intending to extract a maximum of 4m below the lowest point of the Extraction Area. The distance between the finished floor of the pit and the nearest ground water level will approximately be 22.5m, which is a significant clearance and will allow for any variations to ground water levels.



2.4 Vegetation

In September 2019 360 Environmental undertook a flora survey of the Extraction Area. The conclusion of this survey was that, no threatened flora species were considered likely to occur within the Extraction Area or were recorded during the survey.

The environmental consultant, at the request of DAWE and DWER, undertook a targeted flora survey to assess the presence of two Endangered Orchids and other conservation significant flora. This survey was undertaken in October 2020 and again it was found that no threatened species were within the Extraction Area.

The vegetation type across the Extraction Area was identified as *Eucalyptus Marginate*. The vegetation condition within the Extraction Area ranges from Good to Very good with the majority of the Extraction Area in a good condition.

The findings and conclusions of both surveys are reported on in detail in the 360 Environmental Reports at **Appendix C**.

2.5 Fauna

360 Environmental carried out a Black Cockatoo Habitat assessment for the site in September 2019. During this initial assessment 72 trees were found to have potentially suitable hollows, as viewed from the ground. Following consultation with DAWE and DWER, Environmental 360 were then commissioned to undertake a Black Cockatoo hollow assessment during the breeding season.

The hollow assessment (**Appendix C**) was undertaken in November 2020 with the use of a drone to view the hollows. Of the 72 trees surveyed in the Extraction Area, three were found to have hollows which were appropriate to support Black Cockatoo breeding. The trees to be preserved have been identified in Figure 2 of the attached 'Black Cockatoo Habitat Assessment: Tree Hollow Inspection'.

This application and associated clearing application propose the preservation of the three jarrah trees by providing a 50m radius setback around each of the identified trees. By providing these clearing setbacks, the clearing area is reduced to 13.7617ha as demonstrated on the Pre Extraction Site Plan (**Appendix B**).

In addition to preserving three existing jarrah trees within the Extraction Area, environmental offsets will be provided and are available within the subject land. Available offset areas have been more fully described in **Appendix C** and will form part of a separate clearing application.

2.6 Aboriginal Heritage

A search of the Aboriginal Heritage Inquiry System confirms the subject is not located within or in proximity to any aboriginal heritage places and hence is not considered to be an issue relevant to this proposal.

The operator is aware of and will comply with their obligations under the Aboriginal Heritage Act 1972 in relation to the discovery of previously unknown sites during excavations.



2.7 Bushfire Prone Areas

According to the map of Bushfire Prone Areas, the Application Area is identified as bushfire prone (refer to **Figure 4**).

The *Guidelines for Planning in Bushfire Prone Areas* ('the Guidelines'), prepared under State Planning Policy 3.7, allow for discretionary decision making which has regard to the scale of the development and risk to property, people and infrastructure.

It is understood the Shire has previously applied discretion in its application of SPP 3.7 which is to be read in conjunction with (a) *The Planning and Development (Local Planning Schemes) Regulations 2015* (Schedule 2 – the Deemed Provisions), (b) any relevant supplementary provisions of LPS 9, (c) the supporting Guidelines and (d) AS 3959. In particular:

a) Deemed Provisions

Pursuant to clause 78B of the Deemed Provisions, if the development application does not propose a single house, ancillary dwelling, habitable building, or specified building then Part 10A 'Bushfire Risk Management' of the *Planning and Development (Local Planning Schemes) Regulations 2015* does not apply.

(b) Supplementary provisions of LPS 9

There are no supplementary provisions in LPS 9 relating to SPP 3.7 or Part 10A Deemed Provisions.

(c) The Guidelines

The Guidelines refer to developing buildings in an area that has been designated as bushfire prone. This extractive industry application seeks to extract raw materials from the site and no buildings will be placed or constructed within the Application Area. The gravel resources will be generally clear of vegetation (due to initial clearing). Plant/equipment will be operated and parked in cleared locations on-site and will not be immediately adjacent to vegetation.

It is also noted two access routes connecting to the local roads network would be available in the event of an emergency to east and the west along Wannamal Road West.

(d) AS 3959

AS 3959 relates to level of construction of buildings (not the undertaking of works or use of the land).

The proposed development of a gravel extraction pit is not likely to create a significant fire hazard under normal operating conditions and requirements.

The application is considered to represent a low-risk land use and the risk to property, people and infrastructure is also low given the scale of the operation is relatively small and a maximum of 4 employees/contractors would be on site at any one time.

It is our view a BAL assessment or Bushfire Management Plan is not required to support the application and would serve no practical purpose given the above considerations.

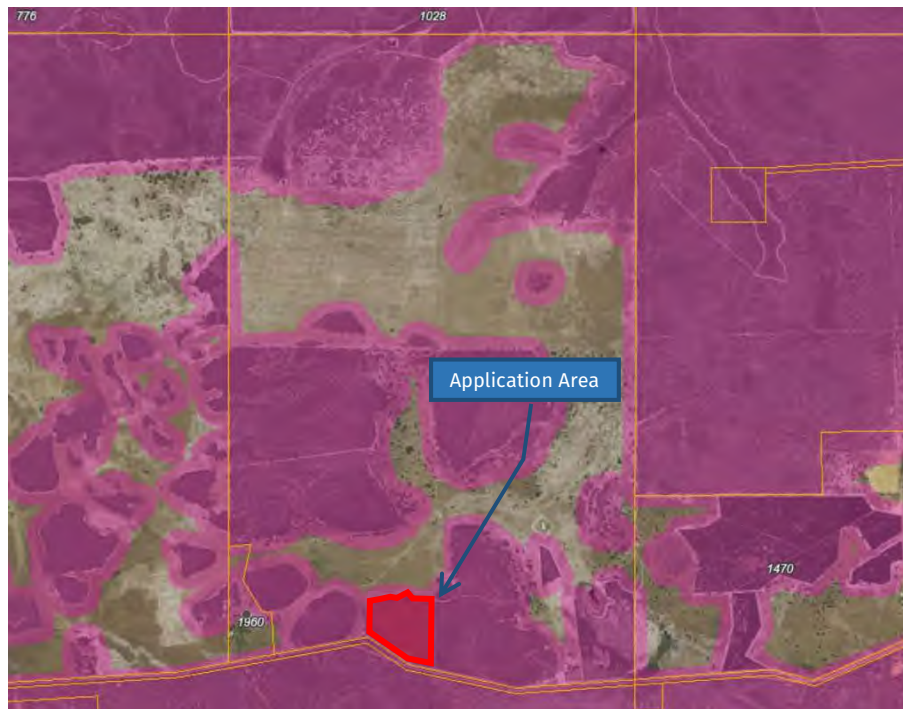


FIGURE 4 – BUSHFIRE PRONE AREAS MAP



3 PLANNING FRAMEWORK

3.1 Shire of Gingin Local Planning Scheme No. 9

The subject site is zoned 'General Rural' under the Shire of Gingin LPS 9, as is the land directly north, east and west. The land on the southern side of Wannamal Road West is reserved for 'Parks and Recreation' and is known as the 'Bonnanarring Nature Reserve'. A Special Use zone (SU8) is contained within 1470 Wannamal Rd West (landholding to the east of the subject land). SU8 permits the applicable area to be utilised as:

1. Landfill site for the disposal, recovery and processing of Class I, II and III wastes only, and incidental infrastructure.
2. Composting
3. Such Land Use Classes as are permitted or permitted subject to the discretion of the Council in Column 7 General Rural Zone of the Zoning Table.

An extract from the Shire's zoning map is included at **Figure 5** (below).



FIGURE 5 – LPS 9 SCHEME MAP

An Extractive Industry is identified as an 'A' use within the General Rural Zone which provides for the use to be granted planning approval at the discretion of the local government following advertising.

Clause 3.2.7 of the Scheme sets out the following objectives for the 'General Rural' zone:

- a) Manage land use changes so that the specific local rural character of the zone is maintained or enhanced;
- b) Encourage and protect broad acre agricultural activities such as grazing and more intensive agricultural activities such as horticulture as primary uses, with other rural pursuits and rural industries as secondary uses in circumstances where they demonstrate compatibility with the primary use;



- c) *Maintain and enhance the environmental qualities of the landscape, vegetation, soils and water bodies, to protect sensitive areas especially the natural valley and watercourse systems from damage; and*
- d) *Provide for the operation and development of existing, future and potential rural land uses by limiting the introduction of sensitive land uses in the General Rural zone.*

With regard to cl 3.2.7 a) relating to local rural character, gravel extraction activity has previously been approved and undertaken on the land to the immediate east of the site (Lot 14).

Generally, the excavation activity will not be visible from Wannamal Road West due to a 40m setback containing dense vegetation which will be retained. The site will become less evident as the gravel extraction progresses (and the floor level of the pit falls).

This form of land use is anticipated within this locality and is considered to form part of the specific rural character of the area.

The proposal does not conflict with cl 3.2.7 b) on the basis that the existing landform, soil profile and vegetation does not lend the site to broad acre or intensive agricultural activities.

Whilst at the cessation of the extractive industry operation (which is a temporary use) the recontoured landform would be potentially suited to an agricultural land use, the proposed rehabilitation using native species is considered to be a more appropriate outcome for the site and is more aligned with its existing use. Significantly, the proposed use will not impact on the ability for any other broad acre agricultural activities to be undertaken on surrounding land given the site is generally surrounded by landholdings which either do not lend themselves to broadacre agricultural activities (due to their soil and vegetation profile) or have been allocated as a reserve.

With regard to cl 3.2.7 c), environmental reports have concluded that there is no endangered flora located within the Extraction Area. Potential black cockatoo nesting sites which have been identified will be preserved by a 50m buffer around each of the three trees. Further, the proponent is seeking to establish offset sites to counter the impact this application will have on the flora and fauna within the Extraction Area. Whilst it is acknowledged that there is some impact on flora and fauna, the impact is limited.

Given the proposal does not involve the introduction of a sensitive use, cl 3.2.7 d) is not considered to be applicable.

The local planning scheme outlines general development standards which requires all development within land zoned 'General Rural' to be setback a minimum of 20m from all boundaries. The proposed development will meet this requirement.

LPS 9 also addresses extractive industries specifically as follows:

- 4.8.10.1 *Local government may consider applications for extractive industries in the General Rural zone where the sites have not been identified within an SCA under clause 5.4. AMD 14 GG 08/04/16*
- 4.8.10.2 *In considering applications for extractive industries, local government will have regard for the zone objectives. AMD 14 GG 08/04/16*
- 4.8.10.3 *Local government will also consider the potential impact of the extractive industry in regard to surrounding land uses (both existing and future) and may apply conditions to manage the potential impacts, such as noise, dust, odour and amenity. AMD 14 GG 08/04/16*

The Application is consistent with the relevant provisions of LPS 9, given it is not within/or in conflict with an SCA (special control area), is capable of satisfying the zone objective and will not impact on surrounding uses via the application of appropriate conditions.



3.2 Shire of Gingin Local Planning Strategy

The Shire of Gingin's Local Planning Strategy ('the Strategy') was endorsed in February 2012 and provides the strategic guidance for land use planning within the municipality for the forthcoming 10-11 years.

The Shire of Gingin Local Planning Strategy identifies that there is *"...increasing pressure for extractive industry development as the resource lessens in the metropolitan area"*. The Strategy identifies that there is a need to protect the Basic Raw Materials (BRM) in the region until such time as they can be extracted.

It is acknowledged a key environmental issue within the Strategy is the potential impact extractive activities have on the landscape in rural areas. The visual amenity impact of the proposed development is considered to be minimal and manageable in the context of the existing rural character of the area, when having regard to the nature of existing adjacent land use.

A key economic objective of the Strategy is to *"...facilitate more intensive and diversified use of rural land for higher value products"* which includes the extraction of basic raw material. The proposal is considered to be consistent with the above objective.

3.3 Guilderton to Kalbarri Sub-Regional Strategy

The Guilderton to Kalbarri Sub-Regional Strategy, identifies gravel extraction is one of the sub-region's key economic drivers:

The Guilderton to Kalbarri Sub-Regional Strategy identifies that gravel makes up a small portion of the Basic Raw Materials extracted in this region however it remains necessary for the construction of roads.

The Sub-Regional Strategy also recommends that heavy haulage be redirected away from Indian Ocean Drive and Aglime routes be utilised as the alternative route. It is noted that the subject has access to the Brand Hwy which is considered to be a more suitable heavy haulage transport route.

3.4 Wheatbelt Regional Planning and Infrastructure Framework

The Wheatbelt Regional Planning and Infrastructure Framework recognises Basic Raw Materials (BRM), including gravel, are in demand both within the Wheatbelt region and to service the Perth metropolitan area. Gravel has a number of uses including road base, in the construction of roads.

3.5 State Planning Policy 2.4 – Basic Raw Materials

The current WAPC State Planning Policy 2.4 – Basic Raw Materials, was gazetted in July 2000. Since this time an updated Draft State Planning Policy 2.4 has been advertised. Submissions for comment on this planning policy closed on the 25/01/2019 and came the policy into force in July 2021.

The objectives of the current State Planning Policy 2.4 are as follows:

- *identify the location and extent of known basic raw material (BRM) resources;*
- *protect Priority Resource Locations, Key Extraction Areas and Extraction Areas from being developed for incompatible land uses which could limit future exploitation;*
- *ensure that the use and development of land for the extraction of basic raw materials does not adversely affect the environment or amenity in the locality of the operation during or after extraction;*



- *provide a consistent planning approval process for extractive industry proposals including the early consideration of sequential land uses.*

The draft policy seeks to enable the responsible extraction of Basic Raw Materials (BRM) while ensuring the protection of people and the environment. The application of this policy provides the foundation for land use planning to address the sustainable management of BRM in Western Australia. Applicable to this proposal, the following objectives of the policy are as follows:

- a) Provide guidance to facilitate the planning of BRM extraction from sites, where such extraction is considered appropriate on planning and environmental grounds;*
- (c) ensure considerations relating to the extraction of BRM and the regional importance of the materials are taken into account in the early stages of the planning process including scheme amendments, planning strategies and structure plans;*
- (e) prioritise the extraction and availability of BRM through the identification of sequential use sites and planned extraction and remediation as appropriate for the final intended land use;*
- (f) ensure that the use and development of land for extraction of BRM, during or after extraction, avoids, minimises and mitigates detrimental impacts on the community and environment, including water resources and biodiversity values, while allowing for future use, consistent with long term planning.*

With regard to the above current state policy objectives, the Application meets the objectives as outlined as follows:

- The proposed extractive industry is within a region known for the availability of BRM resources;
- Due to the location, relatively low intensity, minimal visual intrusion and site management procedures, the development will have no significant impact on the environment or amenity of the area.
- The proposal seeks to minimise and mitigate environmental impacts by progressively rehabilitating the site using native species, whilst still providing for future use of the site by limiting the depth of excavation to a finished level which is generally consistent with surrounding land.

3.6 State Planning Policy 2.5 – Rural Planning

The intent of the rural planning policy is to ‘*protect and preserve Western Australia’s rural land assets due to the importance of their economic, nature resource, food production, environmental and landscape values.*’

The policy objectives are as follows:

- (a) support existing, expanded and future primary production through the protection of rural land, particularly priority agricultural land and land required for animal premises and/or the production of food;*
- (b) provide investment security for existing, expanded and future primary production and promote economic growth and regional development on rural land for rural land uses;*
- (c) outside of the Perth and Peel planning regions, secure significant basic raw material resources and provide for their extraction;*



- (d) *provide a planning framework that comprehensively considers rural land and land uses, and facilitates consistent and timely decision-making;*
- (e) *avoid and minimise land use conflicts;*
- (f) *promote sustainable settlement in, and adjacent to, existing urban areas; and*
- (g) *protect and sustainably manage environmental, landscape and water resource assets.*

The policy specifically addresses the extraction of basic raw materials outside the Perth and Peel planning regions and encourages the protection and extraction of basic raw materials whilst promoting sequential land use planning and appropriate rehabilitation. The proposal satisfies this specific policy objective whilst also having regard to the other relevant objectives of SPP 2.5.

3.7 Environmental Protection Authority Guidance Statement No. 3

The Environmental Protection Authority Guidance Statement No. 3, outlines the buffer distances between industrial uses and sensitive land uses. The proposed Extractive Industry use does not require hard rock or blasting but does involve screening of material, and Guidance Statement No. 3 recommends that the separation distance from sensitive uses be determined on a case-by-case basis. Whilst the total proposed Extraction Area extends over 13.77ha, the intensity of the development is considered to be relatively low, in terms of staging, depth of excavation, frequency of use, hours of operation, transport movements and annual extraction tonnage/volumes.

The guidance statement does advise that Extractive Industries occurring in hard rock along the darling scarp which includes blasting, is required to be setback 1000m from sensitive land uses.

The nearest existing sensitive land use (residence) is approximately 970m to the west of the Application Area. There is a residence on the subject land approximately 1km to the east of the Application Area. The next nearest dwelling is approximately 3.5km west of the Application Area. All three above mentioned dwellings are shielded from the extraction area by dense vegetation. In view of the nature of this extractive industry these separation distances are considered to be more than adequate.

3.8 Shire of Gingin Extractive Industries Local Law

The Shire of Gingin, under the Local Government Act, has prepared an Extractive Industry Local Law to outline the process for determining Extractive Industry Licence applications made to the Shire. The Application is able to satisfy all of the regulations as stipulated within the local law to allow for an appropriately staged and located development to operate in a manner that will have no adverse impact on the surrounding locality.



4 PROPOSED DEVELOPMENT

4.1 Development Overview

This Application for Development Approval proposes the extraction of gravel from Lot 1 Wannamal Road West, Boonanarring. Once all necessary approvals are obtained, gravel extraction shall be undertaken by an experienced operator (Alltrack WA). An overall extraction area of approximately 13.7617ha is proposed, with a total extraction volume estimated to be around 1.3 million tonnes over a period of 15 or more years.

The Development Plan set (**Appendix B**) includes:

- Overall Site Plan – providing a whole site aspect of the Application Area, existing laydown area and dwelling as well as access and crossover locations;
- Overall Site Plan (Crossover) – outlining the location of the proposed access track and crossover;
- a Pre-Extraction Site plan – identifying existing contours, the proposed Application Area and Extraction Area;
- an Extraction and Staging Plan – including likely staging, access tracks, stockpile locations;
- a Post Extraction Plan illustrating the finished levels across the Application Area;

4.2 Scale and Duration of Operations

Demand for gravel is seasonally dependent and will vary according to and contractual requirements. The quarry is expected to be operational for circa 15 years with an average of 86,000 tonnes per year. The maximum daily extraction is not expected to exceed 3,000 tonnes. End users are likely to be local and or state government authorities which require high grade gravel for road base.

Within the 18.74 ha Application Area, 13.77ha will be cleared for extraction. There will be a setback a minimum of 40m from Wannamal Road West Road and more than 20m from all other lot boundaries.

4.3 Stages of Excavation

The extraction will begin in the north-western corner of the Extraction Area and progress in a south-easterly direction, generally up the slope of the hill. Open working areas are anticipated to be approximately 4-5 ha each and rehabilitation will occur on each stage concurrently as work in the next stage commences.

4.1 Depth of Excavation

The pit will be excavated to approximately 4m below the natural surface of the land. The lowest natural ground level of the Extraction Area is approximately 242.5mAHD, which would make the lowest finished level of the pit approximately 238.5mAHD. As noted above this is anticipated to be 22.5m above ground water levels, based on the depth of a nearby soak.



4.2 Method of Excavation

Following the relevant clearing and stockpiling of vegetation, the topsoil (to a depth of 300mm) will be stripped and stockpiled (using a 966H or 972H wheeled loader) in windrows on the paddock to the north, up to a maximum height of 6-7m. A D10 tracked bulldozer will rip and raise the raw material. A 30 tonne excavator will be used to extract the gravel, before a wheeled loader will place the gravel into a mobile crusher (McCloskey 144Rv3 or similar). The crusher will then either stockpile the extracted material or load it directly into a 27.5m pocket road train (or smaller).

As the pit progresses, stripped topsoil will be placed directly onto newly completed areas of the pit. The stockpiled vegetation which was originally cleared from the pit will be placed overtop of the topsoil. A grader and loader will be utilised during the rehabilitation process.

The crusher will be in operation for approximately 300hrs per annum which is likely to be confined to two or three campaigns.

A 1000l refuelling trailer will be utilised to refuel all machinery and will occur outside of the Extraction Area. Machinery will either be parked within the pit or alternatively at an existing laydown area to the north of the Application Area, within the Subject Site.

4.3 Material Stockpiles

Excavated/screened material will be stockpiled on site and within the extraction area. A number of stockpiles may be appropriate and will be placed to allow for adequate truck access and turning circle.

4.4 Hours of Operation

Gravel extraction will occur between the hours of 6am - 5pm Monday to Friday and Saturday 6am to 12pm. No gravel extraction will occur on Sundays or on public holidays.

4.5 Site Access and Traffic Generation

A new crossover will be created at the location approximately indicated in **Appendix B** (Overall Site Plan – Crossover). The proposed crossover will have clear lines of sight to the east and west, the proponent will ensure that the crossover is constructed to the required standard to permit pocket road train safe ingress and egress.

The new crossover will be complimented by a gravel access track which will also be constructed and extend from the proposed location of the new crossover, along the existing firebreak of the Subject Site to the Application Area (as indicated in the plan set contained in **Appendix B**).

The extracted gravel will be transported from the site by pocket road trains (max 27.5m in length) in loads of approximately 60 tonnes. The maximum daily transport of gravel material is considered to be 3,000 tonnes (equating to approximately 50 pocket road trains). This would only occur during the absolute peak periods of operation, and it is expected an average daily transport of material would be approximately 800 to 1,000 tonnes (13 to 17 pocket road trains). During the winter months this is likely to reduce to nil or very limited transport of material.

Wannamal Road West is able to accommodate a 27.5m oversize B-Double as per the Main Roads HVS Network Map. Heavy trucks from the piggery located on an allotment west of the subject land already utilise Wannamal Road West and the road is able to cater for the additional traffic that will be generated by this proposal.



The subject site is positioned approximately 7.2km west from the intersection of Wannamal Road West with the Brand Highway. The Brand Highway is considered to be a major transport route for heavy haulage.

Aglime Route 2 (to the north of the subject site) has been allocated for upgrades as a priority. Work on this route was initially flagged by the state government in 2017 and has more recently received additional funding. It is understood that upgrades to Sappers Rd have already been completed and upgrade works along Orange Spring Road is currently underway. Aglime Route 2 may be utilised by the operator if required for access to the Great Northern Highway.



FIGURE 6 – AGLIME ROUTES (ROADS 2030)

4.6 Dust Management

Dust may be generated by excavation, crushing, truck loading and wind action on exposed surfaces.

Water will be applied as necessary by a 30,000 litre water cart which will be brought in as and when required. It is anticipated that only 20kl of water would be required in peak operations times, particularly for road maintenance.

No topsoil stripping will occur when the wind speed is greater than 20km/hr. No excavation, screening or truck loading will occur in winds of greater than 40km/hr. Progressive rehabilitation of quarried areas will mean that no more than 4-5ha of gravel is exposed at any one time, thus reducing the potential for dust generation.

Dust suppression measures will also be applied to the stockpiles.



4.7 Noise Management

The proposed gravel extraction site is remote from noise-sensitive premises. The nearest neighbouring residence is approximately 970m to the west and screened from the site by topography and vegetation. Given the physical separation from existing residential development and limited development in proximity to the subject, noise nuisance on sensitive land uses is not expected to be an issue.

Mechanical equipment used at the quarry will include a bulldozer, excavator, wheeled loaders, a mobile crusher and pocket road trains carrying the extracted material. These will be fitted with standard noise attenuation equipment. No blasting or rock-breaking will be required. It is anticipated the operations will be able to comply with the *Environmental Protection (Noise) Regulations, 1997* at all times.

4.8 Drainage Management

Drainage Management will to be adequately managed within the site.

The soil profile is considered to be porous which will generate little or no runoff under any but the most extreme rainfall conditions. The pit will capture any runoff which will occur, where it will infiltrate to the groundwater within a few hours.

4.9 Protection of Retained Vegetation

Vegetation proposed to be retained would be protected by identifying the extent of the clearing envelope for each particular stage by pegging the excavation area prior to works commencing.

4.10 Management of Visual Impacts

As referenced in section 3 of this report, the excavation activity will not be highly visible from Wannamal Road West due to the vegetation which shall be retained within the 40m setback area, and the depth of the pit. The site will become less evident as the extraction progresses (and the site levels are lowered).

The topsoil and vegetation stockpile windrows will be positioned to the north of the excavation area and will form a visual buffer from the extraction works themselves.

4.11 Employees and Site Management

A maximum four employees will be on site at any time, including two operating the loaders, one truck driver and one supervisor. The ablutions at the residence on the Subject Site will be utilised by the employees. No on-site effluent disposal will occur.

The excavation site will be securely fenced, and gateways locked when the site is not actually in use. Warning signs will be located along each boundary of the excavated area, not more than 200m apart and not less than 1.8m high or less than 1m wide. The warning signs will contain the wording "DANGER EXCAVATIONS KEEP OUT". These requirements are set out as the Obligations of the Licensee which must be met under the Extractive Industries Local Law 2004.



5 REHABILITATION PROGRAM

5.1 Objectives

The primary objective of the rehabilitation and decommissioning program is to ensure that following the completion of the extractive industry, notwithstanding that the landform will have been modified, the site is otherwise restored and rehabilitated to a condition similar to what it was prior to the commencement of the development.

5.2 Rehabilitation Activity

Rehabilitation will consist of terrain reshaping and the re-establishment of native vegetation. Rehabilitation will be progressive and will take place immediately behind the front of each extraction stage. The topsoil from each stage block will be saved and re-spread over the surfaces of restored landforms to allow for the regrowth of native vegetation from the seed bank in the topsoil. In addition the native vegetation which was removed from within the excavation area will be laid over top of the re-spread topsoil.

The landform at the end of extraction will slope, following the contours of the pre-extraction natural ground level.

Rehabilitation will comprise battering (if necessary) to a slope of less than 1:3, followed by spreading of topsoil and vegetation debris. Topsoil will be applied to the completed pit surface using a wheeled loader and spread using a grader.

Stockpiled vegetation debris will be spread over the soil surface to provide a seed source. Some debris may be burned in situ to break seed dormancy and create ash beds for germination. These rehabilitation activities will be completed within one month of the completion of quarrying in each extraction stage.

It is assumed a condition of approval will require payment of a rehabilitation bond. Given the progressive rehabilitation programme proposed for the site, the bond amount could be applied in a 'rolling' manner, where the bond amount is held against only the active 4-5ha area (not for the entire Extraction Area).

5.3 Ongoing Monitoring

Regrowth of native vegetation in the rehabilitated area will be monitored visually once each year for two years after the completion of the initial rehabilitation works. Records of the monitoring, including photographs of the rehabilitated area, will be made available to the Shire of Gingin.

If at the end of two years the regrowth is not seen to be progressing satisfactorily, direct seeding with local native species (selected from the species list included in the Environmental Assessment) may be undertaken.

5.4 Final clean-up

Upon completion of all works and extraction, the final site clean-up will be completed as part of decommissioning. The access track will remain for the purpose of serving as a firebreak.



6 CONCLUSION

Development approval for an Extractive Industry at Lot 1 Wannamal Road West, Boonanarring is sought on behalf of Alltrack 2 WA Pty Ltd as detailed in this report.

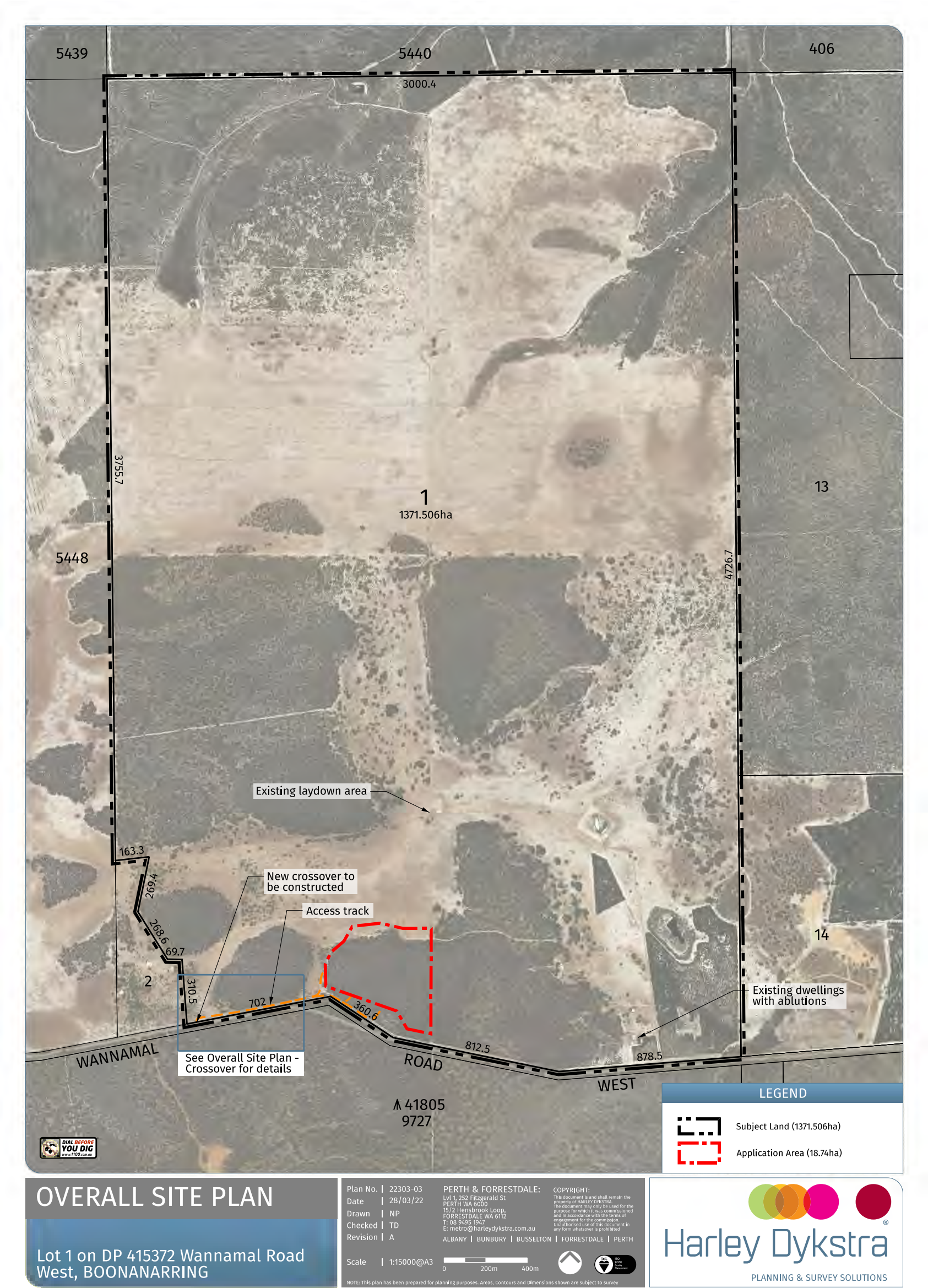
The proposed Extractive Industry development application is justified as follows:

- This proposal seeks to extract a basic raw material (gravel), primarily intended for use as road base in the construction of roads;
- The property is well located with good access to transport links of suitable capacity and construction;
- The proposed extractive industry use will be of a relatively low intensity and consistent with the use of adjacent land for gravel extraction;
- Extraction works shall be appropriately managed and sequentially implemented to minimise any impact on surrounding landholders and the public;
- Rehabilitation work will be completed to a standard which will ensure the amenity and character of the broader area is appropriately maintained.

On the basis of the description and rationale provided within this report, it is respectfully requested that the Shire of Gingin review this application and approve the proposed extractive industry development and issue an extractive industry licence.

Should additional information be required to facilitate approval, please do not hesitate to contact the author of this report.

APPENDIX B | DEVELOPMENT PLANS





OVERALL SITE PLAN - CROSSOVER

Lot 1 on DP 415372 Wannamal Road West,
BOONANARRING

Plan No.		22503-03	PERTH & FORRESTDALE:	COPYRIGHT:
Date		28/03/22	Lvl 1, 252 Fitzgerald St	This document is and shall remain the
Drawn		NP	PERTH WA 6000	property of HARLEY DYKSTRA.
Checked		TD	15/2 Hensbrook Loop,	The document may only be used for the
Revision		A	FORRESTDALE WA 6112	purpose for which it was commissioned
			T: 08 9495 1947	and in accordance with the terms of
			E: metro@harleydykstra.com.au	engagement for the Commission.
			ALBANY BUNBURY BUSSELTON FORRESTDALE PERTH	Unauthorised use of this document in

Scale | 1:1500@A3

0 10m 20m 30m



NOTE: This plan has been prepared for planning purposes. Areas, Contours and Dimensions shown are subject to survey

LEGEND



Subject Area (1371.506ha)



Access Track





LEGEND

Subject Land (1371.506ha)

Application Area (18.74ha)

Proposed Extraction Area (13.77ha)

40m Road Buffer

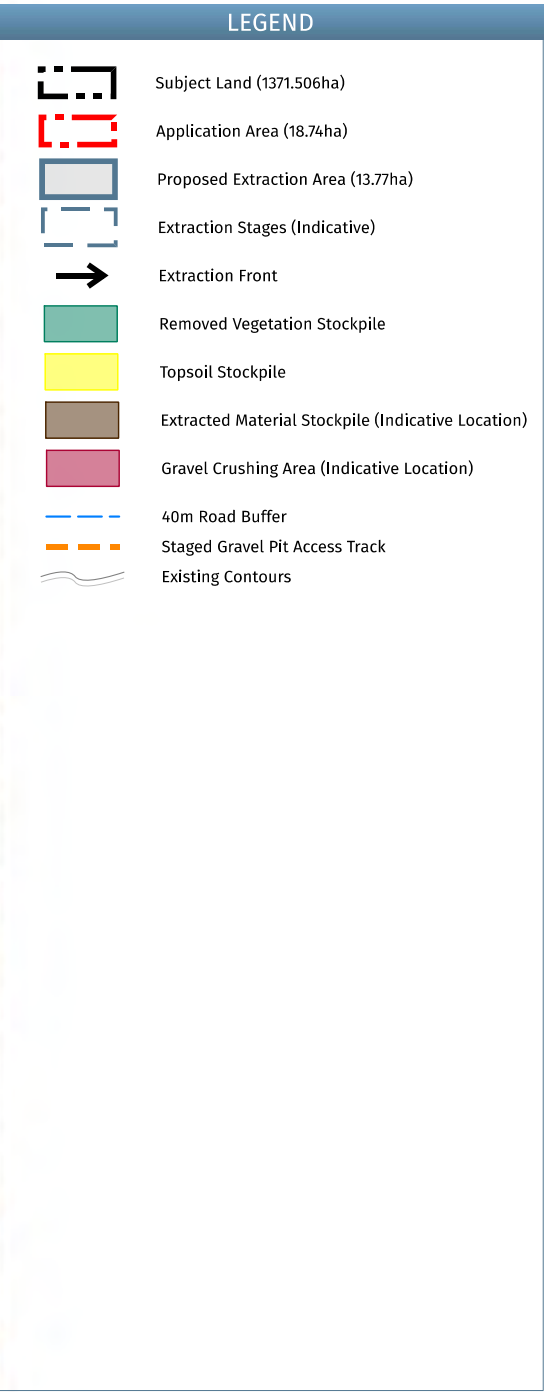
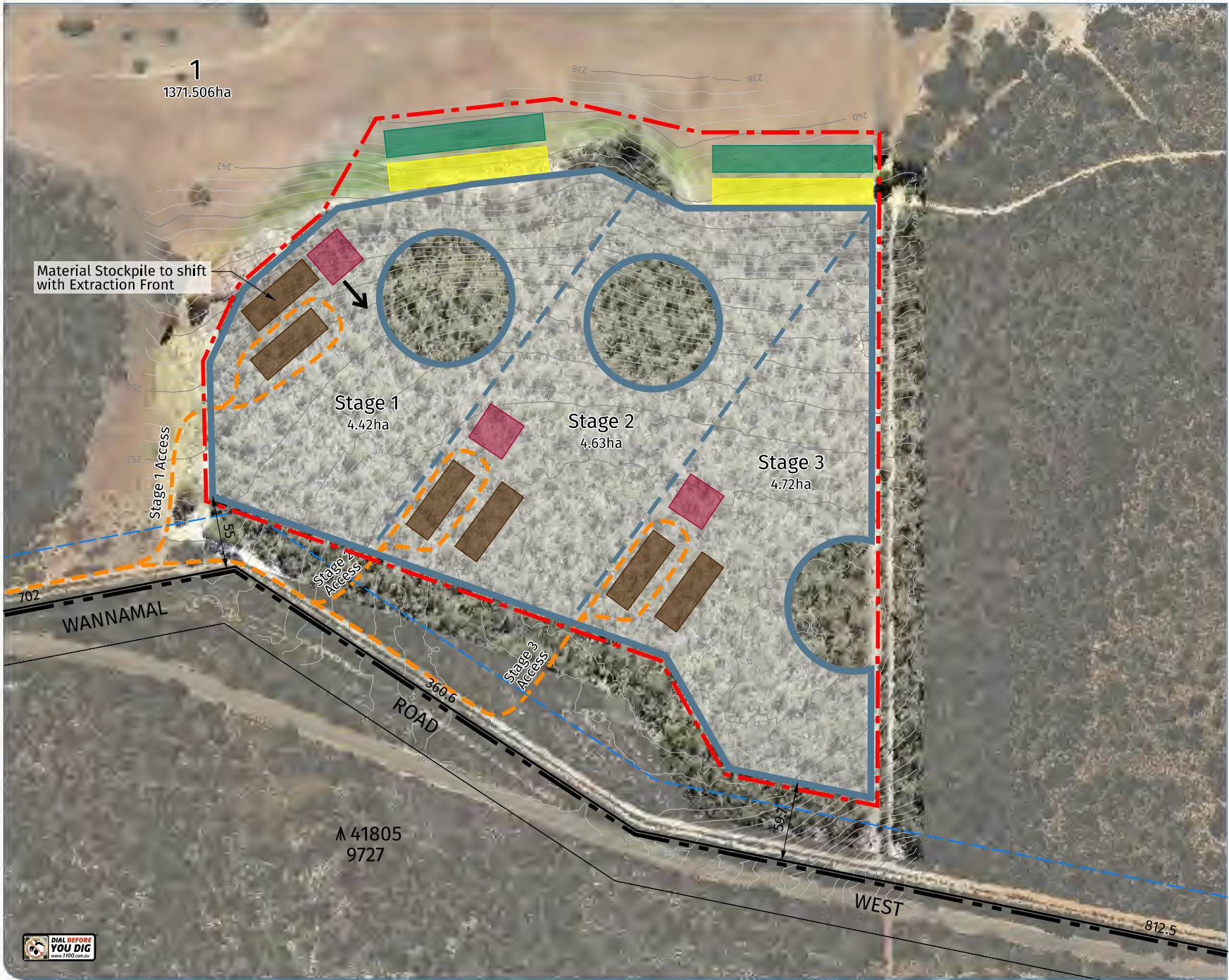
PRE EXTRACTION SITE PLAN

Lot 1 on DP 415372 Wannamal Road West,
BOONANARRING

Plan No.		22303-04	PERTH & FORRESTDALE:	<small>COPYRIGHT: This document is and shall remain the property of Harley Dykstra Pty Ltd. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the Commission. Unauthorized use of this document in any form whatsoever is prohibited.</small>
Date		16/07/21	Lvl 1, 252 Fitzgerald St PERTH WA 6000	
Drawn		NP	15/2 Hensbrook Loop, FORRESTDALE WA 6112	
Checked		DM	T: 08 9495 1947 E: metro@harleydykstra.com.au	
Revision		A	ALBANY BUNBURY BUSSELTON FORRESTDALE PERTH	
Scale		1:3000@A3	<div><div>0</div><div>40m</div><div>80m</div></div> <div></div> <div></div>	<small>NOTE: This plan has been prepared for planning purposes. Areas, Contours and Dimensions shown are subject to survey.</small>

Harley Dykstra

PLANNING & SURVEY SOLUTIONS



EXTRACTION AND STAGING PLAN

Lot 1 on DP 415372 Wannamal Road West,
BOONANARRING

Plan No.	22303-05	PERTH & FORRESTDAL:	COPYRIGHT:
Date	21/03/22	Lvl 1, 252 Fitzgerald St	This document is and shall remain the
Drawn	NP	PERTH WA 6000	property of Harley Dykstra.
Checked	DM	15/2 Hensbrook Loop,	The document may only be used for the
Revision	A	FORRESTDAL WA 6112	purpose for which it was commissioned
		T: 08 9495 1947	and in accordance with the terms of
		E: metro@harleydykstra.com.au	engagement for the Commission.
		ALBANY BUNBURY BUSSELTON FORRESTDAL PERTH	Unauthorised use of this document in
			any form whatsoever is prohibited.
Scale	1:3000@A3		
		0 40m 80m	

NOTE: This plan has been prepared for planning purposes. Areas, Contours and Dimensions shown are subject to survey





LEGEND

- Subject Land (1371.506ha)
- Proposed Extraction Area (13.77ha)
- Toe line (4m below natural ground level)
- Revegetaion Area
- 40m Road Buffer
- Proposed Contours
- Existing Contours

POST EXTRACTION/REHABILITATION PLAN

Lot 1 on DP 415372 Wannamal Road West, BOONANARRING

Plan No.	22303-06	PERTH & FORRESTDALE:	COPYRIGHT: This document is and shall remain the property of Harley Dykstra Pty Ltd. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the Commission. Unauthorised use of this document in any form whatsoever is prohibited.
Date	01/04/22	Lvl 1, 252 Fitzgerald St PERTH WA 6000	
Drawn	NP	15/2 Hensbrook Loop, FORRESTDALE WA 6112	
Checked	TD	T: 08 9495 1947 E: metro@harleydykstra.com.au	
Revision	A	ALBANY BUNBURY BUSSELTON FORRESTDALE PERTH	

Scale | 1:3000@A3

NOTE: This plan has been prepared for planning purposes. Areas, Contours and Dimensions shown are subject to survey

Harley Dykstra

PLANNING & SURVEY SOLUTIONS

APPENDIX C | ENVIRONMENTAL REPORTS



Lot 5449 Wannamal Road West,
Mindarra

Targeted Survey for Threatened Flora

Prepared for
All Track WA

January 2021

● people ● planet ● professional

Document Reference	Revision	Prepared by	Reviewed by	Admin Review	Submitted to Client	
					Copies	Date
3358 AB_Rev0	Internal Draft	M. Ellis	FJ	-	1 x electronic	12/01/2021
3358 AB_Rev1	Client Draft	KAC	FJ	LI	1 x electronic	28/01/2021

Disclaimer

This report is issued in accordance with, and is subject to, the terms of the contract between the Client and 360 Environmental Pty Ltd, including, without limitation, the agreed scope of the report. To the extent permitted by law, 360 Environmental Pty Ltd shall not be liable in contract, tort (including, without limitation, negligence) or otherwise for any use of, or reliance on, parts of this report without taking into account the report in its entirety and all previous and subsequent reports. 360 Environmental Pty Ltd considers the contents of this report to be current as at the date it was produced. This report, including each opinion, conclusion, and recommendation it contains, should be considered in the context of the report as a whole. The opinions, conclusions and recommendations in this report are limited by its agreed scope. More extensive, or different, investigation, sampling and testing may have produced different results and therefore different opinions, conclusions, and recommendations. Subject to the terms of the contract between the Client and 360 Environmental Pty Ltd, copying, reproducing, disclosing, or disseminating parts of this report is prohibited (except to the extent required by law) unless the report is produced in its entirety including this cover page, without the prior written consent of 360 Environmental Pty Ltd.

© Copyright 2021 360 Environmental Pty Ltd ACN 109 499 041

Executive Summary

All Track WA (the proponent) commissioned 360 Environmental Pty Ltd (360 Environmental) to undertake a Targeted Survey for Threatened Flora on part of Lot 5449 Wannamal Road West, Mindarra. The site is located approximately 89 km north northeast of Perth, Western Australia. The Survey Area covered approximately 243.15 ha total hectares across three areas: Impact Area (20.28 ha), Potential Offset Area 1 (154.80 ha) and Potential Offset Area 2 (68.06 ha). A portion of the Impact Area is proposed to be cleared for a gravel quarry.

360 Environmental originally surveyed the Impact Area in September 2019, recording a total of 49 taxa from 37 genera across 17 families. No Threatened flora species pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and/or gazetted as Threatened/Declared Rare Flora pursuant to the *Biodiversity and Conservation Act 2016* (BC Act) were considered likely to occur or recorded during the survey.

The Department of Agriculture, Water, and the Environment (DAWE) and the Department of Water and Environmental Regulation (DWER) were consulted to discuss the potential impacts of the proposed quarry. Both DAWE and DWER recommended that targeted flora survey work be completed to better delineate the impact of clearing, and potential need for an offset. The targeted survey was scoped to assess the presence of two Endangered (EN) Orchids (*Thelymitra stellata* (EN) – Star Sun Orchid and *Thelymitra dedmaniarim* (EN) – Cinnamon Sun Orchid), and other conservation significant flora (including but not limited to *Banksia mimica* (EN), *Goodenia arthrotricha* (EN) and *Conospermum densiflorum* subsp. *unicephalatum* (EN)).

360 Environmental completed a targeted flora survey in spring 2020 in accordance with Environmental Protection Authority (EPA) (2016) Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment and DAWE's (2013) Draft survey guidelines for Australia's threatened orchids.

No Threatened flora species pursuant to the EPBC Act and/or gazetted as Threatened/Declared Rare Flora pursuant to the BC Act were recorded during the 2020 survey.

A single vegetation type (20.05 ha) was identified across the Impact Area. The vegetation EmBsXp is described as *Eucalyptus marginate* – *Corymbia calophylla* woodland over shrubland of *Banksia sessilis* over sparse shrubland of *Xanthorrhoea preisii* and ranged from Completely Degraded to Very Good condition.

EmBsXp was the most widely occurring vegetation type across both potential Offset Areas. Five vegetation types (152.56 ha) were identified to occur across Offset Area 1 and the vegetation condition considered to be Excellent. Four vegetation types (67.46 ha) were identified across Offset Area 2, ranging from Completely Degraded to Excellent condition.

3358AB_Rev1

Targeted Threatened Flora Survey
Lot 5449 Wannamal Road West, Mindarra
All Track WA



Table of Contents

1	Background.....	1
1.1	Proposed Development	1
1.2	Previous Surveys	1
1.3	Stakeholder Consultation.....	2
2	Survey Methodology	4
3	Targeted Threatened Flora Survey.....	6
3.1	Broad Vegetation Mapping	6
3.2	Flora	12
4	Summary	14
5	Limitations	15
6	References	16

List of Figures

Figure 1: Study Area	3
Figure 2: Field Survey Track Locations	5
Figure 3a: Broad Vegetation Units	8
Figure 3b: Broad Vegetation Units	9
Figure 4a: Condition Mapping.....	10
Figure 4b: Condition Mapping	11
Figure 5: Nearest Records of Threatened Flora.....	13

List of Appendices

Appendix A Conservation Codes

1 Background

1.1 Proposed Development

Lot 5449 Wannamal Road West, Mindarra, is located approximately 89 km north northeast of Perth, Western Australia (Figure 1). All Track WA is considering the development of a gravel quarry within part of Lot 5449. The gravel resource is located beneath approximately 20 ha of native vegetation. Pit boundaries (i.e., the area of clearing) have not yet been confirmed, pending the results of ecological surveys and the impact assessment and approval process.

1.2 Previous Surveys

All Track commissioned 360 Environmental Pty Ltd to undertake a Detailed Flora and Vegetation Survey in 2019, including a desktop assessment and a field survey. The 2019 Survey Area covered approximately 20.28 hectares.

The desktop assessment identified 48 conservation significant species occurring within 10 km of the Survey Area. A likelihood of occurrence assessment was undertaken and determined 16 species as having a high likelihood of occurrence, seven species as having a medium likelihood of occurrence, seven species as having a medium likelihood of occurrence, 23 species as having a low likelihood of occurrence.

The detailed flora and vegetation survey recorded the floristic composition and vegetation types from three quadrats and additional mapping notes. The survey recorded a total of 49 taxa from 37 genera across 17 families.

No Threatened flora species pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* and/or gazetted as Threatened/Declared Rare Flora pursuant to the *Biodiversity and Conservation Act 2016* were recorded during the survey. Two Priority Flora listed by DBCA in *Lasiopetalum venustum* (P3) and *Synaphea grandis* (P4) were recorded within the 2019 Survey Area.

No introduced species were recorded during the survey.

A single vegetation type was identified across the Survey Area, totalling 20.28 ha. The vegetation is broadly described as *Eucalyptus marginata* – *Coymbia calophylla* woodland over shrubland of *Banksia sessilis* over sparse shrubland of *Xanthorrhoea preissii*.

Please refer to 360 Environmental (2020) for further details.

3358AB_Rev1

Targeted Threatened Flora Survey
Lot 5449 Wannamal Road West, Mindarra
All Track WA



1.3 Stakeholder Consultation

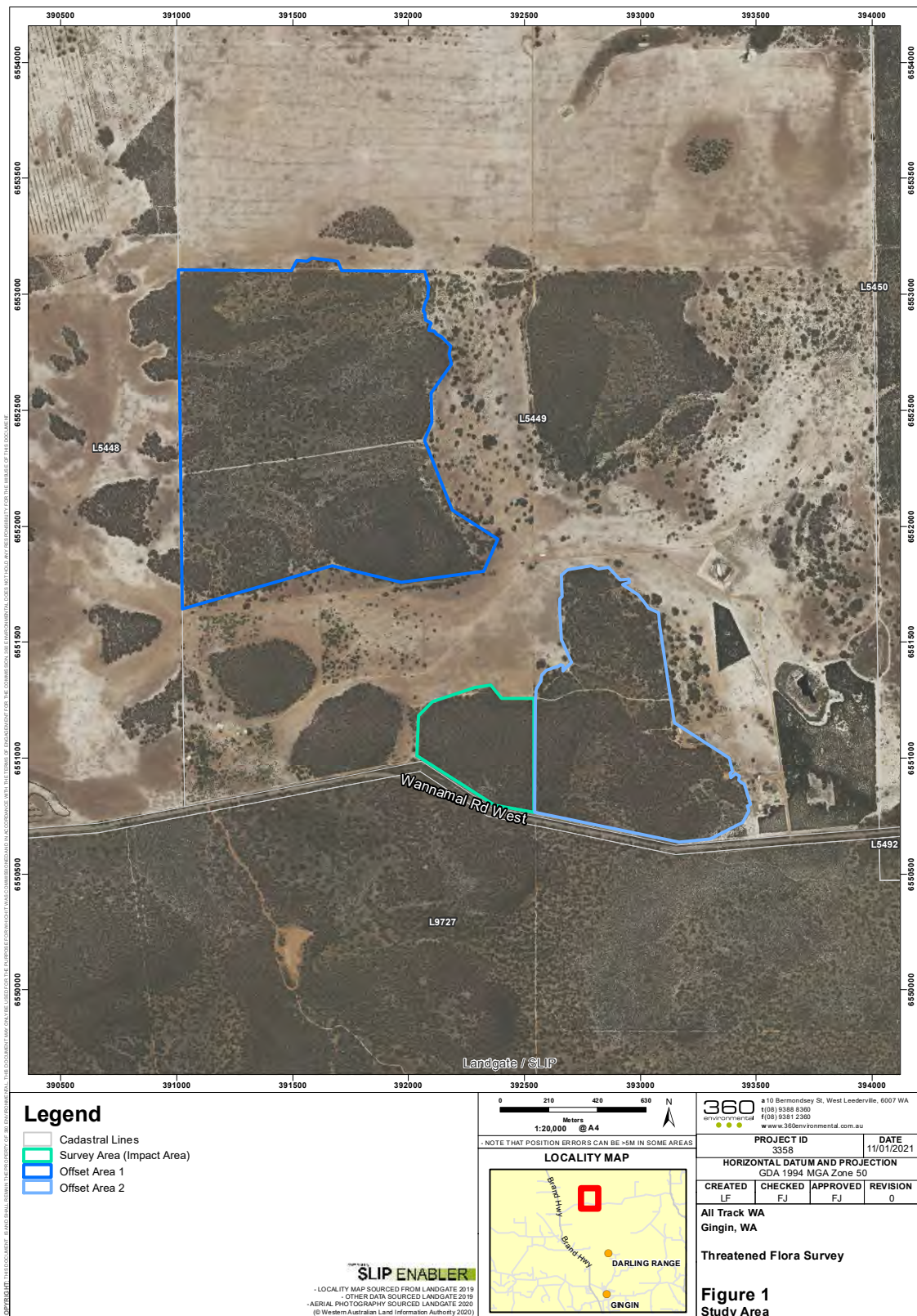
360 Environmental undertook consultation with the Department of Agriculture, Water, and the Environment (DAWE) and the Department of Water and Environmental Regulation (DWER) to discuss the proposed quarry after the survey work was completed in 2019. Both DAWE and DWER advised a targeted survey for Threatened Flora should be undertaken, specifically targeting:

- Two Endangered Orchids (to be conducted in accordance with DAWE's *Draft survey guidelines for Australia's threatened orchids 2013*):
 - *Thelymitra stellata* (EN) –Star Sun Orchid
 - *Thelymitra dedmaniarum* (EN) – Cinnamon Sun Orchid.
- Other conservation significant flora, including but not limited to:
 - *Banksia mimica* (EN)
 - *Goodenia arthrotricha* (EN)
 - *Conospermum densiflorum* subsp. *unicephalum* (EN).

The potential need for environmental offsets was discussed in both consultations, with DAWE indicating a preference for offsetting within the local area with land secured as part of the Project. DWER advised several offset approaches and advised they would expect the opportunity to conduct a site inspection. DWER's approaches include:

- Land Acquisition into State Conservation
- Monetary Contribution
- Revegetation – Conservation Covenant
- Possibility of Mitigation Credit through using revegetation on site.

The survey reported herein was scoped, alongside additional black cockatoo habitat assessment (360 Environmental 2020) to provide further information to support the environmental impact assessment. Two potential Offset Areas were identified by All Track and considered in the 2020 flora and vegetation survey.



2 Survey Methodology

The targeted survey for threatened flora was carried out by Brian Morgan (Principal Botanist) and Susan Downes (Botanist) on 26 to 28 October 2020. The Survey Area was traversed on foot, targeting conservation significant species by walking transects¹ within the Survey Area and Potential Offset Area 1 (68.06 ha) and 2 (154.80 ha) (Figure 2). The targeted species include:

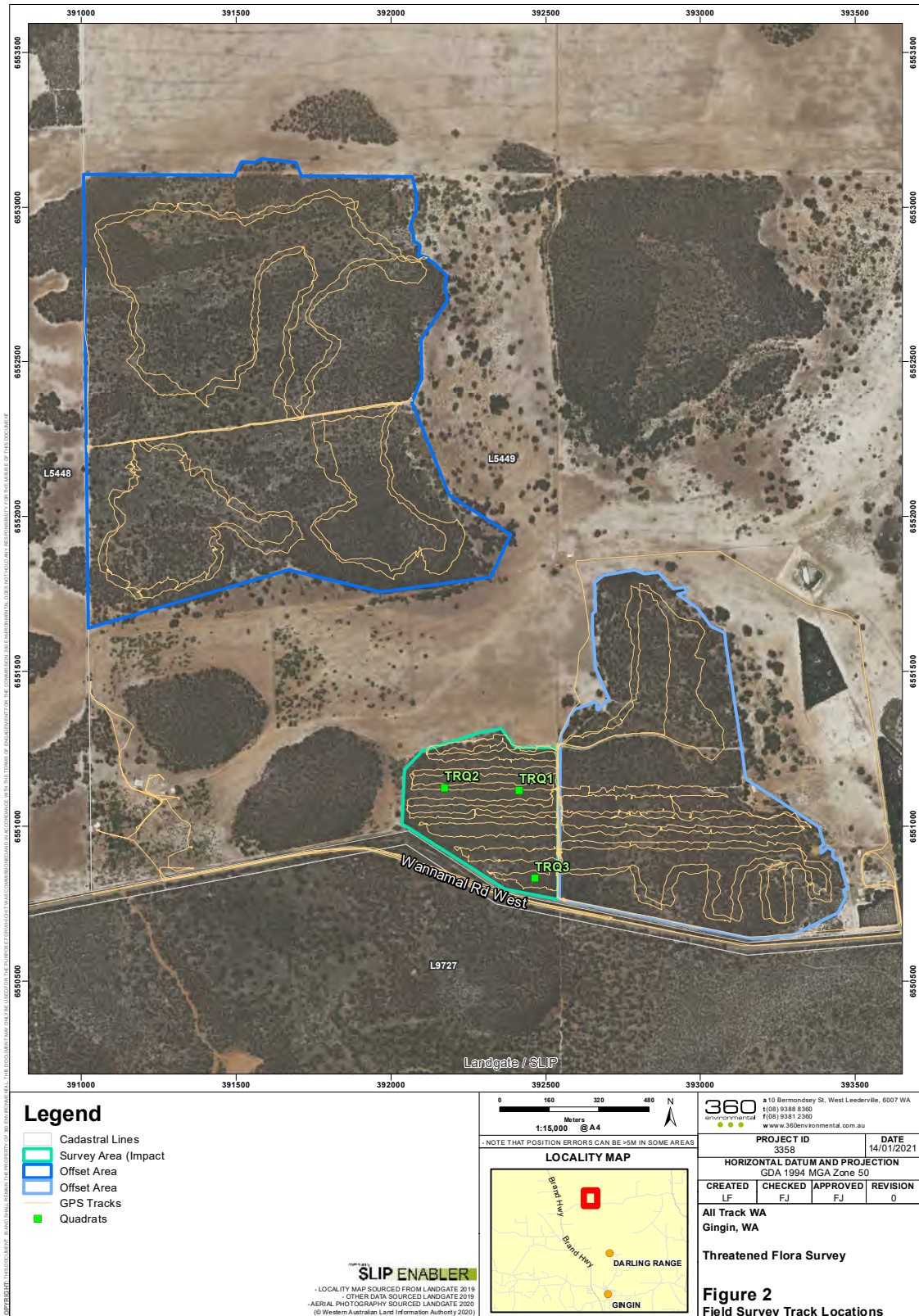
- Two Endangered Orchids:
 - *Thelymitra stellata* (EN) – Star Sun Orchid
 - *Thelymitra dedmaniarim* (EN) – Cinnamon Sun Orchid.
- Other conservation significant flora, including but not limited to:
 - *Banksia mimica* (EN)
 - *Goodenia arthrotricha* (EN)
 - *Conospermum densiflorum* subsp. *unicephalum* (EN).

The survey was conducted in accordance with the EPA requirements for environmental surveying and reporting for flora surveys in Western Australia where relevant, and as documented in:

- Western Australia: Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016a)
- Federal: Matters of National Environmental Significance impact guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999 (DoE, 2013) and DAWE's (2013) *Draft survey guidelines for Australia's threatened orchids*.

While not part of the requested scope of work observations on vegetation condition and type have also been provided as additional information for the Offset Area 1 and 2 (refer to Section 3.2).

¹ Due to GPS malfunction during the survey on day one, some of the transect data from one Botanist was unable to be downloaded for the southern section of the Survey Area, therefore not all transect data is depicted in Figure 2.



3358AB_Rev1

Targeted Threatened Flora Survey
Lot 5449 Wannamal Road West, Mindarra
All Track WA



3 Targeted Threatened Flora Survey

3.1 Broad Vegetation Mapping

Broad vegetation types are mapped during the survey and are shown in Figures 3a and 3b; condition is shown in Figures 4a and 4b.

3.1.1 Impact Area

One vegetation type was identified to occur across the Impact Area, covering 20.05 ha. EmBsXp is described as *Eucalyptus marginata* – *Corymbia calophylla* woodland over shrubland of *Banksia sessilis* over sparse shrubland of *Xanthorrhoea preissii*. This vegetation occurred on grey sands on the upper slopes and crest of the laterite ridge (Figure 3a).

The vegetation condition within the Impact Area ranges from Good to Very Good condition (Figure 4a). The majority of the Impact Area was in Good condition (91%) in accordance with EPA (2016) Vegetation Condition Scale. Disturbances included historic logging and burning. In summary, condition across the Impact Area consisted of:

- Very Good²: 1.65 ha, 8%
- Good³: 18.40 ha, 91%
- Completely Degraded⁴ (cleared): 0.23 ha, 1% (360 Environmental, 2020).

3.1.2 Offset Area 1

Five vegetation types were described across Offset Area 1:

- EmBsXp (99.52 ha): *Eucalyptus marginata* – *Corymbia calophylla* woodland over shrubland of *Banksia sessilis* over sparse shrubland of *Xanthorrhoea preissii*. This vegetation occurred on grey sands on the upper slopes and crest of the laterite ridge.
- EmCcBsLe (24.07 ha): *Eucalyptus marginata* – *Corymbia calophylla* isolated trees to low open woodlands over tall sparse shrubland to tall open shrubland of *Banksia sessilis* subsp. *sessilis* – *Leptospermum erubescens* – *Adenanthos cygnorum* subsp. *cygnorum* over sparse shrubland of *Xanthorrhoea preissii*. This was ecotonal vegetation that occurred in areas around the crests and upper slopes of low lateritic ridges.
- Et (9.80 ha): *Eucalyptus tottiana* – (*Corymbia calophylla*) low open woodland over low heathland of *Hibbertia hypericoides* – *Calothamnus sanguineus*. This vegetation occurred on grey sands on very gently undulating plain.

² Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing (EPA, 2016).

³ Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing (EPA, 2016).

⁴ The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees and shrubs.

3358AB_Rev1

Targeted Threatened Flora Survey
Lot 5449 Wannamal Road West, Mindarra
All Track WA



- HpCp (2.69 ha): low heathland of *Hibbertia hypericoides* – *Conostephium pendulum* – *Leucopogon sprengelioides* – *Melaleuca* sp. This vegetation occurred on the slope of the low ridge.
- LeXp (16.47 ha): *Leptospermum erubescens* sparse tall shrubland to tall open shrubland over sparse shrubland of *Xanthorrhoea preissii* over low heathland of *Hibbertia hypericoides* – *Calothamnus sanguineus*. This vegetation occurred on yellow sands in slight depressions between laterite ridge crests.

The vegetation within Offset Area 1 was in Excellent⁵ condition in accordance with EPA (2016) Vegetation Condition Scale.

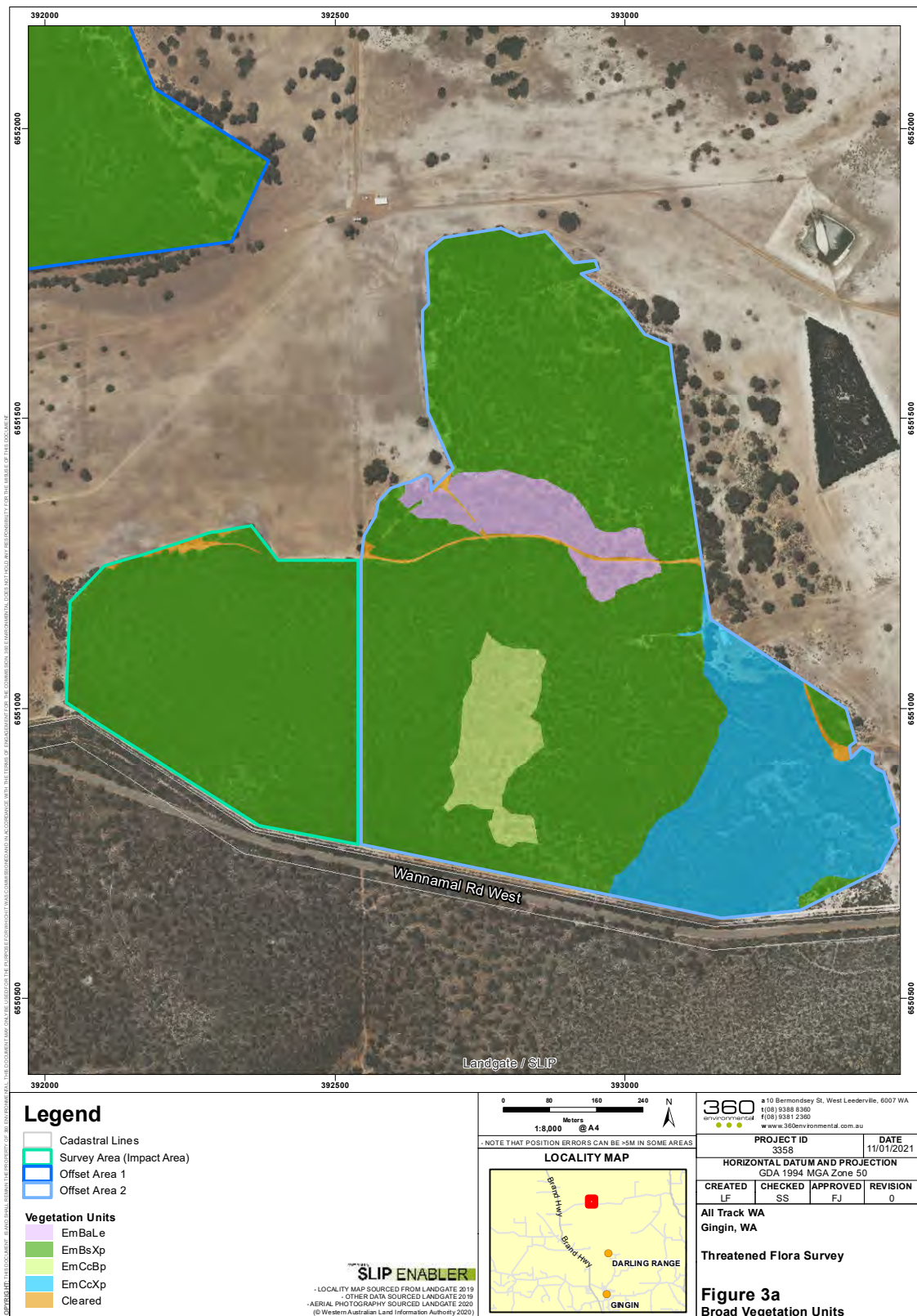
3.1.3 Offset Area 2

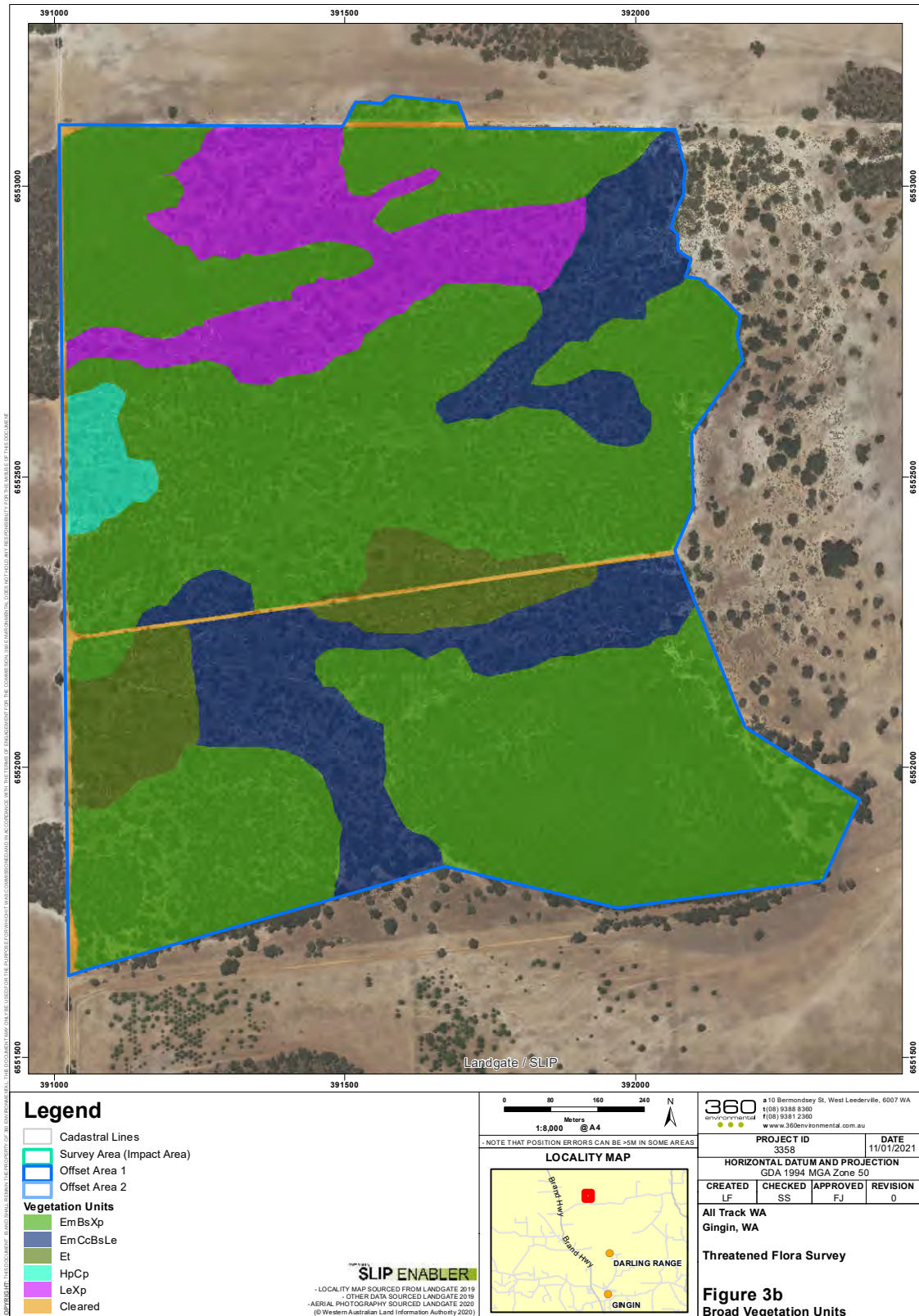
Four vegetation types were described across Offset Area 2:

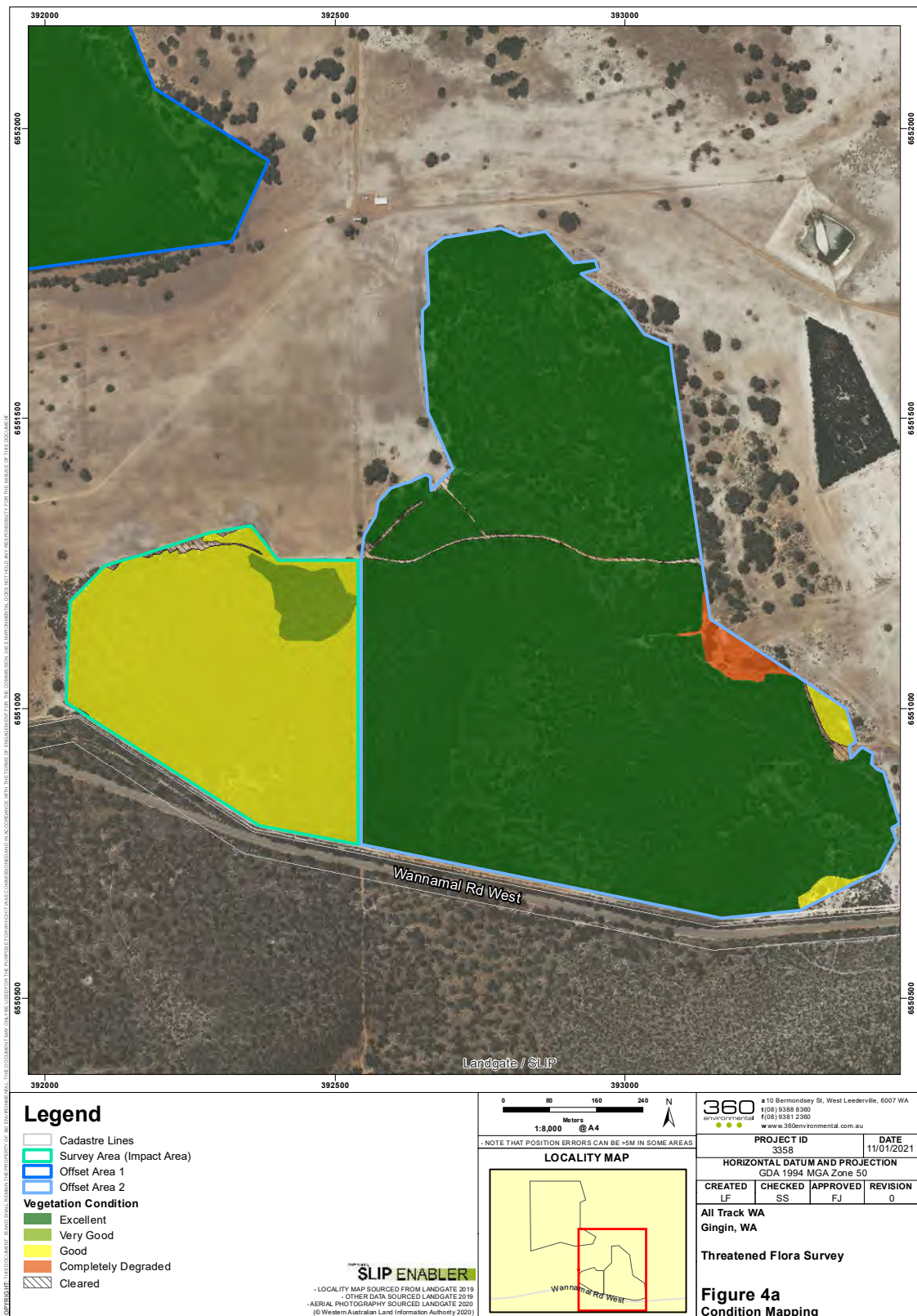
- EmBsXp (46.68 ha): *Eucalyptus marginata* – *Corymbia calophylla* woodland over shrubland of *Banksia sessilis* over sparse shrubland of *Xanthorrhoea preissii*. This vegetation occurred on grey sands on the upper slopes and crest of the laterite ridge.
- EmCcBp (4.63 ha): *Eucalyptus marginata* – *Corymbia calophylla* open woodland over *Banksia prionotes* isolated low trees to low open woodland over tall shrubland of *Banksia sessilis* subsp. *sessilis*. This vegetation occurred on a lower area of yellow sands.
- EmCcXp (12.25 ha): *Eucalyptus marginata* – *Corymbia calophylla* open forest over sparse shrubland of *Xanthorrhoea preissii*. This vegetation occurred on grey sands on the lower slopes of a laterite ridge.
- EmBaLe (3.88 ha) *Eucalyptus marginata* – *Corymbia calophylla* low open woodland over *Banksia attenuata* low isolated trees over tall sparse shrubland of *Leptospermum erubescens* over sparse shrubland of *Xanthorrhoea preissii*. This vegetation was an ecotonal area in a low area between lateritic ridges.

The vegetation within Offset Area 2 ranged from Completely Degraded to Excellent condition. Most of the area was in Excellent condition in accordance with EPA (2016) Vegetation Condition Scale.

⁵ Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks (EPA, 2016).









3358AB_Rev1

Targeted Threatened Flora Survey
Lot 5449 Wannamal Road West, Mindarra
All Track WA



3.2 Flora

No Threatened flora species pursuant to the EPBC Act and/or gazetted as Threatened/Declared Rare Flora pursuant to the BC Act were recorded during the survey. Nearest records of threatened flora are shown in Figure 5.

3.2.1 Impact Area

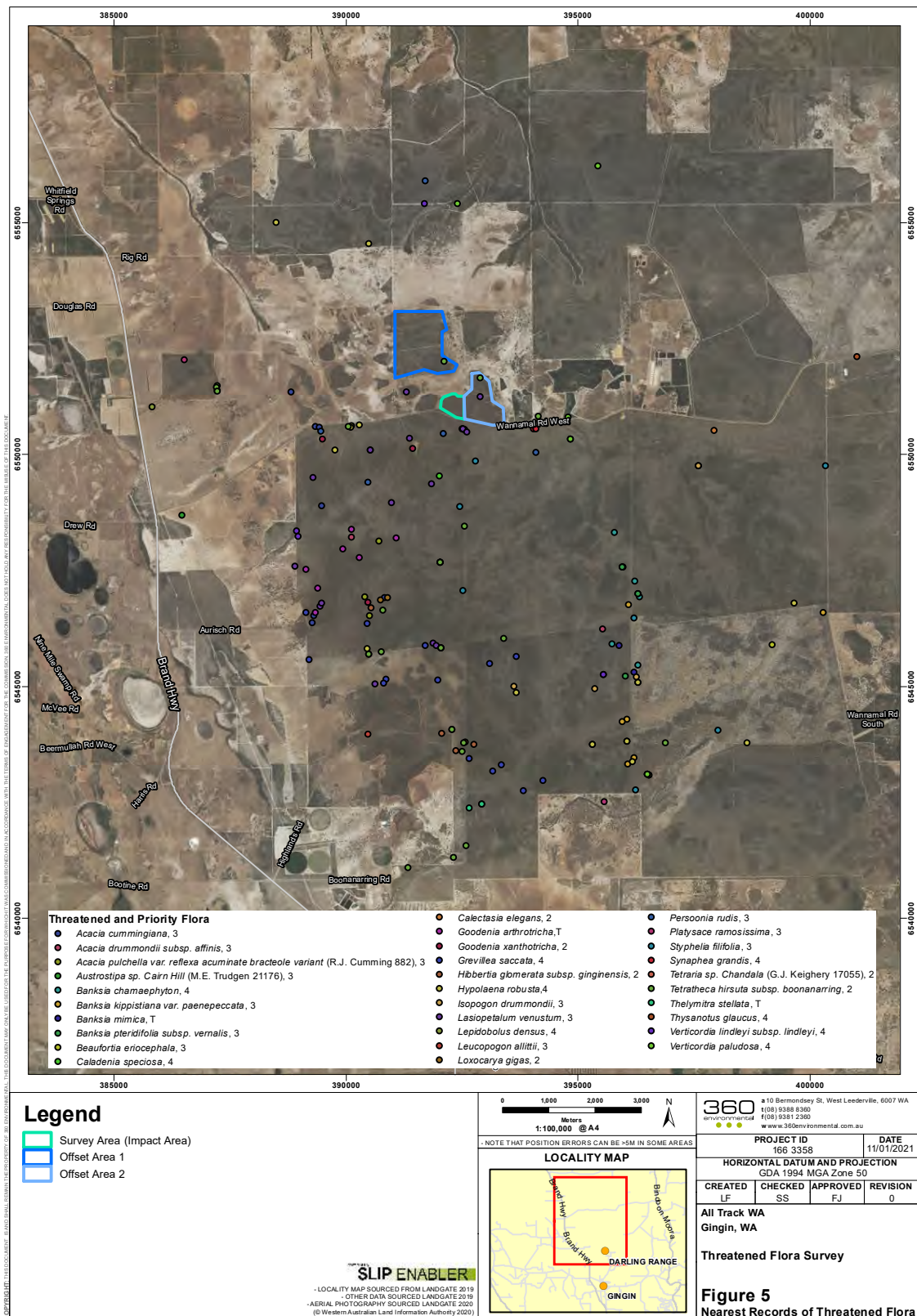
The two DBCA Priority species, *Lasiopetalum venustum* (P3) and *Synaphea grandis* (P4), were recorded within the Impact Area (360 Environmental 2020).

3.2.2 Offset Area 1

The survey recorded a total of 56 taxa from 20 families across 39 genera. The most dominant species were Proteaceae (twelve species) and Myrtaceae (eleven species). The most dominant genus was *Banksia* (five species) and *Hibbertia* (four species).

3.2.3 Offset Area 2

The survey recorded a total of 76 taxa across 27 genera. The most dominant species were Proteaceae (eighteen species) and Fabaceae (eight species). The most dominant genus was *Banksia* (five species) and *Acacia* (four species).



3358AB_Rev1

Targeted Threatened Flora Survey
Lot 5449 Wannamal Road West, Mindarra
All Track WA



4 Summary

In summary, the Targeted Survey for Threatened Flora found:

- No Threatened flora species pursuant to the EPBC Act and/or gazetted as Threatened/Declared Rare Flora pursuant to the BC Act were recorded during the survey.
- A single vegetation type was identified across the Impact Area, covering 20.05 ha. The vegetation, EmBsXp, ranged from Completely Degraded to Very Good condition in accordance with EPA (2016) Vegetation Condition Scale (360 Environmental, 2020). EmBsXp is also the most widely recorded vegetation type across the Offset Areas.
- Five vegetation types (including EmBsXp) were identified to occur across Offset Area One, covering 152.56 ha total. The vegetation recorded in this area is considered to be in Excellent condition (EPA, 2016). Offset Area 1 is the largest of the two potential offset areas.
- Four vegetation types (including EmBsXp) were identified to occur across Offset Area Two, covering 67.46 ha total and ranged from Completely Degraded to Excellent condition (EPA, 2016).

5 Limitations

This report is produced strictly in accordance with the scope of services set out in the contract or otherwise agreed in accordance with the contract. 360 Environmental makes no representations or warranties in relation to the nature and quality of soil and water other than the visual observation and analytical data in this report.

In the preparation of this report, 360 Environmental has relied upon documents, information, data, and analyses ("client's information") provided by the client and other individuals and entities. In most cases where client's information has been relied upon, such reliance has been indicated in this report. Unless expressly set out in this report, 360 Environmental has not verified that the client's information is accurate, exhaustive, or current and the validity and accuracy of any aspect of the report including, or based upon, any part of the client's information is contingent upon the accuracy, exhaustiveness, and currency of the client's information. 360 Environmental shall not be liable to the client or any other person in connection with any invalid or inaccurate aspect of this report where that invalidity or inaccuracy arose because the client's information was not accurate, exhaustive, and current or arose because of any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to 360 Environmental.

Aspects of this report, including the opinions, conclusions, and recommendations it contains, are based on the results of the investigation, sampling and testing set out in the contract and otherwise in accordance with normal practices and standards. The investigation, sampling and testing are designed to produce results that represent a reasonable interpretation of the general conditions of the site that is the subject of this report. However, due to the characteristics of the site, including natural variations in site conditions, the results of the investigation, sampling and testing may not accurately represent the actual state of the whole site at all points.

It is important to recognise that site conditions, including the extent and concentration of contaminants, can change with time. This is particularly relevant if this report, including the data, opinions, conclusions, and recommendations it contains, are to be used a considerable time after it was prepared. In these circumstances, further investigation of the site may be necessary.

Subject to the terms of the contract between the Client and 360 Environmental Pty Ltd, copying, reproducing, disclosing, or disseminating parts of this report is prohibited (except to the extent required by law) unless the report is produced in its entirety including this page, without the prior written consent of 360 Environmental Pty Ltd.

3358AB_Rev1

Targeted Threatened Flora Survey
Lot 5449 Wannamal Road West, Mindarra
All Track WA



6 References

360 Environmental Pty Ltd 2020, *Detailed Flora and Vegetation Survey and Black Cockatoo Habitat Assessment: Wannamal Road West, Mindarra*, Perth, Australia

360 Environmental Pty Ltd 2020, *Black Cockatoo Habitat Assessment: Wannamal Road West, Mindarra*, Perth, Australia

Department of Agriculture Water and Environment (2013) *Draft survey guidelines for Australia's threatened orchids*

Environmental Protection Authority (2016) *Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment*. Government of Western Australia, Perth

3358AB_Rev1

Targeted Threatened Flora Survey
Lot 5449 Wannamal Road West, Mindarra
All Track WA



Appendices

3358AB_Rev1

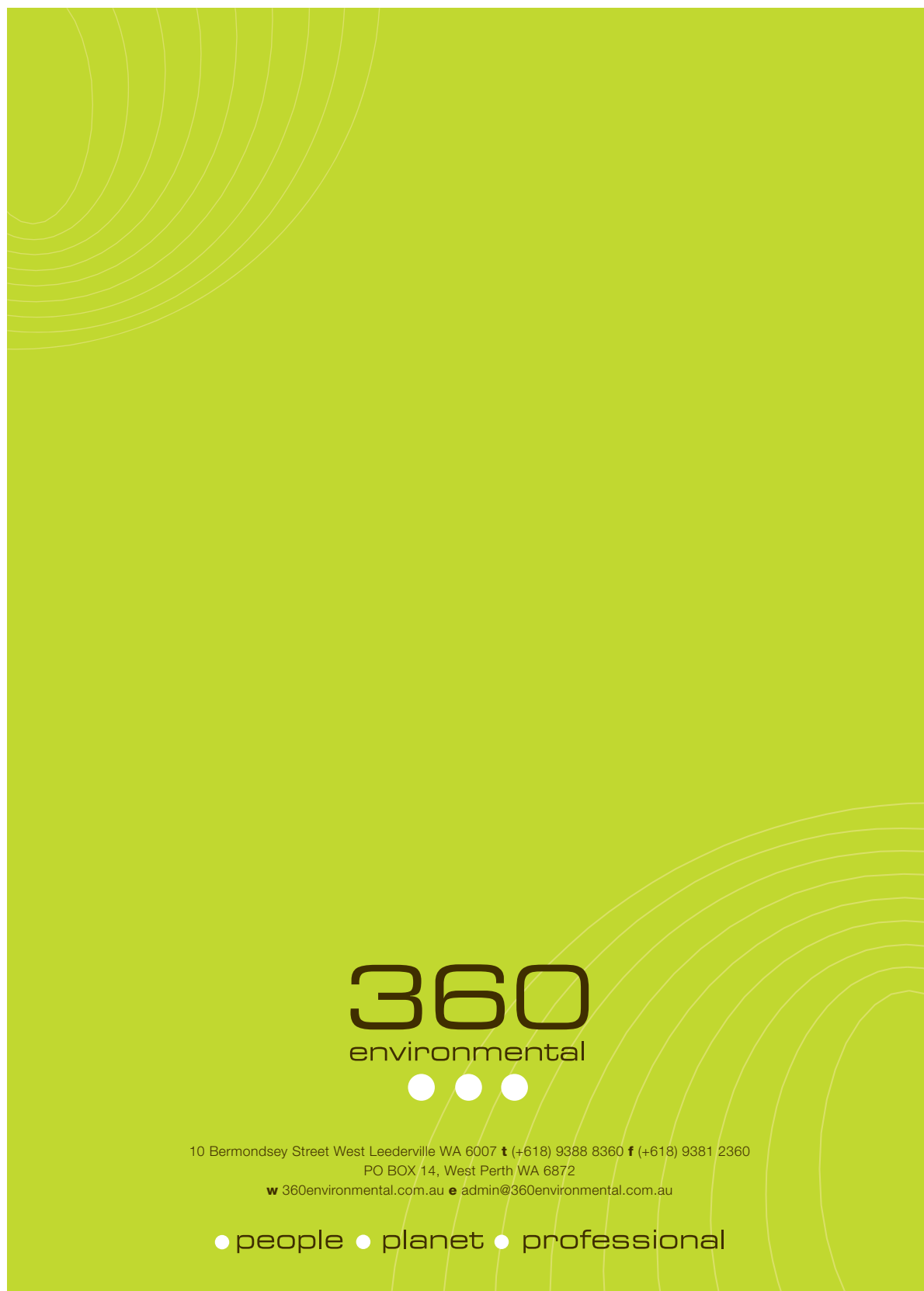
Targeted Threatened Flora Survey
Lot 5449 Wannamal Road West, Mindarra
All Track WA



Appendix A Conservation Codes

Conservation Codes for Significant Flora (DBCA, 2019)

Code	Description
Priority 2 (P2): Poorly known species	Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
Priority 3 (P3): Poorly known species	Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
Priority 4 (P4): Rare, Near Threatened and other species in need of monitoring	<p>(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.</p> <p>(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.</p> <p>(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.</p>





Lot 5449 Wannamal Road West,
Mindarragh

Black Cockatoo Habitat Assessment: Tree Hollow Inspection

Prepared for
All Track WA

January 2021

● people ● planet ● professional

Document Reference	Revision	Prepared by	Reviewed by	Admin Review	Submitted to Client	
					Copies	Date
3358AC_Rev0	Internal Draft	M. Ellis G. Harewood	F. Jones	L. Ioannidis	-	22/01/21
3358AC_Rev1	Client Draft	360	All Track	L. Ioannidis	electronic	29/01/2021

Disclaimer

This report is issued in accordance with, and is subject to, the terms of the contract between the Client and 360 Environmental Pty Ltd, including, without limitation, the agreed scope of the report. To the extent permitted by law, 360 Environmental Pty Ltd shall not be liable in contract, tort (including, without limitation, negligence) or otherwise for any use of, or reliance on, parts of this report without taking into account the report in its entirety and all previous and subsequent reports. 360 Environmental Pty Ltd considers the contents of this report to be current as at the date it was produced. This report, including each opinion, conclusion, and recommendation it contains, should be considered in the context of the report as a whole. The opinions, conclusions and recommendations in this report are limited by its agreed scope. More extensive, or different, investigation, sampling and testing may have produced different results and therefore different opinions, conclusions, and recommendations. Subject to the terms of the contract between the Client and 360 Environmental Pty Ltd, copying, reproducing, disclosing, or disseminating parts of this report is prohibited (except to the extent required by law) unless the report is produced in its entirety including this cover page, without the prior written consent of 360 Environmental Pty Ltd.

© Copyright 2021 360 Environmental Pty Ltd ACN 109 499 041

Executive Summary

All Track WA commissioned 360 Environmental Pty Ltd (360 Environmental) to undertake a Targeted Black Cockatoo Hollow Assessment within a proposed Impact Area of Lot 5449 Wannamal Road West, Mindarra. The site is located approximately 89 km north northeast of Perth, Western Australia. The Survey Area covered approximately 20.28 hectares, a portion of which is proposed to be cleared for a gravel quarry.

360 Environmental completed a Black Cockatoo habitat assessment for the site in September 2019, and 72 trees were found to have potentially suitable hollows, as viewed from the ground. The Department of Agriculture, Water, and the Environment (DAWE) and the Department of Water and Environmental Regulation (DWER) were consulted to discuss the potential impacts of the proposed quarry. Both DAWE and DWER advised a Black Cockatoo hollow assessment would be required during the breeding season. The targeted survey would need to assess the internal dimensions of the potential hollows. This was considered necessary to facilitate an adequate assessment of impact and inform the need to consider an off-site offset in the event an active hollow was identified. The 2020 survey was carried out with the use of a drone in November.

Of the 72 trees surveyed in the Impact Area, three were found to have hollows with an appropriate orientation and internal dimensions to support Black Cockatoo breeding:

- One Jarrah tree (*Eucalyptus marginata*) (Tree ID 13) contained one side entry hollow that appeared suitable for Black Cockatoos, however there were no visual signs of use such as bite marks or chips.
- One Marri (*Corymbia calophylla*) (tree ID 55) contained a potential nest chimney hollow that displays chew marks indicating use. There is a second chimney hollow in close proximity to the nest hollow. The second hollow also displays chew marks; however, it is likely this activity is related to the nearby nest hollow as the second hollow appears too small for Black Cockatoos.
- A second Marri (tree ID 59) contained a suitable spout hollow with two minor chip marks but had no signs of chewing and no conclusive evidence of use by Black Cockatoos.

All Track identified two parcels of land that have potential to be used as an offset, if required. Both potential Offset Areas (133.39 ha and 67.46 ha) are larger than the Impact Site (20.05 ha) and contain similar foraging habitat and quality in accordance with the DEE (2017) foraging habitat scoring tool:

- The Impact Area includes consists of 20.05 ha of Black Cockatoo foraging habitat, EmBsXp, which is considered to be Very High Quality.
- Offset Area 1 provides 133.39 ha of Black Cockatoo foraging habitat where the vegetation is in Excellent condition. The quality of the foraging habitat is considered to be Very High.

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



- Offset Area 2 provides 67.46 ha of Black Cockatoo foraging habitat where the vegetation is largely in Excellent condition. The quality of the foraging habitat is considered to be Very High.

This report should be read in conjunction with the original baseline survey report (360 Environmental, 2020).

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



Table of Contents

1	Background.....	1
1.1	Proposed Development	1
1.2	Previous Survey	1
1.3	Stakeholder Consultation.....	1
2	Survey Methodology	4
3	Black Cockatoo Habitat Assessment.....	6
3.1	Breeding Habitat	6
3.2	Foraging Habitat	9
4	Summary	11
5	Limitations	12
6	References	13

List of Figures

Figure 1: Study Area	3
Figure 2: 2020 Drone Surveyed Trees	5

List of Plates

Plate 1: Tree 13 potentially suitable hollow displaying no signs of use	6
Plate 2: Tree 55 potentially suitable hollow with two minor chips but no conclusive evidence of Black Cockatoo use.....	7
Plate 3: Tree 59 Hollow 1 with potential nest hollow	8
Plate 4: Tree 59 Hollow 2 (not suitable)	8

List of Appendices

Appendix A Black Cockatoo Hollow Survey Data
Appendix B Hollow Assessment Photos

1 Background

1.1 Proposed Development

Lot 5449 Wannamal Road West, Mindarra, is located approximately 89 km north northeast of Perth, Western Australia (Figure 1). All Track (the Proponent) is considering the development of a gravel quarry (the Project) within a portion of the Impact Area as shown in Figure 1, and has identified two potential Offset Areas within proximity to the Impact Area which may or may not be required pending the result of an impact assessment and design of the clearing footprint.

1.2 Previous Survey

All Track commissioned 360 Environmental Pty Ltd to undertake a Black Cockatoo Habitat Assessment in 2019 for the Impact Site, reported in 360 Environmental (2020). The key results were:

- A total of 190 trees were identified as potential breeding trees for Black Cockatoos, of which 72 contained hollows that may be suitable for Black Cockatoo breeding, based on observation from the ground
- A total of 20.05 ha of Black Cockatoo foraging habitat was recorded in the Survey Area and evidence of Carnaby's Black Cockatoo foraging was recorded at five locations within the Survey Area.
- A Carnaby's Black Cockatoo was sighted 60 m south of the Survey Area.

1.3 Stakeholder Consultation

360 Environmental undertook consultation with the Department of Agriculture, Water and the Environment (DAWE) and the Department of Water and Environmental Regulation (DWER) in 2020 to discuss the proposed quarry after the survey work completed. Both DAWE and DWER advised a Black Cockatoo hollow assessment should be undertaken to better understand the potential impact to breeding habitat. DAWE advised the assessment should include number of hollows, hollow size, and evidence of use as a minimum.

The potential need for environmental offsets was discussed in both consultations, with DAWE indicating a preference for offsetting within the local area with land secured as part of the Project. DWER advised a number of offset approaches and indicated they would expect the opportunity to conduct a site inspection. DWER's approach to offsetting includes:

- Land Acquisition into State Conservation
- Monetary Contribution
- Revegetation – Conservation Covenant
- Possibility of Mitigation Credit through using revegetation on site.

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



The survey reported herein was scoped, alongside additional flora and threatened orchid survey (360 Environmental 2020) to provide further information to support the environmental impact assessment. Two potential Offset Areas were identified and considered in the 2020 surveys.



3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



2 Survey Methodology

The Black Cockatoo Hollow Survey was undertaken by Principal Zoologist Greg Harewood on 25 to 27 September 2020 (inclusive). The survey used a drone to view and assess hollows in the 72 trees identified in the previous assessment (360 Environmental, 2020) as containing hollows that may be suitable for Black Cockatoo breeding (

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



).

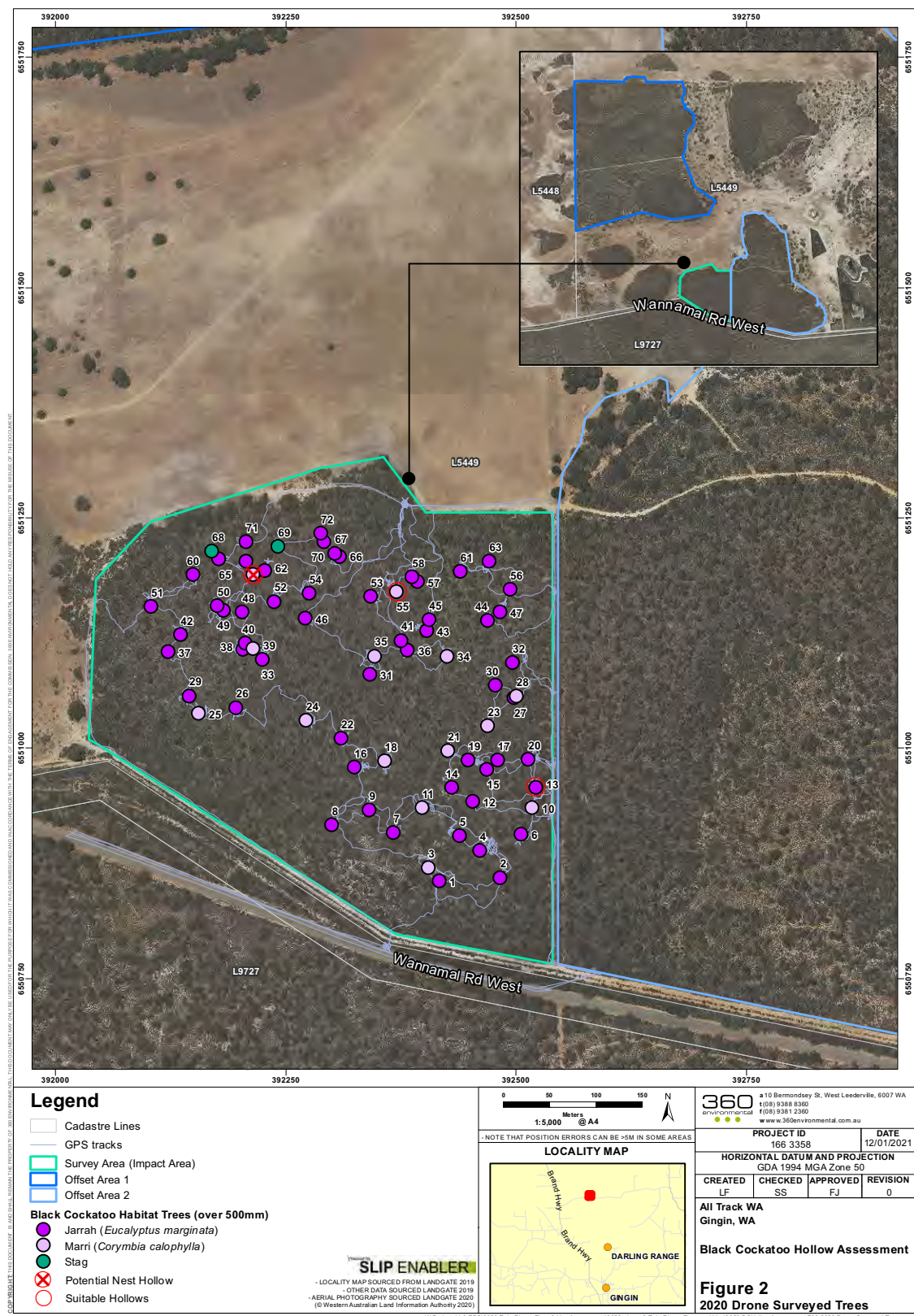
The number of hollows was recorded for each tree including:

- Type (chimney, spout, side entry)
- Entrance size (<10, 10 – 15, 15 – 20 or 20+ cm)
- Field assessment (no hollow, unsuitable hollow, appears suitable – no signs of use, chewed/chipped hollow, confirmed nest hollow, undecided – review pictures).

The survey was conducted in accordance with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) Referral Guidelines for three threatened Black Cockatoo Species: Carnaby's Cockatoo (Endangered) *Calyptorhynchus latirostris*, Baudin's Cockatoo (Vulnerable) *Calyptorhynchus baudinii* and Forest Red-tailed Black Cockatoo (Vulnerable) *Calyptorhynchus banksii naso* (DSEWPac, 2012).

Following the field component of the survey, the Principal Zoologist reviewed all photos captured by the drone and assessed whether the hollows showed evidence of use by Black Cockatoos.

An assessment of vegetation types at the potential Offset Sites was also undertaken in Spring 2020 and is reported in 360 Environmental (2020a), that survey data was used to assess the quality of foraging habitat for Black Cockatoos.



3 Black Cockatoo Habitat Assessment

3.1 Breeding Habitat

The 72 trees surveyed within the Impact Area consisted of 59 Jarrah (*Eucalyptus marginata*), 15 Marri (*Corymbia calophylla*) and 2 stags (Figure 2). The 72 trees supported of 167 hollows, 98.2% of which were determined to be unsuitable for Black Cockatoos when surveyed. Three trees (one Jarrah and two Marri) were found to have suitable hollows of which one (tree 59) contained one suitable hollow with visible crew marks (potential nest hollow).

Raw field data relating to the hollow assessment is displayed in Appendix A. Photos of the hollows surveyed are shown in Appendix B.

The following sections provide additional assessment information on the three trees with potentially suitable hollows.

3.1.1 Tree 13

Tree 13 is a Jarrah (*Eucalyptus marginata*) containing one side entry hollow with the entrance measuring over 20 cm. The hollow appears suitable for Black Cockatoos, however there were no visual signs of use such as bite marks or chips (Plate 1). Tree 13 contains five other unsuitable hollows that are either too small or shallow, or the accommodating branch is too small for Black Cockatoos.

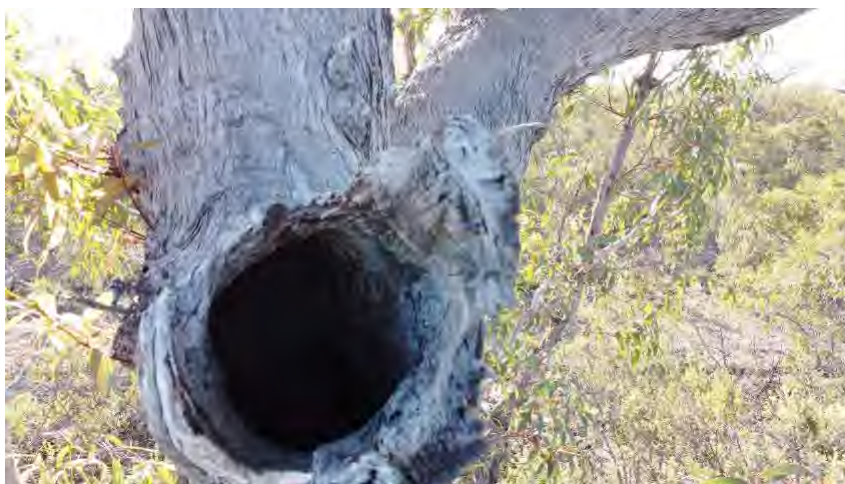


Plate 1: Tree 13 potentially suitable hollow displaying no signs of use

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



3.1.2 Tree 55

Tree 55 is a Marri (*Corymbia calophylla*) containing one spout hollow that appears suitable for Black Cockatoos (Plate 2). The entrance of the hollow measures 15 – 20 cm and has two minor chip marks. There is no evidence of chewing and no conclusive evidence of use by Black Cockatoos. Tree 55 also contains an unsuitable hollow that is too narrow for use by Black Cockatoos.



Plate 2: Tree 55 potentially suitable hollow with two minor chips but no conclusive evidence of Black Cockatoo use

3.1.3 Tree 59

Tree 59 is a Marri (*Corymbia calophylla*) containing a chimney hollow that displays chew marks indicating use (Plate 3). The hollow entrance measures over 20 cm. There is a second chimney hollow in proximity of the potential nest hollow. The second hollow (while entrance measures over 20 cm) also displays chew marks. However, it is likely this activity is related to the first hollow as the second hollow appears too small (shallow) for Black Cockatoos. Tree 59 contains two other hollows that are unsuitable for Black Cockatoos.

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



Plate 3: Tree 59 Hollow 1 with potential nest hollow



Plate 4: Tree 59 Hollow 2 (not suitable)

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



3.2 Foraging Habitat

Vegetation mapping was undertaken by 360 Environmental in September 2019 at the Impact Area (360 Environmental 2020), and in spring 2020 (360 Environmental 2020a) at two potential Offset Areas.

3.2.1 Impact Area

One vegetation type was mapped across the Impact Area, covering 20.05 ha. EmBsXp is suitable Black Cockatoo foraging habitat. It can be described as *Eucalyptus marginata* – *Corymbia calophylla* woodland over shrubland of *Banksia sessilis* over sparse shrubland of *Xanthorrhoea preissii*. The vegetation within the Impact Area ranges from Completely Degraded to Very Good condition. The majority of the Impact Area was in Good condition (91%). The quality of the foraging habitat is considered to be Very High¹ in accordance with the DEE (2017) foraging habitat scoring tool.

3.2.2 Offset Area 1

Five vegetation types were mapped across Offset Area 1. Three of these vegetation types (133.39 ha) are suitable as Black Cockatoo foraging habitat, which include the following:

- EmBsXp (99.52 ha): *Eucalyptus marginata* – *Corymbia calophylla* woodland over shrubland of *Banksia sessilis* over sparse shrubland of *Xanthorrhoea preissii*. This vegetation occurred on grey sands on the upper slopes and crest of the laterite ridge.
- Et (9.80 ha): *Eucalyptus tottiana* – (*Corymbia calophylla*) low open woodland over low heathland of *Hibbertia hypericoides* – *Calothamnus sanguineus*.
- EmCcBsLe (24.07 ha): *Eucalyptus marginata* – *Corymbia calophylla* isolated trees to low open woodlands over tall sparse shrubland to tall open shrubland of *Banksia sessilis* subsp. *sessilis* – *Leptospermum erubescens* – *Adenanthos cygnorum* subsp. *cygnorum* over sparse shrubland of *Xanthorrhoea preissii*. This was ecotonal vegetation that occurred in areas around the crests and upper slopes of low lateritic ridges.

The condition of vegetation in this area is considered to be in Excellent condition. The quality of the foraging habitat is considered to be Very High² in accordance with the DEE (2017) foraging habitat scoring tool.

¹ Score based on that the site contains native shrubland/woodland dominated by Proteaceous plants such as *Banksia* spp., contains trees with suitable nest hollows, primarily comprises of Marri and contains trees with potential to be used for breeding (i.e. ≥500mm DBH).

² Score based on that the site contains native shrubland/woodland dominated by Proteaceous plants such as *Banksia* spp., primarily comprises of Marri and likely to contain trees with potential to be used for breeding (i.e. ≥500mm DBH).

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



3.2.3 Offset Area 2

Four vegetation types were mapped across Offset Area 2 and are considered suitable Black Cockatoo foraging habitat (67.46 ha). The vegetation types are described as:

- EmBsXp (46.68 ha): *Eucalyptus marginata* – *Corymbia calophylla* woodland over shrubland of *Banksia sessilis* over sparse shrubland of *Xanthorrhoea preissii*. This vegetation occurred on grey sands on the upper slopes and crest of the laterite ridge.
- EmCcBp (4.63 ha): *Eucalyptus marginata* – *Corymbia calophylla* open woodland over *Banksia prionotes* isolated low trees to low open woodland over tall shrubland of *Banksia sessilis* subsp. *Sesillis*.
- EmCcXp (12.25 ha): *Eucalyptus marginata* – *Corymbia calophylla* open forest over sparse shrubland of *Xanthorrhoea preissii*.
- EmBaLe (3.88 ha): *Eucalyptus marginata* – (*Corymbia calophylla*) low open woodland over *Banksia attenuata* low isolated trees over tall sparse shrubland of *Leptospermum erubescens* over sparse shrubland of *Xanthorrhoea preissii*.

The vegetation within Offset Area 2 ranges from Completely Degraded to Excellent condition. The majority of the area is in Excellent condition. The quality of the foraging habitat is considered to be in Very High² in accordance with the DEE (2017) foraging habitat scoring tool within the areas where vegetation condition is considered to be 'Good' to 'Excellent' condition.

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



4 Summary

The Black Cockatoo Habitat tree hollow inspection outcomes at the Impact Area were:

- Of the 72 trees surveyed, a total of three trees (one Jarrah and two Marri) contained hollows with appropriate internal and external dimensions to facilitate Black Cockatoo breeding
- Of the three trees, one Marri contained one potential nest hollow displaying chew marks, indicating use by Black Cockatoos
- The other Marri and the Jarrah tree each contained one suitable hollow but displayed no visual signs of use by Black Cockatoos
- Based on the assessment of foraging habitat, both potential Offsite Sites are larger and contain similar foraging habitat and quality:
 - The Impact Area includes consists of 20.05 ha of Black Cockatoo foraging habitat, EmBsXp, in mostly Good condition (91%). The quality of the foraging habitat is considered to be Very High in accordance with the DEE (2017) foraging habitat scoring tool.
 - Offset Area 1 provides 133.39 ha of Black Cockatoo foraging habitat where the vegetation is in Excellent condition. The quality of the foraging habitat is considered to be in Very High in accordance with the DEE (2017) foraging habitat scoring tool.
 - Offset Area 2 provides 67.46 ha of Black Cockatoo foraging habitat where the vegetation is largely in Excellent condition. The quality of the foraging habitat is considered to be Very High in accordance with the DEE (2017) foraging habitat scoring tool.

This report should be read in conjunction with the original baseline survey report (360 Environmental, 2020).

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



5 Limitations

This report is produced strictly in accordance with the scope of services set out in the contract or otherwise agreed in accordance with the contract. 360 Environmental makes no representations or warranties in relation to the nature and quality of soil and water other than the visual observation and analytical data in this report.

In the preparation of this report, 360 Environmental has relied upon documents, information, data and analyses ("client's information") provided by the client and other individuals and entities. In most cases where client's information has been relied upon, such reliance has been indicated in this report. Unless expressly set out in this report, 360 Environmental has not verified that the client's information is accurate, exhaustive or current and the validity and accuracy of any aspect of the report including, or based upon, any part of the client's information is contingent upon the accuracy, exhaustiveness and currency of the client's information. 360 Environmental shall not be liable to the client or any other person in connection with any invalid or inaccurate aspect of this report where that invalidity or inaccuracy arose because the client's information was not accurate, exhaustive and current or arose because of any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to 360 Environmental.

Aspects of this report, including the opinions, conclusions and recommendations it contains, are based on the results of the investigation, sampling and testing set out in the contract and otherwise in accordance with normal practices and standards. The investigation, sampling and testing are designed to produce results that represent a reasonable interpretation of the general conditions of the site that is the subject of this report. However, due to the characteristics of the site, including natural variations in site conditions, the results of the investigation, sampling and testing may not accurately represent the actual state of the whole site at all points.

It is important to recognise that site conditions, including the extent and concentration of contaminants, can change with time. This is particularly relevant if this report, including the data, opinions, conclusions and recommendations it contains, are to be used a considerable time after it was prepared. In these circumstances, further investigation of the site may be necessary.

Subject to the terms of the contract between the Client and 360 Environmental Pty Ltd, copying, reproducing, disclosing or disseminating parts of this report is prohibited (except to the extent required by law) unless the report is produced in its entirety including this page, without the prior written consent of 360 Environmental Pty Ltd.

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wannamal Road West, Mindarra
All Track WA



6 References

360 Environmental Pty Ltd 2020, *Detailed Flora and Vegetation Survey and Black Cockatoo Habitat Assessment: Wannamal Road West, Mindarra, Perth, Australia*

360 Environmental Pty Ltd 2020a, *Targeted Survey for Threatened Flora: Wannamal Road West, Mindarra, Perth, Australia*.

Department of Environment and Energy (DEE) 2017, Revised draft referral guideline for three threatened black cockatoo species: Carnaby's Cockatoo (Endangered) *Calyptorhynchus latirostris* Baudin's Cockatoo (Vulnerable) *Calyptorhynchus baudinii* Forest Red-tailed Black Cockatoo (Vulnerable) *Calyptorhynchus banksii naso*. Commonwealth of Australia, Canberra.

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



Appendices

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



Appendix A Black Cockatoo Hollow Survey Data

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Black Cockatoo Hollow Survey Data

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 1	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Site entry 3m up. Too shallow					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 3	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Apparent hollow open at bottom – not suitable					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 2	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow, no depth					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 4	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Apparent hollow non existent					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 5	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry (fork)	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth	No depth				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 11	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow, irregular base to open					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 7	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth	No depth/hollow				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 9	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small, no depth	Accommodating branch too small, shallow				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 8	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 16	Type	Type	Type	Type	Type	Type
	<u>Chimney</u>	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	<u>20+</u>	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth	No depth				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 18	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small, no hollow	Accommodating branch too small, no hollow				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6 (+7 and 8)
Tree 22	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth, too small	Too small	Accommodating branch too small, too shallow/no hollow	Accommodating branch too small, no hollow	Accommodating branch too small	Accommodating branch too small. NOTE: Hollows 7 and 8 are the same as Hollow 6.

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 24	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow	Accommodating branch too small				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 26	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	<u>Spout</u>
	Side-entry	Side-entry	<u>Side-entry</u>	<u>Side-entry</u>	<u>Side-entry</u>	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	<u>15 – 20</u>	<u>15 – 20</u>
	<u>20+</u>	<u>20+</u>	<u>20+</u>	<u>20+</u>	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	<u>No Hollow</u>	<u>No Hollow</u>	<u>No Hollow</u>	<u>No Hollow</u>	<u>No Hollow</u>
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow/open	No depth	No depth	No hollow	Facing down, no hollow	Accommodating branch too small, no hollow

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 25	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Facing down – horizontal branch					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 29	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA



Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 37	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry (fork)	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Branch has snapped off, collapsed					
Tree 42	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth	No depth	No depth	No depth		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 51	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 60	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No hollow					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 6	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	<u>Side-entry</u>	<u>Side-entry</u>	<u>Side-entry</u>	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	<u>15 – 20</u>	<u>15 – 20</u>	<u>15 – 20</u>	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	<u>No Hollow</u>	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth	No depth	No depth	Accommodating branch too small, no depth		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA


360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 10	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	<u>20+</u>	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow/small	Too shallow/small				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360
environmental


Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 13	Type	Type	Type	Type	Type	Type
	<u>Chimney</u>	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout
	Side-entry	Side-entry (fork)	Side-entry	Side-entry	Side-entry	<u>Side-entry</u>
	Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
		<10	<10	<10	<10	<10
		10 – 15	10 – 15	<u>10 – 15</u>	10 – 15	10 – 15
	DBH	15 – 20	<u>15 – 20</u>	<u>15 – 20</u>	<u>15 – 20</u>	15 – 20
		<u>20+</u>	20+	20+	20+	<u>20+</u>
		Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
	Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
		<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow
		Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	<u>Appears Suitable – no signs of use</u>
		Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
		Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
		Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
	Comments	Little depth, unsuitable, too small	Accommodating branch too small, horizontal	Accommodating branch too small, horizontal	Accommodating branch too small	Appears suitable but no signs
Tree 20	Type	Type	Type	Type	Type	Type
	<u>Chimney</u>	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	<u>Spout</u>	Spout	Spout	Spout
	Side-entry	<u>Side-entry</u>	Side-entry	<u>Side-entry</u>	Side-entry	Side-entry
	Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
		<10	<10	<10	<10	<10
		10 – 15	10 – 15	<u>10 – 15</u>	10 – 15	10 – 15
	DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
		<u>20+</u>	<u>20+</u>	20+	20+	20+
		Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
	Height	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
	Unsuitable Hollow	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No hollow	Too small, shallow	Accommodating branch too small, little depth	No depth		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 17	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	<u>20+</u>	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow/small, narrows down	Too shallow, exposed				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 19	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	<u>15 – 20</u>	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small, no depth	Accommodating branch too small, no depth	Accommodating branch too small, no depth			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 21	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	<u>15 – 20</u>	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small	Accommodating branch too small, no depth; some potential small hollows but all too small for cockatoos	Accommodating branch too small, no depth; some potential small hollows but all too small for cockatoos	Accommodating branch too small, no depth; some potential small hollows but all too small for cockatoos		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 14	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<u><10</u>	<10	<10	<10	<10	<10
	10 – 15	<u>10 – 15</u>	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Entrance too small, no depth	No depth	Accommodating branch too small, no depth	No depth		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 12	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	<u>Spout</u>	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small, no depth	Accommodating branch too small, may have some depth but too small internally				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 27	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry (fork)	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small, some depth but too small	Accommodating branch too small, some depth but too small				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 23	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 30	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	<u>Spout</u>	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	<u>10 – 15</u>	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too small, narrows down	Accommodating branch too small, hollow too small	Marginally too small			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 32	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 44	Type	Type	Type	Type	Type	Type
	Chimney	Chimney (in fork)	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth, too small	No depth				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 47	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No hollow	No hollow, accommodating branch too small				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 56	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No hollow					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 61	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	Spout	Spout	Spout	Spout	Spout
	Side-entry	<u>Side-entry</u>	<u>Side-entry</u>	<u>Side-entry</u>	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	<u>10 – 15</u>	10 – 15	10 – 15
DBH	15 – 20	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	<u>20+</u>	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No hollow	Too small, no depth	No hollow	Accommodating branch too small		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 63	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	Spout	<u>Spout</u>	Spout	Spout	Spout
	Side-entry	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Horizontal, no hollow	Narrows down, appears too small	Horizontal, too small			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 58	Type	Type	Type	Type	Type	Type
	<u>Chimney</u>	Chimney	Chimney	Chimney <u>Fork</u>	Chimney	Chimney
	Spout	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15
DBH	15 – 20	<u>15 – 20</u>	15 – 20	<u>15 – 20</u>	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	<u>No Hollow</u>	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Uneven base, little depth	Narrows down, appears too small	Accommodating branch too small	No depth		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 57	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry (fork)	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Some depth but uneven base narrows down	Accommodating branch too small, no hollow				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 55	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	<u>Appears Suitable – no signs of use</u>	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No real hollow, narrows down	Appears suitable, no signs, two minor chip marks				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 53	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 43	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small, too shallow					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 45	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	<u>Spout</u>	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow	No depth				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 15	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small, no depth	Accommodating branch too small, no hollow				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 34	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow/open	No depth	Horizontal, no depth			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 36	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Horizontal and too small	Horizontal, accommodating branch too small				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 41	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow/exposed	Accommodating branch too small, horizontal	Accommodating branch too small, horizontal, narrows down			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 35	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow/exposed					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 31	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	Spout	Spout	<u>Spout</u>	Spout	Spout
	Side-entry	<u>Side-entry (fork)</u>	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	<u>15 – 20</u>	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	No Hollow	No Hollow	<u>No Hollow</u>	No Hollow	No Hollow
	Unsuitable Hollow	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Horizontal, no hollow	Horizontal, too small	Accommodating branch too small	Accommodating branch too small, no depth		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 46	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15
DBH	15 – 20	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Horizontal, no depth	Horizontal, no depth	Horizontal, no depth			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 71	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	15 – 20	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Some chew marks, appears too small for cockatoos so potentially galahs, narrows down	Accommodating branch too small, no hollow	No hollow			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 68	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating trunk too small, no depth					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 65	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	<u>Spout</u>	<u>Spout</u>	Spout	Spout
	<u>Side-entry</u>	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	<u>20+</u>	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	No Hollow	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	<u>Unsuitable Hollow</u>	Unsuitable Hollow	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth	No depth, horizontal	No depth, horizontal	No depth, horizontal		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 64	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 59	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow (?)	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Nest hollow	Appears too small, some minor chew marks potentially related to actual near nest hollow (hollow 1)	Horizontal, some minor chew marks	Vertical, some minor chew marks		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 62	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	<u>20+</u>	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Near vertical, accommodating branch too small, narrows down	Near vertical, no hollow				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 50	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow	Too shallow/small				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 49	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	<u>Spout</u>	<u>Spout</u>	Spout	<u>Spout</u>	<u>Spout</u>
	Side-entry	Side-entry	Side-entry	<u>Side-entry</u>	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	<u>10 – 15</u>	<u>10 – 15</u>	<u>10 – 15</u>	<u>10 – 15</u>
DBH	15 – 20	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	Unsuitable Hollow	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>	<u>Unsuitable Hollow</u>
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Near horizontal	Vertical, too shallow	Horizontal, too small, no hollow	Too small, shallow	Accommodating branch too small	Accommodating branch too small

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 48	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No hollow	No hollow	No hollow			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 40	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry (fork)	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No hollow	No hollow				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 38	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small, no depth					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 39	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Appears too small in diameter and too shallow/open					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 33	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	Spout	Spout	Spout	Spout	Spout
	Side-entry	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small	No depth				

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 52	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	<u>Spout</u>	Spout	Spout	Spout	Spout	Spout
	Side-entry	<u>Side-entry</u>	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	<u>15 – 20</u>	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Vertical, no depth	No depth	Too small internally			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 54	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	<u>10 – 15</u>	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	<u>20+</u>	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Occupied by 28, appears too small internally					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 69	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	<u>15 – 20</u>	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	<u>Unsuitable Hollow</u>	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too shallow/open					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 72	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Too small internally	No real hollow	Near horizontal, no hollow			

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 70	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	Accommodating branch too small, hollow too small					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 67	Type	Type	Type	Type	Type	Type
	Chimney	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	<u>Side-entry</u>	Side-entry	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	<u>20+</u>	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	<u>No Hollow</u>	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth					

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track WA

360

environmental

Tree ID	Hollow 1	Hollow 2	Hollow 3	Hollow 4	Hollow 5	Hollow 6
Tree 66	Type	Type	Type	Type	Type	Type
	Chimney (in fork)	Chimney	Chimney	Chimney	Chimney	Chimney
	Spout	Spout	Spout	Spout	Spout	Spout
	Side-entry	Side-entry (fork)	Side-entry	Side-entry	Side-entry	Side-entry
Species	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)	Entrance Size (cm)
	<10	<10	<10	<10	<10	<10
	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15	10 – 15
DBH	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
	20+	20+	20+	20+	20+	20+
	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment	Field Assessment
Height	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow	No Hollow
	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow	Unsuitable Hollow
	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use	Appears Suitable – no signs of use
	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow	Chewed/Chipped Hollow
	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow	Confirmed Nest Hollow
	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures	Undecided – Review Pictures
Comments	No depth	No depth	Accommodating branch too small, no depth	Accommodating branch too small, no depth		

3358AC_Rev1

Black Cockatoo Hollow Assessment
Lot 5449 Wanamal Road West, Mindarra
All Track



Appendix B Hollow Assessment Photos



Tree ID: 1, Hollow 1



Tree ID: 2, Hollow 1



Tree ID: 3, Hollow 1



Tree ID: 4, Hollow 1



Tree ID: 5, Hollow 1



Tree ID: 5, Hollow 2



Tree ID: 6, Hollow 1



Tree ID: 6, Hollow 2



Tree ID: 6, Hollow 3



Tree ID: 6, Hollow 4



Tree ID: 7, Hollow 1



Tree ID: 7, Hollow 2



Tree ID: 8, Hollow 1



Tree ID: 9, Hollow 1



Tree ID: 9, Hollow 2



Tree ID: 10, Hollow 1



Tree ID: 10, Hollow 2



Tree ID: 11, Hollow 1



Tree ID: 12, Hollow 1



Tree ID: 12, Hollow 2



Tree ID: 13, Hollow 1



Tree ID: 13, Hollow 2



Tree ID: 13, Hollow 3



Tree ID: 13, Hollow 4



Tree ID: 13, Hollow 5



Tree ID: 13, Hollow 6



Tree ID: 14, Hollow 1



Tree ID: 14, Hollow 2



Tree ID: 14, Hollow 3



Tree ID: 15, Hollow 1



Tree ID: 15, Hollow 2



Tree ID: 16, Hollow 1



Tree ID: 16, Hollow 2



Tree ID: 17, Hollow 1



Tree ID: 17, Hollow 2



Tree ID: 18, Hollow 1



Tree ID: 18, Hollow 2



Tree ID: 19, Hollow 1



Tree ID: 19, Hollow 2



Tree ID: 19, Hollow 3



Tree ID: 20, Hollow 1



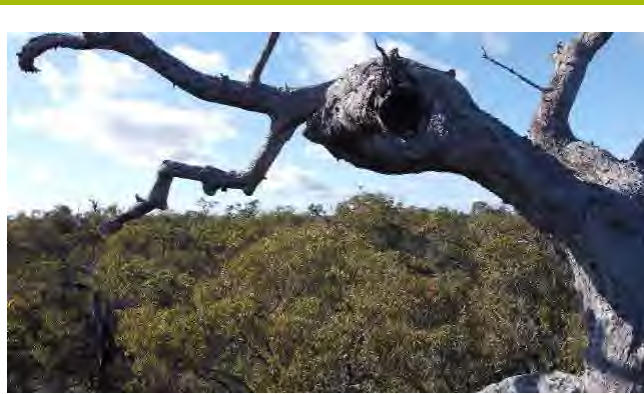
Tree ID: 20, Hollow 2



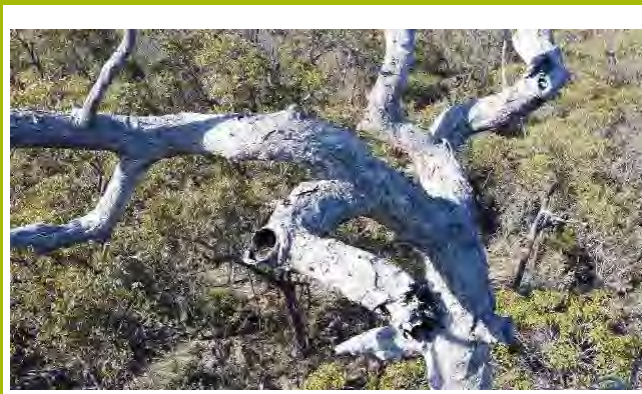
Tree ID: 20, Hollow 3



Tree ID: 20, Hollow 4



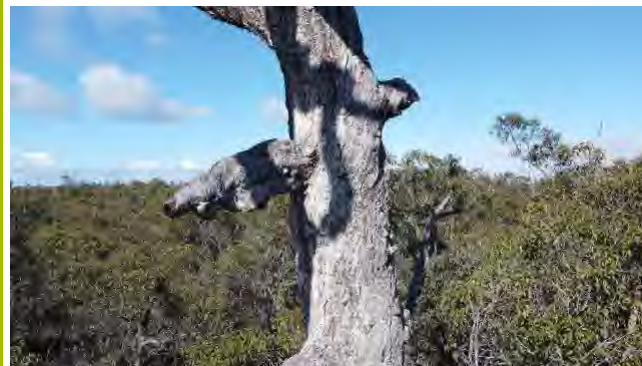
Tree ID: 21, Hollow 1



Tree ID: 21, Hollow 2



Tree ID: 21, Hollow 3



Tree ID: 21, Hollow 4



Tree ID: 22, Hollow 1



Tree ID: 22, Hollow 2



Tree ID: 22, Hollow 3



Tree ID: 22, Hollow 4

	
Tree ID: 22, Hollow 5	Tree ID: 22, Hollow 6
	
Tree ID: 22, Hollow 7	Tree ID: 22, Hollow 8



Tree ID: 23, Hollow 1



Tree ID: 24, Hollow 1



Tree ID: 24, Hollow 2



Tree ID: 25, Hollow 1



Tree ID: 26, Hollow 1



Tree ID: 26, Hollow 2



Tree ID: 26, Hollow 3



Tree ID: 26, Hollow 4



Tree ID: 26, Hollow 5



Tree ID: 26, Hollow 6



Tree ID: 27, Hollow 1



Tree ID: 27, Hollow 2



Tree ID: 29, Hollow 1



Tree ID: 30, Hollow 1



Tree ID: 30, Hollow 2



Tree ID: 30, Hollow 3



Tree ID: 31, Hollow 1



Tree ID: 31, Hollow 2



Tree ID: 31, Hollow 3



Tree ID: 31, Hollow 4



Tree ID: 32, Hollow 1



Tree ID: 33, Hollow 1



Tree ID: 33, Hollow 2



Tree ID: 34, Hollow 1



Tree ID: 34, Hollow 2



Tree ID: 35, Hollow 3



Tree ID: 35, Hollow 1



Tree ID: 36, Hollow 1



Tree ID: 36, Hollow 2



Tree ID: 37, Hollow 1



Tree ID: 38, Hollow 1



Tree ID: 39, Hollow 1



Tree ID: 40, Hollow 1



Tree ID: 40, Hollow 2



Tree ID: 41, Hollow 1



Tree ID: 41, Hollow 2



Tree ID: 41, Hollow 3



Tree ID: 42, Hollow 1



Tree ID: 42, Hollow 2



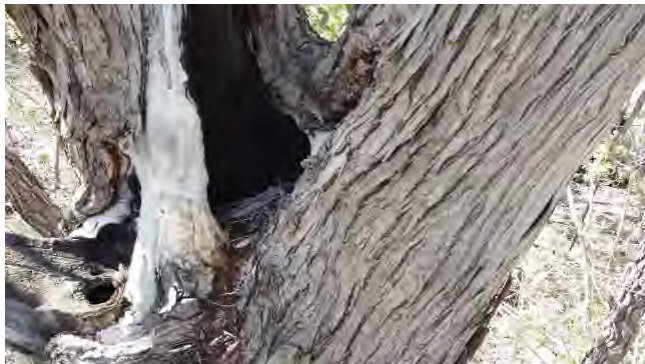
Tree ID: 42, Hollow 3



Tree ID: 42, Hollow 4



Tree ID: 43, Hollow 1



Tree ID: 44, Hollow 1



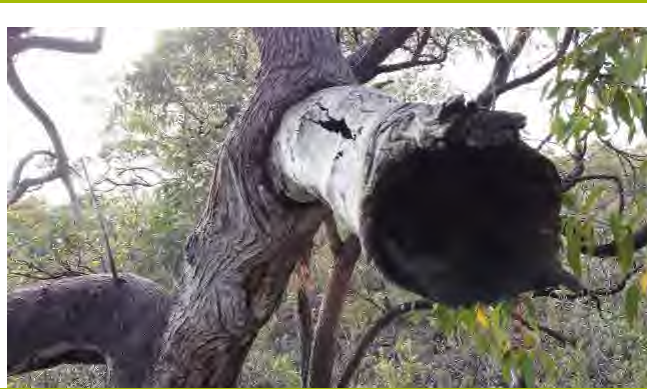
Tree ID: 44, Hollow 2



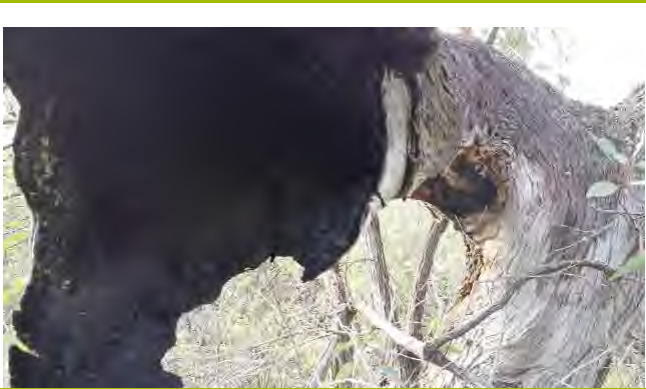
Tree ID: 45, Hollow 1



Tree ID: 45, Hollow 2



Tree ID: 46, Hollow 1



Tree ID: 46, Hollow 2



Tree ID: 46, Hollow 3



Tree ID: 47, Hollow 1



Tree ID: 47, Hollow 2



Tree ID: 48, Hollow 1



Tree ID: 48, Hollow 2



Tree ID: 48, Hollow 3



Tree ID: 49, Hollow 1



Tree ID: 49, Hollow 2



Tree ID: 49, Hollow 3



Tree ID: 49, Hollow 4



Tree ID: 49, Hollow 5



Tree ID: 49, Hollow 6



Tree ID: 50, Hollow 1



Tree ID: 50, Hollow 2



Tree ID: 51, Hollow 1



Tree ID: 52, Hollow 1

	
Tree ID: 52, Hollow 2	Tree ID: 52, Hollow 3
	
Tree ID: 53, Hollow 1	Tree ID: 54, Hollow 1



Tree ID: 55, Hollow 1



Tree ID: 55, Hollow 2



Tree ID: 56, Hollow 1



Tree ID: 57, Hollow 1



Tree ID: 57, Hollow 2



Tree ID: 58, Hollow 1



Tree ID: 58, Hollow 2



Tree ID: 58, Hollow 3



Tree ID: 58, Hollow 4



Tree ID: 59, Hollow 1



Tree ID: 59, Hollow 2



Tree ID: 59, Hollow 3



Tree ID: 59, Hollow 4



Tree ID: 60, Hollow 1



Tree ID: 61, Hollow 1



Tree ID: 61, Hollow 2



Tree ID: 61, Hollow 3



Tree ID: 61, Hollow 4



Tree ID: 62, Hollow 1



Tree ID: 62, Hollow 2



Tree ID: 63, Hollow 1



Tree ID: 63, Hollow 2



Tree ID: 63, Hollow 3



Tree ID: 64, Hollow 1



Tree ID: 65, Hollow 1



Tree ID: 65, Hollow 2



Tree ID: 65, Hollow 3



Tree ID: 65, Hollow 4



Tree ID: 66, Hollow 1



Tree ID: 66, Hollow 2



Tree ID: 66, Hollow 3



Tree ID: 66, Hollow 4



Tree ID: 67, Hollow 1



Tree ID: 68, Hollow 1



Tree ID: 69, Hollow 1



Tree ID: 70, Hollow 1



Tree ID: 71, Hollow 1



Tree ID: 71, Hollow 2



Tree ID: 71, Hollow 3



Tree ID: 72, Hollow 1

	
Tree ID: 72, Hollow 2	Tree ID: 72, Hollow 3



10 Bermondsey Street West Leederville WA 6007 t (+618) 9388 8360 f (+618) 9381 2360
PO BOX 14, West Perth WA 6872
w 360environmental.com.au e admin@360environmental.com.au

• people • planet • professional

SCHEDULE OF SUBMISSIONS AND RECOMMENDED RESPONSES

**DEVELOPMENT APPLICATION: PROPOSED EXTRACTIVE INDUSTRY (GRAVEL PIT) ON LOT 1 WANNAMAL ROAD
WEST, BOONANARRING**

No.	Submitter	Submission details	Recommended response
1	DPLH (Aboriginal Heritage)	<p>The submitter provides the following general comment:</p> <p><i>"A review of the Register of Places and Objects as well as the Department of Planning, Lands and Heritage's Aboriginal Heritage Database, confirms that the extractive area outlined in the Harley Dykstra report you provided does not intersect with any recorded Aboriginal Heritage place.</i></p> <p><i>Based on the information held by DPLH, we have no comment to make on the proposed extractive industry. However, we encourage the development proponents to consult with the local knowledge holders and the representative body (Yued Indigenous Land Use Agreement Group via South West Land and Sea Council) should they wish to better understand the impact future development may have upon the Aboriginal cultural heritage of the wider area."</i></p>	Noted
2.	DPLH	<p>The submitter provides the following general comment:</p> <p><i>"The Department believes the proposal conforms with the requirements of State Planning Policy 2.4 Planning for Basic Raw Materials, and does not offer any comment in this regard.</i></p> <p><i>It is noted that the applicant is seeking exemption from State Planning Policy 3.7 Planning In Bushfire Prone Areas through section 2.6 of the Planning in Bushfire Prone Areas Guidelines. The site contains dense native vegetation which is a designated bushfire prone area. While there are no habitable buildings proposed, as employees are required to be onsite for periods of time in excess of 3 hours, the proposal is required to demonstrate compliance with SPP 3.7 by providing additional information to the Shire related to bushfire management. As indicated in the Planning in Bushfire Prone Areas Guidelines this information should address vehicular access and egress from the site, on-site or off-site shelter and signage requirements."</i></p>	<p>Noted.</p> <p>Most vegetation will be cleared, resulting in low fire risk.</p>

3.	DWER	<p><i>"The Department has identified that the proposed development has the potential to impact on environment and water values and management. Key issues and recommendations that should be addressed are provided below:</i></p> <p><u>Industry Regulation</u></p> <p><i>Based on the information provided it has been determined that the proposed operations may be categorised as Prescribed Premises as per Schedule 1 of the Environmental Protection Regulations 1987:</i></p> <table><tr><th>Category</th><th>Description of category</th><th>Production or design capacity</th></tr><tr><td>12</td><td>Screening, etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated</td><td>50000 tonnes or more per year</td></tr></table> <p><i>Activities such as crushing and screening during extractive industry operations, may cause the premises to become prescribed for the purposes of Part V Division 3 of the Environmental Protection Act (EP Act). This will occur if the proposed crushing and screening equipment has a design capacity (when operated 24/7 or at a capacity limited by a planning approval) that meets or exceeds the specified production or design capacity of the relevant category under Schedule 1 of the Environmental Protection Regulations 1987.</i></p> <p><i>The applicant is therefore advised that they may meet the requirement for Prescribed Premises and as such require a works approval to construct/install the equipment (mobile or otherwise) and a licence or registration to operate. It should be noted that planning approvals may influence the Department's determination of production or design capacity, where an approval has the effect of restricting capacity (such as constraining hours of operation).</i></p> <p><i>The purpose of a works approval is to allow the Department to assess the environmental acceptability of a proposal's potential to cause emissions and discharges during construction and operation. Note that any works approval or licence issued under Part V of the EP Act will only regulate emissions associated with the crushing and</i></p>	Category	Description of category	Production or design capacity	12	Screening, etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated	50000 tonnes or more per year	Noted.
Category	Description of category	Production or design capacity							
12	Screening, etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated	50000 tonnes or more per year							

	<p>screening operation (such as dust, noise and contaminated stormwater). It does not extend to the environmental impacts of extracting the material from the ground or transport off-site.</p> <p>The Department has no record of this premises and has not received any applications relating to this proposal. The applicant is therefore advised to refer to the information and Industry Regulation Guide to Licensing available at https://www.der.wa.gov.au/our-work/licences-and-works-approvals and/or if they have queries relating to works approvals and licences to contact the Department at info@dwer.wa.gov.au or 6364 7000.</p> <p><u>Native Vegetation</u></p> <p>Under section 51C of the Environmental Protection Act 1986 (EP Act), clearing of native vegetation is an offence unless undertaken under the authority of a clearing permit, or the clearing is subject to an exemption. Exemptions for clearing that are a requirement of written law, or authorised under certain statutory processes, are contained in Schedule 6 of the EP Act. Exemptions for low impact routine land management practices outside of environmentally sensitive areas (ESAs) are contained in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (the Clearing Regulations).</p> <p>Based on the information provided, the proposed clearing is not exempt and a clearing permit is required.</p> <p>The Department has not received a clearing permit application for this proposal.</p> <p><u>Water Licensing</u></p> <p>The application states that water for dust suppression will be supplied via water carts. The Department advises that the site is located within the Gingin Groundwater Area, proclaimed under the Rights in Water and Irrigation Act 1914, where there may be a requirement to obtain a licence to abstract groundwater if an additional source is required. The issue of a licence is not guaranteed but if issued will contain a number of conditions including the quantity of water that can be pumped each year. The proponent is encouraged to contact the Department's Swan Avon Region office on 6250 8000 or</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022**

APPENDIX 13.2.4

		<p><i>licence.enquiry@dwer.wa.gov.au to discuss water management options.</i></p> <p><i>In the event there are modifications to the proposal that may have implications on aspects of environment and/or water management, the Department should be notified to enable the implications to be assessed."</i></p>	
4.	DMIRS	<p>The submitter provides the following general comment:</p> <p><i>"The Department of Mines, Industry Regulation and Safety (DMIRS) has determined that this proposal raises no significant issues with respect to mineral and petroleum resources, geothermal energy, and basic raw materials.</i></p> <p><i>DMIRS lodges no objections to the above development application."</i></p>	Noted
5.	DBCA	<p>The submitter provides the following general comment:</p> <p><i>"With reference to your correspondence dates 3 May 2022, the Parks and Wildlife Service at the Department of Biodiversity, Conservation and Attractions (DBCA) provides the following comments.</i></p> <p><u><i>Native vegetation clearing</i></u> <i>Any clearing of native vegetation will need to be undertaken in accordance with the Environmental Protection Act 1986 (EP Act) and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 and discussed with the Department of Water and Environmental Regulation (DWER).</i></p> <p><i>DBCA's Species and Communities Branch will provide comment on the vegetation and flora survey when it is referred by DWER.</i></p> <p><u><i>Black Cockatoo habitat</i></u> <i>The subject area contains foraging and potential breeding habitat for the threatened Carnaby's Black Cockatoo (Calyptorhynchus latirostris), Firetail Red-tailed Black Cockatoo (Calyptorhynchus banksia naso) and Baudin's cockatoo (Calyptorhynchus baudinii).</i></p> <p><i>The cumulative impacts associated with the loss of habitat is reducing the amount of habitat and reducing the number of birds that can be supported in the region. In the respective black cockatoo</i></p>	Noted.

		<p>recovery plans they note that reversal of threats (including loss of habitat) is required before significant increases in the cockatoo populations can occur. The Recovery Plan's identify the need to protect and manage as much habitat as possible to minimise the impacts of habitat loss. Therefore, all remaining resources are significantly important to black cockatoos.</p> <p>It is noted that the proponent has undertaken a black cockatoo habitat assessment, and that 72 trees were found to have hollows potentially suitable for Black Cockatoo breeding. A tree hollow inspection identified three of these trees had hollows with an appropriate orientation and internal dimensions to support Black Cockatoo breeding. The Development Application report outlines that these three trees are proposed to be retained with a 50-metre buffer around them</p> <p><u>Matters of National Significance</u> Please be aware that proponent(s) may have notification responsibilities under the Environment Protection and Biodiversity Conservation Act 1999 in relation to Matters of National Environmental Significance and should contact the Commonwealth Department of Agriculture, Water and the Environment for further information on these responsibilities."</p>	
6.	Ratepayer	<p>The submitter does not support the proposal and provides the following general comment:</p> <p>"The Development Application states that the proponent will establish a new crossover to permit safe ingress and egress of pocket road trains that will each carry loads of approximately 60 tonnes of gravel. The Development Application also states that there would be 50 road trains using the crossover at peak periods of operation and that 13 to 17 road trains would use the crossover each day on average. Furthermore, the Development Application states that the dwellings close to the extraction area will be shielded by dense vegetation and that the separation distances between the gravel pit and the nearby dwellings "are considered to be more than adequate" and that "noise nuisance on sensitive land uses is not expected to be an issue".</p> <p>To the contrary, while the gravel pit would be one kilometre away from the residential property on Wannamal Road West, we think that the proposed new crossover will be much too close to that property and that the road trains will generate a significant amount of noise</p>	<p>As the location of the access is unable to be moved due to safety requirements, reduced trucking hours are proposed.</p> <p>Dust suppression will be managed via a condition of approval</p>

	<p><i>and disruption to the people living in the house from early in the morning to late in the afternoon for five and a half days per week for 15 years or so. Similarly, the frequent use of the proposed access track would generate significant amounts of dust that could settle in, on and around the residential property on Wannamal Road West.</i></p> <p><i>Consequently, we think that the new crossover should be located adjacent to the south-west corner of the proposed gravel pit area (rather than as proposed in the Development Application) so that the noise and dust created by the road rains does not adversely impact on the people living in the residential property on Wannamal Road West.</i></p> <p><i>The Development Application states that three trees will be retained for black cockatoo habitats and that there will be a 50-metre buffer zone around the three trees. It also states that in addition to the retention of the three trees, environmental offsets will be provided on other parts of the property owned by Alltrack Pty Ltd.</i></p> <p><i>We think that the use and retention of the proposed environmental offset areas (as they are) should be a condition of approval of the Development Application by the Shire of Gingin and that the proponent should also be required to plant trees close to the proposed Development Area to provide additional, future habitats for the black cockatoos and other birds and animals.</i></p> <p><i>The Development Application states that no topsoil stripping will occur when the wind speed is greater than 20 kilometres per hour and that no excavation, screening or truck loading will occur in winds of greater than 40 kilometres per hour.</i></p> <p><i>We question how and by whom these commitments will be monitored and enforced and seek additional information and assurances on those commitments.</i></p> <p><i>The Development Application also states that dust suppression measures will also be applied to the stockpiles.</i></p> <p><i>We would like to be provided with additional information on the nature of the dust suppression measures (e.g. what will be used, how often they will be applied etc) and that the Shire of Gingin makes the use of effective dust suppression measures a condition of any approval it gives to the Development Application.</i></p>	<p>Cockatoo habitat will be assessed and Managed by DWER.</p> <p>Reporting will be a condition of approval.</p> <p>This will be done as part of the site management plan.</p>
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

		<p><i>The Development Application states that regrowth of native vegetation in the rehabilitated area will be monitored visually once each year for two years after the completion of the initial rehabilitation works. Records of the monitoring, including photographs of the rehabilitated area, will be made available to the Shire of Gingin. If at the end of two years the regrowth is not seen to be progressing satisfactorily, direct seeding with local native species (selected from the species list included in the Environmental Assessment) may be undertaken.</i></p> <p><i>We would like the regrowth monitoring records to be made available to us as well as the Shire of Gingin and think that the Shire of Gingin should make the direct seeding of local native species an areas where regrowth is inadequate a condition of approval of the Development Application.</i></p> <p><i>The Development Application states that gravel extraction will occur between the hours of 6:00am to 5:00pm Monday to Friday, on Saturdays from 6:00am to 12 noon and that no gravel extraction will occur on Sundays or on public holidays.</i></p> <p><i>Given the proximity of the proposed gravel pit to the residential property owned by the ratepayer on Wannamal Road West, we think that the Shire of Gingin should make approval of the Development Application conditional on the hours of operation being between the hours of 7:00am to 5:00pm Monday to Friday only."</i></p>	
--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

SCHEDULE OF SUBMISSIONS AND RECOMMENDED RESPONSES

DEVELOPMENT APPLICATION: PROPOSED EXTRACTIVE INDUSTRY (GRAVEL PIT) ON LOT 1 WANNAMAL ROAD WEST, BOONANARRING

No.	Submitter	Submission details	Recommended response
1	DPLH (Aboriginal Heritage)	<p>The submitter provides the following general comment:</p> <p><i>"A review of the Register of Places and Objects as well as the Department of Planning, Lands and Heritage's Aboriginal Heritage Database, confirms that the extractive area outlined in the Harley Dykstra report you provided does not intersect with any recorded Aboriginal Heritage place.</i></p> <p><i>Based on the information held by DPLH, we have no comment to make on the proposed extractive industry. However, we encourage the development proponents to consult with the local knowledge holders and the representative body (Yued Indigenous Land Use Agreement Group via South West Land and Sea Council) should they wish to better understand the impact future development may have upon the Aboriginal cultural heritage of the wider area."</i></p>	Noted.
2.	DPLH	<p>The submitter provides the following general comment:</p> <p><i>"The Department believes the proposal conforms with the requirements of State Planning Policy 2.4 Planning for Basic Raw Materials, and does not offer any comment in this regard.</i></p> <p><i>It is noted that the applicant is seeking exemption from State Planning Policy 3.7 Planning In Bushfire Prone Areas through section 2.6 of the Planning in Bushfire Prone Areas Guidelines. The site contains dense native vegetation which is a designated bushfire prone area. While there are no habitable buildings proposed, as employees are required to be onsite for periods of time in excess of 3 hours, the proposal is required to demonstrate compliance with SPP 3.7 by providing additional information to the Shire related to bushfire management. As indicated in the Planning in Bushfire Prone Areas Guidelines this information should address vehicular access and egress from the site, on-site or off-site shelter and signage requirements."</i></p>	<p>As stated in the Development Application and read in Version 1.4, extractive industries can be exempt from SPP 3.7.</p> <p>It is noted that the subject site is located in dense native vegetation. However, the development will result in the clearing of vegetation in order to undertake operations on the site. Further, there are no habitable buildings proposed.</p> <p>Vehicular access to and from the site can be provided from two ways of access. Wannamal Road West extends to the east to Bindoon-Moorra Road to the west to Brand Highway.</p> <p>Extractive industries have always been an exemption under SPP 3.7, with this</p>

			development no different as it provides two-way access and the clearing of vegetation.						
3.	DWER	<p>The submitter provides the following general comment:</p> <p><i>"The Department has identified that the proposed development has the potential to impact on environment and water values and management. Key issues and recommendations that should be addressed are provided below:</i></p> <p><u>Industry Regulation</u></p> <p><i>Based on the information provided it has been determined that the proposed operations may be categorised as Prescribed Premises as per Schedule 1 of the Environmental Protection Regulations 1987:</i></p> <table> <tr> <th>Category</th> <th>Description of category</th> <th>Production or design capacity</th> </tr> <tr> <td>12</td> <td>Screening, etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated</td> <td>50000 tonnes or more per year</td> </tr> </table> <p><i>Activities such as crushing and screening during extractive industry operations, may cause the premises to become prescribed for the purposes of Part V Division 3 of the Environmental Protection Act (EP Act). This will occur if the proposed crushing and screening equipment has a design capacity (when operated 24/7 or at a capacity limited by a planning approval) that meets or exceeds the specified production or design capacity of the relevant category under Schedule 1 of the Environmental Protection Regulations 1987.</i></p> <p><i>The applicant is therefore advised that they may meet the requirement for Prescribed Premises and as such require a works approval to construct/install the equipment (mobile or otherwise) and a licence or registration to operate. It should be noted that planning approvals may influence the Department's determination</i></p>	Category	Description of category	Production or design capacity	12	Screening, etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated	50000 tonnes or more per year	<p>A Works Approval application is currently in preparation and will be submitted to the Department of Water and Environmental Regulation as part of the approval applications for this project.</p> <p>An application for a Native vegetation Clearing Permit is currently in preparation and will be submitted to DWER as part of the approval applications for this project.</p>
Category	Description of category	Production or design capacity							
12	Screening, etc. of material: premises (other than premises within category 5 or 8) on which material extracted from the ground is screened, washed, crushed, ground, milled, sized or separated	50000 tonnes or more per year							

	<p><i>of production or design capacity, where an approval has the effect of restricting capacity (such as constraining hours of operation). The purpose of a works approval is to allow the Department to assess the environmental acceptability of a proposal's potential to cause emissions and discharges during construction and operation. Note that any works approval or licence issued under Part V of the EP Act will only regulate emissions associated with the crushing and screening operation (such as dust, noise and contaminated stormwater). It does not extend to the environmental impacts of extracting the material from the ground or transport off-site.</i></p> <p><i>The Department has no record of this premises and has not received any applications relating to this proposal. The applicant is therefore advised to refer to the information and Industry Regulation Guide to Licensing available at https://www.der.wa.gov.au/our-work/licences-and-works-approvals and/or if they have queries relating to works approvals and licences to contact the Department at info@dwer.wa.gov.au or 6364 7000.</i></p> <p><u><i>Native Vegetation</i></u></p> <p><i>Under section 51C of the Environmental Protection Act 1986 (EP Act), clearing of native vegetation is an offence unless undertaken under the authority of a clearing permit, or the clearing is subject to an exemption. Exemptions for clearing that are a requirement of written law, or authorised under certain statutory processes, are contained in Schedule 6 of the EP Act. Exemptions for low impact routine land management practices outside of environmentally sensitive areas (ESAs) are contained in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (the Clearing Regulations).</i></p> <p><i>Based on the information provided, the proposed clearing is not exempt and a clearing permit is required.</i></p> <p><i>The Department has not received a clearing permit application for this proposal.</i></p> <p><u><i>Water Licensing</i></u></p> <p><i>The application states that water for dust suppression will be supplied via water carts. The Department advises that the site is located within the Gingin Groundwater Area, proclaimed under the</i></p>	
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

		<p><i>Rights in Water and Irrigation Act 1914, where there may be a requirement to obtain a licence to abstract groundwater if an additional source is required. The issue of a licence is not guaranteed but if issued will contain a number of conditions including the quantity of water that can be pumped each ear. The proponent is encouraged to contact the Department's Swan Avon Region office on 6250 8000 or licence.enquiry@dwer.wa.gov.au to discuss water management options.</i></p> <p><i>In the event there are modifications to the proposal that may have implications on aspects of environment and/or water management, the Department should be notified to enable the implications to be assessed."</i></p>	
4.	DMIRS	<p>The submitter provides the following general comment:</p> <p><i>"The Department of Mines, Industry Regulation and Safety (DMIRS) has determined that this proposal raises no significant issues with respect to mineral and petroleum resources, geothermal energy, and basic raw materials.</i></p> <p><i>DMIRS lodges no objections to the above development application."</i></p>	Noted.
5.	DBCA	<p>The submitter provides the following general comment:</p> <p><i>"With reference to your correspondence dates 3 May 2022, the Parks and Wildlife Service at the Department of Biodiversity, Conservation and Attractions (DBCA) provides the following comments.</i></p> <p><u><i>Native vegetation clearing</i></u> <i>Any clearing of native vegetation will need to be undertaken in accordance with the Environmental Protection Act 1986 (EP Act) and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 and discussed with the Department of Water and Environmental Regulation (DWER).</i></p> <p><i>DBCA's Species and Communities Branch will provide comment on the vegetation and flora survey when it is referred by DWER.</i></p> <p><u><i>Black Cockatoo habitat</i></u></p>	Noted.

		<p><i>The subject area contains foraging and potential breeding habitat for the threatened Carnaby's Black Cockatoo (Calyptorhynchus latirostris), Firetail Red-tailed Black Cockatoo (Calyptorhynchus banksia naso) and Baudin's cockatoo (Calyptorhynchus baudinii).</i></p> <p><i>The cumulative impacts associated with the loss of habitat is reducing the amount of habitat and reducing the number of birds that can be supported in the region. In the respective black cockatoo recovery plans they note that reversal of threats (including loss of habitat) is required before significant increases in the cockatoo populations can occur. The Recovery Plan's identify the need to protect and manage as much habitat as possible to minimise the impacts of habitat loss. Therefore, all remaining resources are significantly important to black cockatoos.</i></p> <p><i>It is noted that the proponent has undertaken a black cockatoo habitat assessment, and that 72 trees were found to have hollows potentially suitable for Black Cockatoo breeding. A tree hollow inspection identified three of these trees had hollows with an appropriate orientation and internal dimensions to support Black Cockatoo breeding. The Development Application report outlines that these three trees are proposed to be retained with a 50-metre buffer around them</i></p> <p><u><i>Matters of National Significance</i></u> <i>Please be aware that proponent(s) may have notification responsibilities under the Environment Protection and Biodiversity Conservation Act 1999 in relation to Matters of National Environmental Significance and should contact the Commonwealth Department of Agriculture, Water and the Environment for further information on these responsibilities</i></p>	
6.	Neighbourhood advertising	<p><u>Comment 1:</u> The Development Application states that the proponent will establish a new crossover to permit safe ingress and egress of pocket road trains that will each carry loads of approximately 60 tonnes of gravel. The Development Application also states that there would be 50 road trains using the crossover at peak periods</p>	<p>The proposed crossover has been selected and identified to ensure the safety of truck drivers and road users given the distance from the bend in Wannamal Road West. The achieved line of sight distance</p>

	<p>of operation and that 13 to 17 road trains would use the crossover each day on average. Furthermore, the Development Application states that the dwellings close to the extraction area will be shielded by dense vegetation and that the separation distances between the gravel pit and the nearby dwellings “are considered to be more than adequate” and that “noise nuisance on sensitive land uses is not expected to be an issue”.</p> <p>To the contrary, while the gravel pit would be one kilometre away from the residential property that JB Farm owns on Wannamal Road West, we think that the proposed new crossover will be much too close to that property and that the road trains will generate a significant amount of noise and disruption to the people living in the house from early in the morning to late in the afternoon for five and half days per week for 15 years or so. Similarly, the frequent use of the proposed access track would generate significant amounts of dust that could settle in, on and around the residential property owned by JB Farm Pty Ltd on Wannamal Road West.</p> <p>Consequently, we think that the new crossover should be located adjacent to the south-west corner of the proposed gravel pit area (rather than as proposed in the Development Application) so that the noise and dust created by the road trains does not adversely impact on the people living in the residential property on Wannamal Road West owned by JB Farm Pty Ltd.</p>	<p>of 350m ensures compliance with MRWA guidelines. Further to this, it results in the least amount of vegetation clearing.</p> <p>Under the busiest scenario, there will be 100 truck movements per day, which equates to 9 movements (ingress and egress) per hour. Please note that this is the absolute max, and the average is likely to be 3 movements (ingress and egress) per hour.</p> <p>The existing residence is approximately 200m away from Wannamal Road West which is already utilised by RAV vehicles. As such the dwelling is already impacted by those vehicles traveling along Wannamal Road West. The proposed crossover is approximately 400m away from the existing dwelling and could not have any greater impact on the dwelling than the existing road network does.</p> <p>To further compliment this it is noted that whilst the Environmental Protection Authority Guidance Statement No. 3 does not provide setback distances from industrial crossovers to residential uses, it does advise that for Transport Vehicle Depot uses (buses, trucks and other heavy vehicles depot) a buffer distance of 200m is required. This application provides more than double that distance from the proposed crossover to the existing neighbouring residence.</p> <p>The proposed crossover will also be constructed in accordance with the Local Authority specifications and will be sealed. There will be no dust generated from the crossover. The access track will also be managed by the water cart. A site management plan can be required as a</p>
--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

		<p>condition of approval and include a dust management plan.</p> <p>In order to ease the concerns of the neighbour the proponent is prepared to modify the hours for which truck movements can occur into and out of the application area. We are happy to discuss these further if required.</p> <p>Given the distance from the existing adjoining dwelling (over 400m), the current location of the dwelling (in proximity to Wannamal Road), the sealed construction of the crossover and management practices proposed to be in place, the existing dwelling will not be impacted any greater than it currently is.</p> <p><u>Comment 2:</u> The Development Application states that three trees will be retained for black cockatoo habitats and that there will be a 50-metre buffer zone around the three trees. It also states that in addition to the retention of the three trees, environmental offsets will be provided on other parts of the property owned by Alltrack Pty Ltd.</p> <p>We think that the use and retention of the proposed environmental offset areas (as they are) should be a condition of approval of the Development Application by the Shire of Gingin and that the proponent should also be required to plant trees close to the proposed Development Area to provide additional, future habitats for the black cockatoos and other birds and animals.</p> <p><u>Comment 3:</u> The Development Application states that no topsoil stripping will occur when the wind speed is greater than 20 kilometres per hour and that no excavation, screening or truck loading will occur in winds of greater than 40 kilometres per hour.</p>	<p>Suitable nesting habitats for the Black Cockatoos will be delt with by DWER as part of the clearing permit.</p> <p>The operator will comply with any conditions of approval, with the Local Government to enforce compliance.</p>
--	--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>We question how and by whom these commitments will be monitored and enforced and seek additional information and assurances on those commitments.</p> <p>The Development Application also states that dust suppression measures will also be applied to the stockpiles.</p> <p>We would like to be provided with additional information on the nature of the dust suppression measures (e.g. what will be used, how often they will be applied, etc) and that the Shire of Gingin makes the use of effective dust suppression measures a condition of any approval it gives to the Development Application.</p> <p><u>Comment 4:</u> The Development Application states that regrowth of native vegetation in the rehabilitated area will be monitored visually once each year for two years after the completion of the initial rehabilitation works. Records of the monitoring, including photographs of the rehabilitated area, will be made available to the Shire of Gingin. If at the end of two years the regrowth is not seen to be progressing satisfactorily, direct seeding with local native species (selected from the species list included in the Environmental Assessment) may be undertaken.</p> <p>We would like the regrowth monitoring records to be made available to us as well as the Shire of Gingin and think that the Shire of Gingin should make the direct seeding of local native species on areas where regrowth is inadequate a condition of approval of the Development Application.</p> <p><u>Comment 5:</u> The Development Application states that gravel extraction will occur between the hours of 6.00am to 5.00pm Monday to Friday, on Saturdays from 6.00am to 12 noon and that no gravel extraction will occur on Sundays or on public holidays.</p> <p>Given the proximity of the proposed gravel pit to the residential property owned by JB Farm Pty Ltd on Wannamal Road West, we think that the Shire of Gingin should make approval of the Development application conditional on the hours of operation being between the hours of 7.00am to 5.00pm Monday to Friday only.</p>	<p>A site management plan will be a condition of approval which will include details in relation to dust management.</p> <p>Details in relation to site rehabilitation will likely be included in the site management plan, which will be approved by the Local Government.</p> <p>As mentioned above, the applicant is happy to negotiate hours to mitigate any concerns in relation to noise.</p>
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SCHEDULE OF SUBMISSIONS AND RECOMMENDED RESPONSES

DEVELOPMENT APPLICATION: PROPOSED EXTRACTIVE INDUSTRY (GRAVEL PIT) ON LOT 1 WANNAMAL ROAD WEST, BOONANARRING

Submission	Response
General EIL Matters	
The application notes that the clearing permit has been applied for, but DWER in their referral response says they have no record of the property, can you please provide confirmation/receipt evidence for the clearing permit?	The Native Vegetation Clearing Permit (NVCP) is being prepared and will be submitted to the department after internal and external (All track) review.
In addition to this the Environmental Consultant also notes contact with DWER, but again they say that this has not occurred?	360 Environmental had a meeting with DWER on the 21st of August 2020 to discuss the pre- application scoping for the project area. DWER suggested the project required relevant planning approval from the local government. A NVCP to show how the project was to avoid, minimize and mitigate the potential impacts was required. DWER gave general advice regarding offsets for the project and indicated further black cockatoo habitat assessment was required.
Can you please provide further details about the number of, height, length and width proposed for the stockpiles?	These are likely to vary, however generally they will be up to 6m in height and of 20-30k tons each. Length and width are circa 20m x 60m.
The hours of operation include excavation, crushing and screening, are these the same for the loading of trucks?	Yes.
A rolling bond, this would only work if one area was to be completely rehabbed prior to the next area being cleared. Given the rehabilitation plan proposed, I don't feel that this is practical. Let discuss	Understand the concern here. This approach was previously adopted for a Development Approval (EIL) we received in Sappers Road. The rolling bond could still apply in the situation where Stage 1 is completely rehabbed, and they are looking to commence clearing work on stage 3.
As part of the rehabilitation plan ongoing monitoring is proposed for two years, but if the seed bank in the topsoil fails it would need to be replanted at the two year mark and therefore a 5 year monitoring period may be more suitable.	Understand, maybe we can apply an option period, say 2 years + 3 years, depending on the need to replant. This could be addressed as part of the rehabilitation plan produced as a condition of approval.
Do you have a water license to that demonstrate you are able to suppress dust via water suppression?	We have no water licence, however given the proponent is proposing to bring water in on a truck, it is not considered to be required.
In relation to windrowed topsoil in the nearby paddock, please confirm the number/length of the stockpiles. Furthermore, would you consider reducing the height from 6-7 metres as this may be more susceptible to dust generation/erosion.	Total number of topsoil stockpiles in the nearby paddock would be 2 at a given time. The height could potentially be reduced to 3-5m for the topsoil stockpile.

Environmental Reports/ Clearing	
It is noted that no introduced species were recorded during the survey, and a review of the site doesn't show any real differences between one area and the next. As such, please confirm why the excavation area came back as good as opposed to excellent like the balance land?	It is noted in the 2021, Targeted Survey for Threatened Flora Survey, that the proposed excavation area has been subjected to historic logging and burning (Section 3, 3.1.1- page 6). The historic disturbances have affected the condition of the excavation site. The two sites were surveyed in different years/months September 2019 and October 2020, this also contributes to the variance in vegetation condition.
Also, please confirm why the area immediately adjacent to the area proposed to be cleared Excellent with the excavation area being good and there not being a transitional area between the two? It's a very distinct line with no visual difference being observable. Reword this sentence to be clearer and maybe reference the plan.	Please see above.
It was noted that two priority species were noted in the impact areas, but not if they are in the offset areas, does the applicant have any further information on this?	<p>The detailed flora and vegetation survey of the proposed impact area conducted in 2019 recorded the presence of the Priority flora species in the proposed impact area.</p> <p>The survey conducted in 2020 was designed as a targeted survey of both the proposed impact area and two potential offset areas following consultation with DWER and DAWE. The survey specifically targeted Threatened Flora species (not Priority Flora species) as listed below:</p> <ul style="list-style-type: none"> • <i>Thelymitra stellata</i> (EN) –Star Sun Orchid • <i>Thelymitra dedmaniarim</i> (EN) – Cinnamon Sun Orchid • <i>Banksia mimica</i> (EN) • <i>Goodenia arthrotricha</i> (EN) • <i>Conospermum densiflorum</i> subsp. <i>unicephalum</i> (EN). <p>Given, the same vegetation unit is present in the proposed impact area and the potential offset areas and the proximity of the areas to each other, it is likely the Priority flora species recorded in the proposed impact area also occur in the potential offset areas.</p>
The priority species were noted as being in the impact area, but despite being symbols available for them they were not shown on figure 5, why is this?	The priority species mentioned in the report were identified during a field survey conducted by 360 Environmental whilst the mapping in Figure 5 used the Department of Biodiversity Conservation and Attractions (DBCA)

	GIS dataset (Threatened and Priority Fauna, DBCA-037). The map is a representation of the Desktop assessment.
It was noted in the conclusion that no rare flora is to be impacted but that a priority 4 (rare, near threatened, or in need of monitoring) species was found in the impact area. Why was this species not noted in the conclusion?	P4 species are defined by DBCA as species that have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change, hence the recorded P4 species was not highlighted in the conclusion. If required by the client this can be added /noted in the report.
Carnaby's Black Cockatoos	
Where did the 50m buffer/setbacks from the nesting hollows and the extraction activities come from? Is this an arbitrary distance or is the setback enshrined in an environmental/planning document?	Guidelines for protection of black cockatoos do not provide a specific measurement for buffers but advise buffers should be implemented to reduce the impact on the birds. Australian Standard (AS) 4970-2007, for the protection of trees on development sites, provides guidance on the size of the zone required to ensure the viability and stability of retained trees. The buffers for this proposal were developed with consideration of AS 4970-2007. In all three cases, the proposed 50 m buffer is greater than the tree protection zone recommended under AS 4970-2007, which is the Diameter at Breast Height (DBH) of the tree to be protected multiplied by 12 m. The larger buffers are proposed as the intent is to not only maintain the stability of the tree and the associated nesting hollow, but also to provide foraging habitat around the tree which in turn contributes to maintaining black cockatoo habitat connectivity across the landscape.
How tolerant are the Carnabys to excavation activities. Although they sites are proposed to be retained, are they futile given Carnaby's would be deterred from using them in such close proximity to the development?	The key reason for proposing to retain the selected trees is to protect the nesting habitat present in the trees. Suitable nesting habitat is generally only considered to be present in trees that are over 100 years, so retention of mature trees is important for the longer-term ability of the black cockatoo to breed in the area and for rehabilitation of the area at the conclusion of the proposed activities.
Do you intend to install fencing/bunding around the nesting hollows, or simply peg the area?	However, 360 Environmental recommends the retained vegetation be fenced and 'do not enter' signs used to protect the area.

Intersection Wannamal Road West / Crossover	
Please find attached the Shire's specifications (type B) in relation to the installation of a crossover. This will include an upgrade of Wannamal Road West/ crossover intersection that would be secured by a Deed of Agreement.	The Client is agreeable to the construction of the crossover to Shire specifications.
Traffic	
Shire's request for a TIA	<p>The Transport Guidelines state that a TIS or TIA is not required for developments which generate less than 10 vehicle trips in pear hour. As stated in the Development Application, the development will generate around 100 vehicles per day (ingress and egress) in the busiest period. The pit is operating 11 hours per day, so $100 / 11 = 9.09$ vehicle movements (ingress and egress) per hour. Please note that this is the absolute max, and the average is likely to be 3 movements (ingress and egress) per hour.</p> <p>There have been questions surrounding whether a TIA only includes private car movements, however, page 19 of volume 4 provides the following clarification:</p> <p><i>"The TIA encompasses all modes of transport, that is, public transport, walking and cycling as well as private motor vehicles and freight movements."</i></p>

13.3 SOUTH WEST NATIVE TITLE SETTLEMENT - LAND BASE CONSULTATION 901

File	CPT/2
Author	Kylie Bacon - Coordinator Strategic Planning & Projects
Reporting Officer	Bob Kelly - Executive Manager Regulatory and Development Services
Refer	17 November 2020 – Item 11.3.9 19 October 2021 – Item 15.6 16 November 2021 – Item 13.5 18 January 2022 – Item 13.5 19 July 2022 - Item 13.2
Appendices	1. Map - Land List 901 [13.3.1 - 4 pages] 2. Schedule of Submissions [13.3.2 - 15 pages]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider a proposal for the transfer of lots (78 in total) identified in Table 1 (below) and on the location plans in **Appendix 13.3.1** to the Noongar People under the South West Native Title Settlement (the Settlement).

BACKGROUND

The Settlement is a landmark native title agreement reached between the State Government and the six Noongar Agreement Groups. The six Indigenous Land Use Agreements (ILUAs) comprising the Settlement were conclusively registered on 27 January 2021. The Settlement then formally commenced on 25 February 2021 after some years of delay. The Settlement recognises the Agreement groups as the Traditional Owners of the southwest of Western Australia, while resolving native title in exchange for a negotiated package of benefits.

The State of Western Australia has committed to allocating up to 320,000 hectares of Crown land to the Noongar People to create the Noongar Land Estate, in accordance with the Noongar Land Base Strategy. The Noongar Land Estate will contain up to 300,000 hectares of land transferred in reserve or leasehold, and up to 20,000 hectares of land transferred in freehold. The Landholding Body for all land transferred is Noongar Boodja Land Sub Pty Ltd, which will hold and manage the land in the Noongar Land Estate in consultation with the soon to be established Noongar Regional Corporations. All land will be used and managed in line with Noongar cultural, social and economic aspirations for the benefit of generations to come.

The Department of Planning, Lands and Heritage (DPLH) is responsible for undertaking an identification and assessment process for land parcels within the boundaries of the Settlement.

Land eligible for inclusion in the Noongar Land Estate includes:

- unallocated Crown land;
- unmanaged reserves;
- land owned or held by the Aboriginal Lands Trust/Aboriginal Affairs Planning Authority; and
- land owned or held by State agencies or Local Government Authorities, at the discretion of the State agency or Local Government Authority.

A key part of the process being followed by the Department involves the referral of land under consideration for inclusion in the Noongar Land Estate to relevant State agencies and Local Government Authorities. The Shire has received correspondence regarding the attached land parcels (**refer to Appendix 13.3.1**) identified for possible transfer.

The subject lots that are being considered are zoned under the Shire of Gingin's Local Planning Scheme No. 9 (LPS 9). It is understood, however, that any future land proposal would be subject to the same statutory planning provisions as all other land in the Shire.

It should be noted that land rates may apply to some of the subject lots. Organisations seeking exemption from rates in accordance with section 6.26 of the *Local Government Act 1995* are required to make application in writing. If the freehold land is used for a commercial purpose or leased for a commercial enterprise, it will not be exempt from rates.

COMMENT

Community Consultation

The proposal was advertised to the community for a period of 14 days. The Shire received 19 submissions in total, with responses ranging from not supporting to providing general comments. The Shire has provided responses to each of the community submissions as they were received.

The submissions are outlined in **Appendix 13.3.2**. A copy of the full submissions will be forwarded to DPLH.

Planning Implications

Table 1 below outlines the lot particulars, LPS 9 zoning and other environmental considerations and/or implications that are applicable to the land:

**MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022**

Lot Details	Area (Hectares)	Tenure Details	LPS 9 Zoning	Environmental Considerations / Other Implications
PIN 1372911 Lot 628 on DP 28562	3.28	Reserve with Power to lease	Public Use: School Site Parks and Recreation General Rural Roads	Bushfire Prone Area
Pin 1100253 Lot 312 DP191170 39 Hudson St, Seabird	0.09	Freehold	Residential R12.5/20	Bushfire Prone Area
PIN 573810, DP 211213, Lot 64 McCormick Street, Seabird, Reserve 32410	0.25	Reserve with Power to lease Reserved for purposes of Recreation and Parking	Parks and Recreation	Subject to coastal erosion Bushfire Prone Area
PIN 573841, DP 211213, Lot 53 McCormick Street, Seabird Reserve 35793	0.07	Freehold Reserved for purposes of Government Requirements	Parks and Recreation	Bushfire Prone Area
PIN 573802, DP 211213, Lot 58 McCormick Street, Seabird, Reserve 32410	0.2	Reserve with Power to lease Reserved for purposes of Recreation and Parking	Parks and Recreation	Subject to coastal erosion Bushfire Prone Area
PIN 573749	34.4	Reserve with Power to lease	Residential R12.5/20 Roads General Rural	Bushfire Prone Area
PIN 573949	0.22	Reserve with Power to lease	Residential R12.5/20 Roads	Bushfire Prone Area No sealed road access
PIN 573955, DP 211846, Lot 104	0.07	Reserve with Power to lease	Residential R12.5/20 Roads	Bushfire Prone Area No sealed road access
PIN 573956	0.03	Reserve with Power to lease	Residential R12.5/20	Bushfire Prone Area No sealed road access

MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022

PIN 573958, DP 211846, Lot 105	0.08	Reserve with Power to lease	Residential R12.5/20 Roads	Bushfire Prone Area No sealed road access
PIN 573954 Lot 87 PIN 573957 Lot 88 PIN 573961 Lot 89 PIN 573964 Lot 90	0.08 0.08 0.08 0.07	Reserve with Power to lease	Residential R12.5/20 Roads	Bushfire Prone Area No sealed road access
PIN 573896 Lot 91 PIN 573898 Lot 92 PIN 573901 Lot 93	0.08 0.08 0.08	Reserve with Power to lease	Residential R12.5/20	Bushfire Prone Area No sealed road access
PIN 573904 Lot 94 PIN 573907 Lot 95	0.08 0.08	Reserve with Power to lease	Residential R12.5/20 Roads	Bushfire Prone Area No sealed road access
PIN 573910 Lot 96 PIN 573913 Lot 97	0.08 0.08	Reserve with Power to lease	Residential R12.5/20	Bushfire Prone Area No sealed road access
PIN 573916 Lot 98 PIN 573918 Lot 99 PIN 573921 Lot 100 PIN 573923 Lot 101 PIN 573926 Lot 102 PIN 573929 Lot 103	0.08 0.08 0.1 0.09 0.09 0.08	Reserve with Power to lease	Residential R12.5/20	Within Special Control Area No. 2 – Public Drinking Water Source Area Bushfire Prone Area No sealed road access
PIN 573936 Lot 128 PIN 573935 Lot 127 PIN 573933 Lot 126 PIN 573931 Lot 125 PIN 573928 Lot 124 PIN 573925 Lot 123 PIN 573920 Lot 122 PIN 573917 Lot 121 PIN 573914 Lot 120 PIN 573911 Lot 119 PIN 573941 Lot 130 PIN 573940 Lot 131 PIN 573939 Lot 132 PIN 573937 Lot 133 PIN 573934 Lot 134	0.1 0.1 0.09 0.09 0.08 0.09 0.1 0.11 0.09 0.08 0.08 0.08 0.1 0.08 0.08	Reserve with Power to lease	Residential R12.5/20	Within Special Control Area No. 2 – Public Drinking Water Source Area Bushfire Prone Area No sealed road access
PIN 573932 Lot 135 PIN 573930 Lot 136 PIN 573927 Lot 137 PIN 573924 Lot 138 PIN 573922 Lot 139 PIN 573919 Lot 140 PIN 573915 Lot 141	0.08 0.08 0.08 0.08 0.09 0.09 0.1	Freehold	Residential R12.5/20	Within Special Control Area No. 2 – Public Drinking Water Source Area Bushfire Prone Area

MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022

PIN 573912 Lot 142 PIN 573909 Lot 143	0.08 0.08			
PIN 573906 Lot 144 PIN 573903 Lot 145 PIN 573900 Lot 146 PIN 573897 Lot 147	0.08 0.08 0.08 0.08	Freehold	Residential R12.5/20	Bushfire Prone Area
PIN 573894 Lot 148 PIN 573893 Lot 149	0.08 0.07	Freehold	Residential R12.5/20 Roads	Bushfire Prone Area
PIN 573908 Lot 118 PIN 573905 Lot 117 PIN 573902 Lot 116 PIN 573963 Lot 106 PIN 573962 Lot 107 PIN 573960 Lot 108	0.08 0.08 0.08 0.07 0.08 0.08	Reserve with Power to lease	Residential R12.5/20	Bushfire Prone Area No sealed road access
PIN 573899 Lot 115 PIN 573895 Lot 114	0.08 0.07	Reserve with Power to lease	Residential R12.5/20 Roads	Bushfire Prone Area No sealed road access
PIN 573959	0.07	Reserve with Power to lease	Residential R12.5/20	Bushfire Prone Area
PIN 1079722	0.68	Freehold	Residential R15	Bushfire Prone Area
PIN 573823, DP 174243, Lot 72 Douglas Street, Seabird	0.15	Freehold	Parks and Recreation	Bushfire Prone Area
PIN 573814, DP 174243, Lot 71 McCormick Street, Seabird	0.13	Freehold	Parks and Recreation	Subject to coastal erosion Bushfire Prone Area
PIN 573790, DP 174243, McCormick Street, Seabird	0.02	Freehold	Parks and Recreation	Adjacent to lots that are subject to coastal erosion. Bushfire Prone Area
McCormick Street, Seabird: PIN 573792 Lot 69 PIN 573793 Lot 68 PIN 573795 Lot 67	0.03 0.03 0.03	Freehold	Parks and Recreation	Subject to coastal erosion Bushfire Prone Area
PIN 573788, DP 211213, Lot 22 Tulley View Seabird	0.08	Freehold	Parks and Recreation	Subject to coastal erosion Bushfire Prone Area

PIN 573785, DP 174243, Lot 66 Turner Street, Seabird	0.08	Freehold	Residential R15	Subject to coastal erosion Bushfire Prone Area
PIN 573794, DP 210139, Lot 17 Turner Street, Seabird	0.08	Freehold	Parks and Recreation	Subject to coastal erosion Bushfire Prone Area
PIN 1079662, DP 218337, Lot 280 Hudson Street, Seabird	0.1	Freehold	Residential R15	Bushfire Prone Area
PIN 1079661, DP 218337, Lot 279 Edwards Street, Seabird	0.1	Freehold	Residential R15	Within Special Control Area No. 2 – Public Drinking Water Source Area Bushfire Prone Area

DPLH has outlined the following questions below for Council's consideration and comment.

- 1. Is the Shire supportive of the transfer of this land to the Noongar People under the Settlement?**

The above question will be addressed as part of Council's resolution.

- 2. Does the Shire have any interest in the land?**

Yes, refer to further comments below:

PIN 573802, DP 211213, Lot 58 McCormick Street, Seabird, Reserve 32410.

This parcel of land should not have been included on the consultation list. Council, at its Special Meeting on 1 December 2020, resolved to give in principle support to the Seabird Progress Association, for the construction of a lookout and gazebo structure on Lot 58 (16) McCormick Street, Seabird. Subsequent to Council's decision, the DPLH advised that Lot 58 would not be included in the South West Settlement and that a Management Order incorporating a power to lease could be progressed. The DPLH was requested to prepare the required Management Order and, following receipt of a draft in November 2021, this has been the subject of legal review by both the Shire and the DPLH. At the 15 February 2022 Ordinary Council Meeting, Council considered a draft Deed in relation to a Management Order over the site and this is currently with DPLH for final approval.

3. Does the Shire have existing or planned infrastructure within the land parcel that requires protection? If yes, please provide details and advise if access to this infrastructure will need to be maintained.

Yes, please see comments discussed in 2. above.

4. Is the land parcel subject to any mandatory connection to services?

Currently none of the lots are serviced. Should the lot(s) be developed, all essential services (water, sewer, power, communications) will be required to enable development on this land. Existing sewerage systems, water and electricity networks would require upgrading to accommodate any major urban expansion.

Some lots also do not have any sealed road access to them.

5. Are any future proposals for the land identified? Please provide detail of what is proposed and in what timeframe?

Yes:

- a. PIN 573802, DP 211213, Lot 58 McCormick Street, Seabird, Reserve 32410, has been addressed above.
 - b. PIN 137291, Lot 628 on DP 28562 has been set aside and zoned accordingly as a future school site. No timeframe is indicated.
6. Are there any future proposals for adjoining land that may affect the land identified in the spreadsheet? If so, in what timeframe?

Surrounding land could be developed in accordance with its zoning under LPS 9. It should also be noted that some of the surrounding land may be subject to the omnibus local planning scheme review, which may affect the current zoning. The omnibus scheme review is currently being undertaken.

One of the Shire's Strategic Directions for Seabird is to promote or undertake planning studies and processes to facilitate establishment of an industrial/mixed business area in proximity to the townsite.

7. Please advise of any proposed planning scheme amendments that may affect the zoning of this land at a State or local government level. If a scheme amendment is to occur, what is the change proposed and when will it come into effect?

There are no planning scheme amendments affecting the lots that are subject to potential transfer.

8. Please advise of any known land management issues such as site contamination, hazards, debris or rubbish dumping, unauthorised land use and environmental considerations (such as inundation or similar site constraints).

These are outlined in the 'environmental considerations / other implications' column in Table 1 above.

9. Please provide any additional comments on the proposed transfer of this land as part of the Settlement.

Coastal Land Parcels

There are identified land parcels along the coast and within coastal townsites that are considered to be valuable public open space and hold high public value also. Furthermore, as the coastal towns within the Shire are the subject of coastal erosion and inundation, lots should be considered to be retained in the event land swap becomes a viable long term option, in dealing with these issues.

Coastal Erosion and Inundation

In 2019, Cardno prepared a Coastal Hazard Risk Management and Adaption Plan (CHRMAP) for Lancelin, Ledge Point and Seabird that examined erosion risks and adaptation options. In 2020, Baird prepared an Inundation study for Lancelin, Ledge Point, Seabird and Guilderton. The Shire is currently undertaking a Coastal Hazard Risk Management and Adaption Plan (CHRMAP/Inundation) project including a risk assessment and adaptation options for Guilderton and an assessment of what else has changed across the four coastal towns. This will give the Shire a comprehensive and integrated understanding of how our coastline will be impacted in the future and how we can plan for and manage these changes in the four coastal townsites.

Lots that are affected by coastal erosion/inundation will need to address and comply with State Planning Policy 2.6 – State Coastal Planning Policy, including the Shire's adopted CHRMAP.

Designated Bushfire Prone Area

The subject lots are within a Designated Bushfire Prone Area as identified by the Fire and Emergency Services Commissioner. Additional planning and building requirements may apply to developments within designated bushfire prone areas, in accordance with Schedule 2 Part 10A of the Planning and Development (Local Planning Schemes) Regulations 2015, State Planning Policy 3.7 (SPP 3.7) and the Guidelines and the Building Code of Australia.

Special Control Area No. 2 – Public Drinking Water Source Areas (SCA 2)

There are identified lots within SCA 2. The purpose of SCA 2 is to identify proclaimed Public Drinking Water Source Areas (PDWSAs) and to ensure that land use and development within those areas is compatible with the protection and long-term management of water resources for a public water supply.

Land Use Management

The land will be held and managed for a broad range of purposes across the entire Southwest Land Division. The size, location and cultural value of the land will inform future land use. Large areas of bushland will likely be managed for conservation of Aboriginal heritage and environmental values, caring for country, cultural tourism and cultural activities. The Noongar Regional Corporations will coordinate management of these properties. Smaller areas of land and those properties that are located within townsites may be utilised for economic development, housing, enterprise, wellbeing programs, aged care or similar to meet the strategic aspirations of the Noongar population in that area. A small portion of the Noongar Land Estate will be purely for development purposes and will generate an income. Regardless of tenure, the Trustee and Noongar Boodja Land Subsidiary will comply with the existing statutory framework for each land parcel across the entire Noongar Land Estate.

The Noongar Boodja Trust Deed sets out how the Trustee and future Noongar Regional Corporations will make decisions about the use of land for cultural and development purposes. The Noongar Boodja Trust will be required to meet the standard costs, including rates and service charges, associated with owning and managing freehold land. Furthermore, the Noongar Land Base Strategy (of the Indigenous Land Use Agreements) sets out what land can be allocated and how this will happen.

The *Native Title Act 1993* (Cth) provides for access by native title holders to Crown lands for Aboriginal customary activities. The *Conservation and Land Management Act 1984* (WA) provides for Aboriginal customary activities on conservation estate lands. Consistent with this legislation, Settlement provisions ensure continued legal access by the Noongar traditional owners for customary activities on Crown lands including public drinking water source areas, and the conservation estate.

The Shire acknowledges the above position with respect to its land use management, however with specific land parcels being considered for transfer, the Shire considers that there is a lack of information provided to be appropriately informed.

Previous Decisions of Council

Council has, in the past, supported a series of similar referrals for the transfer of land to the Noongar People under the South West Native Title Settlement. However, given the increasing amount of property affected, it is becoming evident that Council cannot continue to support such proposals where there is no clear strategic direction.

On that basis, Councillors have indicated an interest in changing previous decisions in relation to land transfers of this nature from “support” to “not support”. Revocation of the previous decisions is not recommended, on the grounds that simple revocation without a replacement decision would mean that there is no Council decision in place with respect to these matters.

Normally revocation of, or change to, a previous Council decision would not be recommended in instances where the decision has been communicated to a third party (in this case the Department of Planning, Lands and Heritage) as final. However, in this case each of the individual decisions relates to a very long-running process and it is unlikely that matters will have progressed to a point where a change in position by Council will have a significant impact.

In addition, moving forward as part of the officer’s recommendation, it will be recommended that Council adopt a policy position to not support any transfer of land within the Shire until DPLH can provide thorough information as to the purpose of land (Commercial or Cultural), who will manage the land, when the transfer will occur and any other questions that are pertinent i.e. which other local governments are being affected. It will also be proposed that DPLH conduct proper public consultation with affected landowners and provide them the ability to properly consider and respond.

STATUTORY/LOCAL LAW IMPLICATIONS

Native Title Act 1993

Noongar (Koorah, Nitja, Boordahwan) (Past, Present, Future) Recognition Act 2016

Land Administration Act 1997

Part 2 – General administration

Division 2 – Covenants and conditions and their enforcement

Section 14 – Minister to consult local governments before exercising certain powers in relation to Crown land

Local Government Act 1996

Part 5 Administration

Division 2 Council meetings, committees and their meetings and electors’ meetings

S.5.25 Regulations about council and committee meetings and committees

S.5.25(1)(e) stipulates that regulations may make provisions in relation to the circumstances and manner in which a decision made at a council or committee meeting may be revoked or changed.

Local Government (Administration) Regulations 1996
Part 2 Council and committee meetings
R.10 Revoking or changing decisions (Act s. 5.25(1)(e))

Regulation 10 reads as follows:

- (1) If a decision has been made at a council or a committee meeting then any motion to revoke or change the decision must be supported –*
 - (a) in the case where an attempt to revoke or change the decision had been made within the previous 3 months but had failed, by an absolute majority; or*
 - (b) in any other case, by at least 1/3 of the number of offices (whether vacant or not) of members of the council or committee,*

inclusive of the mover.
- (1a) Notice of a motion to revoke or change a decision referred to in subregulation (1) is to be signed by members of the council or committee numbering at least 1/3 of the number of offices (whether vacant or not) of members of the council or committee, inclusive of the mover.*
- (2) If a decision is made at a council or committee meeting, any decision to revoke or change the decision must be made by an absolute majority.*
- (3) This regulation does not apply to the change of a decision unless the effect of the change would be that the decision would be revoked or would become substantially different.*

With respect to the Council of the Shire of Gingin, the above means that at least three Councillors (including the ultimate mover) must initially support the motion being moved, and then a minimum of five Councillors must vote in support of the motion in order for it to take effect.

POLICY IMPLICATIONS

Nil

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	3. Planning & Sustainability - Plan for Future Generations
Strategic Objective	3.3 Planning & Land Use - Plan the use of the land to meet future requirements incorporating economic development objectives and community amenity

VOTING REQUIREMENTS – ABSOLUTE MAJORITY

In accordance with R.10 of the *Local Government (Administration) Regulations 1996*, at least three Councillors will be required to indicate their support for the following recommendation prior to it being moved for debate.

Councillors Johnson, Peczka and Sorensen indicated their support for the proposed change to previous decisions of Council as listed below.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Peczka

SECONDED: Councillor Johnson

That Council agree to change its previous decisions as listed below from “support” to “not support” for the reason that no clear strategic direction for future use and management has been provided for the land parcels considered for transfer:

1. Ordinary Council Meeting 17 November 2020 Item 11.3.9;

That Council support the transfer of the lots that are identified in Table 1 and on the Location Plan in Appendix 1 of this report to the Noongar People under the South West Native Title Settlement.

2. Ordinary Council Meeting 19 October 2021 Item 15.6;

That Council support the transfer of the following lots (as depicted in Appendix 13.6.1) to the Noongar People under the South West Native Title Settlement:

1. Lot 198 (5) McCormick Street, Seabird (A5297);
2. Lot 78 McCormick Street, Seabird (A4128);

3. *Lot 0 McCormick Street, Seabird (A6264)/PIN 573971;*
 4. *Lot 1041 Kendall Road, Lancelin (A6268);*
 5. *Lot 32 Walker Avenue, Lancelin (A4352);*
 6. *Lot 13735 Ledge Point Road, Ledge Point (A4441) Reserve 36447 for Government Requirements;*
 7. *Lot 350 Boonanarring Nature Reserve Reserve 22605 for the purposes of Water; and*
 8. *PIN 11874326 Lancelin.*
3. Ordinary Council Meeting 16 November 2021 Item 13.5, Part 1;
1. *That Council support the transfer of the following lots (as depicted in Appendix 13.5.1) to the Noongar People under the South West Native Title Settlement:*
 - a. *PIN 573506 Guilderton;*
 - b. *Lot 1040 (11) Kendall Road, Lancelin (A6267) PIN 11101057;*
 - c. *Lot 596 (31) Walker Avenue, Lancelin (A4353) PIN 571202;*
 - d. *Lot 760 Walker Avenue, Lancelin (A4320) PIN 570428;*
 - e. *Lot 734 Ledge Point Road, Ledge Point (A5253) PIN 1230015;*
 - f. *Lot 593 Harper Drive, Ledge Point (A4149) PIN 1072376;*
 - g. *Lot 384 (6) Wood Way, Ledge Point (A787) PIN 577863; and*
 - h. *Lot 385 (4) Wood Way, Ledge Point (A787) PIN 577859.*
4. Ordinary Council Meeting 18 January 2022 Item 13.5.
- That Council support the transfer of Lot PIN 986141 Red Gully (as depicted in Appendix 13.5.1) to the Noongar People under the South West Native Title Settlement.*

CARRIED BY ABSOLUTE MAJORITY
7 / 0

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Balcombe

SECONDED: Councillor Sorensen

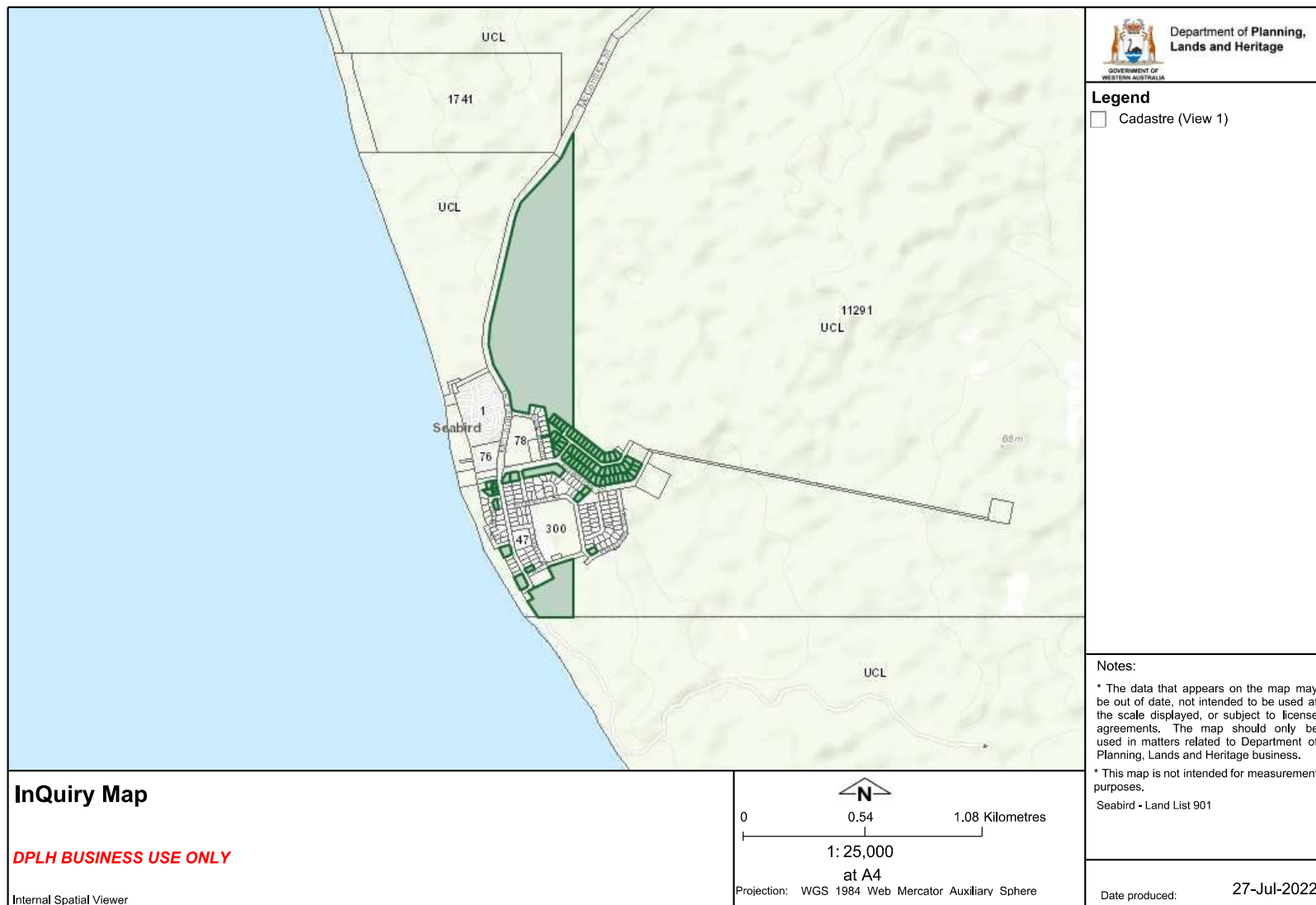
That Council:

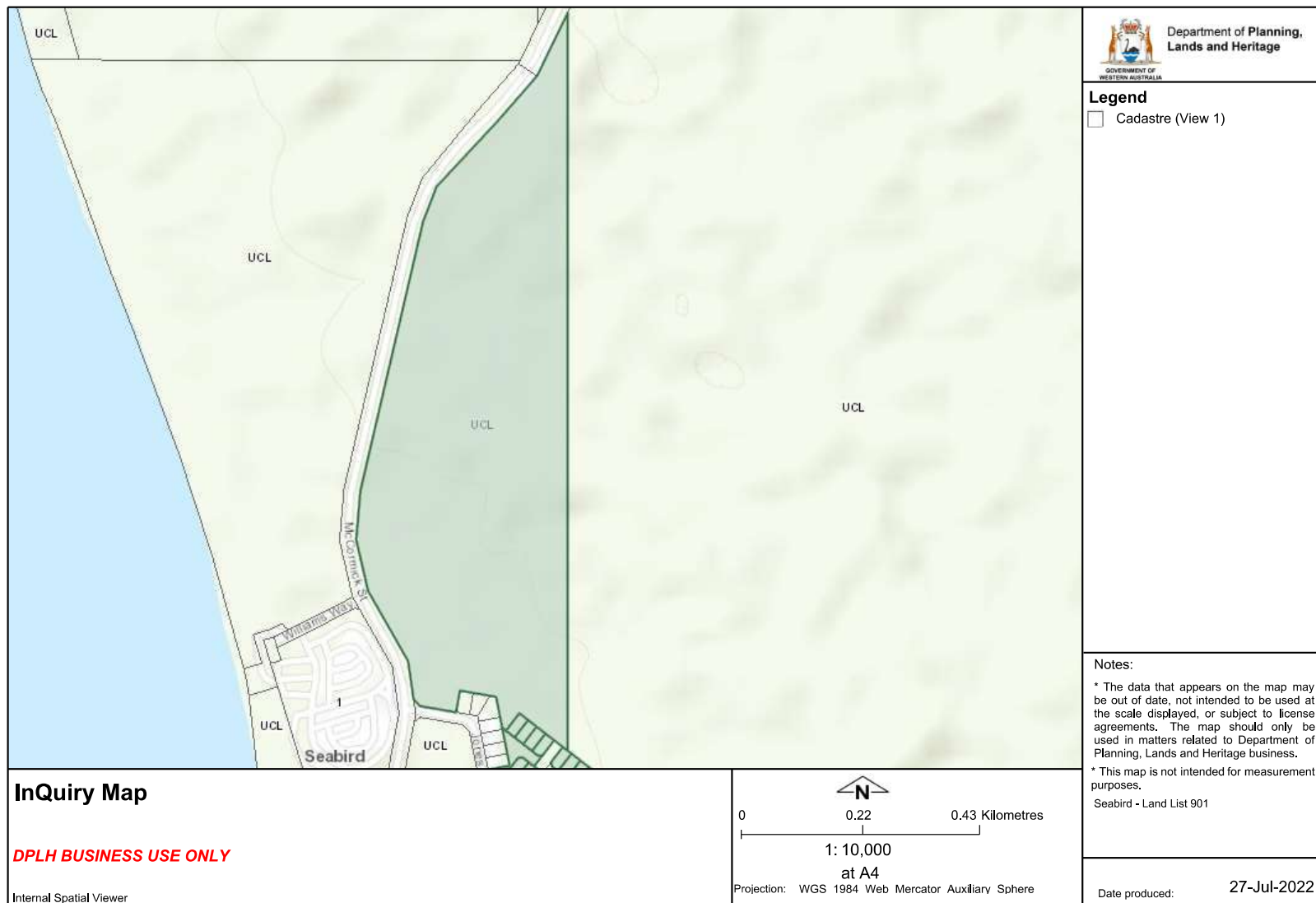
1. Not support the transfer of lots identified in Appendix 13.5.1 to the Noongar People under the South West Native Title Settlement at this time for the following reasons:
 - a. Large tracts of land along the coast and within the coastal towns are considered to be valuable public open space and of high public value;
 - b. The State should consider retaining lots within coastal towns in the event that land swap becomes a viable long term option in dealing with coastal erosion and inundation issues;
 - c. Land Parcels considered for transfer have no clear strategic direction for its use and management;
 - d. The transfer of PIN 573802, DP 211213, Lot 58 McCormick Street, Seabird, Reserve 32410 is the subject of a current draft Management Order over the site and is currently with DPLH for final approval with the land to be used as a lookout with a gazebo structure.
2. Acknowledge the submissions that were received during the community consultation as outlined in Appendix 13.5.2 and forward onto the Department of Planning, Lands and Heritage.
3. Request that Administration draft a policy for Council's consideration which will outline Council's position that future South West Native Title Settlement land based consultation matters will not be supported unless:
 - a. Evidence is provided that the concerns expressed in Parts 1a to 1c above have been addressed; and
 - b. Sufficient time is allowed for the proposal to be advertised for public comment for a minimum of 14 days.

**CARRIED UNANIMOUSLY
7/0**

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

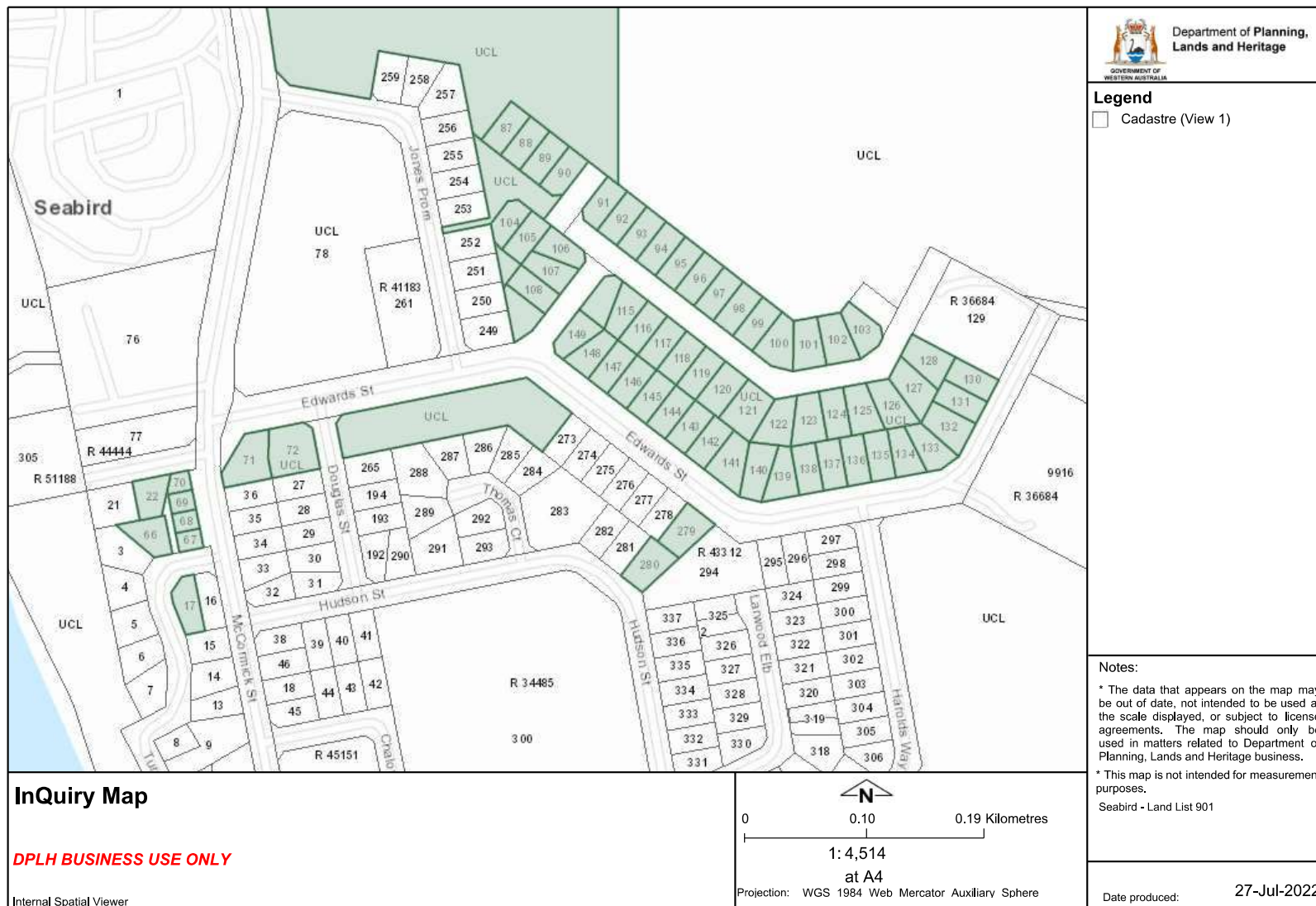
AGAINST: *Nil*

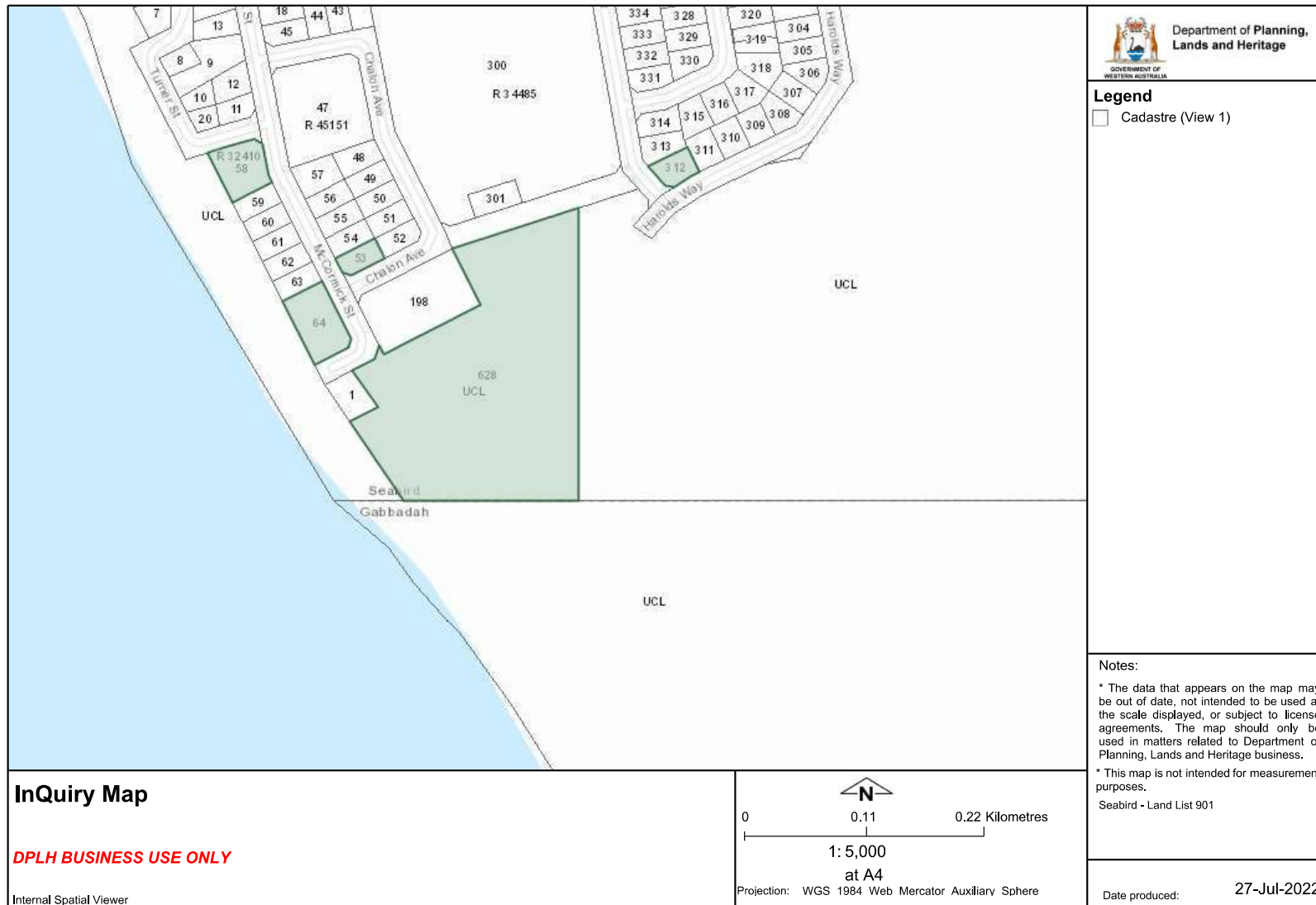




**MINUTES
ORDINARY COUNCIL MEETING
18 OCTOBER 2022**

APPENDIX 13.3.1





No. 1	Submitter	Submission Details
1.	Ratepayer(s) ICP231871	<p>The submitter(s) does not support the proposal:</p> <p>I would like to strongly object to the native title settlement proposal that recently appeared on the shire facebook page for comment. The proposal shows vacant areas of land in and around Seabird proposed to be given to the Noongar people as part settlement of their native title claim.</p> <p>This proposal also contradicts a prior resolution of council dated 19 October 2021 that council supports the transfer of lots 198, 78 & lot 0 all of McCormick Street Seabird as well as other shire lots to the Noongar people under the South West Native Title Settlement. See attachment.</p> <p>Does this new proposal supersede the October 21 resolution or is it an addenda to it? As ratepayers and residents we are entitled to be consulted and kept informed of such issues that directly affect us and our community.</p> <p>The proposal adopted by council on October 19 was not subject to any community consultation prior to being presented to council. We ratepayers are entitled</p> <p>Issues it raises:</p> <ul style="list-style-type: none"> - Why wasn't this communicated direct to SPA and the Seabird community in a timely manner so we could reasonably consider our reaction. - The proposal advertised proposes to give land in and around Seabird only as part settlement. Why has only Seabird been singled out? What about the other towns and areas in the Gingin shire. If other areas in the shire are proposed why haven't they been included in the proposal. - The obscure way it has been advertised suggests you didn't really want to advertise it at all. - One lot proposed is the lot 58 on Turner Street where we are trying to get a gazebo/lookout located. We had been told by shire staff that this lot had been excluded from any native title claim and that the shire was waiting only for the signing of a management order prior to being able to give the project the go ahead. - The lots to the northeast of town, Edward Street, are not developed and are not serviced. What's the point. - A vague reference is given in the proposal as to use the smaller areas of land in townsites maybe utilised for. Surely existing township ratepayers have a right to a more detailed explanation. Are those areas of land going to attract shire land rates, be subject to current town planning schemes, require planning permits for redevelopment etc.

		<p>- The township has as a priority for the protection of the existing coastline be it with groynes, offshore reefs or a combination of both. Is any future large scale development of the town going to contribute or ask to contribute to such project.</p>
2.	Ratepayer(s) ICP231864	<p>The submitter(s) does not support the proposal:</p> <p>To Whom It May Concern.</p> <p>My husband and I are resident's of Seabird</p> <p>It is our dream home in a dream location. The town is idyllic, quiet, picturesque and perfectly meets our needs as we enter our retirement.</p> <p>We were informed that there would be no further development of the town as there was not the infrastructure to support or sustain multiple additions.</p> <p>We were also told - prior to purchase- that the crown land surrounding our property would never be developed, sold or built out and its sole purpose was to remain just that. Vacant crown land.</p> <p>To go ahead with the proposal outlined, and to potentially increase residences to the extent listed in the proposal, will destroy Seabird. And dramatically reduce the value of all Seabird properties.</p> <p>I am disappointed that - as owners of property that will be greatly affected, - we have only become aware of such potential changes through other residents digging through Facebook and stumbling upon this proposal.</p> <p>The deadline to object to the proposal is 26th. This gives no time at all to find out any further information, which I understand has not been forth coming to all enquires made on behalf of the local residents.</p> <p>Perhaps that was the shires' intention?</p> <p>I would like to register our disapproval, Both my husband and myself vehemently oppose this proposition as it currently reads.</p> <p>A lot more detailed information needs to be forth coming prior to considering anything other than total rejection of the proposal.</p>
3.	Ratepayer(s) ICP231830	<p>Dear Aaron,</p> <p>.... seeks an extension to the deadline for submissions to the South West Native Title Settlement Process in relation to the Seabird townsite.</p>

		<p>We became aware of this consultation process only surreptitiously with a local resident finding it by chance on the Gingin Shire website today.</p> <p>If not for this, we would not be aware of the process and would not have been in a position to make a submission. This deadline is less than 11 days from now.</p> <p>The maps supplied indicate a large part of the Seabird townsite would be included. This has already created a great deal of concern amongst residents, as would any development of this size. Much more information is needed by residents in relation to this matter than has been supplied on the Facebook page.</p> <p>Furthermore, there appears to be some discrepancy between the maps and previous advice we have received. In particular, lot 58 McCormick way has been discussed at length and a plan submitted to develop a public gazebo and caravan turn around point on this site. However, this appears to now be included in the land allocated to the Noongar Land Estate, raising many questions.</p> <p>I seek your immediate response to this request to extend the deadline please.</p>
4.	Ratepayer(s) ICP231873	<p>The submitter provides a general comment on the proposal:</p> <p>Hi</p> <p>Just looking to find out if the Gingin Shire intends to write to all land owners in Seabird to make them aware that this is open for public comment like any other council/shire would?</p> <p>We have received no mail/ no email advising us of this proposed change or for any owners' comments.</p> <p>To just place it on Facebook or a website where many would not see it is really not an appropriate way to notify owners.</p> <p>We receive mail if a park is to be built or a neighbour wants a patio built but nothing in relation to crown land use being changed or used for purposes that could significantly impact the value of homes in the area.</p> <p>The comment period should be extended, and all owners of Seabird contacted by mail or email for comment to ensure they are all aware and actually have the opportunity to do so.</p>
5.	Ratepayer(s) ICP231866	<p>The submitter(s) does not support the proposal:</p> <p>I have recently become aware of a native title settlement proposal for the Seabird area of Gingin Shire, where I own a house, I am currently living in.</p>

		<p>1. This proposal states that who manages the land in question has already been decided. By whom, and what was the process?</p> <p>2. How was the decision to transfer the land in question taken, and how is it that people involved have not been informed prior to these decisions?</p> <p>3. How come the strategic aspirations of townsfolk here within towns are not asked for regarding economic aspirations, and not included?</p> <p>4. Lastly, who proposed the list of land parcels considered for transfer, and what, if any, do they stand to gain from this?</p> <p>It is for these and other reasons I reject this proposal, in my opinion, a hasty proposal and not comprehensive by any measures.</p>
6.	Ratepayer(s) ICP231902	<p>The submitter(s) does not support the proposal:</p> <p>To Whom it may concern</p> <p>We have been full-time residents of Seabird for over 20 years now.</p> <p>When we purchased our block 25 years ago, we contacted the Shire of Gingin to ask what was the future plans for the growth of the town. We were told that there would be no further land released, due to the lack of infrastructure. This was wonderful news to us, as we wanted to live in a small community, so we built our house, and have been living in this wonderful small community that we love.</p> <p>This proposal would increase the town to double the size it is now. There is no way this is sustainable, we have no essential services, i.e., medical centre, shopping centre, public transport, police, to name a few. I am sure there is more suitable crown land in the Shire of Gingin that does offer these services. We also have a very fragile coastline with erosion problems.</p> <p>To say that we are disgusted with the way the Shire of Gingin has handled this matter would be an understatement. Just posting it on their Facebook Page??? no public notice, no consultation with the residents, and less than a fortnight to register our views on this proposal. A total lack of respect to the many rate payers here in Seabird.</p> <p>We strongly object to this Proposal, in every way, as do many other residents we have spoken to.</p>

7.	Ratepayer(s) ICP231960	<p>The submitter(s) does not support the proposal:</p> <p>Dear Councillors</p> <p>We are new residents of Seabird having purchased in Seabird in April 2022.</p> <p>We bought this property after checking with Council in March and before putting in an offer that there were no plans to develop the land to the side of our property and opposite on Edwards Street. The land on the side of our property was advertised as “bush for ever” and this is still showing in the description on realestate.com.au if you wish to google it. To be sure, I rang and was put through to a person whose title I have forgotten but could have been an engineer or planner. He kindly looked up the location and advised that whilst things could change there were no plans to develop either of these pieces of land in the foreseeable future. I understand that things do change and in coming years perhaps this might be the case but on the basis that nothing was in planning we felt it safe to purchase this property. Now barely 6 months later we are faced with this disturbing news.</p> <p>I was impressed with the welcome kit from Gingin Council and with the care I see in the maintenance of the town and parks. I felt we had bought into a small community with a Council that really was in touch with its residents. So, it was a shock to find out about the native title settlement issue. I would have thought that a subject as important as this would have been communicated directly - perhaps even with a notice with the rates or a separate letter to every homeowner giving the community more time to learn about this threat and to respond.</p> <p>After a discussion with Councillor Frank Johnson, I understand that the Council has no say in the choices of land parcels and that the DPLH states the places of interest. However, I would have thought more urgency and consultation with the homeowners would have been a matter of priority - even if Council is not obliged to do so, especially given the limited time Council was allocated by DPLH.</p> <p>As you have heard from ... and others who live in Seabird we are absolutely against increasing the size of the town based on the information (or lack of) provided by DPLH.</p> <p>The town does not have the infrastructure to support any of the mentioned uses.</p> <p>Aged Care - no medical, dental, physiotherapist, psych, or health services of any kind. No public transport to the towns that do. Steep access to the beach and limited footpaths. One cafe with limited flat level outdoor eating area and the pub if they can make it up the hill. No shopping, restaurants, cultural activities, or entertainment.</p> <p>Economic Development, Well-being Programs and Enterprise. How can any of the people who live in Seabird make an informed decision how this affects their way of life when these uses are so obscure and come with no further details?</p>
----	---------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

		<p>The land nominated is unsuitable sitting "on a confining layer of bedrock 10m thick and over 25 m deep (as stated on the Government of Western Australia's "Protecting Seabird's drinking water" report of May 2011). This cap of bedrock would make services and site work extremely expensive and therefore the blocks of land expensive and higher than market price should the Noongar Land Estate just flick the land to a developer as they have with El Caballo Blanco.</p> <p>The people that live and cherish this town live here because it is small and quiet and would like some say in any development. The issue of beach erosion needs to be addressed before the population is increased and thought needs to be given to infrastructure to support a younger population to keep them active, engaged, fit and free from boredom and the social issues that come with that. There are no schools and no after school activities unless its fishing - when we have a beach not covered in seaweed which comes back to the issue of needing groynes and an artificial reef.</p> <p>As it stands the proposal from DPLH is causing great anxiety to ourselves and the other residents of Seabird. We would like to know on what basis they selected Seabird and did anyone actually do a site inspection of the town?</p> <p>How long will this selection process take and will we be given an opportunity to meet and discuss our concerns with the DPLH.</p> <p>I look forward to your response.</p>
8.	Ratepayer(s) ICP231914	<p>The submitter(s) does not support the proposal:</p> <p>Good Afternoon,</p> <p>I wish to comment on this Notice as a ratepayer of Seabird.</p> <p>I was astounded to note that such an important proposal was simply put on a Facebook page which not everyone in Seabird has access to or reads on a regular basis.</p> <p>Why, from the Shires point of view, were the ratepayers not notified of such a big change to our area. Surely a letter, private contact or even a public forum would have left us more able to understand the connotations of such action.</p> <p>It appears that the area to be allocated, is as big as the already developed are of Seabird.</p> <p>If a resident wants to change anything on our own property, we are asked to lodge a request, direct to the council (not via social media) with payment of fees, for such change. This new action appears to be a huge change which no-one knew of, until one resident happened to catch the Facebook post.</p> <p>Are there other areas or towns in the Shire under consideration? If so, were they notified in advance?</p>

		<p>I believe ratepayers of the town and members of the Seabird Progress Association have asked for an extension to the date for comment, to enable us to gather and discuss this notice. We would like members of the shire and the DPLH to address us so we are better able to understand the implications of this proposal.</p> <p>I look forward your reply,</p>
9.	Ratepayer(s) CS43003	<p>The submitter provides a general comment on the proposal:</p> <p>Also are we as ratepayers going to get more information about the native title settlement in Seabird as it will affect us as homeowners.</p>
10.	Ratepayer(s) ICP232104	<p>The submitter(s) raises the following concerns on the proposal:</p> <p>Dear Mr Cook,</p> <p>We refer to the article published on the Shire's website on Monday 12th September 2022 regarding the proposed allocation, by the Department of Planning, Lands and Heritage (DPLH), of Crown Land within the Seabird townsite to the Noongar Land Estate.</p> <p>As the representing 180 ratepayers in the Shire we wish to make and ask the following observations, comments, and questions.</p> <ul style="list-style-type: none"> • The information has caught our community by surprise and has caused some concern, primarily because the potential impact of the allocation of the land on the Seabird townsite's future is not understood by the community. • The information provided on such an important proposal is very limited and therefore limits our ability to provide feedback within the very short timeframe for a response (which includes 2 public holidays). • As a starting point for further consideration can you please advise: <ul style="list-style-type: none"> • Is the DPLH considering allocating land from anywhere other than Seabird, within the Gingin Shire, to the Noongar Land Estate? • Does the allocated Seabird land have any special significance, to the Noongar people, as compared to Crown land elsewhere in the Shire? • Why has such a significant part of the unallocated Seabird townsite and surrounds been allocated? Does this limit any further opportunities for development by anyone other than the Noongar Land Estate? • What sort of use or development of the allocated Seabird land is proposed? Or is that not yet understood? • How long has the Shire been aware of, and what is the Shire's initial response to, this DPLH allocation?

		<p>We note that the DPLH has offered to provide community information sessions. Can the Shire arrange for such a session to be held in the near future so the DPLH (together with the Shire) can provide further information to, and answer questions from, the Seabird community?</p> <p>We would be happy to work with you, and the DPLH, to identify key topics for that information session with a view to meaningful and constructive consultation.</p>
11.	Ratepayer(s) ICP232106	<p>The submitter(s) raises the following concerns on the proposal:</p> <p>Hi,</p> <p>I have recently heard that there is a native title claim over parts of Seabird. You apparently had a link on the website with closing date of tomorrow for comments but the link has already been removed, why? Why has there not been any written advice to ratepayers in the Shire affected? I am a resident and ratepayer and have had no notice about this situation and certainly no time to consider the issues. Can you please provide all relevant info to me and other ratepayers asap. Please also extend comments deadline to be fair to all affected .</p> <p>Thank you</p>
12.	Ratepayer(s) ICP232105	<p>The submitter(s) does not support the proposal:</p> <p>To All Councillors</p> <p>It is suggested that many area in Gingin Shire is considering granting "Native Title " to many areas and Towns within the Shire' I as a rate payer disagree with this occurring for a number of reasons.....</p> <p>If we are to grant Native Title, I believe there be a stipulation that should this land be handed over to first Nation people, that they give an undertaking that the land will be put to some Economical use. That the land benefit those who are given this grant for an economical gain In the past land has been given over and for the reason of historical and emotional "benefit".</p> <p>Yours truly</p>
13.	Ratepayer(s)	The submitter(s) does not support the proposal:

	ICP232100	<p>Hello Shire of Gingin</p> <p>NATIVE TITLE SETTLEMENT PROPOSAL</p> <p>We are contacting the Shire of Gingin to lodge our formal objection to the above proposal.</p> <p>This important proposal has not been communicated to ratepayers in a satisfactory manner to enable all ratepayers to consider this matter.</p> <p>We only found out about this matter through a message from a Facebook friend and should have been a notification direct from the Shire of Gingin to all ratepayers via email and mail, allowing a consultative period of at least three months allowing the opportunity for all ratepayers to properly review, consider and vote on this matter for the benefit of the township of Seabird.</p> <p>The grounds for our objection include, but are not limited to, the following:</p> <ol style="list-style-type: none"> 1. The land highlighted in the four maps of the township of Seabird is not suitable for allocation to a "Land Estate" due to the inappropriate mixing of sub-developed and settled land which is part of the township of Seabird. If the State of Western Australia's land is to be transferred into a native land trust, the selected land should be non-mixed use Crown Land that is vacant, undeveloped natural habitat land that is not within or close to developed land. The land should be one uninterrupted and sufficiently large enough parcel of land well East of the coastal areas, which is located in a parallel corridor between Gingin and Mogumber. 2. This land is on the coastal corridor and not far from the reach of the Perth metropolitan area. In the next decade there is a good possibility that the coastal corridor will reach as far as Seabird and adjoining settlements causing extreme problems for infrastructure and roads etc to go through the land that is proposed to be handed over to the "Land Estate". Western Australian Taxpayers would then be forced to pay tens of millions of dollars to make settlement for this land..... 3. There are areas of land indicated on the maps that local residents enjoy a pleasant walk, cycle through for access to other residents and the beach, etc etc. With these areas of land being handed over to the indigenous people existing residents will be prohibited from enjoying what they are entitled to..... 4. A lack of specific information supplied about intended land use, 5. An insufficient time allowed for consultation with the broader community, 6. A lack of detail supplied about any infrastructure needed to support an increase in the size of the town if the blocks were released for sale.
--	-----------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

		Your early response is requested.
14.	Ratepayer(s) ICP232097	<p>The submitter(s) does not support the proposal:</p> <p>Good morning,</p> <p>I've been made aware through a local face book page of the proposal for numerous land areas in the seabird are to be developed for native title areas.</p> <p>I as a rate payer have not been made aware of these and object to the proposal!</p> <p>I've just searched your shire website and can't seem to find any information on this and wish to be informed as a rate payer what the plans are here.</p>
15.	Ratepayer(s) ICP232096	<p>The submitter(s) does not support the proposal:</p> <p>As a land holder and rate payer at Seabird I strongly object to the Native Title proposal that was on your Facebook page. There has been no consultation with the residents and landholders in Seabird.</p>
16.	Ratepayer(s) ICP232109	<p>The submitter(s) does not support the proposal:</p> <p>RE: Submission response to Seabird allocation of land to Noongar People.</p> <p>I wish to lodge my objection to this proposal.</p> <p>The grounds for my rejection include:</p> <ul style="list-style-type: none"> • The land represents a substantial proportion of the town in the hands of one "developer". • A lack of specific information supplied about intended land use, • An insufficient time allowed for consultation with the broader community, • A lack of detail supplied about any infrastructure needed to support an increase in the size of the town, if the blocks were released for sale, • An absolute need for a financial commitment to coastal erosion mitigation (groynes and artificial reef), as a percentage of the sale of block proceeds, to maintain sustainability of the town should it be expanded. • Specifically lot 58 has already been subjected to a detailed planning process for a public gazebo and caravan turnaround facility and cannot be included in any consideration.
17.	Ratepayer(s) ICP232110	The submitter(s) does not support the proposal:

		<p>Morning,</p> <p>In regard to the Native Title Settlement Proposal that was put on your Website on the 15th September 2022, which now you have removed we are rejecting it.</p> <p>It would have been nice if the town had further information than what you have put on there and the residents were sent something in the post. Not everyone is on Facebook site. There is not a lot of information as to what the land will be used for etc.</p>
18.	Ratepayer(s) ICP232113	<p>The submitter(s) does not support the proposal: Native Title Settlement Proposal-Seabird</p> <p>Please find our formal objection to the above proposal below.</p> <p>This important proposal has not been communicated to ratepayers in a satisfactory manner to enable all ratepayers to consider this matter.</p> <p>Firstly, as per my email which I note has yet to be acknowledged sent last weekend we only found out about this proposal through a Facebook re post on our local Seabird page. We should have been advised directly by the Shire of Gingin via email or mail so as to allow a longer more appropriate consultation period with ratepayers. This allowing all ratepayers time to properly review, consider and send their objections/support in regards to this proposal as ultimately it affects all home and business owners in Seabird.</p> <p>The grounds for our objection include, but are not limited to, the following:</p> <ul style="list-style-type: none"> • This land is on the coastal corridor and not far from the Perth metropolitan area. In the future there is a good possibility that the coastal corridor will reach as far as Seabird and adjoining settlements causing extreme problems for infrastructure and roads etc to go through the land that is proposed to be handed over to the "Land Estate" • There are areas of land indicated on the maps that local residents enjoy for recreational purposes whether it be walking, cycling through this using it for access to areas in the town such as the beach etc With these areas of land being handed over residents would likely be prohibited from enjoying what they are entitled to. • A lack of specific information supplied about intended land use just a vague proposal of a care home for the elderly or community housing? A lack of detail supplied about any infrastructure. If this was to occur would the government and council then be putting in significant amenities to cope with this new community, like medical, shopping centre, community activities to stop anti-social behaviour a police station? • An insufficient time allowed for consultation with the broader community and residents of Seabird • The land highlighted in the four maps of the township of Seabird is not suitable for allocation to a "Land Estate" due to the inappropriate mixing of sub-developed and settled land which is part of the township of Seabird. If the State of Western Australia's land is to be transferred into a native land trust, the selected land should be non-mixed use Crown Land that is vacant, undeveloped natural habitat land that is not within or close to developed land. The land

		<p>should be one uninterrupted and sufficiently large enough parcel of land well East of the coastal areas, which is located in a parallel corridor between Gingin and Mogumber.....</p> <p>I would appreciate a reply email confirming receipt of this email.</p> <p>Thank you</p>
19.	Ratepayer(s) ICP232044	<p>The submitter(s) does not support the proposal:</p> <p>..... submission in relation to the proposed allocation of land to the Noongar Land Estate</p> <p>..... seeks to reject the proposal to allocate land in Seabird to the Noongar Land Estate (NLE) detailed on the Map (the Map) published by the Department of Planning, Lands and Heritage (DPLH) July 27, 2022.</p> <p><u>Consultation process:</u> On the 12th of September 2022 the Shire of Gingin (the Shire) posted a PUBLIC NOTICE OF NATIVE TITLE SETTLEMENT on Facebook on behalf of DPLH, with a published deadline of September 26. To our knowledge this was the only attempt made by either the Shire or DPLH to notify the Seabird community about the notice.</p> <p>....only became aware of the notice indirectly on September 15, by a community member who had surreptitiously found the notice on Facebook. This effectively reduced the time available to ... to respond in accordance with the deadline, from 14 to 10 days.</p> <p>A request was made to the Shire CEO on September 15 to extend the deadline to account for the loss in time, but this request was denied.</p> <p>Regardless of this reduction in the time to respond, ... is of the view that the published period of 14 days would have been insufficient time to conduct a meaningful consultation of the local community, anyway. The issue is large, complex and requires much more explanation than was provided on the one page of text posted on Facebook, the only education provided to the community about the issue to date. Organising a meeting of the committee let alone the community in general is difficult with such a short time frame.</p> <p>The proposal is unclear as to whether these are the only blocks in the Shire to be considered or perhaps others will be announced subsequently. Whatever the case, this presents a piecemeal approach to the community.</p> <p><u>Negative community response:</u></p>

	<p>Notwithstanding the lack of an effective consultation process, the response from the community has been overwhelmingly negative. In fact, the process has simply reinforced a sense of distrust in local and state governments to deliver meaningful outcomes for the Seabird community in general. To the extent that none of the positive benefits of such a proposal can really be considered until these negative issues have been resolved.</p> <p><u>Inconsistency with previous advice:</u> Several inconsistencies between the notice published on September 12 and previous advice provided seem apparent. A similar proposal was tabled at the Shire meeting on October 19, 2021, describing 8 blocks of land in the Gingin shire. This included blocks at Seabird, Lancelin, Ledge Point and Boonanarring. Since then, the proposal has gone from 3 to 77 blocks at Seabird and apparently no blocks elsewhere in the Shire. Community members would like to see the whole of Shire proposal rather than this piecemeal approach presented so far.</p> <p>SPA notes that Lot 58 McCormick St. was still under consideration, but the ideal land tenure was likely to be a crown reserve managed by the Shire with power to licence. Planning for a public gazebo and caravan turnaround point is well advanced for this site.</p> <p>At the time of the most recent land release held in Seabird by the Department of Land Administration (DOLA) on March 26, 1994, DOLA indicated that land in town zoned UCL would never be developed. This influenced people's decision to buy land in Seabird at the time and continues to do so now.</p> <p><u>Large proportion of Seabird township:</u> The Map shows that as many as 77 blocks of land could be transferred to the NLE and subsequently utilised for economic development to meet the strategic aspirations of the Nyoongar population in the area. Given that the Seabird townsite consists of about 100 housing blocks currently, development of this area of land could effectively double the size of the townsite.</p> <p>This would completely reshape the town both geographically and socially. The supply of land for sale would increase dramatically, depressing prices to the detriment of existing landholders, at least in the short to medium term.</p> <p><u>Local indigenous culture and floral diversity:</u>has enquired about local indigenous culture in the past to determine if this could be incorporated in our strategic planning process to enhance future development of the town in the way of walkways and cultural heritage attractions.</p> <p>From this enquiry, we have not been made aware of any sites of significance to indigenous culture. This is consistent with the sites identified in the map found in appendix 5 of the Cultural Heritage Management Plan 2016-2019. Many indigenous sites and communities are located in the Gingin shire, but none in the vicinity of Seabird (Shaw et al., 2016).</p>
--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

		<p>Floral diversity is part of the value of the bush in and around Seabird (Keighery et al.). UCL is the only land within the townsite where floral diversity can be maintained. If developed, this asset would be eroded to the detriment of the town, for both residents and the large visitor population attracted to Seabird for recreational purposes.</p> <p><u>Sustainability of development and town planning:</u> Seabirds' location makes the town susceptible to the issue of coastal erosion and the community has worked tirelessly to address this issue. Any future development would need to account for this ongoing threat for the development to be viable. Some of the UCL blocks on the Map could be within the maximum allowable distance from the high-water line to allow building approval. Notably blocks 22, 53, 58, 64, 66, 67, 68, 69, 70, 71, 72 and 628 could be in this category. To avoid this, any development should consider financial contribution to the revetment activity already commenced. This would include the construction of groynes to protect the existing sea wall past the expected life of 2035, as suggested by Cardno (2019).</p> <p>Lack of infrastructure, notably the lack of a sewerage processing facility, has limited development in Seabird. Sixty-two blocks shown on the Map (87- 149) would require roads, water pipes, electricity, internet, and street lighting to be developed for commercial use. Furthermore, the town sewerage system would require upgrading from the current transitional arrangement of the regular emptying of a holding tank, with the construction of a sewerage processing centre for the entire town. Some existing properties are on deep sewerage, but sewerage from these properties is collected from the holding tank by a truck and transferred to a central processing facility located remotely. Upgrading the sewerage system would be much welcomed by the community but should be included in the cost of development of blocks 87-149, to include an appraisal of the cost and the sources of funding for such a facility. A precedent for a developer being required to bear the capital cost is the Tavern caravan park. They were required to install their own sewerage system outside of the existing deep sewerage network in town. Seabird has just the one public toilet block that already struggles to cope with the influx of visitors during the tourist season.</p> <p><u>Uncertainty:</u> An important reservation held commonly by community members is the uncertainty of the future use of this land should it be passed from the Crown to a single entity for commercial development. Given the size of the land area and the number of blocks under consideration, this is a major concern. The community cannot be certain as to how this land will be used once ownership is transferred as there seems to be no compulsion for future use to be defined beforehand. Such uncertainty means the only option available to the community is to reject the proposal.</p> <p><u>Summary</u>rejects the proposal.requests a comprehensive community consultation process withplaying a key role in this going forward. The proposal is large in relation to the size of the town and would almost double the size of the town. There are no documented Noongar sites in the Seabird area that is aware of. The proposal is untenable without attention to town planning and coastal erosion necessities.</p>
--	--	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

		<p><u>References</u></p> <p>CARDNO 2019. Coastal Hazard Risk Management and Adaption Plan Shire of Gingin. 11 Harvest Terrace West Perth WA 6005 Australia: Cardno WA Pty Ltd.</p> <p>KEIGHERY, G. J., GIBSON, N. & KEIGHERY, B. J. Floristics of reserve and bushland areas in the Perth region Part XV Floristics of Seabird bushland.</p> <p>SHAW, C., FIDGE, L., TAYLOR, B., GROVES, C., LOUIS, B. P., PEMBERTON, J., HEADL, J., JETTA, D., DRAYTON, M., NANNUP, M., YAPPO, D., DAWSON, E., EDWARDS, J., TAYLOR, A. & MCGUIRE, M. 2016. Shire of Gingin and the Yued Nyoongar People Cultural Heritage Management Plan 2016-2019. Gingin, WA: Shire of Gingin.</p>
--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

13.4 APPLICATION FOR AMENDED DEVELOPMENT APPROVAL - RESTAURANT (TAKE-AWAY COFFEE OUTLET) ON LOT 1 (86A) GINGIN ROAD, LANCELIN

File	BLD/7045
Applicant	Kate Bassham
Location	Lot 1 (86A) Gingin Road, Lancelin
Owner	Kate Bassham and Paul Gowdie
Zoning	Tourism
WAPC No	NA
Author	James Bayliss - Coordinator Statutory Planning
Reporting Officer	Bob Kelly - Executive Manager Regulatory and Development Services
Refer	20 August 2019 - Item 11.3.1 17 August 2021 - Item 13.3
Appendices	<ol style="list-style-type: none"> 1. Location Map - Lot 10 (86 A) Gingin Road, Lancelin [13.4.1 - 1 page] 2. Aerial Map (2) - Lot 10 (86 A) Gingin Road, Lancelin [13.4.2 - 1 page] 3. Applicant's Proposal [13.4.3 - 1 page] 4. Schedule of Submissions and Recommended Responses [13.4.4 - 1 page]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider an Application for Amended Development Approval for a restaurant (take-away coffee outlet) on Lot 1 (86A) Gingin Road, Lancelin.

BACKGROUND

The restaurant (take-away coffee outlet) is currently being operated from a modified caravan that has been converted to accommodate the required appliances and serving facilities to operate the outlet.

Council resolved at its Ordinary Meeting on 20 August 2019 to approve the restaurant subject to conditions, one of which restricted the approval term to a period of 2 years. Council resolved at its Ordinary Meeting on 19 August 2021 to remove the time limited approval and issue development approval indefinitely.

This application seeks to amend condition 11 which states:

11. *The restaurant (take-away drink outlet) outlet is limited to operating hours of between 7am and 4 pm, unless otherwise approved by the Shire of Gingin.*

The applicant seeks to cater for events, specifically the Lancelin Wind Festival 2023 (formerly the Ledge to Lancelin Ocean Classic) which requires a departure from the approved operating hours.

Rather than provide an amended development approval outlining the suite of earlier conditions, this report seeks to provide consent to vary the operating hours during the Lancelin Wind Festival 2023.

Over the event period (18 – 21 January 2023) the applicant intends to host ‘pop-up’ evening events on the lawned area to the rear of the property, between 4pm – 8pm over each evening. While the specific event is yet to be finalised, it is anticipated to be a ‘pop-up’ boutique brewery or the like, catering for between 80–100 persons.

The property is 2,087m² in area and is a strata title arrangement with a single house located on the northern portion of the site. The property is a battle-axe design and gains access from Gingin Road via a nine-metre-wide common property access leg. The property contains an easement burden for right of footpath purposes as outlined on the submitted plans.

A location plan and aerial image are provided as **Appendix 13.4.1** and **Appendix 13.4.2** respectively.

The applicant’s proposal including development plans is provided as **Appendix 13.4.3**.

COMMENT

Stakeholder Consultation

The application was advertised to surrounding landowners for a period of 14 days in accordance with clause 64 of the *Planning and Development (Local Planning Scheme) Regulations 2015*. The Shire received one submission supporting the proposal.

A copy of the Schedule of Submissions and Recommended Responses is provided as **Appendix 13.4.4**.

PLANNING FRAMEWORK

Local Planning Scheme No. 9 (LPS 9) Planning Assessment

Local Planning Scheme No. 9 (LPS 9)

The subject land is zoned Tourism under LPS 9, the objectives of which are to:

- (a) *Promote and provide for tourism opportunities;*
- (b) *Provide for a variety of holiday accommodation styles and associated uses, including retail and service facilities where such facilities are provided in support of the tourist accommodation and are of an appropriate scale where they will not impact detrimentally on the surrounding or wider area;*
- (c) *Allow limited residential uses where appropriate;*
- (d) *Encourage the location of tourist facilities so that they may benefit from existing road services, physical service infrastructure, other tourist attractions, natural features and urban facilities;*
- (e) *Ensure that short stay tourist and holiday accommodation are the predominant land uses in the zone; and*
- (f) *Encourage tourism development that is generally sympathetic to the natural and built features of the surrounding area.*

The land use 'Restaurant' is a permitted (P) use within the Tourism zone, and is defined as follows:

Premises where the predominant use is the sale and consumption of food and drinks on the premises and where seating is provided for patrons, and includes a restaurant licensed under the Liquor Licensing Act 1988.

Note 2 of 'clause 3.3 - zoning table' states:

The local government will not refuse a 'P' use because of the unsuitability of the use for the zone but may impose conditions on the use of the land to comply with any relevant development standards or requirements of the Scheme and may refuse or impose conditions on any development of the land.

The existing restaurant was approved on the basis of being a modest scale that was unlikely to detrimentally affect the surrounding or wider locality. The officer has some concern that between 80-100 people onsite at any one time may impact the amenity of adjoining owners by way of noise and a general intensification of pedestrian activity. This concern is balanced on the understanding that the event is temporary, and that the amenity of neighbours will not be impacted indefinitely should their amenity in fact be affected.

4.8 - Zone Specific Development Standards

The zone-specific development standards are outlined below, with a summary of how the proposed development satisfies the relevant clause.

4.8.7 - Tourism Zone

4.8.7.1 - Development within the Tourism Zone will comprise a range of land uses set out in the purpose and objectives of the Zone and in the Zoning Table. Dependent upon the use proposed, sites for such developments will normally be identified within or in close proximity to established settlements.

The use class restaurant is permitted within the zone and contributes to the provision of a diverse range of land uses targeted at catering for tourists in addition to local residents.

4.8.7.2 - Development proposals will be considered by the local government with particular regard to the impact of the proposed development on visual and natural amenity, the availability of reticulated sewerage and/or the suitability of the land for on-site effluent disposal, the provision of sufficient landscape buffers and the density of the development.

The built form of the events will likely consist of a gazebo structure and portable bar or the like, which is unlikely to have any significant visual impact. Portable toilets will be provided to cater for the anticipated number of patrons.

4.8.7.3 - Those areas of the site providing the highest tourism amenity, e.g. the beachfront, shall be retained for tourism purposes, and not designated for residential use. The maximum proportion of residential units shall be such that the site retains a dominant tourism function and character and shall be determined by the local government between zero and 25 per cent inclusive.

The development site has a high tourism amenity as it abuts the beachfront via Reserve 32037. This development enables the site to be set aside for the benefit of tourists and community members to enjoy as opposed to a traditional residential use.

4.8.7.4 - Where tourism development with no permanent or semi-permanent residential units is proposed, local government may at its discretion vary the maximum plot ratio imposed.

4.8.7.5 - Where strata titling is proposed, appropriate management arrangements in a management statement which ensures that all units will be let out for tourism.

4.8.7.6 - The maximum percentage of residential units/development on site shall comply with the following at all stages of the development:

- (a) The proportion of residential units relative to the total number of accommodation units on the site shall be equal to or less than the approved percentage.*

- (b) *The site area occupied by the residential units, and any areas designated for the specific use of occupiers of those units, relative to the area occupied by the short-stay development shall be equal to or less than the approved percentage. In calculating the area occupied by the two development categories, those facilities available for common use shall be excluded from the calculation.*
 - (c) *That any individual residential unit and as a whole any residential component of such a development shall be of a design and scale that is clearly is subsidiary to the tourism component of the development such that the tourism component remains dominant in all aspects.*
- 4.8.7.7 - *Proposals for offices and reception centres in the Tourism Zone will only be considered where they are incidental to, and support the proposed tourism use on the site.*
- 4.8.7.8 - *Tourism development that incorporates accommodation and/or reception facilities shall include provision for an onsite manager.*
- 4.8.7.9 - *Proposals for subdivision and development for Residential land uses in the Tourism zone will be determined in accordance with Residential R12.5 code unless combined with a Tourism proposal.*
- Clauses 4.8.7.4 to 4.8.7.9 are not applicable in this instance.
- 4.8.7.10 - *In considering proposals in the Tourism Zone, local government shall have regard for the zone objectives, the scale and bulk of the proposal and its integration with surrounding land uses.*

The proposal is viewed as being consistent with the objectives of the zone.

- 4.8.7.11 - *Local government may, at its discretion, require proposed shared facilities in tourist developments to be established in the first stage of development.*

Not applicable in this instance.

- 4.8.7.12 - *To reduce the likelihood of tourism accommodation being used as permanent or semi-permanent accommodation, a maximum length of stay provision of three months in any twelve month period should apply to the tourism units on all developments.*

Not applicable in this instance.

Car Parking

Clause 4.7.2.3 of LPS 9 states:

Except with the approval of local government, a person shall not use or develop land for a purpose specified in Column 1 of Table 3 unless provision is made on the site for a number of car parking spaces not less than the number calculated in accordance with Column 2 of that Table shown opposite that purpose.

Table 3 – Parking Requirements of LPS 9 requires a restaurant to provide one car bay for every four patrons. Given the temporary nature of the amended development, no changes to parking as previously considered under the earlier approvals is proposed.

Public parking areas are located ~120 metres to the south of the subject site along Cunliffe Street and also ~120 metres north along Miragliotta Street. Patrons will likely walk to the site via the dual use path to rear after parking at one of these car parks.

Local Planning Policy 3.2 – Tourism Zone (LPP 3.2)

Given the land is zoned ‘tourism’ under LPS 9, LPP3.2 is applicable. The policy objective and policy statement are provided below:

Policy Objective

To encourage the development of tourist accommodation and related services.

Policy Statement

- 3.1 Land will be allocated to the Tourism zone ahead of requirement to ensure an adequate supply of land for these purposes and to assist in minimising development delays due to the scheme amendment procedure.*
- 3.2 Land shown as Tourist Accommodation on the townsite strategy maps will progressively be included in the Tourism zone.*
- 3.3 The Tourism zone includes a number of designated tourist nodes, and a range of tourist related services will be encouraged to locate in these nodes.*
- 3.4 In some instances Council may require Structure Plans to be prepared for tourist.*

The proposed development is considered to be consistent with LPP 3.2.

Further comments:

Similar to the original approval for this development, the impact of approving amended operating hours to cater for a relatively high number of patrons is unknown. The officer is mindful that residential uses are being undertaken on adjacent properties.

The officer notes that the Lancelin Wind Festival 2023 will likely attract many tourists to the town and that the revised operating hours will provide a service to compliment that event, and that the land is zoned to contemplate such land uses.

Rather than amend condition 11 to enable year-round operating hours, the officer suggests that written authorisation be limited to coincide with the proposed event so that the restaurant operates as per the status quo for the remainder of the year. If impacts from this event are detrimental to surrounding properties, then the consideration of further events can be revisited.

Should the events be successful and have no detrimental impact, the officer has provided for authorisation to be given to the CEO to consider further requests in order to reduce processing timeframes and administrative burden.

Summary

In view of the above, the officer supports the applicant's request for revised operating hours during the Lancelin Wind Festival 2023.

STATUTORY/LOCAL LAW IMPLICATIONS

Planning and Development (Local Planning Scheme) Regulations 2015

Local Planning Scheme No. 9

POLICY IMPLICATIONS

State Planning Policy No. 2.6 – State Coastal Planning Policy

State Planning Policy No. 3.7 – Planning in Bushfire Prone Areas

Local Planning Policy 3.2 – Tourism Zone

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	1. Attractions & Economy - Actively Pursue Tourism and Economic Development
Strategic Objective	1.6 Attractions & Events - Host/support iconic community events and attractions that will entice residents and visitors throughout the year

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson

SECONDED: Councillor Peczka

That Council:

1. Agree to revise the operating hours for the restaurant (take-away coffee outlet) outlet on Lot 1 (86A) Gingin Road, Lancelin to permit the facility to open between the hours of 4pm – 8pm during the Lancelin Wind Festival 2023 (18 – 21 January 2023 - inclusive).
2. Authorise the CEO to provide written approval to the operator to vary the approved operating hours as required in circumstances where the extended operating hours are associated with an event.

CARRIED UNANIMOUSLY
7 / 0

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*





James Bayliss

From: [redacted]
Sent: Monday, 5 September 2022 12:54 PM
To: Gingin Shire Email
Cc: James Bayliss; Hole in the Van
Subject: FW: Pop up Events, Hole in the Van - Jan 2023
Attachments: Ext Trading Application.pdf

To Whom It May Concern,

Re – Pop Up Events at 86a Gingin Rd, Lancelin @ Hole in the Van.

With regards to the return of the Indian Ocean Classic in January 2023 – renamed as Lancelin Wind Festival – Hole in the Van as a major sponsor, is hoping to hold four evening pop-up events in conjunction with the Wind Festival from January 18th to 21st, inclusive.

The experience would be a sunset event on the lawn at 86a Gingin Rd, Lancelin (the location of the existing coffee outlet, Hole in the Van) from approx. 4pm – 9pm. Planning is in early stages, however, the event would include a proposed pop-up micro-brewery, as well as food service from a licenced food provider.

Licencing for the event will be sought from DLGSC – Racing, Gaming and Liquor – by the brewer; as well as myself (Hole in the Van) if we are to provide an alternative alcohol option to brewery.

The proposed event would be a 'boutique' experience with restricted numbers of approximately 100 people; as recommended by Racing, Gaming and Liquor, regarding the size of the venue and sanitary requirements.

Discussions with several Wind Festival committee members has so far brought positive feedback for the event. With the Festival bringing 200+ competitors to Lancelin, plus family members, this pop-up event offers another unique experience for tourists to the region.

Hoping you will consider our proposal, and we will hear from you soon.

Warm Regards,

Kate Bassham
0429 104 507
holeinthevan@yahoo.com


Hole in the Van

Click [here](#) to report this email as spam.

SCHEDULE OF SUBMISSIONS AND RECOMMENDED RESPONSES

DEVELOPMENT APPLICATION: PROPOSED EXTENDED TRADING HOURS (COFFEE VAN) ON LOT 1 (86A) GINGIN ROAD, LANCELIN

No.	Submitter	Submission details	Recommended response
1.	Ratepayer	<p>The submitter supports the proposal and provides the following general comment:</p> <p><i>"Agree with the proposal for extended trading hours during Lancelin Wind Festival 18-21 January 2023."</i></p>	Noted.

13.5 APPLICATION FOR DEVELOPMENT APPROVAL - PROPOSED STORAGE SHED ON LOT 13 PT 10 (35) GINGIN BROOK ROAD, COONABIDGEE

File	BLD/7461
Applicant	Barry Maguire
Location	Lot 13 Pt 10 (4/35) Gingin Brook Road, Coonabidgee
Owner	Danbar Super Pty Ltd
Zoning	Rural Industry
WAPC No	N/A
Author	Natasha Jurmann - Statutory Planner
Reporting Officer	Bob Kelly - Executive Manager Regulatory and Development Services
Refer	n/a
Appendices	<ol style="list-style-type: none"> 1. Location Map - Lot 10 (35) Gingin Brook Road, Coonabidgee [13.5.1 - 1 page] 2. Aerial Map - Lot 10 (35) Gingin Brook Road, Coonabidgee [13.5.2 - 1 page] 3. Applicant's Proposal [13.5.3 - 9 pages]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider an Application for Development Approval for a proposed storage shed at Lot 10 of Strata Plan 036598 (35) Gingin Brook Road, Coonabidgee.

BACKGROUND

The subject lot is within the Coonabidgee (Frogmore) Rural Industry Estate in a higher density strata titled development which appears as rural industrial shops and warehouse use. The landowner has recently started expanding their stockfeed business range, and is seeking approval for a new shed addition to their existing shop front. The applicant would like to match the existing structures as much as possible but tilt-up is prohibitive in cost, hence the request for Colorbond.

The applicant notes that they intend to expand the existing car park to the west and install an additional crossover to Gingin Brook Road for ease of ingress and egress. The new shed will be accessible via the existing sealed crossover from Gingin Brook Road.

The Application is being presented to Council for determination as it seeks to use Colorbond as a building material instead of tilt-up concrete panel, as per the adjoining units.

The Location Plan and Aerial Imagery proposal are provided as **Appendix 13.5.1 and 13.5.2.** respectively.

The applicant's proposal is provided as **Appendix 13.5.3.**

COMMENT

Stakeholder Consultation

The application was advertised to the adjoining landowner for a period of 14 days in accordance with clause 64 of the *Planning and Development (Local Planning Schemes) Regulations 2015*. No comments were received from the stakeholders.

PLANNING FRAMEWORK

Local Planning Scheme No. 9 (LPS 9) Planning Assessment

The subject lot is zoned Rural Industry under LPS 9, the objective of which is:

- a) provide for a range of industrial land uses on rural-living sized lots where people can work and live on the same property.*

Notably this locality within the Coonabidgee Rural Industry Estate is comprised of industrial development with a built and survey strata lot arrangement. The officer notes that this arrangement (albeit approved) is inconsistent with the Rural Industry zone and is more representative of the Mixed Business zone.

The relevant development standards for the Rural Industry zone are noted below:

4.8.4.1 Lot sizes shall be between 1 and 4 hectares.

Comment

As noted above the subject lot is approximately 3500m² in area among 13 other strata titled lots within a 2.5ha parent lot. As such the existing development is at a greater density (with respect to lot area) than was originally anticipated under the zoning.

4.8.4.3 Refuse Storage Areas

All developments shall provide at least one refuse storage area readily accessible to service vehicles and screened from view from a public street by a close fence, wall or screen landscaping no less than 1.8 metres in height.

Comment

Noted, to be offered as a condition of approval should Council support the proposal.

4.8.4.4 Storage Yards

A person shall not use land for open storage purposes unless it is screened from public view by a fence or wall to the satisfaction of the local government.

Comment

Noted, to be offered as a condition of approval should Council support the proposal.

Rural Industry General Development Requirements

The Rural Industry zone applies a 20m development setback to the front, side and rear lot boundaries in accordance with the low-density development sought upon initial estate subdivision and zoning.

Whilst the proposal proposed a 1m setback from the strata boundary this is considered acceptable as it is significantly further from the parent lot boundary and consistent with the existing development located on the lot. This is influenced by the small lot area with respect to what is anticipated for the Rural Industry zone. As such, meeting the site requirements for the zoning is impractical.

Throughout the entirety of the strata plan, the development density and built form matches that of a Light Industry/Mixed Business zone. This subdivision may have been influenced by the absence of industrial zoned land for the Gingin townsite. As such, this strata plan to some extent provides the only industrial sized and appropriately zoned land in proximity to the town.

Parking requirements

LPS 9 affords car parking requirements for specific land uses. In this instance the Warehouse/Storage land use is afforded a car parking requirement of 1 car parking space (cps) per 100m² of gross leasable area.

The proposed Shed is 340m² in area and therefore requires 3.4 car parking spaces for the development.

Clause 4.7.2.1 of LPS 9 also notes the following:

- i. no land or buildings shall be developed unless provision is made for an area clear of the street for the purpose of loading or unloading goods or materials.*
- ii. the local government will seek to ensure that the majority of servicing vehicles will be able to leave and enter the street in a forward direction.*

- iii. parking, loading and unloading and access, complete with necessary drainage, signs and marking as required by the local government, shall be provided prior to any occupation of the development or at such time as may be agreed in writing between the local government and the developer.*
- iv. external servicing areas shall be established and maintained to the satisfaction of the local government.*

With respect to the above parking provisions the officer notes that with the proposed additional parking and crossover, there will be substantial space for vehicle manoeuvring, access and unloading to the front and rear of the proposed storage shed.

Strata Titling

While the subject lot is strata titled, the officer notes that the landowner will not be able to successfully strata title the new storage shed as a new part on the Strata Plan. The lot area does not meet the required 1ha minimum as prescribed under the development standards.

The existing strata title arrangement is not sufficient grounds to support further intensification of the strata title arrangement along Gingin Brook Road.

As such the officer acknowledges that the proposed storage shed will only have the capacity for lease arrangements. The above is summarised as an Advice Note in the officer's recommendation.

Further Comment

Ideally the officer would have liked to see the new structure match the existing tilt-up, but as we do not have any specific requirements in our scheme to request this and due to the substantial cost of tilt-up compared to Colorbond, the officer feels the request is acceptable in this instance.

Summary

While the proposal seeks a different material to the other structures in the row, the proposed materials do match the other structures in the area. The reduced setback to the strata boundary will not impact the overall area and is consistent with the existing development. Due to these factors, the officer is recommending approval.

STATUTORY/LOCAL LAW IMPLICATIONS

Planning and Development (Local Planning Schemes) Regulations 2015

Shire of Gingin Local Planning Scheme No. 9

POLICY IMPLICATIONS

Nil

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2019-2029

Focus Area	Infrastructure and Development
Objective	3. To effectively manage growth and provide for community through the delivery of community infrastructure in a financially responsible manner
Outcome	3.1 Development New and existing developments meet the Shire's Strategic Objectives and Outcomes
Key Service Area	Building And Planning Permits
Priorities	N/A

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Balcombe

SECONDED: Councillor Johnson

That Council grant Development Approval for a proposed Storage Shed at Lot 13 Pt 10 Gingin Brook Road, Coonabidgee subject to the following conditions:

1. The land use and development shall be undertaken in accordance with the approved plans and specifications, including any directions written in red ink by the Shire, unless otherwise conditioned in this Approval;
2. This approval is for a Storage Shed only as indicated on the approved plans;
3. The finished floor level of the Storage Shed must be set at the existing natural ground level to the satisfaction of the Shire of Gingin;
4. The Storage Shed is not to be used for human habitation;
5. The proposed Storage Shed is to be built in a similar colour to the existing structures that it will abut;

6. Stormwater from all roofed and paved areas shall be collected and contained onsite to the satisfaction of the Shire of Gingin;
7. Prior to commencement of the approved use, the car parking and manoeuvring areas shall be constructed and sealed in accordance with the approved plans and maintained in a good condition thereafter to the satisfaction of the Shire of Gingin; and
8. Goods or materials must not be permanently stored within the areas dedicated to parking, landscaping or vehicle maneuvering.

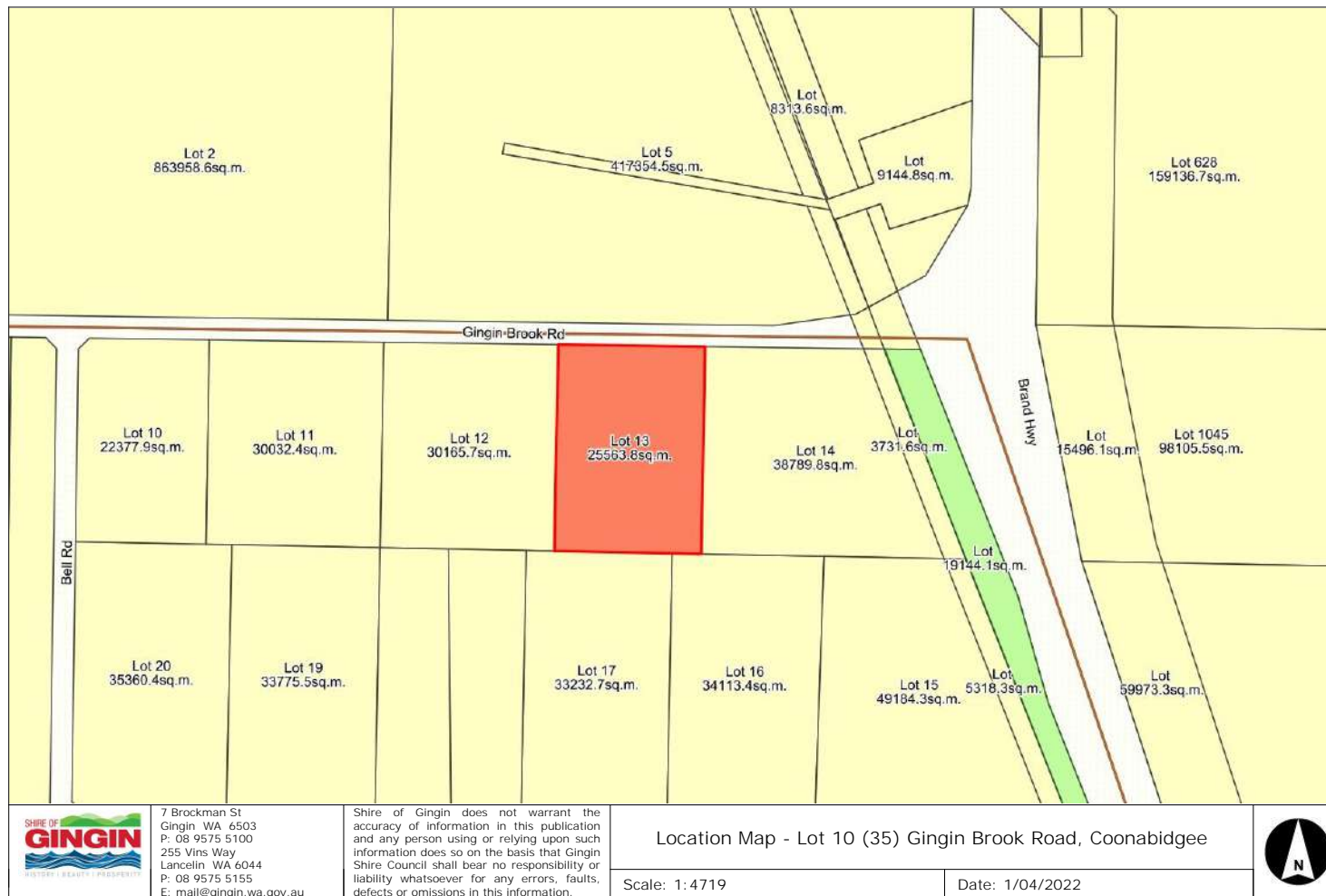
Advice Notes:

- Note 1: If you are aggrieved by the conditions of this approval, you have the right to request that the State Administrative Tribunal (SAT) review the decision, under Part 14 of the *Planning and Development Act 2005*.
- Note 2: This approval is valid for a period of two years. If it is not substantially commenced within that period, then the approval shall lapse.
- Note 3: Where an approval has so lapsed, no development may be carried out without further approval of the local government having first been sought and obtained.
- Note 4: Further to this approval, the applicant is required to submit working drawings and specifications to comply with the requirements of the *Building Act 2011*, which are to be approved by the Shire of Gingin.
- Note 5: This approval shall not be construed as an approval or support of any kind for any other planning related application (including subdivision) on the subject land.
- Note 6: Any proposal to create a new strata titled lot for the new storage shed will not be supported by the Shire of Gingin.

CARRIED UNANIMOUSLY
7 / 0

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*





Unit 4/35 Gingin Brook Road, Coonabidgee WA 6503

3.7 Location and neighbourhood

CAR PK



DRIVEWAYS

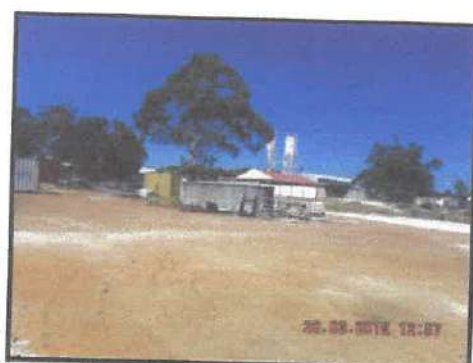
Property is located in "Gingin Service Area" close to well-established residential areas and approximately 85 kilometres north of the Perth Central Business District.

The subject development is located on through road between Brand Highway and Indian Ocean Road.

Development comprises of 6 strata warehouse units. Subject unit is located in the development of 4 similar units which face Gingin Brook Road and has good exposure from passing traffic.



Unit 4/35 Gingin Brook Road, Coonabidgee WA 6503



Unit 4/35 Gingin Brook Road, Coonabidgee WA 6503

TO THE PLANNING DEPT

THE USE OF THE SHED WILL BE FOR THE USE
OF STORAGE & SALES OF PRODUCT FOR GINGIN
STOCK FEEDS.

AND THE REASON FOR COLOUR BOND AND NOT
TILT PANELS IS PRICE AS I HAVE A SMALL
BUDGET THAT WILL COVER COLOUR BOND.

REGARDS BARRY MACQUEEN

P: 0409 670 448



Doc No: ICP230754
File: A6659
Date: 01 AUG 2022
Officer: KW:HENATHANRUSSELL;JAMESB
Disposal: A

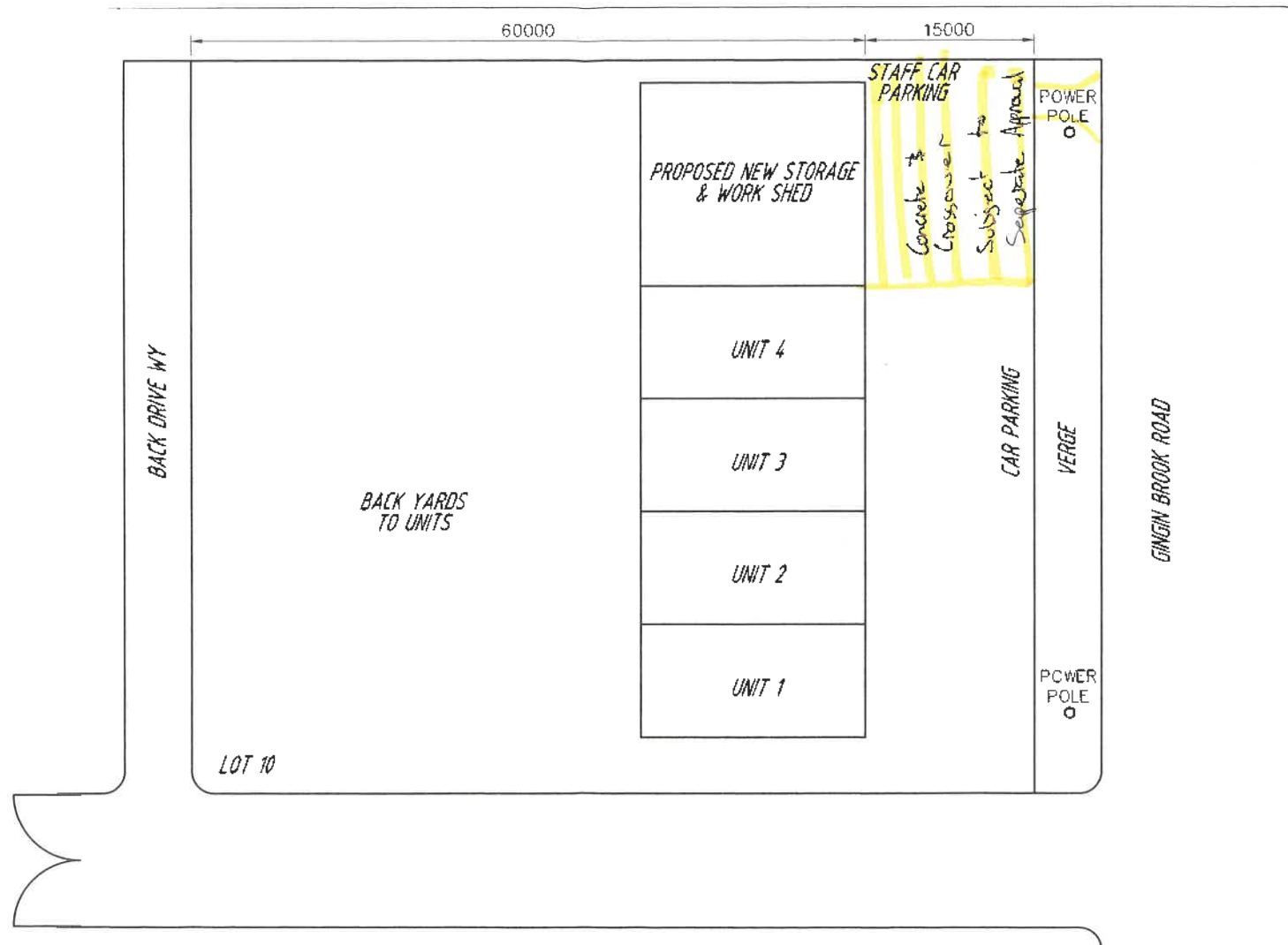
A6659 8/35 GINGINBROOK.

PLANE P2345

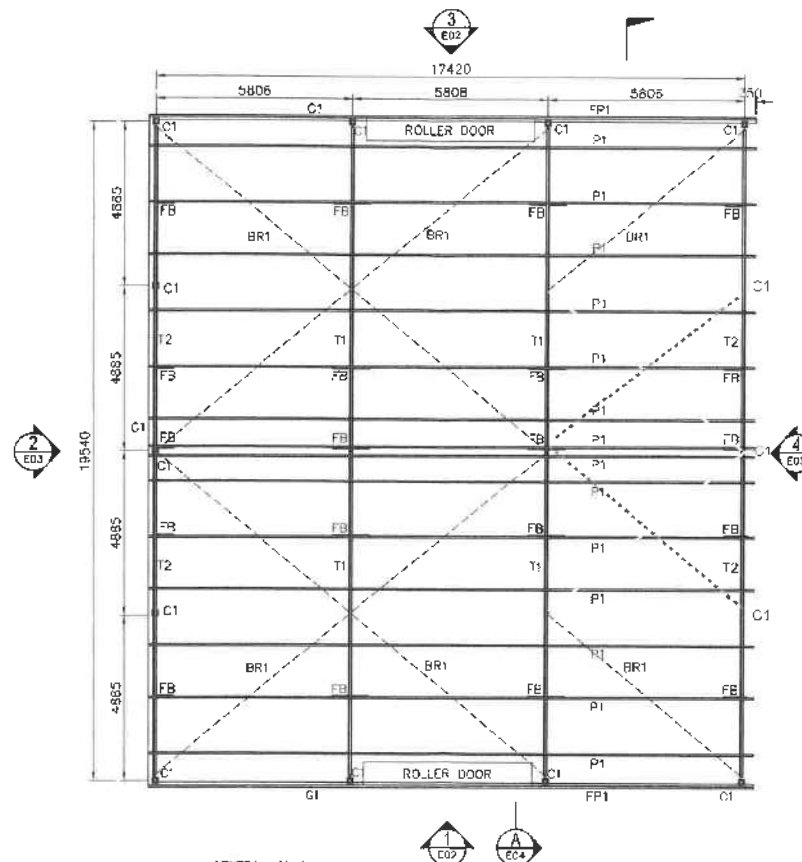
SUBJECT FOR FRONT OF BUILDING

CONCRETE PAD & CROSSOVER HAS BEEN APPROVED
AND DELIVERY TRUCKS UNLOAD IN SHED OR
~~FRONT~~ BACK OF BUILDING.

COLOR BOND WILL BE COLOR MATCHED TO EXISTING
BUILDING.



REV -0	DATE 1/3/2022	SITE PLAN 636-E07	PROJECT PROPOSED GP STORAGE SHED 4/35 GINGIN BROOK ROAD GINGIN	CLIENT GINGIN STOCK FEEDS	DESIGNER PURE STEEL SHEDS CONSTRUCTION	NICKAD	DESIGN DRAFTING P.O. Box 200 Maitland NSW 2320
-----------	------------------	----------------------	-------------------------------------------------------------------------	------------------------------	-------------------------------------------	--------	---------------------------------------------------



GENERAL NOTES

- 1 ALL WORK TO CONFORM WITH THE BCA
- 2 SITE TO BE CLEARED OF VEGETATION & UNSTABLE MATTER
- 3 FOUNDATION SOIL TO BE COMPACT (90% MOD DRY DENSITY)
- 4 DRAIN SURFACE & ROOF RUNOFF AWAY FROM FOUNDATIONS

GENERAL NOTES STEEL

- 1 CHECK ALL DIMENSIONS ON SITE
- 2 ALL FABRICATION OF STEELWORK SHALL COMPLY WITH AS1250 & AS1554
- 3 ALL WELDING TO COMPLY WITH AS 1554
- 4 MINIMUM WFLDS TO BE 6mm FILLET CONTINUOUS
- 5 CORRECT ALL MEMBER DISTORTIONS BEFORE & AFTER WELDING
- 6 PROVIDE ALL CLEATS BRACKETS WELDING & FILLING TOGETHER WITH ANY TEMPORARY BRACING FOR THE COMPLETION OF THE BUILDING
- 7 ALL NUTS & BOLTS SHALL BE GALVANIZED UNLESS STATED OTHERWISE
- 8 ALL RHS & SHS SECTIONS TO BE DURAGAL (C450)
- 9 SEAL ALL OPEN ENDS OF RHS & SHS SECTIONS
- 10 PURLINS TO BE FIXED ACCORDING TO MANUFACTURERS RECOMMENDATIONS
- 11 PURLIN & GIRT SPACING TO SUIT CLADDING
- 12 WALL & ROOF SHEETING TO BE FIXED ACCORDING TO MANUFACTURERS RECOMMENDATIONS

PROMPT
DESIGN & CONSTRUCTION
W. CHAPMAN ENGINEER & ARCHITECT
P.O. BOX 1000, 1511-1512-1513

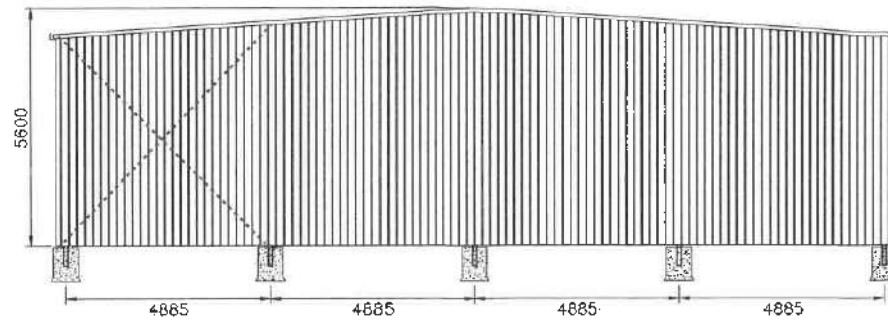
LEGEND

- C1 COLUMN 100x4 SHS
 - T1 TRUSS REFER E04/5
 - B1 BEAM REFER E04/5
 - P1 PURLIN 150x15
 - FP1 FASCIA PURLIN 150x15
 - G1 WALL GIRT 150x15
 - BR1 BRACING 160 TENSIONED ROD
 - FB FLY BRACE 32x3 FL
- ROOF PURLINS TO BE LAPPED 900 AND BRIDGED CENTRALLY
SINGLE SPAN 5806 LONG WALL GIRTS TO BE DOUBLE BRIDGED. OTHER GIRTS NO BRIDGING REQUIRED.

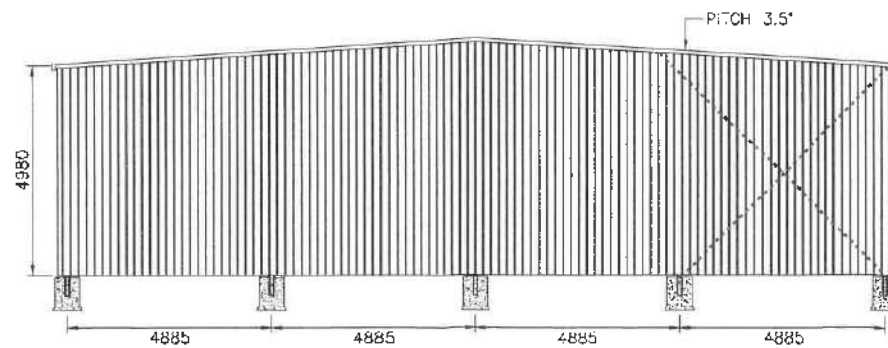
REV	DATE	DESCRIPTION	PROJECT	SHEET
0	14/12/22	636-E01	PROPOSED GP STORAGE SHED 4/35 GINGIN BROOK ROAD GINGIN	GINGIN STOCK FEEDS PURE STEEL SHEDS CONSTRUCTION

NICKAD

DESIGN DRAWING
P.O. BOX 300, HATHORN VIC 3001



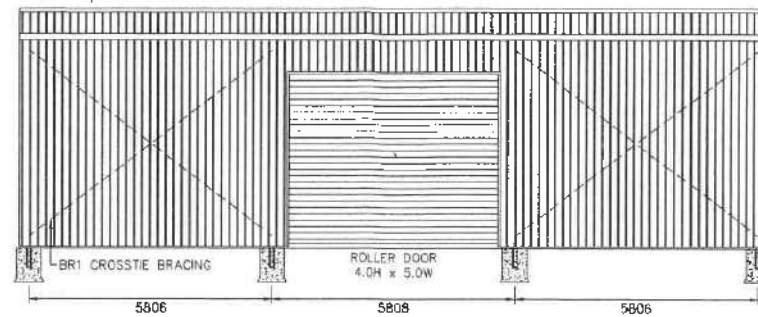
ELEVATION 2
E01



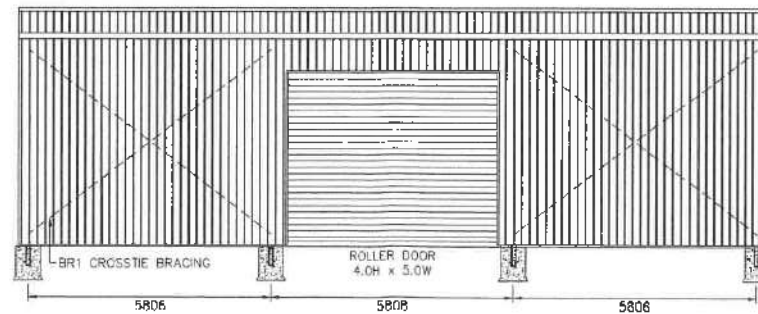
ELEVATION 4
E01

PROMPT *Michael Young*
P.O. Box 208 Gungahlin ACT 2901
MICHAEL YOUNG DESIGN & ARCHITECTURE
P.O. Box 208 Gungahlin ACT 2901

REV 0	NO ELEVATIONS 2 & 4 DATE: 10/10/22 636-F03	PROJECT PROPOSED GP STORAGE SHED 4/35 GINGIN BROOK ROAD GINGIN	CLIENT GINGIN STOCK FEEDS DRAWN PURE STEEL SHEDS CONSTRUCTION	NICKAD DESIGN DRAFTING P.O. Box 208 Gungahlin ACT 2901
----------	--------------------------------------------------	-------------------------------------------------------------------------	------------------------------------------------------------------------	------------------------------------------------------------------



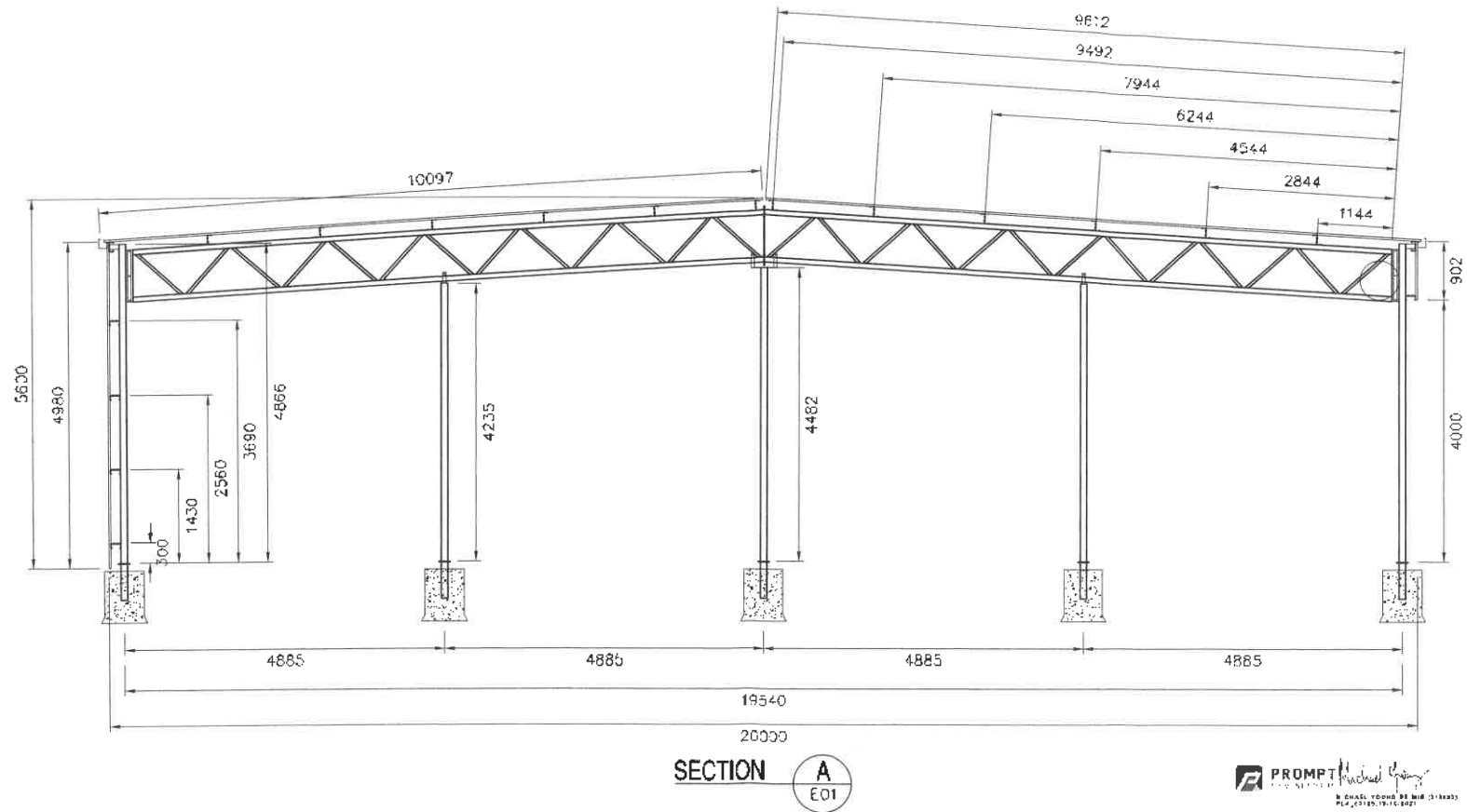
ELEVATION 1
E01



ELEVATION 3
E01

PROMPT *Michael Younis*
ELEVATION 1
MICHAEL YOUNIS ENGINEERING (1770623)
P.O. Box 306 Merton St. 4007

REV 0	Site ELEVATIONS 1 & 3 scale 1:100 636-E02	project PROPOSED GP STORAGE SHED 4/35 GINGIN BROOK ROAD GINGIN	client GINGIN STOCK FEEDS	builder PURE STEEL SHEDS CONSTRUCTION	NICKAD DESIGN DRAFTING P.O. Box 306 Merton St. 4007
----------	-------------------------------------------------	-------------------------------------------------------------------------	------------------------------	------------------------------------------	---------------------------------------------------------------



REV 0	004 scale 1:60	SECTION A 636-E04	project PROPOSED GP STORAGE SHED 4/35 GINGIN BROOK ROAD GINGIN	client GINGIN STOCK FEEDS	sub-client PURE STEEL SHEDS CONSTRUCTION	NiCKAD DESIGN DRAWING P.A. No. 200 (March 2001)
----------	-------------------	----------------------	-------------------------------------------------------------------------	------------------------------	---------------------------------------------	-------------------------------------------------------

13.6 APPLICATION FOR DEVELOPMENT APPROVAL - PROPOSED TELECOMMUNICATIONS FACILITY ON LOT 451 (15) KING STREET, LANCELIN

File	BLD7525
Applicant	Ventia Pty Ltd
Location	Lot 451 (15) King Street, Lancelin
Owner	Telstra Corporation Ltd
Zoning	Mixed Business
WAPC No	NA
Author	James Bayliss – Coordinator Statutory Planning
Reporting Officer	Bob Kelly - Executive Manager Regulatory and Development Services
Refer	Nil
Appendices	<ol style="list-style-type: none"> 1. Location Map - Lot 451 (15) King Street, Lancelin [13.6.1 - 1 page] 2. Aerial Map - Lot 451 (15) King Street, Lancelin [13.6.2 - 1 page] 3. Applicant's Proposal [13.6.3 - 81 pages] 4. Schedule of Submissions and Recommended Responses (1) [13.6.4 - 1 page]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider an Application for Development Approval for a proposed Telecommunications Facility on Lot 451 (15) King Street, Lancelin.

BACKGROUND

The subject property is known by Amplitel as the 'Lancelin exchange' and is within a fenced lot, 259m² in area. The site currently contains an existing 26.9m high lattice tower, equipment shelter, toilet block, soak well and fibre pits/manhole.

Adjacent land to the east consists of the mixed business area while land to the west consist of residential properties. The nearest residence is approximately 30 metres to the west.

The scope of works for the proposed telecommunication facility is as follows:

- Decommissioning and removal of the existing 26.9m high lattice tower;
- Installation of one (1) temporary 23.5m mast structure during construction phase;
- Installation of one (1) new 40m high monopole;

- Installation of one (1) circular headframe;
- Installation of six (6) new panel antennas (no greater than 2.8m in length);
- Installation of 1 Amplitel equipment shelter that is not more than 3m high with an area of not more than 7.5m² at the base of the aforementioned tower;
- Installation of associated ancillary cabling and equipment.

Given that the existing chain mesh fencing surrounding the facility is dilapidated, the applicant confirms that the existing fence will also be replaced either during or shortly after construction of the infrastructure.

A location plan and aerial photograph are provided as **Appendix 13.6.1** and **Appendix 13.6.2** respectively.

A copy of the Applicant's Proposal is provided as **Appendix 13.6.3**.

COMMENT

Stakeholder Consultation

The application was advertised in accordance with clause 64 of the *Planning and Development (Local Planning Scheme) Regulations 2015*. Landowners within a 200 metre radius were afforded 28 days to provide comment. The Shire received one general comment in relation to an Osprey nest that is located on top of the existing tower, and one objection to the development.

The application was also advertised to the following State agencies for a period of 42 days in accordance with clause 66 of the *Planning and Development (Local Planning Scheme) Regulations 2015*:

- Department of Health (DoH);
- Department of Defence (DoD); and
- Civil Aviation Safety Australia (CASA).

No objections from State agencies were received.

A copy of the Schedule of Submissions and Recommended Responses is provided as **Appendix 13.6.4**.

PLANNING FRAMEWORK

Local Planning Scheme No. 9 (LPS 9) Planning Assessment

The subject land is zoned Mixed Business under LPS 9, the objectives of which are to:

- a) *accommodate commercial activities which, because of the nature of the business, require good vehicular access and/or large sites;*

- b) *provide for a wide range of light and service industries, wholesale sales, showrooms, trade and services which, by reason of their scale, character, operational or land requirements, are not generally appropriate in, or cannot conveniently or economically be accommodated in, the central area, shops and offices or industrial zones;*
- c) *allow for commercial and light industrial uses that are compatible with nearby uses;*
- d) *provide for the efficient and safe movement and parking of vehicles;*
- e) *encourage new development that will enable future adaptation and re-use, and will enhance the visual amenity of the area; and*
- f) *ensure that where any development adjoins zoned or developed residential properties, such development is suitably set back, screened or otherwise treated so as not to detract from the residential amenity.*

'Telecommunications Infrastructure' is a 'D – discretionary' use in the mixed business zone, and is defined under LPS 9 as:

Land used to accommodate any part of the infrastructure of a telecommunications network and includes any lines, equipment, apparatus, tower, antenna, tunnel, duct, hole, pit or other structure used, or for use in or in connection with, a telecommunications network.

Telecommunications Act 1997

The *Telecommunications Act 1997* requires that the installation of telecommunications facilities, apart from specified facilities and activities, must comply with state planning and environmental legislation. This means that unless exempted by legislation or a planning scheme, telecommunications facilities in Western Australia require development approval prior to installation.

Exemptions under the *Telecommunications Act 1997* include:

1. *A low impact facility described in the Telecommunications (Low Impact Facilities) Determination 1997 (the Determination) and all existing and future amendments to the Determination, when installed by a carrier;*
2. *Inspection and maintenance;*
3. *A temporary defence facility; and*
4. *A facility authorised by a Facilities Installation Permit issued under the Telecommunications Act 1997.*

Given no exemptions are applicable in this instance, development approval is required.

Planning and Development (Local Planning Scheme) Regulations 2015 (the Regulations)

The Regulations are subsidiary legislation created under the *Planning and Development Act 2005* that include 'Deemed Provisions' which apply to every local planning scheme throughout the State.

In accordance with Schedule 2, Part 9, Clause 67 of the Deemed Provisions, the local government is to have due regard to a range of matters to the extent that, in the opinion of the local government, those matters are relevant to the development the subject of the application. In this instance, the following matters are considered to be relevant:

c) Any approved State Planning Policy

State Planning Policy 5.2 – Telecommunications Infrastructure (SPP 5.2)

SPP 5.2 contains the following provisions for Council to consider:

5.1 Visual impacts

For telecommunications infrastructure to be effective, structures are generally located prominently, at high points in the landscape or on top of buildings, where they are more likely to be visible to the public.

The planning authority may exercise discretion in addressing the visual impacts of telecommunications infrastructure. Visual impacts of an infrastructure development proposal should be assessed by applying the following set of policy measures to guide the location, siting and design of the structure.

5.1.1 - The benefit of improved telecommunications services should be balanced with the visual impact on the surrounding area.

- i. Assessment of the visual impact of development proposals for telecommunications infrastructure should be made on a case-by-case basis;*
- ii. Telecommunications infrastructure should be sited and designed to minimise visual impact and whenever possible:*
 - a. Be located where it will not be prominently visible from significant viewing locations such as scenic routes, lookouts and recreation sites;*
 - b. Be located to avoid detracting from a significant view of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land;*

- c. Not be located on sites where environmental, cultural heritage, social and visual landscape values maybe compromised; and*
 - d. Display design features, including scale, materials, external colours and finishes that are sympathetic to the surrounding landscape;*
 - iii. In addition to the existing exemptions under the Telecommunications Act, Local Governments should consider exempting telecommunications infrastructure from the requirement for development approval where:*
 - a. The infrastructure has a maximum height of 30 metres from finished ground level;*
 - b. The proposal complies with the policy measures outlined in this policy; and*
 - c. The proponent has undertaken notification of the proposal in a similar manner to 'low impact facilities' as defined and set out in the Mobile Phone Base Station Deployment Industry Code (C564:2011);*
 - iv. Telecommunications infrastructure should be located where it will facilitate continuous network coverage and/or improved telecommunications services to the community; and*
 - v. Telecommunications infrastructure should be co-located and whenever possible:*
 - a. Cable and lines should be located within an existing underground conduit or duct; and*
 - b. Overhead lines and towers should be co-located with existing infrastructure and/or within existing infrastructure corridors and/or mounted on existing or proposed buildings.*

Officer Comment:

Particular consideration is afforded to balancing visual impacts and locating infrastructure to ensure optimum network coverage. The main visual consideration relates to the pole itself, with the incidental infrastructure at the base of the pole being largely uncontentious.

The applicant has provided justification in relation to the visual prominence of the pole in its context, and rather than the officer paraphrase, the wording is outlined below:

The subject lot in its present state comprises a 26.9m lattice tower, an exchange building and a toilet block in terms of its above ground features. As a result, Amplitel consider the existing telecommunications site as already relatively disturbed land, harbouring some level of visual impact to the community. It is therefore Amplitel's intention that this site can be re-used for telecommunication facilities without unacceptably further impacting the nearest residences and community.

As there is the onus on Amplitel to ensure that their structures can adequately support the future co-location of facilities by other carriers and enable them to provide a sufficient level of coverage, Amplitel cannot replace the existing 26.9m lattice tower with a like-for-like structure standing at the same height. Given that the proposed 40m concrete monopole tower will be approximately 13m taller in height than the decommissioned and removed 26.9m lattice tower, the towers comparatively slimmer build and incorporation of a narrower circular headframe, as opposed to a robust triangular headframe, are seen to be elements compensating for the sites increased tower height.

The proposed 40m concrete monopole will also remain unpainted (dull grey in colour) so that it blends in with the sky and will be positioned approximately where the existing 26.9m lattice tower is.

As Lancelin has a relatively flat terrain and sparse distribution of shrubbery, with predominantly low rise and low-density premises, the replacement of the 26.9m lattice tower with the 40m concrete monopole is not anticipated to disturb any new residences or community sensitive places of interest in the area, other than residences already presently disturbed.

To view the entirety of the applicant justification, section 13.1 of the Applicant's proposal refers. The officer concurs with the summary provided, and forms the view that the proposed infrastructure, although it will be highly visible, will not significantly depart from the visual amenity created by the existing infrastructure.

Given the topography of the land and the height of the monopole, it is inevitable that the telecommunications infrastructure will be visible from the surrounding locality. The proposed location is not considered to detract from views of significance, which are predominantly ocean views to the west of the existing residential areas.

Health Impact

Amplitel, along with other mobile providers, must adhere to Commonwealth legislation and regulations regarding telecommunication facilities which are administered by the Australian Communications and Media Authority (ACMA). In 2003 ACMA adopted a technical standard for exposure to electromagnetic energy (EME) with a significant safety margin, or precautionary approach.

The applicant has supplied an EME report for the subject lot which demonstrates that exposure to EME is limited.

Further comment:

The officer notes that the existing infrastructure contains an osprey nest that currently contains chicks (as advised by a submitter). The applicant has indicated that the nest will be relocated onto the proposed structure and that construction works can be scheduled outside of the hatching season. The precise details in relation to relocating the nest is unknown at the time of writing this report, as the situation is somewhat unusual, however a condition has been imposed to ensure the nest is safeguarded.

Summary

In summary, the application is recommended to be supported on the basis that the subject site is deemed to be a suitable location to achieve the required coverage with limited impacts on the amenity of the locality. The proposal is viewed as satisfying LPS 9 and the relevant planning framework.

STATUTORY/LOCAL LAW IMPLICATIONS

Local Planning Scheme No. 9

Telecommunications Act 1997

Telecommunications (Low Impact Facilities) Determination 1997 (Commonwealth)

POLICY IMPLICATIONS

State Planning Policy 5.2 – Telecommunications Infrastructure

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	3. Planning & Sustainability - Plan for Future Generations
Strategic Objective	3.3 Planning & Land Use - Plan the use of the land to meet future requirements incorporating economic development objectives and community amenity

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson

SECONDED: Councillor Sorensen

That Council grant Development Approval for the proposed Telecommunications Facility on Lot 451 (15) King Street, Lancelin subject to the following conditions:

1. The land use and development shall be undertaken in accordance with the approved plans unless conditioned otherwise in this Approval;
2. This Approval is for a Telecommunication Facility only;
3. Prior to operation of the development, the existing chain mesh fencing around the property is to be removed and replaced;
4. As constructed details must be provided to Air Services Australia in accordance with the requirements of the Department of Defence;
5. The operator/landowner shall ensure that the amenity of the area is not adversely affected by noise and dust emissions during the construction stage; and
6. Prior to the commencement of siteworks, the landowner/applicant shall demonstrate to the Shire of Gingin that the existing Osprey Nest attached to the existing tower will be adequately relocated and safeguarded to the satisfaction of the Shire of Gingin.

Advice Notes

Note 1: If you are aggrieved by the conditions of this approval, you have the right to request that the State Administrative Tribunal (SAT) review the decision under Part 14 of the *Planning and Development Act 2005*;

Note 2: If the development subject to this approval is not substantially commenced within a period of two years, the approval shall lapse and have no further effect;

Note 3: Where an approval has so lapsed, no development may be carried out without further approval of the local government having first been sought and obtained;

Note 4: Further to this approval, the applicant is required to submit working drawings and specifications to comply with the requirements of the *Building Act 2011* and *Health Act 2016*, which are to be approved by the Shire of Gingin;

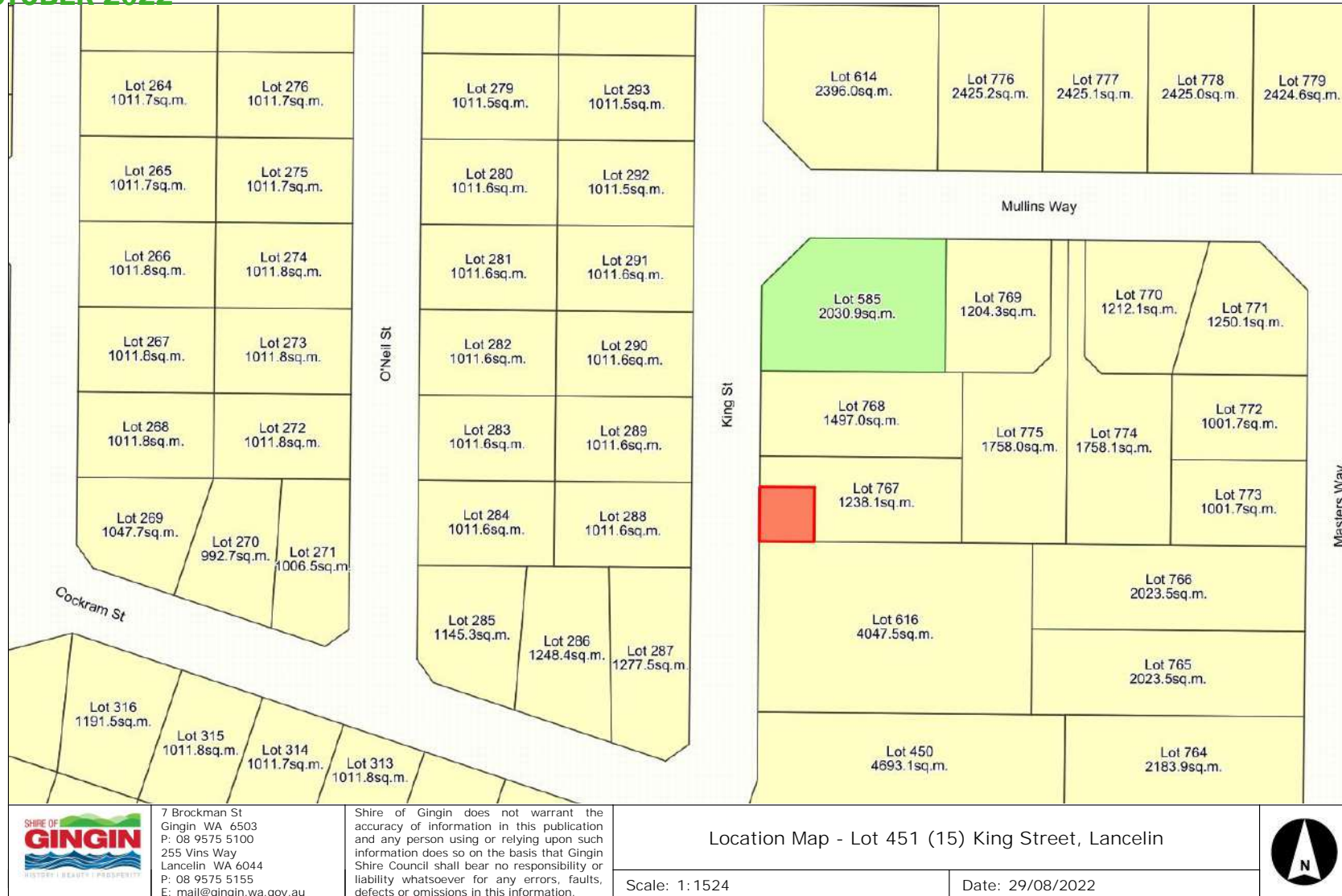
Note 5: The proposed tower will need to comply with any Air Services Australia / Department of Defence regulations in relation to tall structure requirements;

Note 6: Given the telecommunications infrastructure is a 'tall structure', you may be required to provide Civil Air Services Australia (CASA) 'as constructed' details for aviation safety. This may also include the installation of obstacle lighting to indicate the presence of the mast at night. Please contact CASA for further information.

**CARRIED UNANIMOUSLY
7 / 0**

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*





PLANNING ASSESSMENT REPORT

Planning Permit Application for a Telecommunications Facility

**15 King Street, Lancelin WA 6044
(Lot 451 on Deposited Plan 173799)**

**Prepared by Ventia Pty Ltd
On behalf of Amplitel**

**Project No: WA09732.01
August 2022**





CONTENTS

1.0	EXECUTIVE SUMMARY	1
1.1	Site and Proposal Details.....	1
1.2	Applicant Details.....	1
2.0	INTRODUCTION	2
3.0	PROPOSED SCOPE OF WORKS.....	2
4.0	PURPOSE OF THE PROPOSAL	3
5.0	THE NEED FOR THE PROPOSAL	4
6.0	MOBILE TELECOMMUNICATIONS NETWORKS	5
7.0	SITE SELECTION PROCESS	6
8.0	CANDIDATE SITES	6
8.1	Colocation opportunities	7
8.2	Candidates considered	8
8.3	Nominated Candidate	11
8.4	Site context	12
8.5	Site details	13
9.0	PROPOSAL DETAILS	17
9.1	Facility and Equipment Overview	17
9.2	Access, traffic and parking	17
9.3	Utilities	19
9.4	Construction schedule	19
9.5	Acoustic	19
10.0	RELEVANT FEDERAL LEGISLATION	20
10.1	Telecommunications Act 1997	20
10.2	Telecommunications Code of Practice 2018.....	20
10.3	Telecommunications (Low-impact Facilities) Determination 2018	21
10.4	Communications Alliance Ltd. Industry Code C564: 2020 – Mobile Phone Base Station Deployment.....	21
10.5	Environment Protection and Biodiversity Conservation Act 1999	22
10.6	Native Title Act 1993	22
11.0	STATE REGULATORY FRAMEWORK	23
11.1	Aboriginal Heritage Act 1972	23
11.2	Planning and Development Act 2005.....	24
11.3	State Planning Policy No. 5.2 – Telecommunications Infrastructure (WAPC)	25
11.4	Statement of Planning Policy No. 5.2 – Telecommunications Infrastructures (WAPC)	26
12.0	LOCAL REGULATORY FRAMEWORK	30
12.1	Shire of Gingin Local Planning Scheme No. 9	31
12.2	Mixed Business Zone Objectives and Site Requirements	32
13.0	GENERAL PROVISIONS	33



13.1	Visual Impacts	33
13.2	Heritage	35
13.3	Flora and Fauna.....	36
13.4	Bushfire	36
13.5	Health and Safety	37
13.6	Social and Economic Impact	38
14.0	CONCLUSION	38
	APPENDIX A – PLANS OF THE PROPOSAL	40
	APPENDIX B – CERTIFICATES OF TITLE	41
	APPENDIX C – ENVIRONMENTAL ANALYSIS REPORT	49
	APPENDIX D – EME REPORT	55
	APPENDIX E – GUIDE TO EME REPORT.....	55



Document Quality Control

This Planning Assessment Report is prepared by:

Ventia Pty Ltd

ABN 51 603 146 676

Postal Address:

PO Box 5452

West End QLD 4101

P (02) 6124 4423

W www.ventia.com

Document Control				
Rev	Date	Status	Prepared by	Reviewed by
0.1	11/08/2022	Draft	MB	PA
1.0	25/08/2022	Final	MB	PA

Disclaimer:

Ventia Pty Ltd does not accept any risk or responsibility for a third party using this document, unless written authorisation is provided by Ventia Pty Ltd.



1.0 EXECUTIVE SUMMARY

1.1 Site and Proposal Details

Address of Site	15 King Street, Lancelin WA 6044.
Legal Property Description	Lot 451 on Deposited Plan 173799
Coordinates	-31.020850, 115.336900
Site Area	258.999m ²
Registered Owner	Telstra Corporation Limited
Local Authority	Shire of Gingin
Proposal	40m high monopole tower, six (6) panel antennas on a circular headframe, one (1) equipment shelter not more than 3m high with a base area of not more than 7.5m ² at the base of the tower and ancillary equipment. This is to be installed within the existing fenced compound 16.1m x 15.7m in length.
Planning Instrument	Shire of Gingin Local Planning Scheme No. 9
Zone	Mixed Business
Overlays	None
Application seeking	Development permit for a Telecommunications Facility
Use definition	Telecommunications Facility

1.2 Applicant Details

Applicant	Amplitel C/- Ventia Australia Pty Ltd
Contact Person	Marc Bays (02) 6124 4423 Marc.bays@ventia.com
Our Reference	WA09732.01 Lancelin Exchange



2.0 INTRODUCTION

This report has been prepared by Ventia on behalf of Amplitel as supporting information to a Planning Permit Application for the works and use of a Telecommunications Facility at 15 King Street, Lancelin WA 6044. The property is formally described as Lot 451 on Deposited Plan 173799.

Amplitel, a new company part of the Telstra Group is currently undertaking work across Australia to support and expand the new mobile phone infrastructure and coverage for Telstra and other Carrier to improve customer experience through faster and more reliable voice and data services.

Due to an industry-specific network requirement, Amplitel have identified the need to install a telecommunications facility on the site to improve both voice and data services within the surrounding area. Furthermore, the facility will provide 4G and 5G services to the surrounding Lancelin area.

All mobile phone network operators are bound by the operational provisions of the federal *Telecommunications Act 1997* ("The Act") and the *Telecommunications Code of Practice 2018*. The proposed telecommunications facility installation is not defined as a low-impact facility and is therefore subject to relevant State and local planning provisions.

An extensive site selection process has been completed prior to selecting the subject site as the nominated candidate for a new Telecommunications Facility. This site selection process included considering a variety of factors including planning scheme considerations technical and coverage objectives, cost considerations, land tenure, visual impact and engineering/design criteria. The site was selected as the most appropriate location based on the above considerations, which are outline in **Section 2** of the report.

The proposal is subject to the provisions of the WA Planning and Development Act 2005 and the provisions of the *Shire of Gingin Local Planning Scheme No. 9*.

3.0 PROPOSED SCOPE OF WORKS

The proposal is inclusive of the following scope of works:

- Decommissioning and removal of one (1) existing 26.9m high lattice tower;
- Installation of one (1) temporary 23.5m mast structure during construction phase;
- Installation of one (1) new 40m high monopole;
- Installation of one (1) new circular headframe;
- Installation of six (6) new panel antennas (no greater than 2.8m in length);
- Installation of one (1) Telstra Equipment Shelter that is not more than 3m high with a base area of not more than 7.5m² at the base of the aforementioned tower; and
- Installation of associated ancillary cabling and equipment.

Refer to Plans attached in **Appendix A** for further details and **Appendix B** for Land Titles.

All mobile phone network operators are bound by the operational provisions of the Federal Telecommunications Act 1997 (the "Act") and the Telecommunications Code of Practice 1997. The proposed telecommunications facility installation **is not defined as a low-impact facility** and is therefore subject to relevant State and local planning provisions.



Pursuant to the *Planning and Development Act 2005 (PDA)*, the proposal constitutes a change of use and requires a development application to be made to the Shire of Gingin Council (**Council**) for approval.

The proposal is subject to the *Shire of Gingin Local Planning Scheme No. 9* (the **local planning scheme**). The proposal has addressed the applicable provisions of the planning scheme in **Section 11** of this report.

Under the planning scheme, the proposed scope of works meets the definition for 'telecommunications infrastructure' and the site is within a 'mixed business' zone and subject to no overlay features. As such, the use will not be permitted unless Council has exercised its discretion by granting development approval.

This Planning Assessment Report demonstrates compliance of the proposal against the local planning scheme and the applicable overlay provisions.

Based on the above, the proposed application to install a Telecommunications Facility at 15 King Street, Lancelin is considered appropriate for the site and warrants favourable consideration by Council.

4.0 PURPOSE OF THE PROPOSAL

To cater for the growing demand for mobile services, Telstra has embarked on a nationwide rollout to deliver an improved, reliable telecommunications network to the Australian public. The rollout will provide improved mobile coverage and enhanced services in metropolitan, regional and rural areas throughout Australia. This rollout consists of the upgrade of existing telecommunications facilities and where required the installation of new mobile base stations to expand the coverage footprint and offer seamless mobile services.

Additional base stations are required where surrounding facilities cannot provide sufficient coverage to a target area. New facilities are also required when existing base stations are fully utilised and cannot serve additional users in the area. Amplitel and Telstra have undertaken analysis of the Telstra mobile network in Lancelin and has identified areas where coverage and network quality needs to be improved. These includes existing commercial and residential areas, as well as the future residential areas to the west. If this investment is not made, the following main issues will arise:

1. Users may have difficulty connecting to the mobile network or the call may drop out. This impacts businesses, residents, visitors to the area and the ability of the user to contact emergency services.
2. Users may experience reduced data speeds, longer download times and poor network performance at busy times of the day with data intensive and time sensitive applications (e.g. newscasts, social media, mobile banking, weather forecasts, sports highlights etc).

As noted above, the lack of Telecommunications Facilities in Lancelin does not only deprive existing users of signal, but also puts at risk the availability of 21st century services to facilitate residential expansion.

Once a need for improved network performance has been identified, the optimisation of existing facilities throughout the region is explored and undertaken where required. In some cases this option resolves network deficiencies in an area. However, in this situation the optimisation of



surrounding facilities has not been able to achieve a satisfactory outcome for the network in Lancelin. Further investigations into the use of other Carrier and broadcast facilities within the area has also been completed. This is discussed in the Site Selection Process of this report.

5.0 THE NEED FOR THE PROPOSAL

Access to wireless services is a critical requirement in the modern era. While Australia has among the fastest mobile networks speeds across the globe, there is an identified coverage disparity between urban and rural areas. This disparity is due to the population concentration in urban areas, with existing wireless services covering 99% of the population but only 33% of the total landmass. As a result, major transport routes and large landholdings miss out on the critical wireless services available in urban areas.

While satellite services for mobile phone and data are available in some rural areas, the steep cost for landholders, unreliability and low data caps are all significant impediments to their daily use.

The 2018 Regional Telecommunications Review (the **Edwards Review**) brought these issues into clear focus, with important findings relating to:

- economic benefits; and
- social benefits

The Edwards Review found that economic benefits in regional areas are increasingly linked to wireless services, with regional businesses in a weak position to take advantage of new digital applications and economic opportunities. The Australian Government Response to the review strengthened this argument, stating that *"digital agriculture could increase the gross value of Australian agricultural production by \$20.3 billion, a 25% increase over 2014-15 levels. The greatest gains are expected to come from remote monitoring, automation, better tailoring of inputs such as fertiliser and seed, and environmental benefits such as efficiencies in water and pest management"*.

Tourism is often touted as a key asset to Australia as a whole, with the emerging areas of agri-tourism and eco-tourism combining with the rich and unique history and experiences available in outback areas to provide new economic opportunities for regional areas. Connectivity is a driver of such economic opportunities, even in rural areas. Data from Tourism Australia shows that 289 million visitor nights were spent in regional Australia in 2017, up from 234 million in 2012. The Edwards Report includes first-hand examples from regional tourism operators on the challenges they have faced and how technologies have or could improve their businesses.

The education opportunities in regional areas of Australia have lagged behind those in urban areas for several decades (Karmel. 1973 and Lamb et al. 2014). The need to send children and young adults to cities to obtain the education available in urban areas was long seen as a necessity. The advent of digital education services has proven a boon in ensuring that families in regional areas can stay together while still receiving a high-quality education. Irrespective of students being educated via distance or at local schools, education is increasingly digital. With video being a key component of lessons, access to wireless services is essential.

Social cohesion and connectivity is another important aspect of the digital age. Expanded wireless services allow for regional and rural communities more options to communicate with each other and with relatives and/or friends in other cities and countries. Additionally, rural and remote communities are less likely to have access to a range of health care services (Rural Health



Standing Committee, 2016: National Strategic Framework for Rural and Remote Health). Given the natural hazards such as drought, bushfires and floods that are a frequent and ongoing occurrence in Australia, access to mental health services can be of critical importance. Wireless services allow for more communications opportunities in regional areas and opens additional avenues for mental health services (National Mental Health Commission, 2018).

Wireless services are also important for safety reasons, particularly in relation to the aforementioned natural hazards present in Australia. The 2017-2018 ACMA Communications Report showed that in 2017-2018 there were nine (9) millions calls made to emergency services numbers, and increase of 4.8 per cent from 2016-2017, with the majority made from mobile phones. This increase in emergency numbers calls from mobile phones is a continuing trend, with the share increase by approximately 2-3% on average every year from 2012-2014. In regional and remote communities, where potentially dangerous tasks are undertaken on a daily basis, but where neighbours or family-members are oftentimes out of earshot, the ability to call for assistance from a mobile phone can be critical.

The proposal is an important aspect of bridging the digital disparity between denser urban area and regional communities, and in doing so better supporting their communities in a range of areas, including economic, education, social and safety.

6.0 MOBILE TELECOMMUNICATIONS NETWORKS

A mobile telecommunications network is made up of multiple base stations covering a geographic area. They work by sending and receiving radio signals from their antennas to mobile phones and other mobile devices such as tablet computers, wireless dongles etc. Base stations are designed to provide service to the area immediately surrounding the base station which can be up to several kilometers in distance. Depending on the technical objectives of a base station, the physical characteristics of each telecommunications facility; such as its height, number and size of antennas, equipment, cabling etc. will vary.

As a general rule, the higher the antennas of a base station the greater the range of coverage and the ability to relieve capacity issues. If this height is compromised then additional facilities, and thus more infrastructure, will be required for any given locality. The further a facility is located away from its technically optimum position the greater the compromise of the service. This may result in coverage gaps and require additional or taller base stations to provide adequate service.

Each base station transmits and receives signals to and from mobile devices in the area. As the mobile device users move around their devices will communicate with the nearest base station facility to them at all times. If the users cannot pick up a signal, or the nearest base station is congested because it is already handling the maximum number of phone calls or maximum level of data usage, then the users may not be able to place a call, they may experience call "drop outs" or they might experience a slow data rate while attempting to download content.

There are three main factors that can cause the above:

- You may be too far away from a facility to receive a signal, or there may be objects blocking the signal from the nearest facility; such as hills and large trees. To ensure optimum service the radio signals transmitted between the facility's antennas and mobile devices need to be unimpeded, maintaining a "line-of-sight" between them.



- The facility may be transmitting as much data and calls as it can handle. This can result in call drop-outs and slower data rates when too many users are connected to a facility at once.
- The depth of coverage, which affects the ability to make calls inside buildings, may be insufficient in some local areas.

The current proposal will form part of Telstra's 4G and 5G network solution to the Lancelin locality and will deliver essential mobile services (voice calling, SMS), as well as live video calling, video-based content including; news, finance and sports highlights, and high-speed wireless internet – wireless broadband. With a coverage footprint of more than 2.1 million square kilometers and covering more than 99% of the Australian population. Telstra's 4GX is Australia's largest and fastest national mobile broadband network and as such requires more network facilities, located closer together to ensure a high-quality signal strength to achieve reliable service and the fastest possible data transfer rates.

7.0 SITE SELECTION PROCESS

Amplitel commences the site selection process with a search of potential sites that meet the network's technical requirements, with a view to also having the least possible impact on the amenity of the surrounding locality. Amplitel applies and evaluates a range of criteria as part of this site selection process.

Telstra and Amplitel assess the technical viability of potential sites through the use of computer modelling tools that produce predictions of the coverage that may be expected from these sites as well as from the experience and knowledge of the radio engineers.

There are also a number of other important criteria that Telstra uses to assess options and select sites that may be suitable for a proposed new facility. These take into account factors other than the technical performance of the site, and include:

- The potential to co-locate on an existing telecommunications facility.
- The potential to locate on an existing building or structure.
- Visual impact and the potential to obtain relevant town planning approvals.
- Proximity to community sensitive locations and areas of environmental heritage.
- The potential to obtain tenure at the site.
- The cost of developing the site and the provision of utilities (power, access to the facility and transmission links).

In making the proposal for this site at Lancelin, Amplitel has carefully weighed all of the aforementioned criteria. This analysis is detailed in the next section.

8.0 CANDIDATE SITES

Amplitel carefully examined a range of possible deployment options in the area before concluding that a new mobile base station at 15 King Street, Lancelin would be the most appropriate solution to provide necessary mobile phone coverage to the Lancelin locality.

Accordingly, this section of the report will demonstrate the following:

- Colocation opportunities and existing telecommunications infrastructure within proximity to the proposed installation; and

- An analysis of the locations considered when determining an appropriate location for a new telecommunications installation within the required coverage area.

8.1 Colocation opportunities

The Communications Alliance Ltd. (formerly Australian Communications Industry Forum Ltd. - ACIF) Industry Code C564:2020 – Mobile Phone Base Station Deployment promotes the use of existing sites in order to mitigate the effects of facilities on the landscape. It should also be noted that as a first preference, Amplitel attempts to utilise, where possible, any existing infrastructure or co-location opportunities. Co-location is the beneficial reuse of an existing tall structure to negate a need for a new tower in the area, with antennas and equipment being placed on the existing tall structure and the immediate ground area. Co-locations will commonly include an existing Telecommunications Facility, but can include tall residential buildings, radio towers, or government assets such as water tanks.

Figure 1 shows all existing tall infrastructure and existing and proposed telecommunications facilities surrounding within the surrounding area.

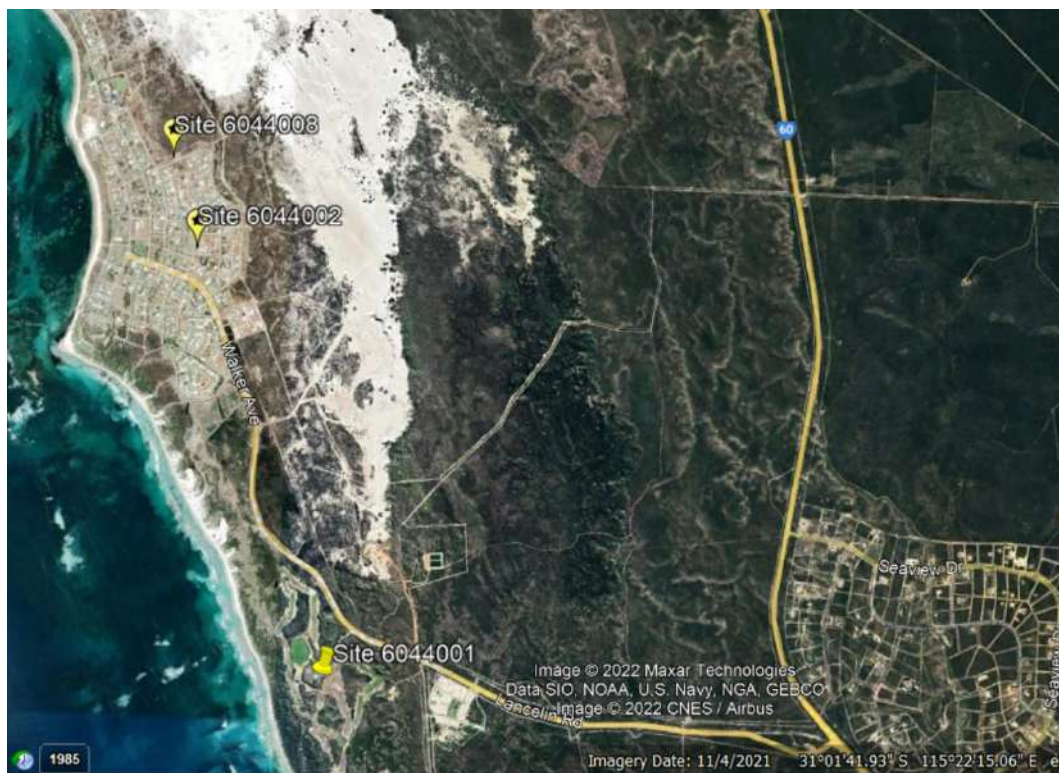


Figure 1: Location of candidates for co-location Source: www.rfnsa.com.au and Google Earth

The characteristics of the co-location candidates identified in **Figure 1** are provided below in **Table 1**.



Table 1: Summary of co-location opportunities within the Lancelin area

RFNSA Site No.	Site Address	Structure type	Is site constructed?	Suitable for co-location?	Comments
6044008	Lot 503 on Deposited Plan 52281 Collins Way, Lancelin WA 6044	40m monopole tower	Yes	No	ATN Tower has existing Optus antennas, though no Telstra antennas on it and is not able to provide coverage to targeted area south.
6044002	15 King Street, Lancelin WA 6044	26.9m lattice tower	Yes	No	Telstra tower has existing Telstra antennas, though insufficient height and present structural integrity to meet enhanced Telstra coverage objectives.
6044001	Lancelin Community Recreation Centre, Lancelin Road, Lancelin WA 6044	60.5m Steel Guyed Mast	Yes	No	Amplitel Tower has existing Telstra antennas on it and is not able to provide coverage to targeted area centred 3km to the north.

As indicated in **Figure 1**, the closest existing telecommunications facility is located at Collins Way, Lancelin WA 6044 (RFNSA 6044008) which is 700m from the approximate centre of the targeted coverage area. As this facility is unable to provide coverage to the targeted coverage area it was not considered a feasible co-location option.

The remaining tall structure in the area, a tall guyed mast operated by Amplitel, is not considered a feasible co-location candidate as it is too far, at 3km from the centre of the targeted coverage area.

8.2 Candidates considered

The site selected is deemed to be the most optimal location to achieve the required coverage for the targeted coverage area and requires the installation of a new mobile base station. Alternative candidates were considered, though the residential areas in between the candidates were excluded due to issues with amenity, land size and existing use conflicts. The target coverage area was identified as largely comprising several single dwelling residential unit lots, one park reserve and just a few premises with tourism, town centre and special use zoning.

Figure 2 provides a map of the non-colocation candidates considered for the proposed facility. Details on these alternative candidates are further outlined in Table 2 along with the balance of alternative candidates considered as part of the site selection process.

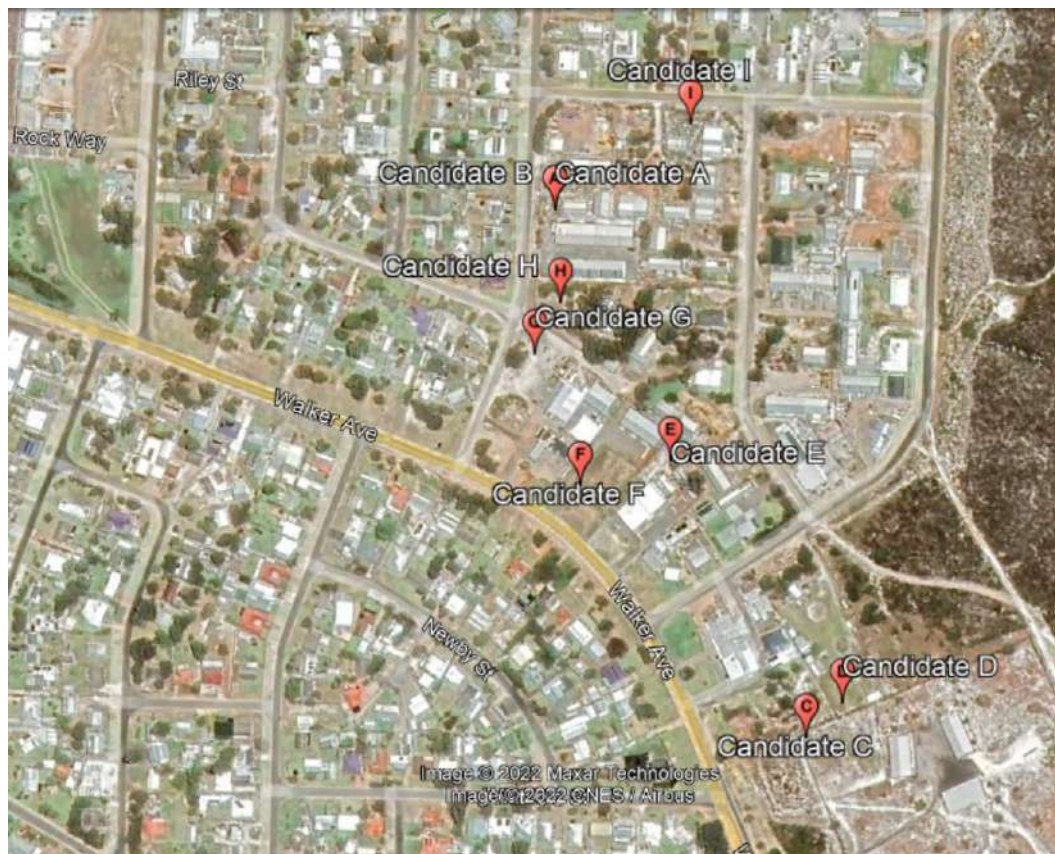


Figure 2: Location of non-colocation candidates (north) Source: Google Earth

Table 2: Summary of non-colocation candidates considered

Candidate	Location	Proposal	Zoning	Reason for exclusion/comments
Candidate A	15 King Street, Lancelin WA 6044 Lat: -31.020850° Long: 115.336900°	Colocation on to existing 26.9m lattice tower	Mixed Business	This candidate sites existing 26.9m lattice tower is old and not considered to be in sufficient condition to host new facilities and future carrier co-located facilities.



Candidate B	15 King Street, Lancelin WA 6044 Lat: -31.020850° Long: 115.336900°	Greenfield 40.0m monopole (decommis sion existing 26.9m lattice tower)	Mixed Business	This is the preferred candidate and the subject of this application. The subject site is an existing exchange site with a lattice tower, already disturbed/cleared site with available utilities, space and easy access for a new monopole, with favorable zoning and no development constraint overlays.
Candidate C	35 Walker Ave, Lancelin WA 6044 Lat: -31.024607° Long: 115.339110°	Greenfield 30.0-40.0m monopole	Special Use Zone	This candidate site is zoned 'special use' with specific uses that are permissible, telecommunications not being one of them. The site is also within a bushfire prone area and is outside the coverage search ring.
Candidate D	5 Kendall Road, Lancelin WA 6044 Lat: -31.024349° Long: 115.339407°	Greenfield 30.0-40.0m monopole	Special Use Zone	This candidate site is zoned 'special use' with specific uses that are permissible, telecommunications not being one of them. The site is also within a bushfire prone area and is outside the coverage search ring. Challenges obtaining landowner support.
Candidate E	25 Walker Ave, Lancelin WA 6044 Lat: -31.02263 Long: 115.337918°	Greenfield 30.0-40.0m monopole	Special Use Zone	This candidate site is zoned 'special use' with specific uses that are permissible, telecommunications not being one of them. The landowner has expressed interest in the development, however access is considered tight for machinery to maneuver.
Candidate F	23 Walker Ave, Lancelin WA 6044 Lat: -31.022831° Long: 115.337163°	Greenfield 30.0-40.0m monopole	Special Use Zone	This candidate site is zoned 'special use' with specific uses that are permissible, telecommunications not being one of them. Challenges obtaining landowner support.
Candidate G	23 King Street, Lancelin WA 6044 Lat: -31.021891° Long: 115.336757°	Greenfield 30.0-40.0m monopole	Special Use Zone	This candidate site is zoned 'special use' with specific uses that are permissible, telecommunications not being one of them. Challenges obtaining landowner support.



Candidate H	21 King Street, Lancelin WA 6044 Lat: -31.021518° Long: 115.336964°	Greenfield 30.0-40.0m monopole	Mixed Business	This candidate site is zoned 'mixed business'. Challenges obtaining landowner support.
Candidate I	10 Mullins Way, Lancelin WA 6044 Lat: -31.020212° Long: 115.338023°	Greenfield 30.0-40.0m monopole	Mixed Business	This candidate site is zoned 'mixed business'. Challenges obtaining landowner support.

8.3 Nominated Candidate

A preferred nominated candidate was selected for the proposed facility based on the radiofrequency objectives, property tenure, planning and environmental issues, potential community sensitive uses and engineering criteria as noted above. For this project, co-location on an existing telecommunications facility is not considered feasible and a new macro tower is considered suitable given:

- the site is technically feasible and can achieve Amplitel's coverage and capacity objectives by installing the new mobile base station;
- the site will provide improved coverage to the Lancelin area,
- the proposed monopole will maintain the same separation from sensitive land uses that the present lattice tower does, which will be decommissioned;
- the facility will not alter the land use and will support future carrier co-located facilities;
- the site is not located within a culturally significant area;
- the site is appropriately serviced and has access to the electricity supply network and existing transport network;
- the site will not require the clearing of any vegetation;
- the costs associated with delivering the site and constructing the facility are considered by Amplitel to be reasonable.

As stated above, the site selection process carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts. The proposed Amplitel site has been sited and designed to minimise any adverse impact on the amenity of the surrounding locality. The site is located at an existing exchange away from sensitive sites such as schools and child care centres and is not within an identified heritage area.

As a result of the aforementioned points it is considered that the siting and design effectively responds to the landscape setting in the area.

8.4 Site context

The proposed facility is located near the centre of Lancelin township, inside the local planning scheme map '09' for Lancelin townsite south.

The subject property is Lancelin exchange at 15 King Street, Lancelin. The entrance to the property is taken directly off King street. Within the fenced subject lot (16.1m x 15.7m) is a existing 26.9m high lattice tower, equipment shelter (3.86m x 8.6m), toilet block (2.4m x 2.4m), a soak well and fibre pits/manhole. Adjacent to and East of the site is light industrial/commercial premises while west across from the site can be characterized by low density residential premises. The nearest residence across to the existing lattice tower proposed to be replaced with a monopole is approximately 30m away, therefore residences can be considered to be in the immediate vicinity. There are no community sensitive places of interest such as childcare centres and schools identified as being close or within 500m from the proposal.

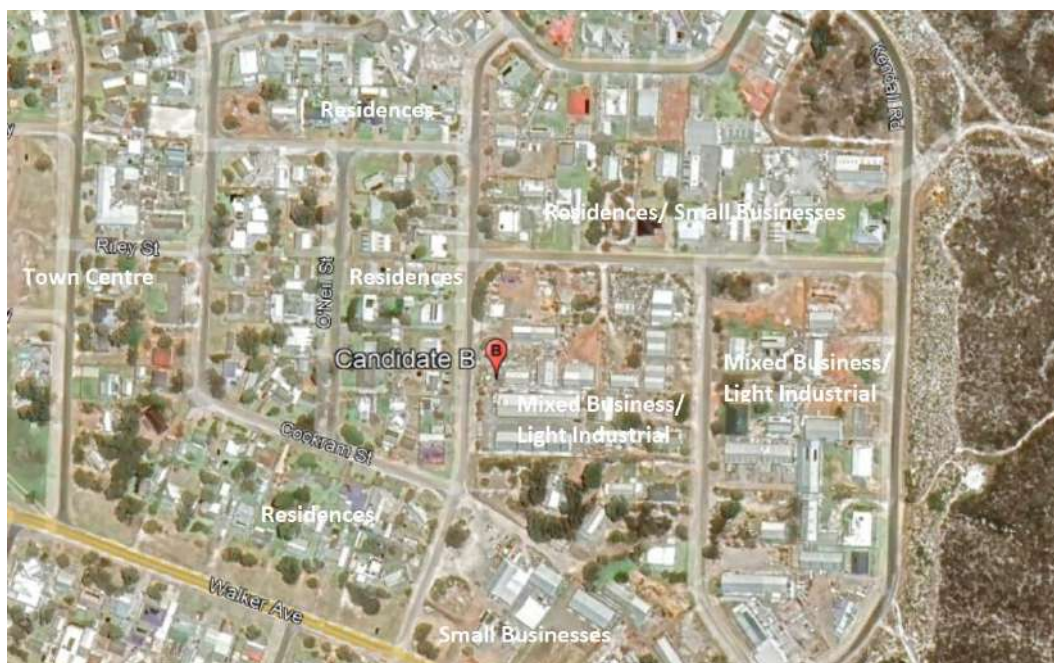


Figure 3: Aerial view of subject site and surrounds Source: Ventia, 2022

The subject site at 15 King Street, Lancelin is surrounded by low density residential, commercial and light industrial premises with specific cardinal borders provide in **Table 3**

Table 3: Summary of adjoining land uses

North	Mixed Business.
East	Residential.
South	Mixed Business adjoining a Special Use Zone further south.
West	Mixed Business.

8.5 Site details

Site Details	
Site address	15 King Street, Lancelin WA 6044
Real property description	Lot 451 on Deposited Plan 173799
Coordinates	-31.020850, 115.336900
Site area	258.999m ²
Registered owner	Shire of Gingin Council
Existing land use	Mixed Business
Vegetation	The subject site is clear of vegetation
Topography	The proposal area is relatively flat
Services	Site has access to power and an existing access.



WA09732.01 Lancelin Exchange – Planning Assessment Report



Figure 5: Subject site after Amplitel proposal – 15 King Street, Lancelin Source: Ventia, 2022



Figure 6: Subject site for Amplitel proposal – 15 King Street, Lancelin Source: Google Earth



Figure to **Figure 10** show the area to be light industrial in nature with residences in the immediate vicinity to the west.



Figure 7 View north of site access gate Source: Ventia 2021



Figure 8 View east of proposed facility Source: Ventia 2021



Figure 9 View south of site access gate Source: Ventia 2021



Figure 3 View west of proposed facility Source: Ventia 2021



9.0 PROPOSAL DETAILS

The proposal is necessary to provide improved 4G and 5G telecommunications services within the Lancelin area. The proposal is part of Telstra's network coverage expansion program but through Amplitel will support additional Carriers to co-locate on the proposed structure.

9.1 Facility and Equipment Overview

The proposed telecommunication installation requires the following works:

- Decommissioning and removal of one (1) existing 26.9m high lattice tower;
- Installation of one (1) temporary 23.5m mast structure during construction phase;
- Installation of one (1) new 40m high monopole;
- Installation of one (1) circular headframe;
- Installation of six (6) new panel antennas (no greater than 2.8m in length);
- Installation of one (1) Telstra Equipment Shelter that is not more than 3m high with a base area of not more than 7.5m² at the base of the aforementioned tower;
- Installation of associated ancillary cabling and equipment; and

The proposed installation will be an unpainted/untreated galvanized grey in colour. This is considered appropriate given the moderate level of visual impact from the proposed facility. While green-coloured facilities can be a better option in some circumstances, the proposed facility will not have a vegetated backdrop to blend into and so a green pole will be more noticeable against the sky. The proposed galvanized grey facility will blend better into a variety of sky backdrop. Galvanised facilities also tend to weather over time, creating a low reflective facility that matches the tin and timber style of rural Australia.

The proposal is demonstrated through the proposal plans, attached in **Appendix A**.

9.2 Access, traffic and parking

The subject site has one (1) access off King Street, one from the west of its boundary. (**Figure 4**).



Figure 4 Existing access to subject site Source: Ventia 2022

Access to the facility will be via the western access gate, with the nature strip before it being unpaved hardstand earth. (**Figure 4**).



Figure 5 Existing access to subject site Source: Ventia 2021



Mobile phone base stations require only infrequent maintenance visits (i.e. only two (2) to four (4) times per year). Furthermore, the site will operate on a continually unmanned basis. As such, the proposal will not be a significant generator of vehicular and/or pedestrian traffic.

The existing access will provide appropriate access to the site for the infrequent maintenance inspections. Furthermore, dedicated parking spaces are not considered necessary for the site given the very low traffic generation of the site and the unmanned nature of the site.

During the construction phase various vehicles will be used to deliver equipment and construct the proposed development. Any traffic impacts associated with construction and establishment will be of a short-term in duration (i.e. approximately five weeks over non-consecutive periods) and will be temporary in nature and will not affect existing traffic flows of the surrounding area.

9.3 Utilities

The proposal will connect to the existing power supply on the subject property.

The unmanned nature of the proposed mobile base station removes the need for connection to water or sewer services.

Furthermore, the proposal incorporates very minimal hard surfaces and therefore will generate insignificant stormwater runoff from the site. As such, the proposal does not require connection to the stormwater network.

9.4 Construction schedule

The construction of the mobile base station will take approximately five to six weeks over non-consecutive periods, subject to weather.

The construction of the proposed mobile phone base station primarily consists of the following processes:

- Site preparation and foundation earthworks – Including site clearing and access track preparation
- Tower foundation installation – Concreting of foundations and installation of underground conduits.
- Tower assembly including head frame and equipment shelter – Crane on site for duration of tower assembly
- Installation of new equipment using an EWP and laying of cabling – reflective of the scope of works outlined within this Development Application; and
- Network Integration – Ensuring that the mobile phone base station can connect with both end users and other sites within the Telstra network.

No road closures will be required for the erection and installation of equipment, as all construction equipment can be set-up on the subject property.

9.5 Acoustic

Noise and vibration emissions associated with the proposed facility would be limited to the construction/demolition phase outlined above. The works are to be concluded in a timely manner with construction occurring over a period of 4 weeks, so that residents in the surrounding area should not be inconvenienced in the long term.



During normal operation the noise emanating from the air- conditioning equipment would be similar to those used in domestic situations and will comply with the background noise levels given in *Australian Standard AS 1055*.

10.0 RELEVANT FEDERAL LEGISLATION

The following information provides a summary of the Federal legislation relevant to telecommunications deployment.

While Amplitel is not a Carrier itself, it is part of the Telstra Group and the proposed facility will serve Telstra initially. As a licensed telecommunications carrier, Telstra must operate under the provisions of the *Telecommunications Act 1997* and the following legislation and industry codes:

- The *Telecommunications Code of Practice 2018*;
- The *Telecommunications (Low-impact Facilities) Determination 2018* (as amended);
- Mobile Phone Base Station Deployment Code; and
- The *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*

10.1 Telecommunications Act 1997

The *Telecommunications Act 1997* (the Act) came into operation on 1 July 1997. The Act provides a system for regulating telecommunications and the activities of carriers and service providers. The aim of the *Telecommunications Act 1997* is to provide a regulatory framework that promotes:

- The long-term interests of end users of carriage services or of services provided by means of carriage services; and
- The efficiency and international competitiveness of the Australian Telecommunications Industry.

Under the Act, telecommunications carriers are no longer exempt from State and Territory planning laws except in three limited instances:

1. There are exemptions for the inspection of land, maintenance of facilities, installation of "low impact facilities", subscriber connections and temporary defense facilities. These exemptions are detailed in the *Telecommunications (Low-impact Facilities) Determination 2018* and these exemptions are subject to the *Telecommunications Code of Practice 2018*;
2. A limited case-by-case appeals process exists to cover the installation of facilities in situations of national significance; and
3. There are some specific powers and immunities from the previous *Telecommunications Act 1991*.

10.2 Telecommunications Code of Practice 2018

The *Telecommunications Code of Practice 2018* (The Code) authorizes a carrier to enter land, inspect land and install and maintain a facility. The Code emphasizes "best practice" for the installation of facilities, compliance with industry standards and minimization of adverse impacts, particularly in terms of degradation of the environment and visual impact. The proposal is considered to comply with "best practice" given the proposal will:



- provide improved telecommunications and wireless internet coverage in the Lancelin area;
- be located on a non-residential site within the local area, which maximizes separation to residential and other sensitive uses; and
- Comprises the smallest configuration possible for the site to reduce the visual impact of the proposal, while providing appropriate coverage to the surrounding area.

10.3 Telecommunications (Low-impact Facilities) Determination 2018

The Telecommunications (Low-impact Facilities) Determination 2018 came into effect in March 2018.

The *Determination* contains a list of Telecommunications Facilities that the Commonwealth will continue to regulate. These are facilities that are essential to maintaining telecommunications networks and are unlikely to cause significant community disruption during their installation or operation. These facilities are therefore considered to be 'Low-impact' and do not require planning approval under State or Territory laws.

The proposed facility at Lancelin does not fall under the *Determination* and, therefore, requires approval under State planning legislation.

10.4 Communications Alliance Ltd. Industry Code C564: 2020 – Mobile Phone Base Station Deployment

The Communications Alliance Limited – *Mobile Phone Base Station Deployment C564:2020* (the Deployment Code) is an industry code of practice registered by the Australian Communications and Media Authority. All licensed telecommunications carriers must abide by the Deployment Code provisions.

The code does not change any regulations at a local, State or Federal level, but supplements these regulations applying to telecommunications carriers, including Telstra. The code sets guidelines for site selection, community consultation, design, installation and operation of telecommunication facilities.

The subject proposal, not being designated a 'Low-impact' Facility', is not subject to the notification or consultation requirements associated with the Deployment Code. These processes are handled within the relevant State and Local consent procedures.

Though the Code does not apply to the proposed development, the intent of the Code is to ensure Carriers follow a 'precautionary approach' to the siting of infrastructure away from sensitive land uses and this approach has been followed in the selection of this site, as demonstrated in the *Deployment Code* section 4.1 and 4.2 Precautionary Approach Checklists. The checklists will be uploaded to the RFNSA website, reference number 6044002.

Included in these section's Checklist is a statement of how the public's exposure to EME from the site has been minimised. All emissions from the site will be well within the requirements of the relevant Australian Standard. Details of this standard are contained in the following section.



This site has been selected and designed to comply with the requirements of the *Deployment Code* in so much as the precautionary approach has been adhered to and, as a result, the best design solution has been achieved.

10.5 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection Biodiversity Conservation Act 1999* (the EPBC Act) controls matters of national environmental significance. The key objectives of the EPBC Act include:

- a. "To provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance; and
- b. To promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources; and
- c. To promote the conservation of biodiversity; and
- d. To provide for the protection and conservation of heritage..."

Amongst other aspects, the EPBC Act relates to matters of national environmental significance, including world heritage areas, natural heritage places (including declared RAMSAR wetland areas), listed threatened species in communities, listed migratory species, protection of environment on nuclear actions, and environment matters.

The proposal is **not** identified as having a significant impact on any of the above matters of national environmental significance. Therefore, the proposal will not require referral to the Government Minister for the Environment for assessment.

10.6 Native Title Act 1993

The *Native Title Act 1993* (the **Native Title Act**) was given effect on 1 January 1994 and recognises the rights and interests of Aboriginal and Torres Strait Islander people in land and waters according to their traditional laws and customs. The Native Title Act also sets out processes through which development as a Future Act can proceed with regards to the rights and interests of Traditional Owners.

The subject site is identified on a site that is the subject of a single Native Title claim (WCD2021/010) that has been determined, with the determination providing that Native Title exists does not exist over the claim area (**Figure 6**).

Under section 23B of the Native Title Act, native title can be extinguished by previous exclusive possession, where that previous exclusive possession includes a grant or vesting that was granted or created on or before 23 December 1996. The current land title shows the land has been freehold since at least 21 September 2021. Accordingly, Native Title is not considered to be extinguished based on previous exclusive possession under the existing Title.

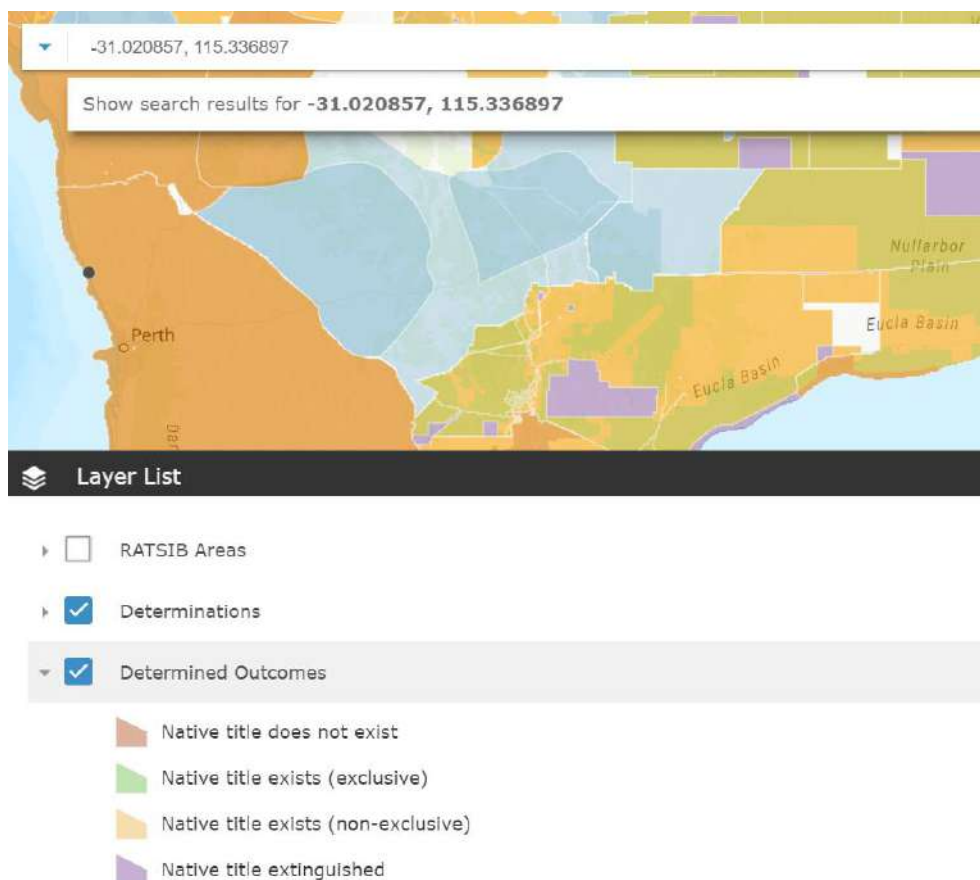


Figure 6: Excerpt of Native Title Tribunal Vision showing relevant Native Title determination in area surrounding subject site Source: *Native Title Tribunal Vision, 2022*

11.0 STATE REGULATORY FRAMEWORK

The following information provides a summary of the State legislation/guidelines relevant to telecommunications development proposals.

11.1 Aboriginal Heritage Act 1972

The Aboriginal Heritage Act 1972 (the **Aboriginal Heritage Act**) is the main piece of legislation within Western Australia with regards to Aboriginal cultural heritage. The Aboriginal Heritage Act sets out the requirements for ensuring that Aboriginal heritage is appropriately identified and protected.

Under the Aboriginal Heritage Act the Western Australian must maintain an Aboriginal Sites Register where specific places of importance and significance to Aboriginal people are recorded and protected by Law.

Section 5 of the Aboriginal Heritage Act defines an Aboriginal site as;



- a) Any place of importance or significance where people of Aboriginal descent have, or appear to have, left any object, natural or artificial, used for, or made or adapted for use for, any purpose connected with the traditional cultural life of Aboriginal people, past or present;
- b) Any sacred, ritual or ceremonial site, which is of importance and special significance to people of Aboriginal descent;
- c) Any place which, in the opinion of the committee, is or was associated with Aboriginal people and which is of historical, anthropological, archaeological or ethnographical interest and should be preserved because of its importance and significance to the cultural heritage of the State; and
- d) Any place where objects to which this Act applies are traditionally stored, or to which, under the provisions of the Act, such objects have been taken or removed.

As a result of this definition a breach of Section 17 of the Aboriginal Heritage Act occurs when a person excavates, destroys, damages, conceals or in any way alters any Aboriginal site; or who deals with in a manner not sanctioned by relevant custom, or assumes the possession, custody or control of, any object on or under an Aboriginal site, commits an offence unless he is acting with the authorization of the Registrar under Section 16 or the consent of the Minister under Section 18.

Regulation 10 Consent can be granted by authorization by the Registrar or Minister under the AHA, usually granted for non-deleterious, site-preservation land uses (rehabilitation) or in emergencies. Aboriginal sites broadly fall into two categories, archaeological and anthropological or ethnographic sites. Archaeological sites are generally where material evidence of Aboriginal people's traditional cultural life is found. Sites of this type consist of artefact scatters, stone structures, marked trees, fish traps, middens, cave or rock paintings/engravings, arranged stones and burial sites. Most archaeological sites are prehistoric, but some are also more contemporary in nature and are where Aboriginal cultural material objects from the post settlement period are found.

Ventia has conducted an assessment of the area against the Aboriginal Heritage Due Diligence guidelines (the **Guidelines**), as published originally by the Department of Aboriginal Affairs & Department of the Premier and Cabinet. This assessment considered that the Aboriginal Heritage Inquiry System did not show any aboriginal heritage matters in the area, the previous disturbance of the land, the current use of the land, the proximity of potential risk factors including freshwater, elevated lookouts, exposed stone or rock and other relevant factors.

The assessment considered the area where works (including ground disturbance) are proposed (the **works area**) is a 253² (15.7m x 16.1m), area of land located at 15 King Street Lancelin. Given the characteristics of the immediate area it is likely that ground disturbance of the works area has occurred in the past.

This assessment has determined the area is not of high or medium risk for aboriginal heritage and so the works may proceed without further approval.

11.2 Planning and Development Act 2005

The Minister of Planning and Infrastructure has ultimate authority for town planning in Western Australia. Development within Western Australia is controlled by the *Planning and Development Act 2005* through the application of environmental planning instruments. Under the *Planning and Development Act 2005*, the Western Australian Planning Commission (**WAPC**) is the responsible



authority for land use planning and development matters and this report seeks to demonstrate compliance with the WAPC and other items of relevant legislation which pertain to the subject application.

11.3 State Planning Policy No. 5.2 – Telecommunications Infrastructure (WAPC)

State Planning Policy 5.2: Telecommunications Infrastructure Policy aims to balance the need for effective telecommunications services and effective roll-out of networks, with the community interest in protecting the visual character of local areas. The SPP applies for above and below telecommunications infrastructure, other than those exempted under the Commonwealth Telecommunications Act 1997.

Under section 5.1.1 of the State Planning Policy 5.2: Telecommunications Infrastructure Policy the West Australian Planning Commission provides a set of measures in assessing the visual impact of a proposed telecommunications facility.

An assessment of these guidelines below has found that the proposed Telstra Mobile Phone Base Station is compliant with the intent and requirements of the State Planning Policy 5.2: Telecommunication Infrastructure Policy.

Table 4: Assessment against State Planning Policy 5.2, Policy Measure 5.1.1

Measures	Comments	Complies
Be located where it will not be prominently visible from significant viewing locations such as scenic routes, lookouts and recreation sites;	The proposed 40m monopole has been sited to maintain the primary use of the land whilst considering the impact to the surrounding locality. The site carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts. Furthermore, the proposed 40m facility will have the height to allow numerous other Carriers to co-locate in the future which helps to reduce the need for more structures to be built in the area which in turn helps to reduce impacts upon the amenity of the area.	✓
Be located to avoid detracting from a significant view of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land;	Amplitel has selected a site and location that seeks to minimise perceived negative impacts on the visual amenity of the area. In doing that, it has settled on Lancelin exchange as the prime candidate site, which in its present form is already visually associated with being a telecommunications site. As a result, impact to the streetscape has been minimised.	✓
Not be located on sites where environmental, cultural heritage, social and visual landscape values may be compromised;	There are no known items of environmental, cultural or social significance located on the proposed site. Any visual impact has been mitigated through a variety of design elements.	✓



Display design features, including scale, materials, external colours and finishes that are sympathetic to the surrounding landscape;	The proposed 40m concrete monopole will remain unpainted (dull grey in colour) which blends in with the sky. This structure will be slimmer than the existing 26.9m lattice tower it will replace. It will also use a circular headframe for the new antennas as opposed to a more robust triangular one in order to minimise visual impact within the vicinity. Both the new 40m concrete monopole and equipment shelter will be partially concealed by existing built features within the subject site, including the toilet block and exchange building, which will provide a buffer against views from the nearest residences.	✓
Be located where it will facilitate continuous network coverage and/or improved telecommunications services to the community;	The proposed location at 15 King Street in Lancelin has existing telecommunications facilities and will provide improved and continuous coverage to the locality, also providing other Carriers with the opportunity to co-locate their infrastructure in the future.	✓
Telecommunications infrastructure should be co-located and whenever possible: Cables and lines should be located within an existing underground conduit or duct; and Overhead lines and towers should be co-located with existing infrastructure and/or within an existing infrastructure corridor and/or mounted on existing or proposed buildings.	As per Section 7 of this report, no suitable opportunities for co-location were identified in the area and it has been identified that the proposed Telstra site location is seen as the preferred site location. Colocation was investigated; however, the locations are too far from the subject area to meet the coverage objectives of the project or lack the structural capacity to support a new headframe, panel antennas and other facilities. Therefore, it has been identified that the Lancelin Exchange is seen as the preferred site location. As mentioned previously, the proposed Telstra monopole will also provide other Carriers with the opportunity to co-locate their infrastructure in the future. Overhead lines are not applicable to this application.	✓

Overall the proposed development application is consistent with the intent and requirements of the SPP 5.2.

11.4 Statement of Planning Policy No. 5.2 – Telecommunications Infrastructures (WAPC)

With the gazettal of State Planning Policy 5.2, the WAPC *Statement of Planning Policy No. 5.2 – Telecommunications Infrastructure* (Statement 5.2) has been repealed. However, it is recognised that the Statement 5.2 provides a more holistic set of criteria than SPP 5.2 which largely focuses on visual impacts. Given this, an assessment of the guiding principles of Statement 5.2 is provided in **Table 5**.



Table 5 Assessment against Statement 5.2 Guiding Principles

Principles	Comments	Complies
There should be a co-ordinated approach to the planning and development of telecommunications infrastructure, although changes in the location and demand for services require a flexible approach.	Telstra undertakes a carefully co-ordinated and planned approach to the development of their network.	✓
Telecommunications infrastructure should be strategically planned and co-ordinated, similar to planning for other essential infrastructure such as networks and energy supply.	The proposed facility is strategically planned and co-ordinated to ensure that the facility will provide high level coverage to the Lancelin area. The proposed facility will allow for future co-location by other telecommunication providers, ensuring no other similar scale facilities are required in the future to provide essential telecommunication services.	✓
Telecommunications facilities should be located and designed to meet the communication needs of the community.	The proposed facility is strategically planned and co-ordinated to ensure that the facility will provide high level coverage to the Lancelin area.	✓
Telecommunications facilities should be designed and sited to minimise any potential adverse visual impact on the character and amenity of the local environment, in particular, impacts on prominent landscape features, general views in the locality and individual significant views.	The proposed 40m monopole has been sited to maintain the primary use of the land whilst considering the impact to the surrounding locality. The site carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts. Furthermore, the proposed 40m facility will have the height to allow numerous other Carriers to co-locate in the future which helps to reduce the need for more structures to be built in the area which in turn helps to reduce impacts upon the amenity of the area.	✓
Telecommunications facilities should be designed and sited to minimise impacts on areas of natural conservation value and places of heritage significance or where declared rare flora are located.	The proposed telecommunications facility will not require the removal of any trees and is not located within an identified built heritage or cultural heritage area. As a result, the proposed facility will not have any impact on areas of natural conservation values, places of heritage significance or rare flora.	✓



Telecommunications facilities should be designed and sited with specific consideration of water catchment protection requirements and the need to minimise land degradation.	Prior to the commencement of work Telstra will undertake such measures as deemed necessary by Council to effectively protect water catchments within the immediate area, though none are identified in available planning documents.	✓
Telecommunications facilities should be designed and sited to minimise adverse impacts on the visual character and amenity of residential area.	The proposed 40m concrete monopole will remain unpainted (dull grey in colour) which blends in with the sky. This structure will be slimmer than the existing 26.9m lattice tower it will replace. It will also use a circular headframe for the new antennas as opposed to a more robust triangular one in order to minimise visual impact within the vicinity. Both the new 40m concrete monopole and equipment shelter will be partially concealed by existing built features within the subject site, including the toilet block and exchange building, which will provide a buffer against views from the nearest residences. Based on the above measures and the site being an existing exchange with telecommunication facilities, no other site close to residences could allow for an acceptable impact with a new tower and equipment shelter proposal.	✓
Telecommunications cables should be placed underground, unless it is impractical to do so and there would be no significant effect on visual amenity or, in the case of regional areas, it can be demonstrated that there are long-term benefits to the community that outweigh the visual impact.	Overhead cabling is not proposed for this site.	N/A
Telecommunications cables that are installed overhead with other infrastructure such as electricity cables should be removed and placed underground when it can be demonstrated and agreed by the carrier that it is technically feasible and practical to do so.	This principle does not apply to the subject of this application.	N/A
Unless it is impractical to do so telecommunications towers should be located within commercial, business, industrial and rural areas and	The proposed site is zoned 'Mixed Business' as identified by the <i>Shire of Gingin Local Planning Scheme No. 9</i> . Despite the contrast between the residential nature of premises west of King street and the light industrial	✓



areas outside identified conservation areas.	nature of premises east of King Street, the subject proposal being within 50m across from the nearest residence is believed to be acceptable since the existing site functions as a telecommunications exchange and has housed an existing tower structure for a great length of time.	
The design and siting of telecommunications towers and ancillary facilities should be integrated with existing buildings and structures, unless it is impractical to do so, in which case they should be sited and designed so as to minimise any adverse impact on the amenity of the surrounding area.	As per Section 7 of this report, no suitable opportunities for co-location were identified in the area and it has been identified that the proposed Telstra site location is seen as the preferred site location. Colocation was investigated; however, the locations are too far from the subject area to meet the coverage objectives of the project and the existing 26.9m lattice tower proposed to be decommissioned and removed lacks the structural integrity to host new facilities, let alone other future carrier co-located facilities.	✓
Co-location of telecommunications facilities should generally be sought, unless such an arrangement would detract from local amenities or where operation of the facilities would be significantly compromised as a result.	As per Section 7 of this report, no suitable opportunities for co-location were identified in the area and it has been identified that the proposed Telstra site location is seen as the preferred site location. Colocation was investigated; however, the locations are too far from the subject area to meet the coverage objectives of the project and the existing 26.9m lattice tower proposed to be decommissioned and removed lacks the structural integrity to host new facilities, let alone other future carrier co-located facilities.	✓
Measures such as surface mounting, concealment, colour co-ordination, camouflage and landscaping to screen at least the base of towers and ancillary structures, and to draw attention away from the tower, should be used, where appropriate, to minimise the visual impact of telecommunications facilities.	<p>Telstra has selected a site and location that seeks to minimise any perceived negative impacts on the visual amenity of the area.</p> <p>The proposed 40m concrete monopole will remain unpainted (dull grey in colour) which blends in with the sky. This structure will be slimmer than the existing 26.9m lattice tower it will replace. It will also use a circular headframe for the new antennas as opposed to a more robust triangular one in order to minimise visual impact within the vicinity. Both the new 40m concrete monopole and equipment shelter will be partially concealed by existing built features within the subject site, including the toilet block, sites fencing and exchange building, which will provide a buffer against some views from the nearest residences. Trees line along the fences of King Street west of the 'mixed business' zoned premises boundary will also have a small concealing affect on views towards the monopole looking on from the north and south.</p>	✓



	Landscaping is something that has occurred only sporadically within the surrounding area but is not precluded by the proposed development.	
Design and operation of a telecommunications facility should accord with the licensing requirements of the Australian Communications Authority, with physical isolation and control of public access to emission hazard zones and use of minimum power levels consistent with quality services.	Telecommunications facilities include radio transmitters that radiate electromagnetic energy (EME) into the surrounding area. The levels of these electromagnetic fields must comply with safety limits imposed by the Australian Communications and Media Authority (ACMA, previously ACA). All Telstra installations are designed to operate within these limits.	✓
Construction of a telecommunications facility (including access to a facility) should be undertaken so as to minimise adverse effects on the natural environment and the amenity of users or occupiers of adjacent property and to ensure compliance with relevant health and safety standards.	During construction Telstra contractors will endeavour to minimise the impact of their works on the amenity of nearby residents and on the surrounding environment. As the proposed site is located in a mixed business area, adverse effects on nearby properties will be minimal. For the duration of construction works with the decommissioning and removal of the 26.9m lattice tower and installation of a new 40 m monopole tower, a temporary 23.5m mast tower will be erected to host temporarily the relocated yagi antennas from the lattice tower, in order not to disrupt services to the community. Following construction, maintenance (excluding emergency repair work) activities should not interfere with the amenity of users. All Health and Safety standards will be adhered to.	✓

Overall, the proposed development application is consistent with the intent and requirements of the Statement 5.2

12.0 LOCAL REGULATORY FRAMEWORK

The following information provides a summary of the local provisions relevant to telecommunications development proposal.

12.1 Shire of Gingin Local Planning Scheme No. 9

The *Shire of Gingin Local Planning Scheme No. 9* provides the basis for planning in the Shire of Gingin local government area.

The proposed site is within the Mixed Business Area (**Figure 7**) further outlined in **section 8.5** of this report.

For the purposes of this proposal the Principal Designated Use of the property is 'Mixed Business'.

As telecommunications infrastructure is listed as an activity in the Shire of Gingin's Local Planning Scheme text, an activity involving 'telecommunications infrastructure' is identified as "D" within a mixed business zone, where the use is not permitted unless the local government has exercised its discretion by granting development approval. 'Telecommunications infrastructure' as defined by the scheme relates with the structure and facilities proposed. Nonetheless, the proposal complies with the objectives and general requirements of the Mixed Business Zone, supporting existing and future mixed business uses with high-quality coverage.



Figure 7: Zoning Map No.09 Lancelin Townsite South Source: *Shire of Gingin Local Planning Scheme No. 9*



12.2 Mixed Business Zone Objectives

Development within the Mixed Business Zone is required to demonstrate compliance with the objectives and site requirements of the zone within the local planning scheme.

As such, this proposal can therefore be assessed against the Mixed Business Zone objectives set out in section 3.2.3 of the *Shire of Gingin Local Planning Scheme No. 9* in **Table 6** below.

Objectives	Comments	Complies
Accommodate commercial activities which, because of the nature of the business, require good vehicular access and/or large sites.	Enhanced telecommunications coverage will help facilitate commercial activities in the surrounding area. Following construction, the site will not impede pedestrian and vehicular access in the area.	✓
Provide for a wide range of light and service industries, wholesale sales, showrooms, trade and services which, by reason of their scale, character, operational or land requirements, are not generally appropriate in, or cannot conveniently or economically be accommodated in, the central area, shops and offices or industrial zones.	The development of this site will not impede any future development relating to light and service industries in the area within the surrounding mixed business zone. Improved reception in the Lancelin area for SMS/calls and mobile data download speeds will also foster their growth and operation away from the town centre area also.	✓
Allow for commercial and light industrial uses that are compatible with nearby uses.	The existing site is the Lancelin exchange and hosts a lattice tower, therefore the proposal is considered to be compatible with the sites existing function and visual association in the vicinity.	✓
Provide for the efficient and safe movement and parking of vehicles.	The proposal will not be a significant generator of vehicular and pedestrian traffic, as it will operate on an unmanned basis and require maintenance visits just 2-4 times annually. As such, dedicated parking spaces are not considered necessary. A traffic management plan will be implemented over the short-term duration of the construction phase.	✓
Encourage new development that will enable future adaptation and re-use, and will enhance the visual amenity of the area.	The proposed tower and equipment shelter will enable Telstra and other carriers to co-locate their facilities in future reducing the need to erect more visible structures within Lancelin.	✓
Ensure that where any development adjoins zoned or developed residential properties,	Despite the contrast between the residential nature of premises west of King street and the light industrial nature of premises east of King Street, the subject proposal being within 50m across from the nearest residence is believed to be acceptable since the existing	✓



<p>such development is suitably set back, screened or otherwise treated so as not to detract from the residential amenity.</p>	<p>site functions as a telecommunications exchange and has housed an existing tower structure for a great length of time.</p> <p>In order to mitigate the visual impact towards the nearest residences, the following measures have been applied.</p> <p>The proposed 40m concrete monopole will remain unpainted (dull grey in colour) which blends in with the sky. This structure will be slimmer than the existing 26.9m lattice tower it will replace. It will also use a circular headframe for the new antennas as opposed to a more robust triangular one in order to minimise visual impact within the vicinity. Both the new 40m concrete monopole and equipment shelter will be positioned so that they are partially concealed by existing built features within the subject site, including the toilet block, sites fencing and exchange building, which will provide a buffer against some views from the nearest residences.</p>	
--------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

Overall, the proposed development application is consistent with the intent and requirements of the *Western Australian Planning Commission SPP 5.2* and the *Shire of Gingin Local Planning Scheme No. 9*.

13.0 GENERAL PROVISIONS

This proposal is for a new Telstra Mobile Base Station Facility in the Lancelin area.

Amplitel considers that the proposal is appropriate for the locality given the light industrial and mixed business nature of the proposed site and the nature of existing and anticipated uses of the surrounding land.

Environmental considerations such as visual impact, heritage, flora and fauna, traffic, flooding, bushfire, social and economic aspects, health and safety have been discussed within the below sub sections.

13.1 Visual Impacts

The King Street site has been identified as being on the edge of a 'Mixed Business' zone, abutting a Residential zone on the Western side of King Street. The subject lot however in its present state comprises a 26.9m lattice tower, an exchange building and a toilet block in terms of its above ground features. As a result, Amplitel consider the existing telecommunications site as already relatively disturbed land, harbouring some level of visual impact to the community. It is therefore Amplitel's intention that this site can be re-used for telecommunication facilities without unacceptably further impacting the nearest residences and community.

As there is the onus on Amplitel to ensure that their structures can adequately support the future co-location of facilities by other carriers and enable them to provide a sufficient level of



coverage, Amplitel cannot replace the existing 26.9m lattice tower with a like-for-like structure standing at the same height. Given that the proposed 40m concrete monopole tower will be approximately 13m taller in height than the decommissioned and removed 26.9m lattice tower, the towers comparatively slimmer build and incorporation of a narrower circular headframe, as opposed to a robust triangular headframe, are seen to be elements compensating for the sites increased tower height.

In order to retain the telecommunications site as being sympathetic to its surrounds with as little disturbance possible, there are other design measures which have been applied. As an example, the proposed ICS equipment shelter will not be more than 3m high or have a base area exceeding 7.5m². It will be coloured surf mist and positioned between the lots eastern fence, the existing toilet block and exchange building. As a result, the new equipment shelters roof will not protrude significantly above the two existing buildings and blend in with them as they conceal a large proportion of it. The proposed 40m concrete monopole will also remain unpainted (dull grey in colour) so that it blends in with the sky and will be positioned approximately where the existing 26.9m lattice tower is, allowing the existing toilet block and building exchange to continue partially concealing the towers lower facade from views looking on from King Street and the nearest residences.

As Lancelin has a relatively flat terrain and sparse distribution of shrubbery, with predominantly low rise and low density premises, the replacement of the 26.9m lattice tower with the 40m concrete monopole is not anticipated to disturb any new residences or community sensitive places of interest in the area, other than residences already presently disturbed. **Figure 15** and **Figure 16** illustrates the present 26.9m lattice towers visibility from the two nearest intersections. The proposed 40m concrete monopole is believed to blend in greater with electricity powerpoles when looking from a distance when compared with the existing 26.9m lattice tower. It's overall design is also considered to be more modern, symmetrical and aesthetic than the existing lattice tower which was last reported to show significant corrosion across its components.

On the whole, Amplitel accepts there is a moderate visual impact to the nearby community, though considers it to be at an acceptable level in light of the above assessment and the alternative of developing a new greenfield tower elsewhere at a site which has not previously disturbed the community.



Figure 8: View northwards from the King Street and Cockram Street intersection Source: Google Earth



Figure 9: View southwards from the King Street and Mullins Way intersection Source: Google Earth

13.2 Heritage

In order to determine any possible natural or cultural values of state or national significance associated with the site a search was conducted through the relevant Heritage Registers.



No Aboriginal or other heritage sites of significance have been identified within the subject land holding or within close proximity (see **section 12.1**).

13.3 Flora and Fauna

In order to determine any possible natural Flora and Fauna significance associated with the site, a search was conducted during a visit to the subject site and an online search conducted through the relevant environmental registers.

The subject site is a previously developed telecommunications site. The only flora on the subject site are native grasses and some low shrubbery, neither of which are considered valuable or protected. Further, there is no apparent fauna on the site given the lack of habitat for animals beyond rats or mice.

The Protected Matters Search Tool from the Department of the Environment and Energy which shows matters of national environmental significance or other matters protected by the *Environment Protection and Biodiversity Conservation Act 1999*. A search using this tool found that no significant environmental matter was identified on the subject site. Please see **Appendix C** for more detail.

13.4 Bushfire

The specific site location is not identified as being within a Bush Fire Prone Area by the Fire and Emergency Services Commissioner (**Figure**).

The subject site is on a flat terrain, predominately cleared and not adjoining large, vegetated areas which could cause high bushfire risk. Additionally, the proposed facility will operate on an unmanned basis acquiring only 2-4 maintenance visits per year. As a result, the proposed works do not increase the extent of bushfire risk currently affecting the land.



Figure 17: Bushfire Prone Areas Mapping Source: <https://maps.slip.wa.gov.au/landgate/bushfireprone/?center=13022786.8429561,-3828291.59547117,102100&scale=10000>



13.5 Health and Safety

Telstra acknowledges some people are genuinely concerned about the possible health effects of electromagnetic energy (EME) from mobile phone base stations and is committed to addressing these concerns responsibly.

Telstra, along with the other mobile phone carriers, must strictly adhere to Commonwealth Legislation and regulations regarding mobile phone facilities and equipment administered by the Australian Communications and Media Authority (ACMA).

In 2003 the ACMA adopted a technical standard for continuous exposure of the general public to RF EME from mobile base stations. The standard, known as the *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003*, was prepared by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and is the same as that recommended by ICNIRP (International Commission for Non- Ionising Radiation Protection), an agency associated with the World Health Organisation (WHO). Mobile carriers must comply with the Australian Standard on exposure to EME set by the ACMA.

The Standard operates by placing a limit on the strength of the signal (or RF EME) that any Carrier can transmit to and from any network base station. The general public health standard is not based on distance limitations or the creation of "buffer zones". The environmental standard restricts the signal strength to a level low enough to protect everyone at all times. It has a significant safety margin, or precautionary approach, built into it.

In order to demonstrate compliance with the standard, the ARPANSA created a prediction report using a standard methodology to analyse the maximum potential impact of any new telecommunications facility. Carriers are obliged to undertake this analysis for each new facility and make it publicly available.

Importantly, the ARPANSA-created compliance report demonstrates the maximum signal strength of a proposed facility, assuming that it is handling the maximum number of users 24-hours a day.

In this way, the ARPANSA requires network carriers to demonstrate the greatest possible impact that a new telecommunications facility could have on the environment to give the community greater peace of mind. In reality base stations are designed to operate at the lowest possible power level to accommodate only the number of customers using the facility at any one time. This design function is called "adaptive power control" and ensures that the base station operates at minimum, not maximum, power levels at all times.

Using the ARPANSA standard methodology, Telstra is required to complete and make available an EME report which predicts the maximum environmental EME level the facility will emit. Telstra has completed this EME report and it shows that the maximum level of EME emitted by the proposed facility is 0.50% (1/200) (**Appendix D**). To better understand the information within this EME report, an ARPANSA published *A Guide to the Environmental EME Report* (**Appendix E**).

Amplitel and Telstra rely on the expert advice of national and international health authorities such as the ARPANSA and the WHO for overall assessments of health and safety impacts.

The WHO advises that all expert reviews on the health effects of exposure to radiofrequency fields have concluded that no adverse health effects have been established from exposure to



radiofrequency fields at levels below the international safety guidelines that have been adopted in Australia.

Telstra has strict procedures in place to ensure its mobile phones and base stations comply with these guidelines. Compliance with all applicable EME standards is part of Telstra's responsible approach to EME and mobile phone technology.

13.6 Social and Economic Impact

Reliable mobile phone coverage is important to ensure the economic growth of communities. It is not expected to have any adverse social or economic impacts as a result of the development. Indeed, it is anticipated that there would be positive impacts because of the mobile telephone coverage, and the proposed facility could also be utilised in the event of an emergency with reference to mobile phone and internet use.

The proposed development is essential to enable Carriers to remain competitive and increase the choice of mobile telephone services to consumers. Additional competition in the market will have economic benefits for individual consumers and the community as a whole. The development is consistent, with the objectives of the *Telecommunications Act 1997*, namely:

- To promote "the efficiency and international competitiveness of the Australian telecommunications industry" (s.3 (1)); and
- To ensure that telecommunications services "are supplied as efficiently and economically as practicable" (s.3 (2) (a) (ii)).

14.0 CONCLUSION

This application is a direct result of the community's requests for reliable telecommunications to be provided to the Lancelin area. There is strong State policy support for telecommunications facilities if, when balancing improved telecommunications services with environmental impacts; including for example, visual impact and flood or fire hazard, a particular proposal provides a net community benefit.

The proposed works provide the community with reliable 4G and 5G access, which in turn supports a variety of commercial, residential and industrial uses within the Lancelin area. It is further noted that the proposed telecommunications facility forms part of a wider plan to ensure reliable as well as accessible coverage during times of emergency and natural disaster events.

Ventia on behalf of Telstra and Amplitel has undertaken an assessment of the relevant matters as required by the *Telecommunications Act 1997*, State Legislation and the *Shire of Gingin Local Planning Scheme No. 9*. The proposal is considered appropriate in light of the relevant legislative, environmental, technical, radio coverage and public safety requirements.

The proposed development is considered appropriate for the subject site for the following reasons:

- The proposed works will provide reliable mobile phone service to Lancelin. The improved coverage is increasing access to new technologies for key regional sectors and communities, which rely on a fast, reliable and affordable mobile network.
- The proposal is for a re-use of an existing site which already houses a telecommunications facility, therefore no new immediate streetscapes or residences will be impacted which aren't already.



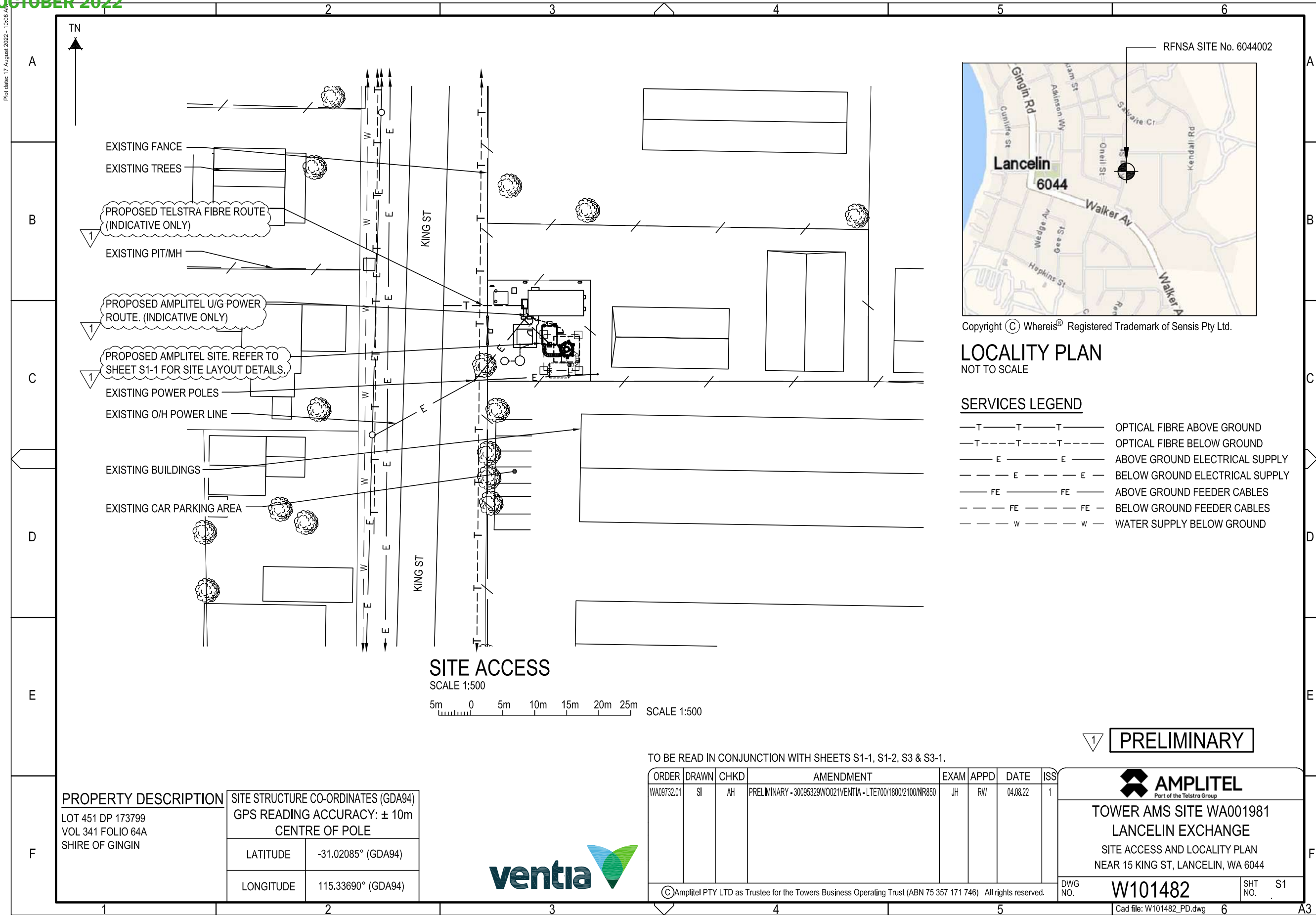
- The proposal does not require the addition of a new structure in Lancelin, with the replacement of an inadequate tower allowing for future facilities by other carriers to co-locate onto the structurally sound new structure.
- The proposal achieves reasonable separation from schools, childcare centres and areas of environmental and heritage significance as featured and defined in the Industry Code and *Telecommunications (Low-impact Facilities) Determination 2018*.
- The proposal will mitigate visual impacts through various design measures employed, relating to the material and colours used, along with the size and positioning of facilities without compromising the proposals structure and coverage objectives.
- The proposal is consistent with the relevant provisions of the *Shire of Gingin Local Planning Scheme No. 9* or presents only minor conflicts with them.
- The proposal will improve Telstra 4G and 5G communications services to the area, including voice calls, video calling and Wireless Broadband, and allow or other Carriers to provide similar services.
- The proposal does not require any vegetation clearing.
- The proposal will not affect the existing residential and mixed business uses or their potential to develop or redevelop.
- Emissions from the proposed facility will be significantly below the Australian Radiation Protection and Nuclear Safety Agency standards adopted by the Australian Communications and Media Authority.

The assessment of the proposal demonstrates that the proposal represents sound and proper town planning and it is respectfully requested that consent is granted for this development application.

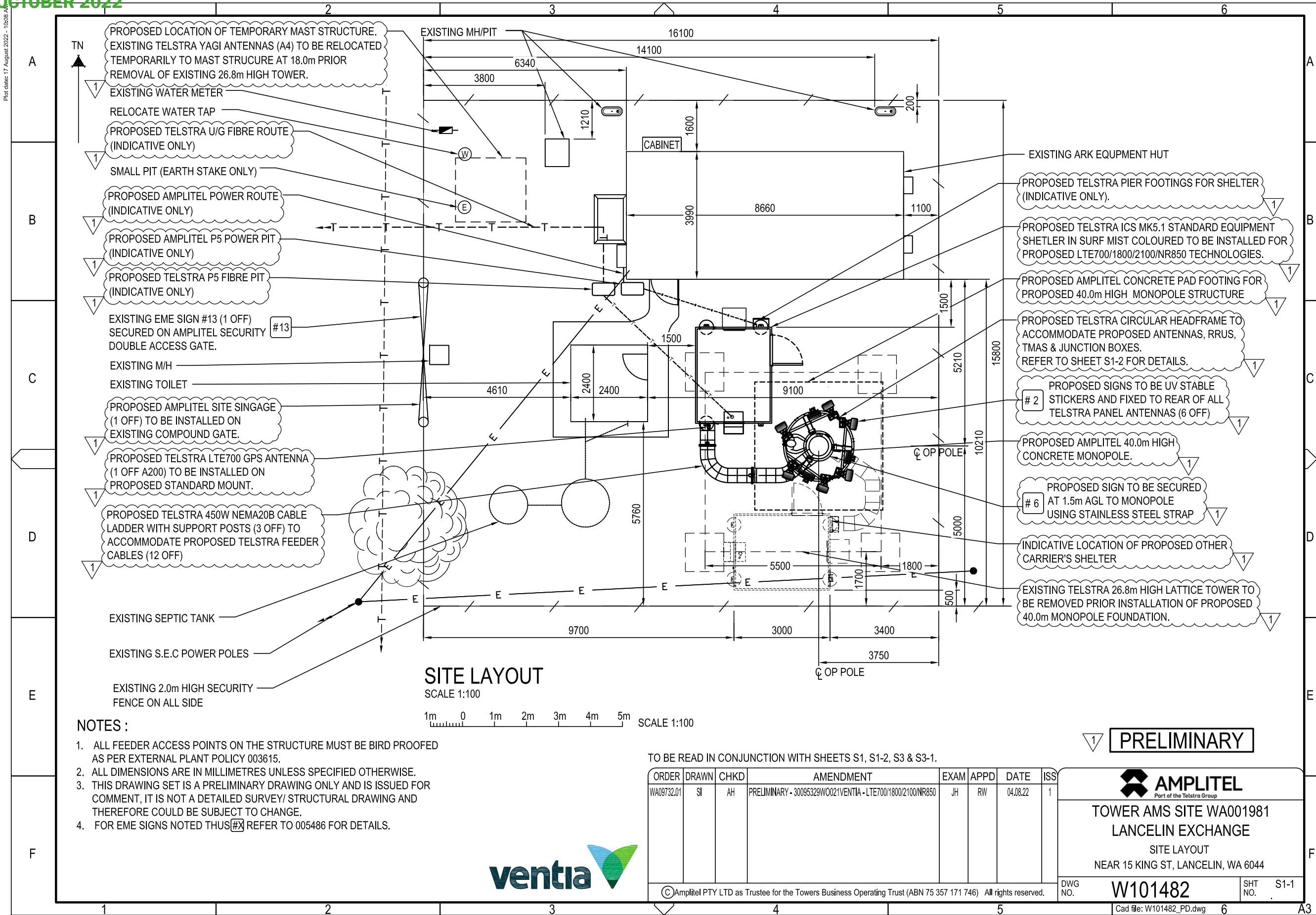
Should Council have any further queries regarding the subject application, please do not hesitate to contact the nominated representative outlined within this document.

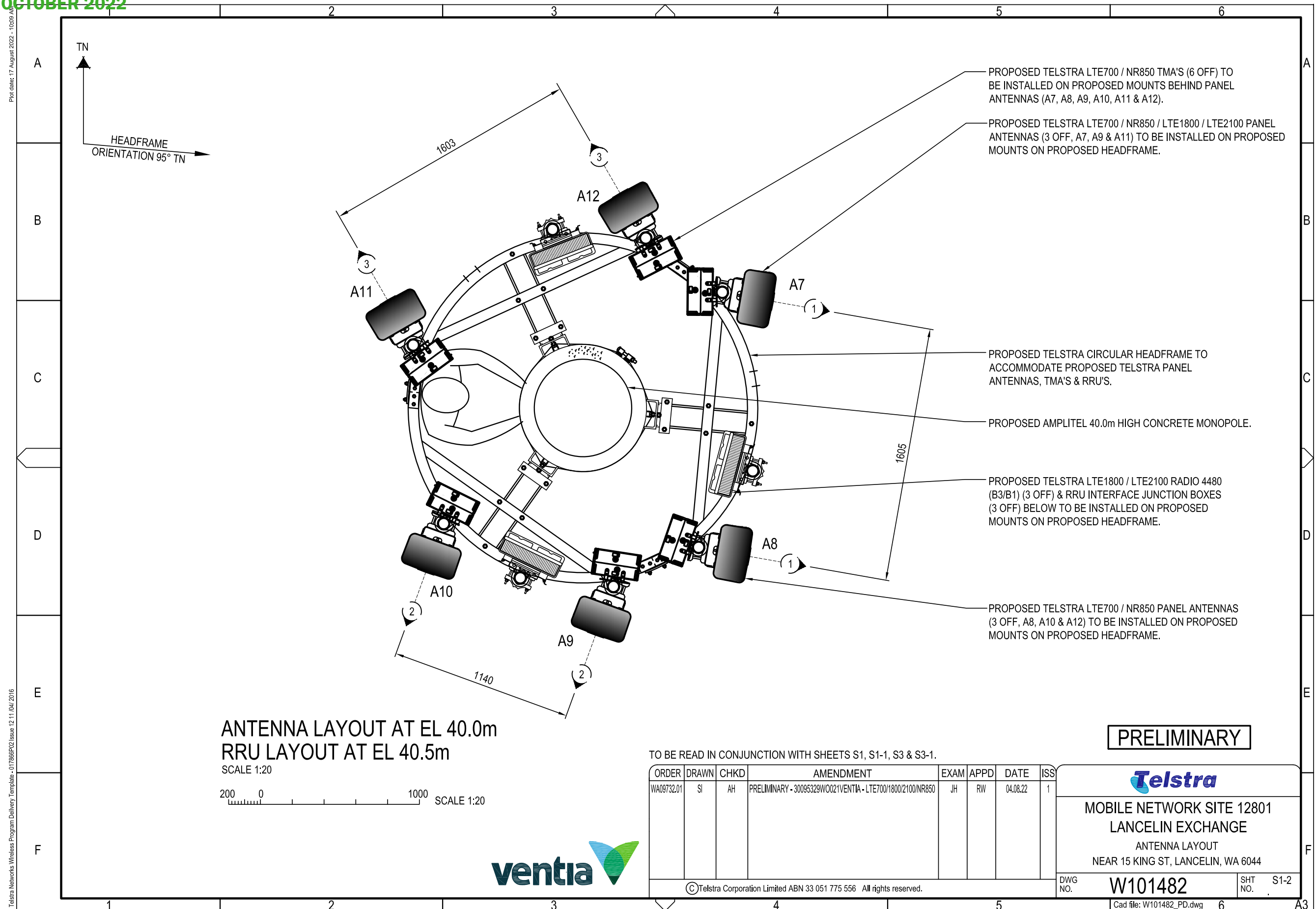


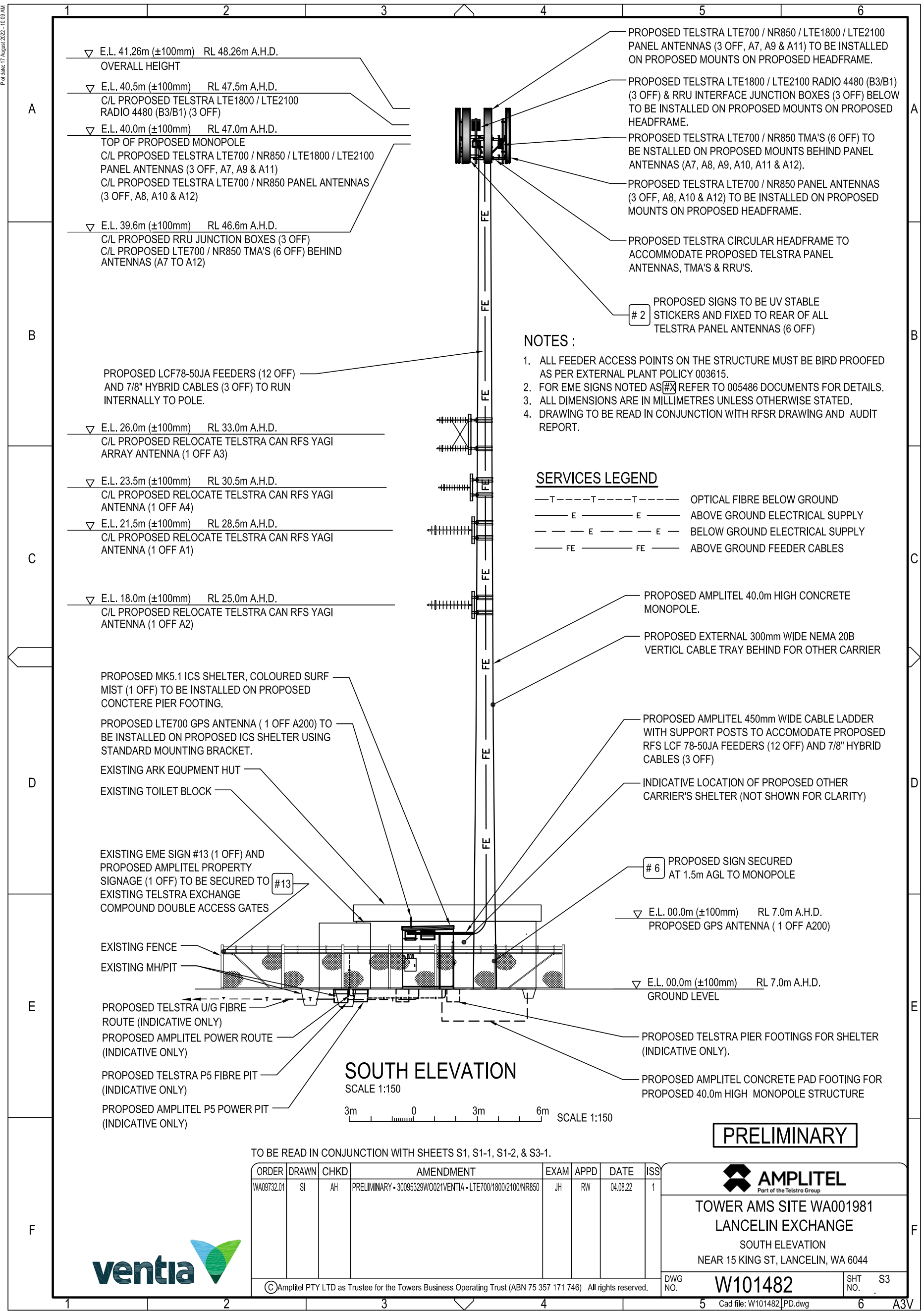
APPENDIX A – PLANS OF THE PROPOSAL



The copyright and ownership of this drawing is assigned to Amplitel and must not be copied or saved elsewhere without written permission from Amplitel.







The copyright and ownership of this drawing is assigned to Amplitel and must not be copied or saved elsewhere without written permission from Amplitel.

Plot Date: 17 August 2022 - 10:09 AM

<



APPENDIX B – CERTIFICATES OF TITLE

REGISTER NUMBER 451/DP173799	
DUPLICATE EDITION N/A	DATE DUPLICATE ISSUED N/A

WESTERN AUSTRALIA

RECORD OF CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME 341 FOLIO 64A

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts
REGISTRAR OF TITLES



LAND DESCRIPTION:

LOT 451 ON DEPOSITED PLAN 173799

**REGISTERED PROPRIETOR:
(FIRST SCHEDULE)**

TELSTRA CORPORATION LIMITED OF 242 EXHIBITION STREET MELBOURNE VIC 3000
(A 0880322) REGISTERED 21/9/2021

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)**

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

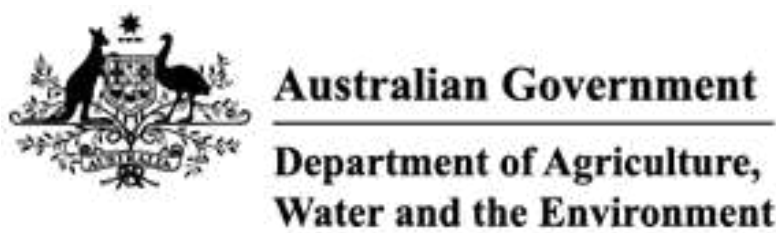
The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 341-64A (451/DP173799)
PREVIOUS TITLE: 341-64A
PROPERTY STREET ADDRESS: 15 KING ST, LANCELIN.
LOCAL GOVERNMENT AUTHORITY: SHIRE OF GINGIN

NOTE 1: A000001A LAND PARCEL IDENTIFIER OF LANCELIN TOWN LOT/LOT 451 (OR THE PART THEREOF) ON SUPERSEDED PAPER CERTIFICATE OF TITLE CHANGED TO LOT 451 ON DEPOSITED PLAN 173799 ON 08-JUN-02 TO ENABLE ISSUE OF A DIGITAL CERTIFICATE OF TITLE.
NOTE 2: THE ABOVE NOTE MAY NOT BE SHOWN ON THE SUPERSEDED PAPER CERTIFICATE OF TITLE OR ON THE CURRENT EDITION OF DUPLICATE CERTIFICATE OF TITLE.



APPENDIX C – ENVIRONMENTAL ANALYSIS REPORT (EPBC)



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 25/08/22 11:52:25

- [Summary](#)
- [Details](#)
 - [Matters of NES](#)
 - [Other Matters Protected by the EPBC Act](#)
 - [Extra Information](#)
- [Caveat](#)
- [Acknowledgements](#)

No Image
Available

This map may contain data which are
©Commonwealth of Australia
(Geoscience Australia), ©PSMA 2015

[Coordinates](#)
[Buffer: 1.0Km](#)

No Image
Available

Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	34
Listed Migratory Species:	41

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	63
Whales and Other Cetaceans:	11
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	15
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community may occur within area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community may occur within area

Listed Threatened Species [Resource Information]

Name	Status	Type of Presence
Birds		
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Species or species habitat known to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat may occur within area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Critically Endangered	Species or species habitat known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area

Name	Status	Type of Presence
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area
Mammals		
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat likely to occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Ctenotus lancelini Lancelin Island Skink [1482]	Vulnerable	Species or species habitat may occur within

Name	Status	Type of Presence
area		
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area
Sharks		
Carcharias taurus (west coast population) Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat known to occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Listed Migratory Species		
[Resource Information]		
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Hydroprogne caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area

Name	Threatened	Type of Presence
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Species or species habitat likely to occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area
Manta alfredi Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
Manta birostris Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land		[Resource Information]
The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.		
Name		
Commonwealth Land -		
Listed Marine Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Birds		

Name	Threatened	Type of Presence
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Larus pacificus Pacific Gull [811]		Foraging, feeding or related behaviour known to occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area
Pandion haliaetus Osprey [952]		Breeding known to occur within area
Puffinus assimilis Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Foraging, feeding or related behaviour likely to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Sterna albifrons Little Tern [813]		Species or species habitat may occur within area
Sterna caspia Caspian Tern [59467]		Foraging, feeding or related behaviour known to occur within area
Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat may occur within area
Fish		
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area
Campichthys galei Gale's Pipefish [66191]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Choeroichthys suillus Pig-snouted Pipefish [66198]		Species or species habitat may occur within area
Halicampus brocki Brock's Pipefish [66219]		Species or species habitat may occur within area
Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area
Hippocampus subelongatus West Australian Seahorse [66722]		Species or species habitat may occur within area
Lissocampus fatiloquus Prophet's Pipefish [66250]		Species or species habitat may occur within area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area
Mitotichthys meraculus Western Crested Pipefish [66259]		Species or species habitat may occur within area
Nannocampus subosseus Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area

Mammals

Name	Threatened	Type of Presence
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat likely to occur within area
Reptiles		
Aipysurus pooleorum Shark Bay Seasnake [66061]		Species or species habitat may occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Disteira kingii Spectacled Seasnake [1123]		Species or species habitat may occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area
Pelamis platurus Yellow-bellied Seasnake [1091]		Species or species habitat may occur within area
Whales and other Cetaceans		[Resource Information]
Name	Status	Type of Presence
Mammals		
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area

Name	Status	Type of Presence
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area

Extra Information

Invasive Species [Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Anas platyrhynchos Mallard, Northern Mallard [974]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
Mammals		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area

Name	Status	Type of Presence
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-31.020869 115.336911

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [Office of Environment and Heritage, New South Wales](#)
- [Department of Environment and Primary Industries, Victoria](#)
- [Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [Department of Environment, Water and Natural Resources, South Australia](#)
- [Department of Land and Resource Management, Northern Territory](#)
- [Department of Environmental and Heritage Protection, Queensland](#)
- [Department of Parks and Wildlife, Western Australia](#)
- [Environment and Planning Directorate, ACT](#)
- [Birdlife Australia](#)
- [Australian Bird and Bat Banding Scheme](#)
- [Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [Museum Victoria](#)
- [Australian Museum](#)
- [South Australian Museum](#)
- [Queensland Museum](#)
- [Online Zoological Collections of Australian Museums](#)
- [Queensland Herbarium](#)
- [National Herbarium of NSW](#)
- [Royal Botanic Gardens and National Herbarium of Victoria](#)
- [Tasmanian Herbarium](#)
- [State Herbarium of South Australia](#)
- [Northern Territory Herbarium](#)
- [Western Australian Herbarium](#)
- [Australian National Herbarium, Canberra](#)
- [University of New England](#)
- [Ocean Biogeographic Information System](#)
- [Australian Government, Department of Defence Forestry Corporation, NSW](#)
- [Geoscience Australia](#)
- [CSIRO](#)
- [Australian Tropical Herbarium, Cairns](#)
- [eBird Australia](#)
- [Australian Government – Australian Antarctic Data Centre](#)
- [Museum and Art Gallery of the Northern Territory](#)
- [Australian Government National Environmental Science Program](#)
- [Australian Institute of Marine Science](#)
- [Reef Life Survey Australia](#)
- [American Museum of Natural History](#)
- [Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.



APPENDIX D – EME REPORT

Environmental EME Report

Location	15 King St, LANCELIN WA 6044		
Date	09/08/2022	RFNSA No.	6044002

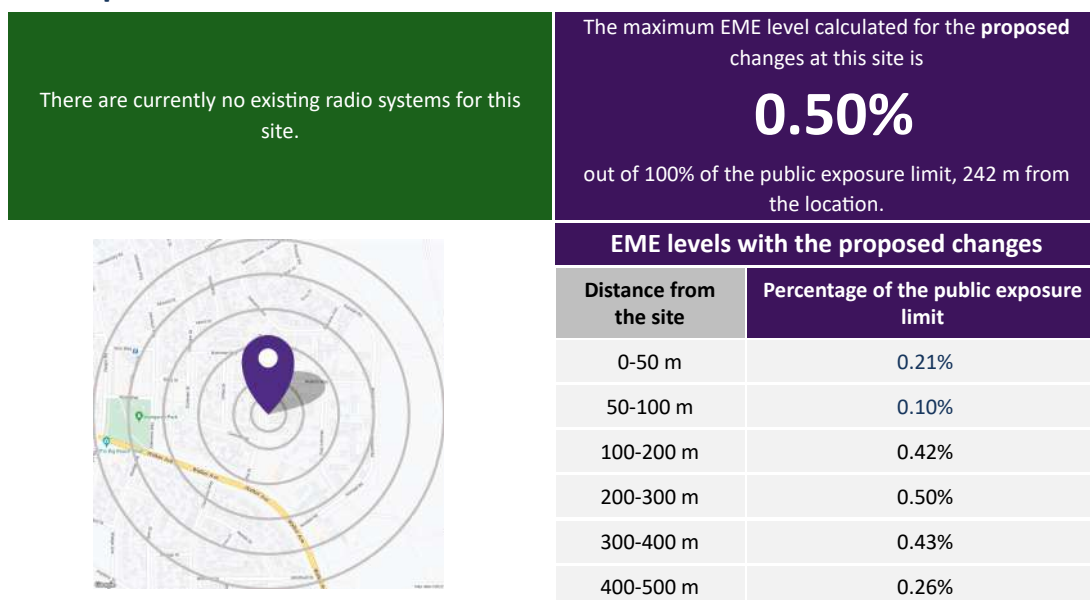
How does this report work?

This report provides a summary of levels of radiofrequency (RF) electromagnetic energy (EME) around the wireless base station at 15 King St, LANCELIN WA 6044. These levels have been calculated by Visionstream using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

A document describing how to interpret this report is available at ARPANSA's website:

[A Guide to the Environmental Report.](#)

A snapshot of calculated EME levels at this site



For additional information please refer to the EME ARPANSA Report annexure for this site which can be found at <http://www.rfnsa.com.au/6044002>.

Radio systems at the site

This base station currently has equipment for transmitting the services listed under the existing configuration.

The proposal would modify the base station to include all the services listed under the proposed configuration.

Carrier	Existing		Proposed	
	Systems	Configuration	Systems	Configuration
Telstra			4G, 5G	LTE700 (proposed), NR850 (proposed), LTE1800 (proposed), LTE2100 (proposed)

An in-depth look at calculated EME levels at this site

This table provides calculations of RF EME at different distances from the base station for emissions from existing equipment alone and for emissions from existing equipment and proposed equipment combined. All EME levels are relative to 1.5 m above ground and all distances from the site are in 360° circular bands.

Distance from the site	Existing configuration			Proposed configuration		
	Electric field (V/m)	Power density (mW/m ²)	Percentage of the public exposure limit	Electric field (V/m)	Power density (mW/m ²)	Percentage of the public exposure limit
0-50m				2.65	18.64	0.21%
50-100m				1.75	8.11	0.10%
100-200m				2.82	21.09	0.42%
200-300m				3.20	27.17	0.50%
300-400m				3.03	24.34	0.43%
400-500m				2.37	14.95	0.26%

Calculated EME levels at other areas of interest

This table contains calculations of the maximum EME levels at selected areas of interest, identified through consultation requirements of the [Communications Alliance Ltd Deployment Code C564:2020](#) or other means. Calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site.

Maximum cumulative EME level for the proposed configuration

Location	Height range	Electric field (V/m)	Power density (mW/m ²)	Percentage of the public exposure limit
No locations identified				



APPENDIX E – GUIDE TO EME REPORT



Australian Government
Australian Radiation Protection
and Nuclear Safety Agency



A Guide to the Environmental EME Report

What is an Environmental EME Report?

The Environmental EME Report provides calculations of the maximum levels of radiofrequency (RF) electromagnetic energy (EME) around an existing and/or proposed wireless base station that may include mobile telephony, broadband and data services. The report is generally produced by a network operator (such as a mobile phone company) or consultants working on their behalf.

All deployment of public mobile telecommunications service infrastructure in Australia, which includes wireless base stations, small cells and antennas, must be carried out according to the Industry Code C564:2020 Mobile Phone Base Station Deployment (the Code)¹. The Code requires the supply of certain information as part of the consultative process with the local community and local government authority. The environmental EME report is part of this process and is produced according to a methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA)². It provides objective estimates of the maximum levels of EME from a wireless base station or small cell for both existing and proposed upgrades to telecommunications systems at the site. There are two types of environmental EME report, each representing either a wireless base station or a small cell.

Why is there an EME Report?

Wireless base stations and small cells work by sending out RF EME in the form of waves carrying information. When the RF EME reaches objects, including people and animals, some of the energy carried by the waves is deposited in the object³. This can lead to heating of the object and, if levels are too high, can cause harmful effects. The ARPANSA RF Standard⁴ provides limits of exposure which must be complied with by all radio installations, including wireless base stations and small cells. The limits for EME exposure given in the ARPANSA Standard are intended to provide protection for people of all ages and medical conditions when exposed 24 hours per day, 7 days per week. The EME Report shows the maximum

¹ The Communications Alliance Ltd Industry Code C564:2011 'Mobile Phone Base Station Deployment' is available from the Communications Alliance Ltd website, <http://commsalliance.com.au>.

² The ARPANSA methodology produces overconservative calculations for multiple-input and multiple-output (MIMO) systems

³ Information on RF EME and its effects is available from ARPANSA <http://www.arpansa.gov.au/RadiationProtection/basics/rf.cfm>

⁴ The ARPANSA RF Standard is available from <http://www.arpansa.gov.au/Publications/Codes/rps3.cfm>

calculated levels for a specific installation and compares them against the exposure limits in the ARPANSA Standard.

What information is on the report?

The report gives the address of the installation, together with a list of the companies using the site and the types of mobile network currently installed and being proposed. It also includes details of calculated levels of RF EME. If the site already has antennas in place, the report includes separate information on the existing and the combined existing and proposed installations. The report estimates RF EME from all of the identified wireless transmitters at this site; it does not estimate RF EME from all surrounding sites. The calculated levels do not include RF EME from other types of radio transmitters (that are not subject to the industry Code) which may be installed on the same structure, e.g. AM and FM radio, TV etc.

EME Levels

The tables of calculated EME levels on the report provide maximum levels of EME found at various distances from the base of the tower or supporting structure for wireless base stations. Within each range of distances, the highest value is given regardless of direction. For small cells mounted on light and power poles or other structures, the report shows the maximum EME level and the distance where this occurs. This provides more relevant exposure information to account for the lower overall power and the much shorter range of the transmitted radio signals from small cells.

For wireless base stations the values of EME are presented in 3 different units:

- volts per metre (V/m) – the electric field component of the RF wave
- milliwatts per square metre (mW/m²) – the power density (or rate of flow of RF energy per unit area)⁵
- percentage (%) of the ARPANSA Standard

In reports for small cells the EME levels are only presented as a percentage of the ARPANSA Standard.

When expressed as a percentage, a value of 100% corresponds to the general public exposure limit. For example, a typical highest value of 1% means that the total EME level from all wireless network transmitters on the site, all operating at their maximum power, will be no more than one hundredth (1/100) of the limit set by the ARPANSA Standard for members of the public.

The table below shows the actual EME limits in the ARPANSA RF Standard used for the frequency bands representing different types of mobile network. At frequencies below 2000 megahertz (MHz) the limits vary across the band and the limit values shown in the table have been determined at the Assessment Frequency indicated. The table shows the three equivalent exposure limit figures in V/m, mW/m² and % ARPANSA Standard.

⁵ Power density is often expressed in units other than mW/m², other common units are watts per square metre (W/m²) and microwatts per square centimetre (µW/cm²). Where conversion is required: 1 watt per square metre (W/m²) = 100 microwatts per square centimetre (µW/cm²) = 1000 milliwatts per square metre (mW/m²).

Radio Systems	Frequency Band	Assessment Frequency	ARPANSA Standard public exposure limits at the Assessment Frequency		
			Electric Field V/m	Power Density mW/m ²	% of ARPANSA exposure limits
LTE700	758 – 803 MHz	750 MHz	37.5 V/m	3750 mW/m ²	100%
WCDMA850	870 – 890 MHz	900 MHz	41.1 V/m	4500 mW/m ²	100%
GSM900, LTE900, WCDMA900	935 – 960 MHz	900 MHz	41.1 V/m	4500 mW/m ²	100%
GSM1800, LTE1800	1805 – 1880 MHz	1800 MHz	58.1 V/m	9000 mW/m ²	100%
LTE2100, WCDMA2100	2110 – 2170 MHz	2100 MHz	61.4 V/m	10000 mW/m ²	100%
LTE2300	2302 – 2400 MHz	2300 MHz	61.4 V/m	10000 mW/m ²	100%
LTE2600	2620 – 2690 MHz	2600 MHz	61.4 V/m	10000 mW/m ²	100%
LTE3500	3425 – 3575 MHz	3500 MHz	61.4 V/m	10000 mW/m ²	100%

Effect of Landscape (topography)

The tables of calculated EME levels provide values at 1.5 m above a flat landscape. Commonly, wireless base stations and small cells are located on a high point and the assumption of flat ground provides a worst-case estimate for these situations. Sometimes, however, the ground may slope upwards away from the installation and this can cause concern that levels may be higher than calculated. In these cases the 'Calculated EME levels at other areas of interest' table should include the levels of EME at a selection of heights where maximum levels are expected.

Generally, locations very close to the base of the antenna will experience very low levels of EME compared to the surrounding areas. This may not be true if a location is both close, say within 100 m, and elevated above the height of the base of the antenna structure. This may occur because a building is located nearby or the ground rises sharply. In either of these circumstances, EME levels may actually be higher than found at the height of flat ground or a community member may have reasonable concerns that this is so. If such locations exist, carefully calculated estimates in a representative sample of such situations should be provided in the 'Calculated EME levels at other areas of interest' table. It is important to note that in many cases the location may not be in the direction of significant radiated EME and the EME levels may be very low.

Other Areas of Interest

The Code requires the mobile network companies to take account of Community Sensitive Locations. The Code defines Community Sensitive Location to include land uses such as residential areas, childcare centres, schools, aged care centres, hospitals and regional icons which may be considered as sensitive uses in some communities. It is acknowledged that each location should be evaluated on a site by site basis to determine community sensitive locations.

The table 'Calculated EME levels at other areas of interest' on the report provides additional estimates of EME levels at a small number of such locations. These locations may be identified as being of particular concern to the community during the consultation process required by the Code. Typically, levels may be given for the closest point of a children's facility, or for a small number of other locations. It is expected that for an average report, there may be 3 to 5 additional areas of interest calculations. These should be chosen to be representative of both community concern and locations where higher levels of EME may actually be expected on technical grounds. Community Sensitive Locations would be expected to include a small number of floors of a multistorey building if it is close to the antennas and in the direction of significant radiated EME. For some sites there may be no indication for other areas of interest, such as where there is flat ground, no elevated buildings and no locations identified as being of particular community concern. In these cases, after checking:

- the Code's community consultation plan
- topography or buildings near the antennas
- other locations, such as those identified as being of significant previous community concern

no other areas of interest will have been identified. In this case, the EME Report should include the statement 'No locations identified' in the 'Calculated EME levels at other areas of interest' table.

Can I expect to have an EME calculation done for my house?

Whilst the Environmental EME report is a basic report, members of the public are free to request (in writing) a Carrier to provide additional information under section 3.3 of the Code

The Carrier will choose how best to service that request, but it will not be considered as part of the ARPANSA EME report.

Why do the EME levels vary with distance?

The calculations of the maximum EME levels are based on well understood principles of physics that deal with how electromagnetic waves travel and spread out. The total amount of energy emitted from the antenna is limited by the power of the amplifier used to drive the antenna. As the energy leaves the antenna, it spreads out to cover bigger and bigger areas and so gets less intense the further away it gets, this is illustrated in Figure 1 which shows a basic 2-dimensional view of what happens to the EME around a real base station.

The antenna is usually designed to direct most of the energy out towards the horizon, or a few degrees below, so that most of the energy goes where it is needed to communicate with the mobile phone handsets or other user equipment. As one moves away from a base station at ground level, the levels first increase before reaching a maximum and then get less as you move still further away. Typically, the maximum EME level at ground level will occur between 75 m and 200 m from the base of the antenna.

The mobile network companies sometimes need to adjust the angle of the antennas to obtain the best coverage and this can alter slightly the distance at which the maximum occurs and exactly what EME level is found there. Often, the ARPANSA EME Report will take likely alterations into account and include the

highest levels that might occur if the antenna is moved in the future. Some antennas use self-tilt and pan to dynamically change direction; in these situations the orientation that produces the highest maximum EME level is used for the calculation.

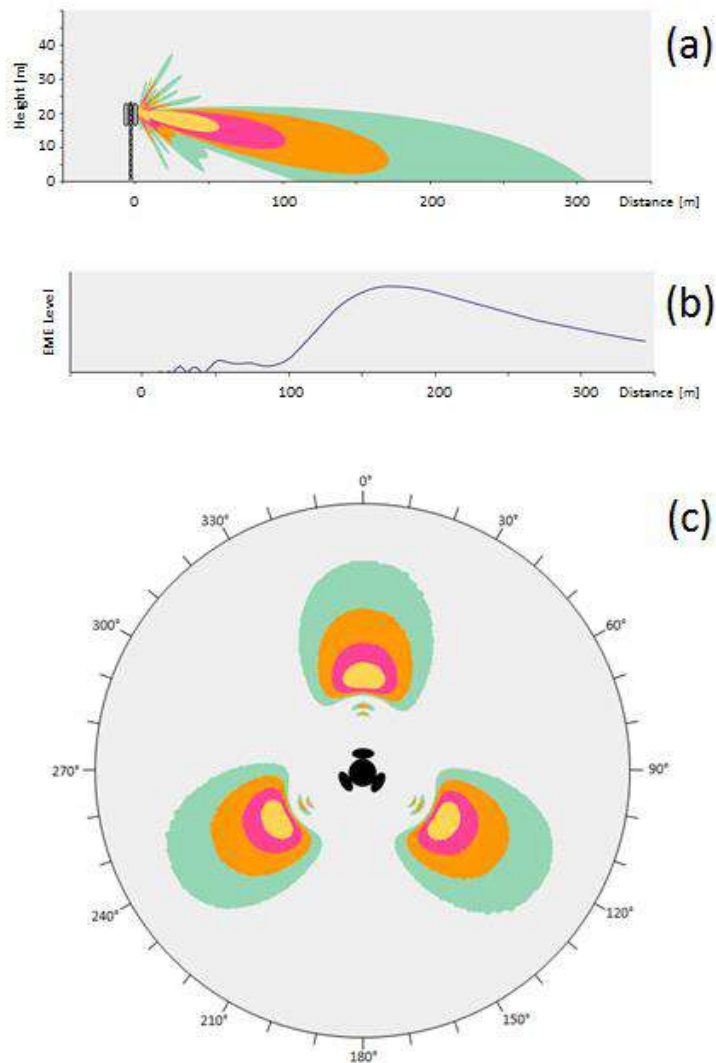


Figure 1. How the EME levels vary as you move away from a base station tower.
(a) Side view of a single antenna pattern. (b) EME level at 1.5 m above ground.
(c) Aerial view of three sector antenna pattern

The EME transmitted from small cells is more localised and, depending on its configuration, may not follow the same emission profile as a larger base station. Typically, the EME levels are very low and they decrease rapidly with distance away from the source much like the larger base stations.

How Accurate are the Calculated Values?

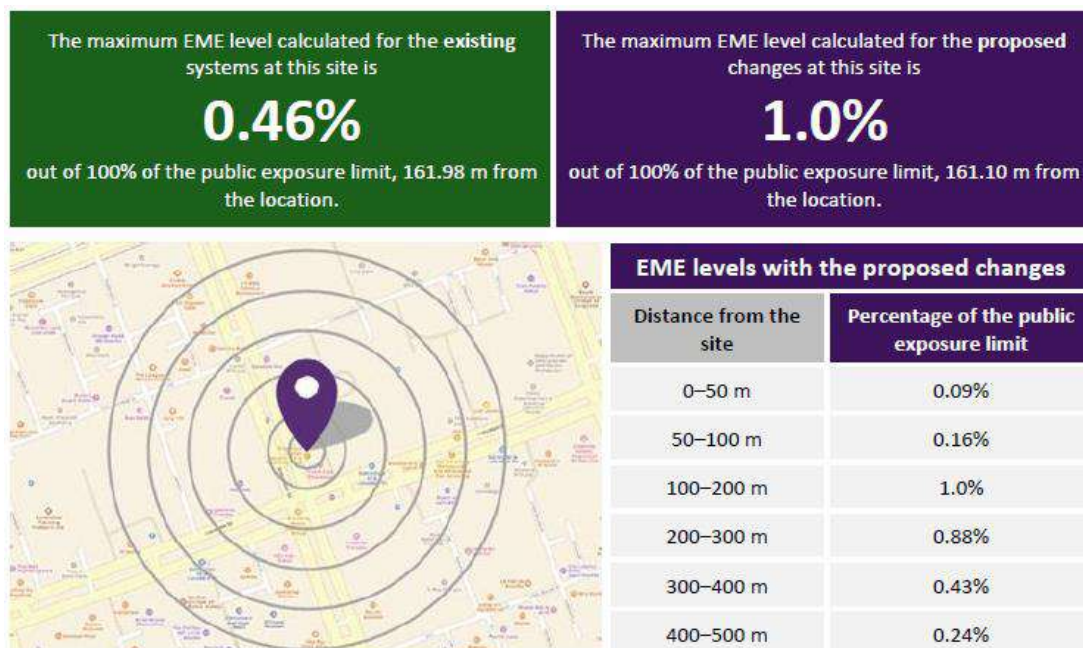
The values of EME provided in the report are intended to be maximum levels that can almost never be exceeded when the base station is operating. The values assume, for example, that all the planned transmitters are installed and are all operating at maximum power. Some of the transmitters at a base station are only used when there are a certain number of telephone calls or data transmissions actually in progress; otherwise they are turned off. Even when a call is in progress, the power transmitted is adjusted to be only as high as necessary to communicate with the handset. If the handset is close, or in a good signal area, the base station transmitter will reduce its power automatically.

The calculations do not take into account trees, vegetation or buildings which may alter the EME levels, generally decreasing them. Some of the EME is reflected from buildings and the ground and often this signal is used by a handset when the direct signal is blocked by a building. When the reflected signal and direct signal combine the overall level can be lower or higher than the direct signal alone depending on the exact location.

Measurements around base stations have shown actual values of EME are usually less than calculation by factors of 10 to 1000 or even more. Values of EME indoors will typically be even lower as walls, windows and roofs absorb or reflect the energy.

A similar situation applies to the emissions from small cells. The EME emissions from small cells follow the same physical process and are similarly affected by surrounding objects.

Example Snapshot of Calculated EME Levels



The example snapshot above applies to the calculated EME levels around a typical base station and provides the following information:

- The highest calculated level of RF EME coming from the existing equipment at this base station is found at a distance of approximately 161.98 m and is 0.46% or less than 1/200 of the ARPANSA Standard exposure limit.
- Subsequent to the proposed alterations to the equipment at this site, the highest calculated level of RF EME rises to 1.04%, which is found at a distance of 161.10 m from the base of the tower.

The information detailing EME levels at radial distances from the installation is not included in EME reports for small cells due to the more localised emission of the antennas. In this case, information about the highest calculated EME level at the corresponding distance associated with the small cell is included. This is reported for both existing and proposed systems at the site in the same way as wireless base stations.

Example Table of an In-depth Look at Calculated EME Levels

Distance from the site	Existing configuration			Proposed configuration		
	Electric field (V/m)	Power density (mW/m ²)	Percentage of the public exposure limit	Electric field (V/m)	Power density (mW/m ²)	Percentage of the public exposure limit
0–50 m	0.57	0.87	0.01%	1.7	7.2	0.09%
50–100 m	0.96	2.5	0.04%	1.9	9.2	0.16%
100–200 m	3.4	31	0.46%	5.0	66	1.0%
200–300 m	3.2	27	0.40%	4.6	56	0.88%
300–400 m	2.3	13	0.20%	3.2	28	0.43%
400–500 m	1.7	7.7	0.11%	2.4	16	0.24%

The example table above provides the following information:

- At any location on level ground within 50 m of the base of the tower, the highest calculated level of RF EME coming from the existing equipment at this base station is 0.01% or approximately 1/10000 of the ARPANSA Standard exposure limit. In physical units this is a power density of 0.87 milliwatts per metre squared (mW/m²), equivalent to an electric field strength of 0.57 volts per metre (V/m).
- Subsequent to the proposed alterations to the equipment at this site, at any location on level ground within 50 m of the base of the tower, the highest calculated level of RF EME rises to a power density of 7.18 mW/m² or an electric field strength of 1.65 V/m which is equivalent to 0.09% of the ARPANSA Standard exposure limit (or less than 1/1000 of the limit).
- The values reported here are only expected to occur when the transmitters are all operating at full power and where there is clear line-of-sight to all antennas. Levels indoors will be lower.
- At any distance within 500 m of the tower the table can be used to determine the maximum level. For example at a location 330 m from the tower, that is between 300 m and 400 m, the calculated level will be less than 0.2% of the ARPANSA Standard exposure limit for the existing equipment and 0.43% of the ARPANSA Standard exposure limit for the existing and proposed equipment. In many directions, and at most times, the actual level will be much lower than this calculated level.
- For a new wireless base station where there are no antennas already installed, the above table will only contain data under the 'Proposed Configuration' columns. Similarly, for a wireless base station that is not being upgraded, the table will only contain data under the 'Existing Configuration' columns.

This table is not included in EME reports for small cells due to the more localised emission from these installations.

It should be noted that all values quoted in the above two tables are calculated at 1.5 m above ground level in a flat landscape. As stated in the section “Effects of Landscape (topography)”, If the ground height changes enough to cause significant under estimation of the worst case environmental levels, further calculations shall be reported in the “Other Areas Of Interest” section.

Example Table of Calculated EME levels at Other Areas of Interest

Location	Height range	Electric field (V/m)	Power density (mW/m ²)	Percentage of the public exposure limit
ABC Primary School	0–6 m	2.6	18	0.29%
123 Sports Centre	0–6 m	2.4	15	0.23%
XYZ Community Centre	0–6 m	2.6	18	0.29%

The 'Calculated EME levels at other areas of interest' table provides calculated levels of RF EME at locations considered to be of special community interest or at elevated locations where there may be concern about higher levels of EME. The calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site. This table is included in reports for both wireless base stations and small cells. In reports for small cells the EME levels are only presented as a percentage of the ARPANSA Standard.

Further Information

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) is a Federal Government agency incorporated under the Health portfolio. ARPANSA is charged with responsibility for protecting the health and safety of people, and the environment, from the harmful effects of radiation (ionising and non-ionising).

Information about RF EME can be accessed at the ARPANSA website, <http://www.arpansa.gov.au>, including:

- The procedure used for the calculations in this report is documented in the ARPANSA Technical Report; "Radio Frequency EME Exposure Levels - Prediction Methodologies" ²
- The ARPANSA RF Standard⁴

The Australian Communications and Media Authority (ACMA) is responsible for the regulation of broadcasting, radiocommunications, telecommunications and online content. Information on EME is available at <https://www.acma.gov.au/our-rules-eme>.

The Communications Alliance Ltd Industry Code C564:2020 Mobile Phone Base Station Deployment is available from the Communications Alliance Ltd website, <http://commsalliance.com.au>.

Contact details for the Carriers (mobile network companies) operating in Australia and the most recent version of each site's Environmental EME Report are available online at the Radio Frequency National Site Archive, <http://www.rfnsa.com.au>.

1. The Communications Alliance Ltd Industry Code C564:2020 Mobile Phone Base Station Deployment is available from the Communications Alliance Ltd website, <https://www.commsalliance.com.au/Documents/all/codes/c564>
2. The ARPANSA methodology produces overconservative calculations for multiple-input and multiple-output (MIMO) systems. ([Radio frequency EME exposure levels - prediction methodologies technical report.](#))
3. Information on RF and its effects is available from ARPANSA <https://www.arpansa.gov.au/understanding-radiation/what-is-radiation/non...>
4. The ARPANSA RF Standard is available from <https://www.arpansa.gov.au/regulation-and-licensing/regulatory-publications/radiation-protection-series/codes-and-standards/rpss-1>
5. Power density is often expressed in units other than mW/m^2 , other common units are watts per square meter (W/m^2) and microwatts per square centimetre ($\mu\text{W/cm}^2$). Where conversion is required: 1 watt per square metre (W/m^2) = 100 microwatts per square centimetre ($\mu\text{W/cm}^2$) = 1000 milliwatts per square metre (mW/m^2).

SCHEDULE OF SUBMISSIONS AND RECOMMENDED RESPONSES

DEVELOPMENT APPLICATION: PROPOSED TELECOMMUNICATION FACILITY ON LOT 451 (15) KING STREET, LANCELIN

No.	Submitter	Submission details	Recommended response
1.	DOH	The submitter provides the following general comment: <i>"The DOH has no objection to the above proposal."</i>	Noted.
2.	Ratepayer	The submitter does not support the proposal and provides the following general comment: <i>"Through enquiry from a trusted and very experience source our fears of EMF and broadly radiation from this proposed structure have been satisfied to be a human safe environment.</i> <i>We are supportive of a very overdue upgrade of the Telstra mobile facility as we experience fluctuation in mobile coverage and download speeds. The worst is busy weekends etc. But we are critical of the site of the new structure in that this is an opportunity to remove this type of eyesore from our town. The Optus tower further North is a blight on the town amenity in our view.</i> <i>This is not a 'not in our backyard' comment but for instance, when an alternative site 6044001 (Lancelin Community Centre proximity) is available or preferably further away we see this as a planning opportunity missed if this proposal proceeds as planned.</i> <i>We ask councillors to seize this opportunity for Lancelin and do likewise in the other towns in the Shire when the similar situations arise."</i>	Noted. Noted. The officer does not disagree with the sentiment; however the local government must consider an application as lodged. Being of the view that the landowner should move their development elsewhere is not a valid reason to refuse a development under consideration.
3.	Ratepayer	The submitter provides the following general comment: <i>"What will happen to the large bird nest at the top of the current tower? Have been very interested in closely watching it."</i>	The applicant has advised that the nest will be relocated to the proposed structure and that construction works can be scheduled outside of the hatching season. The precise details in relation to relocating the nest is unknown at the time of writing this report, however a condition has been imposed to ensure the nest is safeguarded.

13.7 APPLICATION FOR DEVELOPMENT APPROVAL - CANCELLATION OF EXISTING APPROVAL FOR AGRICULTURE INTENSIVE (PERENNIAL HORTICULTURE) AND ACKNOWLEDGEMENT OF A RURAL PURSUIT ON LOT 103 (863) COWALLA ROAD, WANERIE

File	BLD/5089
Applicant	Marilyn Brown
Location	Lot 103 (863) Cowalla Road, Wanerie
Owner	Marilyn Brown and Trevor Brown
Zoning	General Rural 20
WAPC No	NA
Author	James Bayliss – Coordinator Statutory Planning
Reporting Officer	Bob Kelly - Executive Manager Regulatory and Development Services
Refer	Nil
Appendices	<ol style="list-style-type: none"> 1. Original Development Approval [13.7.1 - 4 pages] 2. Location Map - Lot 103 (863) Cowalla Road, Wanerie [13.7.2 - 1 page] 3. Aerial Map - Lot 103 (863) Cowalla Road, Wanerie [13.7.3 - 1 page] 4. Applicant's Proposal [13.7.4 - 9 pages]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider an Application for Development Approval to change the use classification from 'Agriculture Intensive' to 'Rural Pursuit' on Lot 103 (863) Cowalla Road, Wanerie.

BACKGROUND

The subject site is 10.3 hectares in area and received approval in 2002 for Irrigated Horticulture (Perennial) purposes. The area of irrigated horticulture was restricted to an area of 2 hectares, with a copy of the approval attached as **Appendix 13.7.1**.

The property has since changed ownership, with the current owners advising that only one acre (0.4 hectare) of mangoes was ever implemented. The officer notes that, having calculated the land dedicated to perennial horticulture using an aerial overlay of the property, an area of approximately 6,409m² (.64 hectares or 1.5 acres) is in use.

The land contains a dwelling, shed and a few other incidental structures. The remainder of the land is used for grazing purposes with the rear portion consisting predominantly of remnant vegetation. The water licence associated with the property is 29,430 kilolitres.

This application has been lodged in response to the removal of a concession which effectively allowed for a property to be split into separate rating categories based on area. The area under which the intensive activity was undertaken was rated at the higher 'Intensive- Rural/Mining' rate in the dollar, with the balance of the property being rated at the lower 'Rural – General' rate in the dollar. Since removal of the concession, several properties have experienced rate increases that have triggered the landowners/operators to review the approvals related to activities being undertaken on their property to ascertain if they are appropriately classified as 'intensive'.

Since Council last considered an application of this nature, the officer sought information from the Shire's legal advisors in relation to resolving issues such as this, given a 'Rural Pursuit' is exempt from the need to obtain development approval in the General Rural zone. This advice has been circulated separately.

A location plan and aerial imagery are provided as **Appendices 13.7.2 and 13.7.3** respectively.

The applicant's proposal is provided as **Appendix 13.7.4**.

COMMENT

Stakeholder Consultation

The application was not advertised to surrounding landowners. The use class Rural Pursuit is permitted within the General Rural zone. The development has been in existence for ~20 years and the officer concludes that there is no purpose to advertising the proposal.

PLANNING FRAMEWORK

Local Planning Scheme No. 9 (LPS 9) Planning Assessment

The subject land is zoned General Rural under LPS 9, the objectives of which are to:

- a. *Manage the land use changes so that the specific local rural character of the zone is maintained or enhanced;*
- b. *Encourage and protect broad acre agricultural activities such as grazing and more intensive agricultural activities such as horticulture as primary uses, with other rural pursuits and rural industries as secondary uses in circumstances where they demonstrate compatibility;*

- c. *Maintain and enhance the environmental qualities of the landscape, vegetation, soils and water bodies, to protect sensitive areas especially the natural valley and watercourse systems from damaged; and*
- d. *Provide for the operation and development of existing, future and potential rural land uses by limiting the introduction of sensitive land uses in the General Rural zone.*

‘Agriculture – Intensive’ is defined under LPS 9 as follows:

means premises used for trade or commercial purposes, including outbuildings and earthworks, associated with the following -

- (a) *the production of grapes, vegetables, flowers, exotic or native plants, or fruit or nuts;*
- (b) *the establishment and operation of plant or fruit nurseries;*
- (c) *the development of land for irrigated fodder production or irrigated pasture (including turf farms); or*
- (d) *aquaculture.*

‘Rural Pursuit’ is defined under LPS 9 as follows:

means any premises used for -

- a) *the rearing or agistment of animals;*
- b) *the stabling, agistment or training of horses;*
- c) *the growing of trees, plants, shrubs or flowers for replanting in domestic, commercial or industrial gardens; or*
- d) *the sale of produce grown solely on the lot but does not include agriculture – extensive or agriculture – intensive.”*

To assist in establishing the differences between the two use classes, the officer has also outlined the definition of a ‘Rural Pursuit’ under the model provisions provided under Schedule 1 of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

rural pursuit/hobby farm means any premises, other than premises used for agriculture – extensive or agriculture – intensive, that are used by an occupier of the premises to carry out any of the following activities if carrying out of the activity does not involve permanently employing a person who is not a member of the occupier’s household -

- a) *the rearing, agistment, stabling or training of animals;*
- b) *the keeping of bees;*
- c) *the sale of produce grown solely on the premises;*

The general approach by the Shire's Planning Department is that if the development is for a commercial purpose, then generally the use class 'Agriculture Intensive' is applied. If the application is a hobby farm, notwithstanding a small commercial gain could be sought, then generally the use class 'Rural Pursuit' is applied. This approach is supported by the model provisions explicitly referencing 'hobby farm' as part of the definition.

The officer's understanding is that typically 'Rural Pursuit' approvals have been applied to properties zoned Rural Living, and 'Agriculture Intensive' approvals have been applied to properties zoned General Rural. This statement is a generalisation, though it has been the case in most instances.

Each proposal must be considered on the specific facts and circumstances which apply to each application. It is critical for sufficient information to be provided by the applicant as part of their submission to enable the assessing officer to correctly categorise the application. Factors such as the size and scale of the development (this is the most obvious), vehicle movements, sale method, water entitlement etc. all contribute in some way as to how the overall development is classified in a planning sense.

In this instance, a relatively small portion of the property is designated for the growing of mangoes with the balance area being used for low scale grazing purposes or residential purposes. The information supplied as part of the application suggest that no employees are required to assist, and the intensity of the use is negligible in terms of vehicle movements or emissions.

Notwithstanding the above, the site does have approximately 1.5 hectares of mangoes which is more than required for personal consumption, so it is likely that a commercial element does exist.

The officer notes that the development could arguably fall under either use classification, however on balance with the benefit of the above information, is of the view that the Rural Pursuit classification should be applied in this circumstance.

Given the officer is of the view that the development is capable of being classed as a 'Rural Pursuit', consistent with advice received the existing approval dated 28 November 2002 must be cancelled and there would no longer be a basis for the Shire to continue rating the land as 'Rural Intensive'. The owner would not need a further approval to undertake the Rural Pursuit in the General Rural zone and correspondence would be provided to that effect.

Summary

In summary, application of the 'Rural Pursuit' use class is considered appropriate in this instance, as it better aligns with the scale of activities currently occurring on the property. On that basis, the officer recommends cancelling the existing 'irrigated horticulture' approval.

STATUTORY/LOCAL LAW IMPLICATIONS

Planning and Development (Local Planning Scheme) Regulations 2015
Local Planning Scheme No. 9

POLICY IMPLICATIONS

Local Planning Policy No – 1.6 Agriculture Intensive

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	3. Planning & Sustainability - Plan for Future Generations
Strategic Objective	3.3 Planning & Land Use - Plan the use of the land to meet future requirements incorporating economic development objectives and community amenity

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Kestel

SECONDED: Councillor Johnson

That Council:

1. Agree that the development being undertaken on Lot 103 (863) Cowalla Road, Wanerie constitutes a 'Rural Pursuit' under Local Planning Scheme No. 9.
2. Cancel development approval NT/COWA/103 of 4413 issued on 28 November 2002 for 'Irrigated Horticulture' (Perennial) on Lot 103 (863) Cowalla Road, Wanerie.

CARRIED UNANIMOUSLY
7 / 0

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*



7 Brockman Street, Gingin, Western Australia 6503
Telephone (08) 9575 2211 Facsimile (08) 9575 2121
Email: ginginwa@inet.net.au

28 November 2002

~~Stephen & Tina Parsons~~
~~[Redacted]~~
GINGIN WA 6503

Dear Mr & Mrs Parsons

APPLICATION FOR PLANNING CONSENT – IRRIGATED HORTICULTURE
(PERENNIAL) ON LOT 103 OF 4413 COWALLA ROAD, WANERIE

I refer to your application for planning consent dated 19 November 2002 for
Irrigated Horticulture (Perennial) on Lot 103 of 4413 Cowalla Road, Wanerie.

Council's Chief Executive Officer, acting under delegated authority of Council,
has considered your proposal and I am pleased to advise that your application
has been approved, subject to conditions that are outlined on the attached Notice
of Approval of Planning Consent.

Should you be aggrieved by the conditions applied to this approval you may
appeal in accordance with Part V of the Town Planning and Development Act
1928 (as amended) and any rules or regulations made pursuant to the Act.

Yours faithfully

DAVID MAIORANA
PLANNING OFFICER

DM:lf

Enc

Our Ref: NT/COWA/103 OF 4413
Enq: David Maiorana



7 Brockman Street, Gingin, 6503
Tel. 08 9575 2211 Fax 08 9575 2121

APPENDIX 5
NOTICE OF APPROVAL OF PLANNING
CONSENT

Name and Address of Applicant/Owner:

~~Stephen & Tina Parsons, PO Box 241, GINGIN, WA 6503~~

Description of Land:

Lot 103 of 4413 Cowalla Road, Wanerie

Planning consent for the application dated the nineteenth day of November 2002 and the plans attached thereto for Irrigated Horticulture (Perennial) on Lot 103 of 4413 Cowalla Road, Wanerie, is granted subject to the following conditions:

1. Development may be carried out only in accordance with the terms of the application as approved herein and the approved plan.
2. The area of Irrigated Horticulture shall be limited to 2 hectares.
3. This approval is for Irrigated Horticulture (perennial) only. Should any other form of irrigated horticulture be proposed in the future, then a separate application for planning consent will be required.
4. Waste material generated from the horticultural activity shall not be stored on the property in a manner that facilitates fly breeding or odour emissions, but shall be either buried, treated or removed offsite to Council's satisfaction.
5. Horticultural waste to be trashed for soil improvement shall be turned into the soil within two days of the removal of the crop or portion of the crop to Council's satisfaction.

Advice Notes:

1. Further to this approval, the applicant is required to submit working drawings and specifications to comply with the requirements of Part 4 of the Building Regulations 1989 and the Health Act 1911 which are to be approved by the Shire's Principal Building Surveyor and Principal Environmental Health Officer prior to the issue of the building licence.
2. Where any vegetation clearing is proposed then it will be necessary to contact the Office of the Commissioner for Soil and Land Conservation in relation to any possible requirements or restrictions.

This is not a building licence. A separate application is required for a building licence.

- 2 -

S & T Parsons

28 November 2002

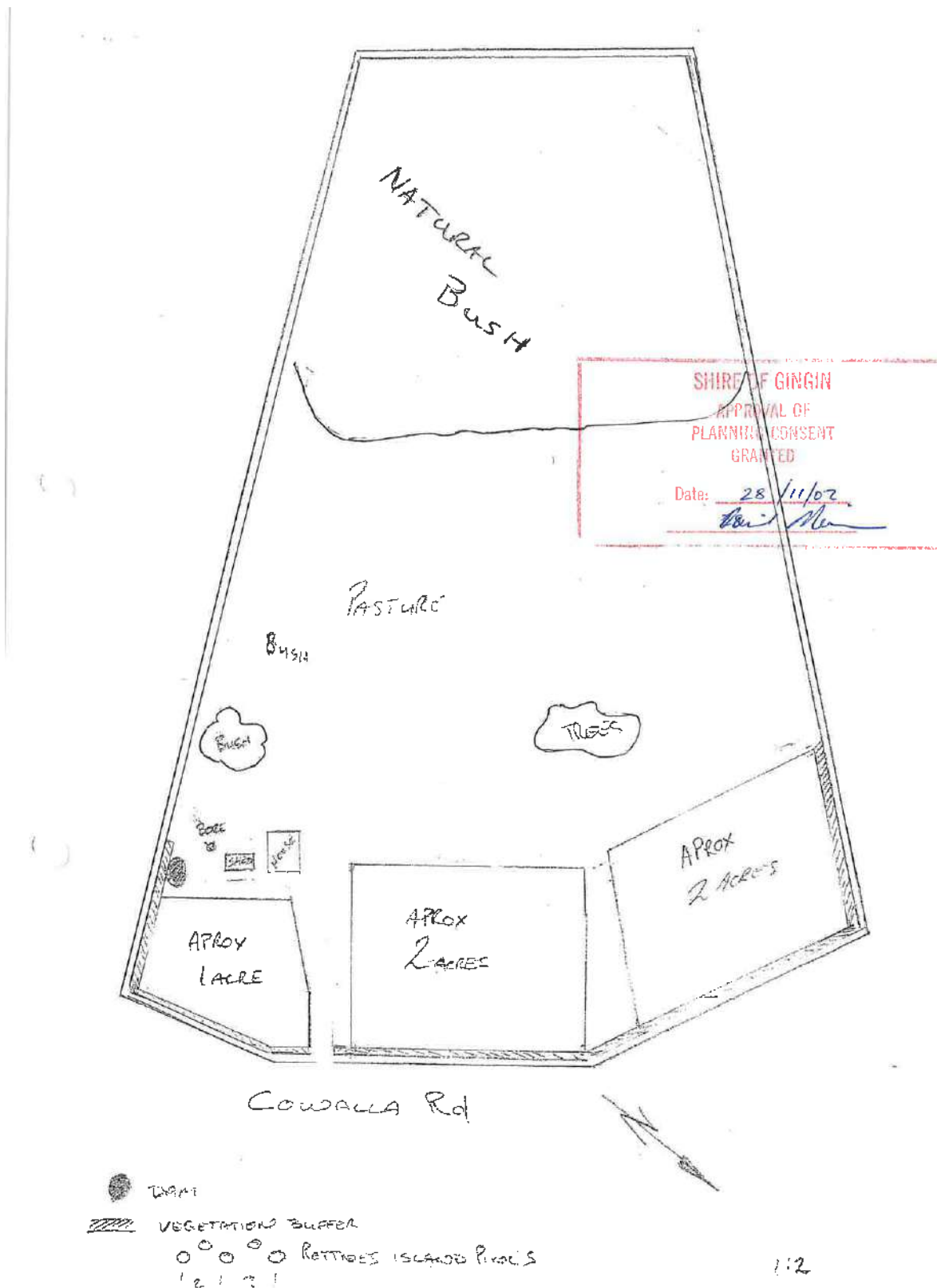
3. *Prior to the installation of a water bore, a licence is to be obtained from the Water and Rivers Commission.*
4. *This approval is for Irrigated Horticulture (perennial) only. In the Rural Conservation zone, further approval is required for most land uses and building construction. Council's Planning Department should be contacted for further information.*
5. *You are advised that structures such as shed enclosures over bores or pumps may require a building licence from Council, and in any event must have a minimum boundary setback of 20m.*
6. *The applicant is advised that the Health (Poultry Manure) Regulations 2001 have now been gazetted and are being enforced. Under these Regulations, it is an offence to sell, transport, store or use poultry manure during the months of September to April, inclusive.*
7. *The applicant is advised that a license may be required from the Department of Agriculture for aerial herbicide and pesticide spraying.*

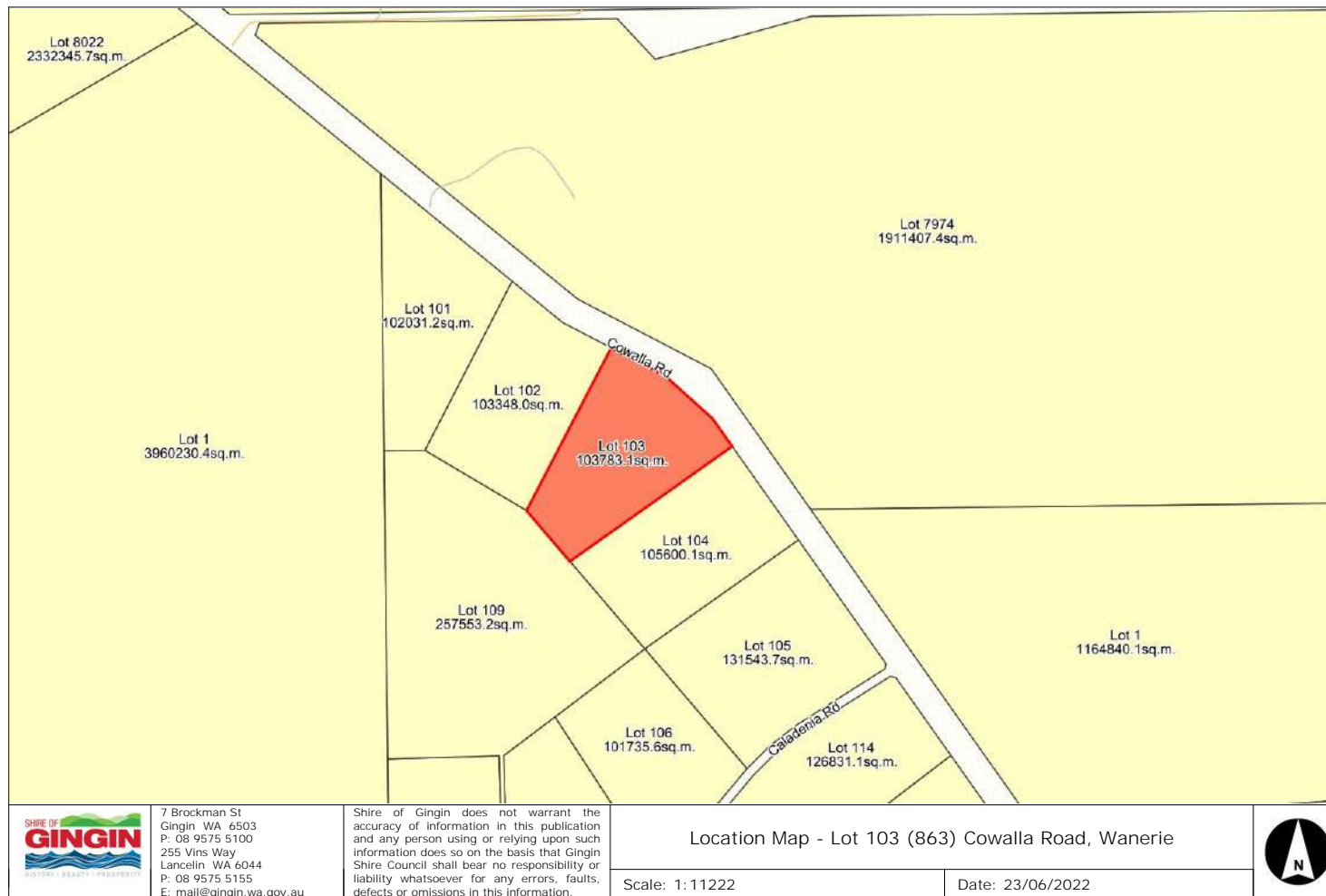
- Note 1:** If the development the subject of this consent is not substantially commenced within a period of 2 years, or such other period as specified in the consent after the date of the decision, the consent shall lapse and be of no further effect.
- Note 2:** Where a consent has so lapsed, no development shall be carried out without the further consent of the Council having first been sought and obtained.
- Note 3:** If an application is aggrieved by this decision there is a right of appeal pursuant to the provisions of Part V of the Town Planning Act. An appeal must be lodged within 60 days of the Council's decision.

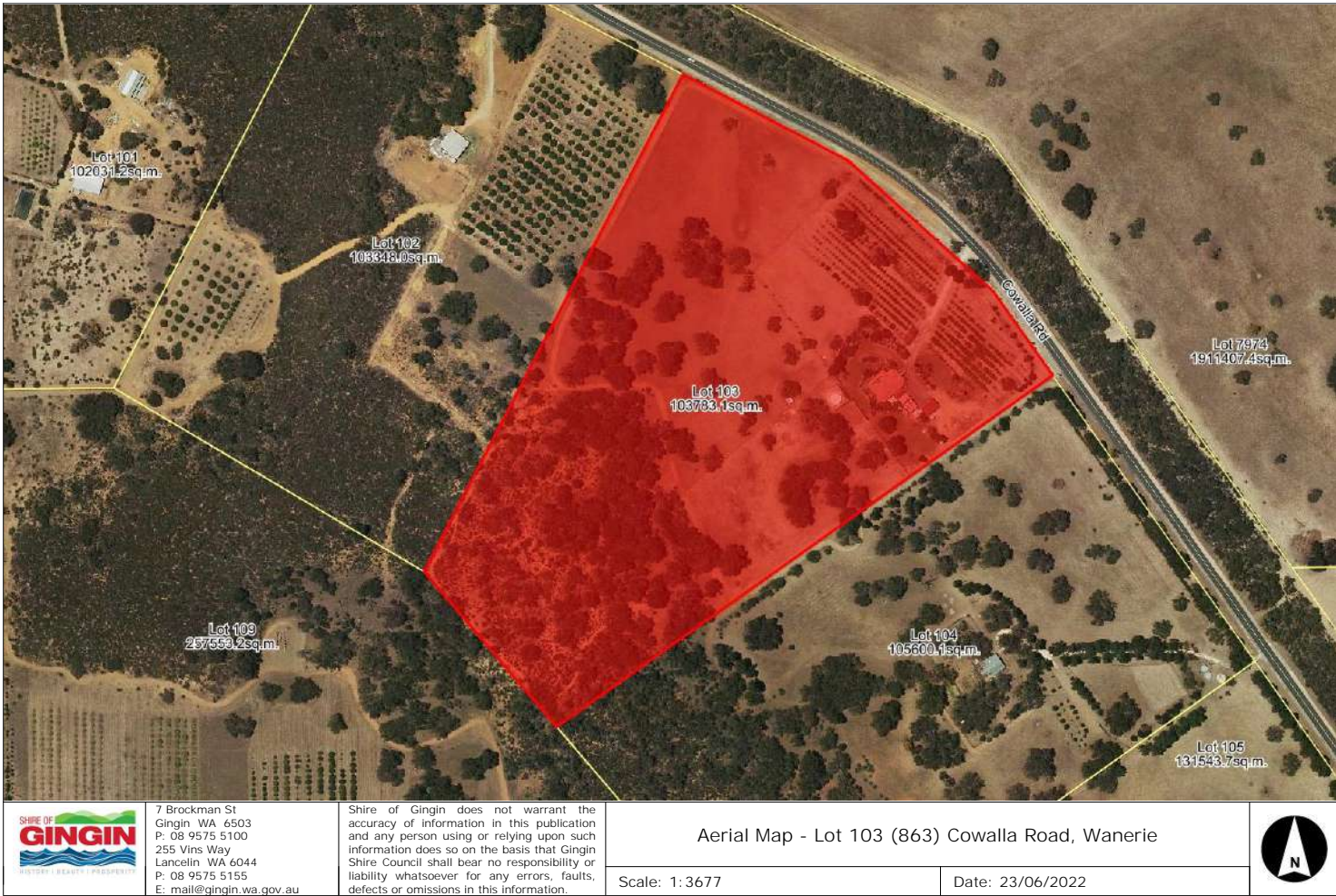


David Maiorana
PLANNING OFFICER
(On behalf of the Chief Executive Officer)
28 November 2002

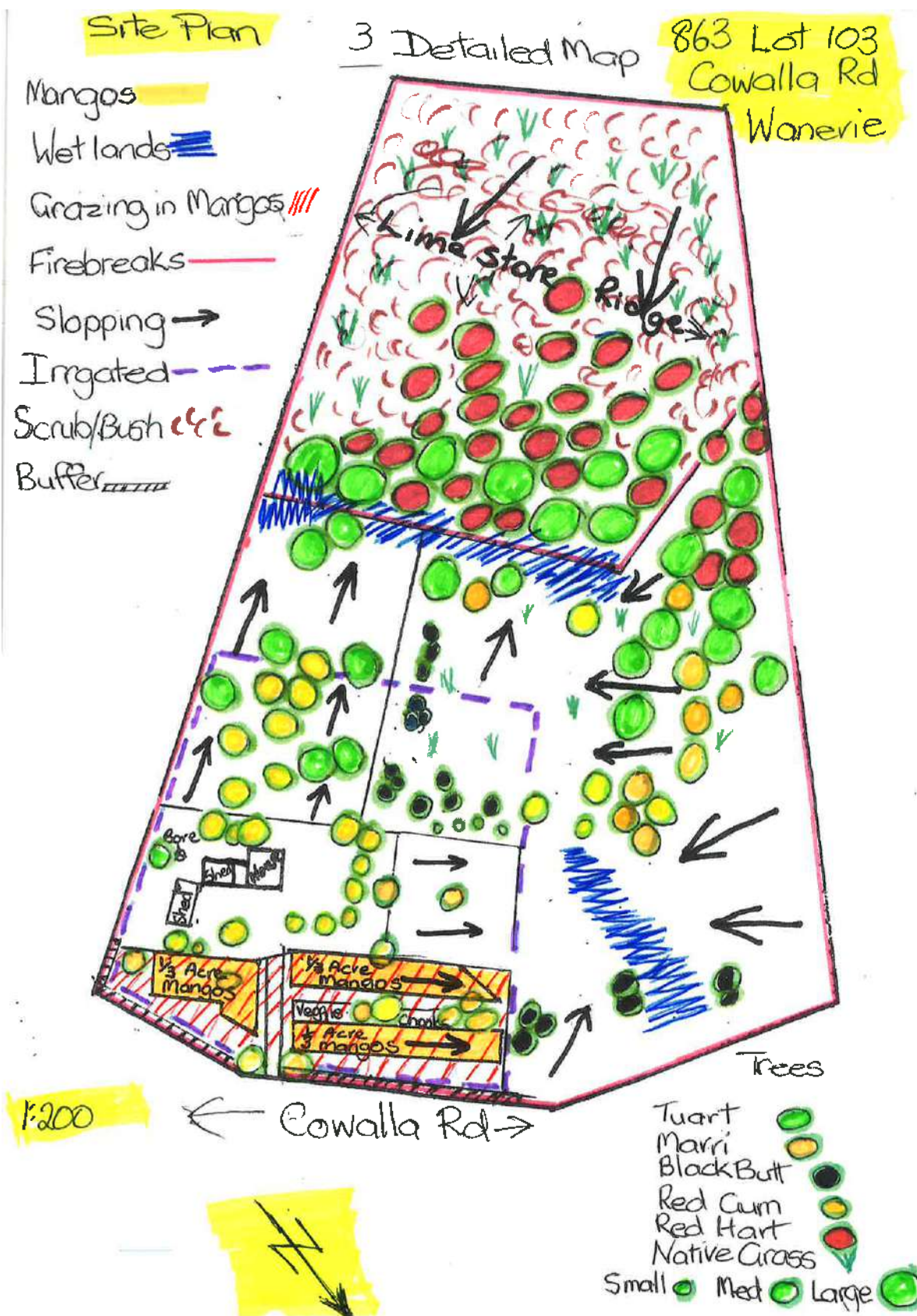
This is not a building licence. A separate application is required for a building licence.











The current water year's usage amount is **1 087 / 29 430 KILOLITRES** N.B. Have misplaced original Water Licence and still waiting for DWER for another one

Licence Details

Instrument Number	110996	Type	Groundwater Licence
Applicants	Brown, Marilyn, Brown, Trevor	Area	Gingin H
Issue Date	16/06/2022	Sub Area	Seabird
Expiry Date	22/11/2031	Resource	Gingin, Seabird, Perth - Superficial Swan
Measurement Type	Metering	Allocation Plan	
Submission Type	Water Online Portal		

Allocation Usage for the Current Water Year	1 087 kilolitres	Abstraction Volume Entitlement	29 430 kilolitres
----------------------------------------------------	------------------	---------------------------------------	-------------------

Restrictive Covenant

ANNEXURE "A"

**SPECIAL CONDITIONS TO OFFER AND ACCEPTANCE CONTRACT TO
PURCHASE LOT [REDACTED] "CALADENIA CAVES" ESTATE COWALA ROAD
GINGIN PORTION OF SWAN LOCATION [REDACTED] AND [REDACTED]**

A) RURAL CONSERVATION ZONE

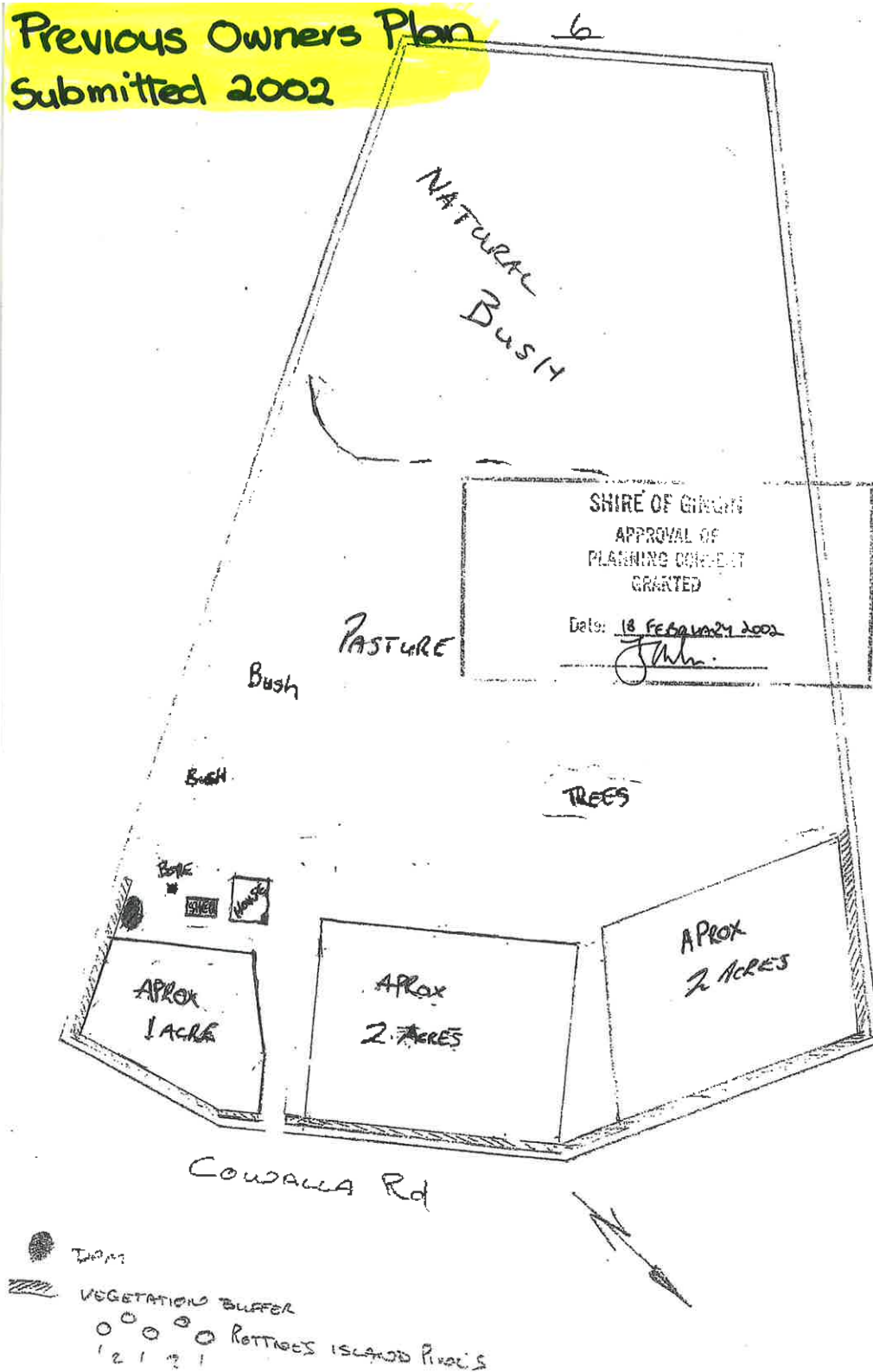
The Purchasers are aware that the property is zoned Rural Conservation and that no trees or vegetation on the property shall be removed or destroyed without prior written approval from the Shire of Gingin.

B) PROPERTY IMPROVEMENTS

51) The purchaser acknowledges that it is necessary to obtain written approval from the Shire of Gingin prior to commencing any developments which includes (but is not limited to) all buildings and irrigation projects. They further acknowledge that no second hand dwellings shall be located on the property and that no approval shall be granted for more than 2HA (5 Acres) of marker garden/vegetable production and no poultry manure shall be spread or stored on the lot.

C) UNDERGROUND WATER

The purchaser is advised that the property is located within the Gingin Groundwater Area where there is a need to obtain a license from the Water Authority of Western Australia before a well or bore can be constructed. The license will contain a number of conditions including the quantity of water that can be pumped each year.



6/6/2022

Planning Dept
Shire of Gingin
Gingin WA
Att: James Bayliss

Dear sir

863 (Lot 103) Cowalla Road, Wanerie-
Development Application -
Reclassification Rural Pursuit

Regional Context

The subject site is located approximately 40km northwest of Gingin Townsite in the rural locality of Wanerie. Access is gained from Gingin Brook Road with access from either the Brand HWY or Indian Ocean Drive.

Local Context

The site is zoned "General Rule" under "Local Planning Scheme No 9" (LPS9). It is surrounded by other properties with the same zoning. Existing developments on our 25 acres include: single story farmhouse, sheds, gardens, mixed fruit trees, about 1 acre of mangos, a back paddock consisting of natural bush with a huge limestone ridge running right through, with huge trees which run through the whole property including; Tuarts, Marris, Blackbutts, Sheoak, Banksia, and Native Grass trees.

We hold a full water licence from the Department of Water and Environmental Regulation (DWER) to take 29,430 KL of water for domestic purposes, gardens, lawns, stock, to irrigate pastures and to irrigate up to 1 Acre of Mangos.

Proposed Overview

The site has land capable of sustaining only minimal horticulture/agriculture activities considering the zoning was a "Rural Conservation" then changed in 2019 to "Intensive" and given the existing water licence which restricts the use of land to the following;

Domestic use	
Lawns and Gardens	0.35ha
Pasture irrigation	2.86ha
Mango trees irrigation up to	0.45ha (about 1 acre)

No activity is solely for commercial purposes.

Land Use

The site does currently have planning consent which was submitted by **PREVIOUS OWNERS "Parsons"** in 2002 which we never knew existed and were never made aware of these plans until May 2022 when I requested a copy of all planning for our property from the Gingin Shire.

"Parsons" only mentioned to contact the DWER to change the water licence to our name, after communicating with the DWER, who told us the "Parsons" only had a partial water license and we could also change the "Parsons" plan, so we changed the "Parsons" plan to our own plan. There was no mention from the "Parsons" of any Planning requirements or LPS 9 and nothing from the Gingin Shire either; with being new residents to Gingin, one would think this would be mentioned in the "welcome letter from the Gingin Shire."

Our proposal is considered to clearly meet the scheme land use definition of "Rural Pursuit" which means any premises used for;

- a) The rearing or agistment of animals

2

- b) The stabling agistment or training of horses
- c) The growing of trees, plants, shrubs, or flowers
for replanting in domestic, commercial or industrial gardens
- d) The sale of produce grown solely on the Lot.

Farm Management Plan

The proposed activities are compliant with the Shire's requirements and are not conflicting with activities in the locality or previously on site. Accordingly, a detailed Farm Management Plan is not considered necessary, but an outline is listed below.

Spray Management

Herbicides:

Are not anticipated, at times our 8 sheep are grazing threw the mangos, with about also 50 Guinea Fowls and chooks freeranging all the time threw the mangos but if required whatever the DWER recommends, if nothing is suggested product called Fusilade is used to control grass type weeds.

Insecticides:

Are not anticipated as our Guinea Fowls and chooks continually graze the mangos but if required whatever the DWER recommends, if nothing suggested a product called Confidor is used.

Fungicide:

When required whatever the DWER recommends if nothing is suggested a product called Mangazeb a copper based product is used for controlling fungi.

Fertilisers

Are not anticipated as we graze our 8 sheep at times and 50 Guinea Fowls and chooks are continually free ranging through the mangoes.

When required and **only** when required whatever the DWER recommends if nothing is suggested we use a product called NPK Blue and NPK Perfect.

Chemicals

These are stored in the existing shed on a concrete pad to avoid leakage during storage.

Waste Management

Waste material from the mangos is minimal as we have only have about 1 acre of mangos so what waste we do get is disposed of and buried accordingly to avoid the breeding of Stable Fly which cause problems for our animals.

Employment

As we both have employment elsewhere, husband full time and myself part time. Since we only have about 1 acre of mangos which is minimal we haven't and never have had employment available as we manage everything ourselves.

Traffic Management

As we both have 2 tray back 4WD Utes to use for picking up our fertilisers, chemicals and whatever is needed for our property, other then that it's only family, friends and neighbours that enter our property. There are no commercial trucks involved on this site.

History of Lot 103

We purchased the property as a "Rural Conservation Block" in 2005 from Steve and Tina Parsons("Parsons") at the time of purchase we were informed by the "Parsons" about the water license which had to be transferred into our names.

We contacted DWER who informed us that "Parsons" only had a partial water license because the planting of 5 acres of mangos had not been completed, only about 1 acre of mangos had been planted by the "Parsons" The DWER said since it was only a partial license, we could change the "Parsons" plan. So we created our own plan.

Since the "Parsons" already planted about 1 acre of mangos we left this on our plan, as for the other 4 acres of mangos-(the non existent mangos) we converted this over to

3

irrigation of pasture and moved this so it surrounded the house and sheds in the event of fires and not where the "Parsons" had allocated it.

At the time of discussing the water license with the "Parsons" nothing was mentioned to us, about contacting The Shire of Gingin or the Planning Department or anything about LPS 9, we weren't contacted from The Shire of Gingin to say there was any sort of planning developments put on our property and if we wanted to carry on with the developments or change it, we didn't know what LPS 9 meant, all we knew was we had purchased a 25 acre life style block/hobby farm, with a zoning as "Rural Conservation with about an acre of mangos and being from the city we knew nothing, absolutely nothing about "LPS 9"

AUGUST 2011

A rate increase and the Gingin Shire deemed us as "Intense farmers", same category as the mining companies and the big veggie farmers because of this 1 acre of mangos and 4 acres of non existing mangos/ghost mangos, and a development plan from the previous owners we knew nothing about/didn't know this plan existed, we repeatedly told the Gingin Shire we were only "hobby farmers" not "Intense Farmers" but we kept getting told we were intense farmers with 5 acres of mangos in the end we reluctantly run with what the Gingin Shire was telling us, that we had "5 acres of Mangos" and when the mangos were mentioned referred to it as "5 acres of Mangos", as we felt we couldn't do anything to change this, talking and letter writing done nothing to help.

2011 we were charged intense rates for the 5 acres of mangos but in reality it was about 1 acre of mangos and 4 acres of non existent mangos, and development plan from the previous owners, we didn't know existed, a LPS 9 plan we knew nothing about, but we reluctantly paid these rates. Our dream of being "Hobby Farmers" on this "Rural Conservation" Block turn into a nightmare.

AUGUST 2021

Another "Major rate increase" and still classed as an "Intense Farmer" and requested to pay the "Intense Rates" not only for the 1 acre of Mangos and 4 acres of Non Existent mangos/Ghost Mangos but over the WHOLE 25 ACRES all because of THIS "1 acre of Mangos and "4 acres of non Existent Mangos/Ghost Mangos" a Development Plan we didn't submit and never ever seen it also a "LPS 9" plan we knew nothing about, no one could or would take the time to explain it to us. Then we met Matt Griffith, who took the time to explain in detail what a "Development Plan" and a "LPS 9" was and what it all meant, in a way we could understand it clearly.

So May 2022 (last month) we requested a copy of all planning for our property, that is when it was revealed about "THE MANGOS" where the "Parsons" in "2002" put a "Development Plan" into the Shire of Gingin consisting of "5 Acres of Mangos" which was granted, approved, and cemented in, by the Shire of Gingin but then the "Parsons" sold the property onto us in 2005 before this "Planning Development" was competed, so we have been penalised because of a "Development Plan" we never knew existed and a "LPS 9" we knew nothing about and never understood until we met Matt Griffith, who explained everything to us.

This is why we are requesting a "Reclassification from Intense Farmers to Rural Pursuit" as we are not and do not class ourselves as "Intense Farmers" and never have since purchasing the property.

Conclusion

The purpose of this letter, is to demonstrate the use of the site is and has always been in accordance with the "Rule Pursuit" classification, since we took possession from the previous owners "the Parsons" in 2005 then with the zoning as "Rural Conservation" furthermore we don't understand how the Gingin Shire has determined the site to be classified in another classification, particularly the current "Intensive Agriculture/Horticulture" which the site would not be able satisfy under the terms of the "Local Planning Scheme 9 or LPS 9"

The site has a water license which contributes to the value of the land and will expire if not used.

4

The property had the zoning "Rural Conservation" up until it was changed by the Gingin Shire in 2019 and is only capable of sustaining **only** minimal **Agriculture/Horticulture** which this property was previously developed for; home, sheds, small orchard, native bush paddock and grazing paddocks with huge native trees scattered threw.

The proposal is to confirm the various Agriculture/Horticulture activities, which fits within the Scheme land-use of "Rural Pursuit" are a discretionary use. The proposal complies with the zones objectives and Council's policy on the use.

A concise Farm Management Plan has also been provided which demonstrates the minimal impact the proposal will have on the environment and surrounding properties within the "Rural Conservation Estate Caladenia Caves"

As buildings are not been proposed, building setbacks and planning for bushfires is not a relevant consideration. Subject to new information as a result of the request made here within, it is considered that the proposed development is an acceptable outcome for the site and surrounding area. As such the Gingin Shires discretion is requested to approve the discretionary land use.

If the Gingin Shire does not see this proposal as being acceptable I would appreciate a meeting to discuss the most efficient way forward.

Finally in assuming the Gingin Shire acknowledges the site should be classified "Rural Pursuit" we would like to understand what rectification will occur for the previous rate applications we have contributed too.

If you have any queries or wish to I discuss this matter further please do not hesitate to contact me.

Yours faithfully

Marilyn Brown and Trevor Brown



Please find Attachments:

- 1) Application for Development
- 2) Location Plan
- 3) Site Plan
- 4) Water License
- 5) Restrictive Covenant
- 6) Previous owner site plan
- 7) Overlay of previous owners site plan and our site Plan

13.8 APPLICATION FOR AMENDED DEVELOPMENT APPROVAL - PROPOSED COMPOSTING FACILITY AND ASSOCIATED INFRASTRUCTURE ON LOT 10 (1340) WANNAMAL ROAD WEST, BOONANARRING

File	BLD/2337
Applicant	Burgess Design Group
Location	Lot 10 (1340) Wannamal Road West, Boonanarring
Owner	Westpork Pty Ltd
Zoning	General Rural
WAPC No	NA
Author	James Bayliss – Coordinator Statutory Planning
Reporting Officer	Bob Kelly - Executive Manager Regulatory and Development Services
Refer	17 December 2013 - Item 11.1.10 21 January 2019 - Item 11.3.2 16 March 2021 - Item 11.3.5
Appendices	<ol style="list-style-type: none"> 1. Aerial Map - Lot 10 (1340) Wannamal Road West, Boonanarring [13.8.1 - 1 page] 2. Location Map - Lot 10 (1340) Wannamal Road West, Boonanarring [13.8.2 - 1 page] 3. Applicant's Proposal [13.8.3 - 3 pages] 4. Revised Traffic Impact Statement [13.8.4 - 31 pages] 5. Shire of Gingin Crossover Specifications [13.8.5 - 1 page]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider an Application for Amended Development Approval for an approved Composting Facility and Associated Infrastructure on Lot 10 (1340) Wannamal Road West, Boonanarring.

BACKGROUND

Council at its Ordinary Meeting on 17 December 2013 resolved to issue conditional approval for a composting facility on the subject land, coexisting with the existing Animal Husbandry – Intensive (piggery) development.

The proponent subsequently obtained a Works Approval from the Department of Water and Environmental Regulation (DWER) in 2016, three years later, which resulted in the 2013 development approval lapsing.

At its Ordinary Meeting on 21 January 2019, Council resolved to issue a fresh development approval with revised conditions for the composting facility. The report presented to Council in relation to the 2019 submission provides a comprehensive overview and assessment of the proposal. Councillors are encouraged to view that report, as it is not intended to duplicate that assessment in this report, but simply to address the pertinent points related to the proposed amendments.

Further to the above, Council at its Ordinary Meeting on 16 March 2021 resolved to amend conditions imposed on the 2019 approval that related to material throughput tonnages, that ensured consistency with the works approval issued by the DWER.

This application seeks to amend Condition 8 of the current approval, which in doing so also clears condition 7, both of which state:

- 7. The Traffic Impact Assessment (TIA) prepared by Shawmac Traffic Engineers shall be updated/amended to the satisfaction of the Shire of Gingin. The landowner(s) shall be responsible for all costs associated with the preparation of the amended TIA (including all drafts);*
- 8. Prior to operation of the development, the landowner shall enter into a deed of agreement for contributions to the maintenance and upgrade of Wannamal Road West, with the Deed to be submitted to Council for final approval. The landowner(s) shall be responsible for all costs associated with the preparation of the deed (including all drafts);*

The construction phase of the composting facility is nearing finalisation, with the operational phase being imminent. Condition 8 was deliberately worded to ensure that the development could not commence operating until the Deed had been finalised; however, the Deed has not been initiated and without modification to Condition 8, delays to the opening of the facility will likely occur.

The applicant therefore seeks modification to Condition 8 to permit the development to operate whilst the details covered by the Deed are negotiated and road upgrades are arranged.

An aerial plan and location plan are provided as **Appendix 13.9.1** and **Appendix 13.9.2** respectively.

The applicant's proposal is provided as **Appendix 13.9.3**.

The revised Traffic Impact Statement (TIS) is provided as **Appendix 13.9.4**.

COMMENT

Stakeholder Consultation

Community consultation is not required to clear or revise the relevant conditions of the earlier approval.

PLANNING FRAMEWORK

Local Planning Scheme No. 9 (LPS 9) Planning Assessment

The subject lot is zoned 'General Rural' (GR) under LPS 9, the objectives of which are to:

- a) *Manage land use changes so that the specific local rural character of the zone is maintained or enhanced;*
- b) *Encourage and protect broad acre agricultural activities such as grazing and more intensive agricultural activities such as horticulture as primary uses, with other rural pursuits and rural industries as secondary uses in circumstances where they demonstrate compatibility with the primary use;*
- c) *Maintain and enhance the environmental qualities of the landscape, vegetation, soils and water bodies, to protect sensitive areas especially the natural valley and watercourse systems from damage; and*
- d) *Provide for the operation and development of existing, future and potential rural land uses by limiting the introduction of sensitive land uses in the General Rural zone.*

The land use 'Composting' is defined as follows:

Means the controlled process whereby compostable organic wastes, which may include liquid organic wastes, but not any liquid wastes classed as Listed Waste, Radioactive Waste or Hazardous Waste, are pasteurised and microbiologically transformed under aerobic and thermophilic conditions.

The zoning table designates 'Composting' as an 'A' use in the GR zone, meaning that the use is not permitted unless the local government has exercised its discretion by granting development approval after giving special notice in accordance with clause 64 of the Deemed Provisions.

Planning and Development (Local Planning Scheme) Regulation 2015 (Deemed Provisions)

In accordance with Schedule 2, Part 9, Clause 67 of the Deemed Provisions, the local government is to have due regard to a range of matters to the extent that, in the opinion of the local government, those matters are relevant to the development the subject of the application. In this instance, the following matters are considered to be relevant as a result of the amendments to the conditions (i.e. traffic impact).

- (s) *The adequacy of –*
 - (i) *The proposed means of access to and egress from the site; and*
 - (ii) *Arrangements for the loading, unloading, manoeuvring and parking of vehicles;*
- (t) *The amount of traffic likely to be generated by the development, particularly in relation to the capacity of the road system in the locality and the probable effect on traffic flow and safety;*

Comment

Access to the site is via Brand Highway, Wannamal Road West and the property crossover which is approximately two km east of the junction between the sealed and unsealed portion of Wannamal Road West. The subject property produces a total of 92 vehicle movements per day, 42 of which are heavy vehicles.

Commentary in 2019 and 2021 Council reports outlined that the submitted TIA lacked detail in relation to total vehicle movements related to material throughput and output associated with the development in combination with existing vehicle movements from the piggery. The revised TIA resolves these concerns (amongst some other details).

The comments in the conclusion of the TIA suggest that the additional heavy vehicle movements generated per day are not considered to increase the likelihood of crashes to an unacceptable level. The statement is viewed as being debatable, considering that the unsealed portion of road will undoubtedly increase dust and therefore reduce visibility, thus increasing safety risks. The increased dust also equates to the rapid deterioration of the two km of unsealed pavement.

It should also be noted that Condition 8 was worded and imposed on the assumption that Wannamal Road West was being programmed for an upgrade to a sealed standard in relation to a separate development located on Wannamal Road South. On that basis the wording required a contribution to this upgrade, whereas in most instances the Shire takes the view that each development is considered on a standalone basis, and that the burden for road upgrades sits with the landowner/operator to fund and undertake.

The broader upgrade to Wannamal Road West is currently being investigated by staff, however is not viewed as being imminent and alternate options are being explored for the unrelated development on Wannamal Road South.

As such, the officer is of the view that the landowner/operator ought to undertake the road upgrade at their expense, as it is their development that instigates the need for an upgrade to a sealed standard between the crossover and existing seal on Wannamal Road West. It is therefore their responsibility and burden to undertake remedial works. This is the approach the Shire has adopted for similar intensive development.

The officer has no objection to the development operating in the interim period until remedial works are completed, however the Deed of Agreement may contain a maintenance contribution for the portion of road until such time as the road works are finalised.

Further to the above, the applicable crossover standard and specification also includes a portion of asphalt overlay to Wannamal Road West, as outlined under 'Shire of Gingin Crossover Specifications - SoG-STD10_RevB' which is provided as **Appendix 13.9.5**.

In accordance with Schedule 2, Part 9, Clause 77(1)(b) of the Deemed Provisions, the local government can amend or delete any condition to which the approval is subject. In this instance, the officer is of the view to support amendment of Condition 8 to provide flexibility to the landowner/operator to commence composting, however in terms that differ to that put forward by the Applicant.

Given the suggested changes to Condition 8, the officer forms the view that Condition 7 is able to be cleared.

The officer notes that Condition 8 was imposed by Council in slightly different wording to the officer's recommendation at the Ordinary Meeting on 16 March 2021, which required the Deed to be returned to Council for consideration given the potential financial impost on the Shire. With the revised wording of Condition 8 and the financial impost suggested to fall on the landowner, this may no longer be necessary.

To provide clarity for the landowner/applicant/operator and Shire staff, all conditions have been replicated in the officer recommendation, noting that only Condition 8 has been amended. Condition 7 remains, however with the understanding that it has been cleared on the assumption that revised Condition 8 will be implemented by the landowner/operator.

Summary

In view of the above, the officer supports an amendment to Condition 8, which has been worded in three parts to avoid subsequent renumbering of latter conditions.

STATUTORY/LOCAL LAW IMPLICATIONS

Local Planning Scheme No. 9

Planning and Development (Local Planning Scheme) Regulations 2015 (Deemed Provisions)

POLICY IMPLICATIONS

Environmental Protection Authority Guidance Statement No. 3 - Guidance for the Assessment of Environmental Factors Western Australia (In Accordance with the Environmental Protection Act 1986) - Separation Distances between Industrial and Sensitive Land Uses

State Planning Policy 3.7 – Planning in Bushfire Prone Areas (SPP 3.7)

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	3. Planning & Sustainability - Plan for Future Generations
Strategic Objective	3.3 Planning & Land Use - Plan the use of the land to meet future requirements incorporating economic development objectives and community amenity

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Rule

SECONDED: Councillor Balcombe

That Council approve an amendment to Condition 8 of the development approval for a proposed Composting Facility and Associated Infrastructure on Lot 10 (1340) Wannamal Road West, Boonanarring as follows:

1. The land use and development shall be undertaken in accordance with the approved plans dated 29 January 2019 and specifications, including any directions written in red ink or modifications required as a consequence of any condition(s) of this approval;
2. All works required to satisfy a condition of this approval and the operation of the development, are required to be installed/constructed/maintained/undertaken in accordance with the conditions of this approval, approved plans and planning report (including attached reports) for the life of the development;
3. This approval is for a composting facility and associated infrastructure as indicated on the approved plans;
4. The development shall only accept and process compostable organic wastes and shall not accept and process any non-organic wastes including but not limited to listed waste, radioactive waste, hazardous waste or wash down from industry process. However, this condition shall not preclude the blending of benign waste with composted organic wastes provided the quantity of benign waste does not exceed the amount specified in condition 5;
5. The annual tonnage of waste received shall not exceed the following tonnages per annum:

- a. 60, 000 tpa of shredded green waste;
 - b. 20,000 tpa nitrogenous solid waste;
 - c. 10,000 tpa benign waste; and
 - d. 50,000 tpa of liquid waste (grease trap waste, pond and stormwater);
- 6A. The compost manufacturing and soil blending output shall not exceed 80,000 tonnes per year;
6. The landowner/operator is required to keep up to date records of waste received and shall provide the Shire of Gingin with a copy of such records within 14 days upon request;
7. The Traffic Impact Assessment (TIA) prepared by Shawmac Traffic Engineers shall be updated/amended to the satisfaction of the Shire of Gingin. The landowner(s) shall be responsible for all costs associated with the preparation of the amended TIA (including all drafts);
8.
 - a. Within 6 months from the date of this approval, the applicant/operator shall enter into a deed of agreement for an upgrade to the unsealed portion of Wannamal Road West to the proposed property access location, (including interim maintenance contributions) to the satisfaction of the Shire of Gingin. The applicant/operator shall be responsible for all costs associated with the preparation of the deed (including all drafts);
 - b. Within 12 months from the date of this approval, the applicant/operator shall undertake the work specified in the deed of agreement to the satisfaction of the Shire of Gingin. The applicant/operator shall be responsible for all costs associated with the works;
 - c. Within 12 months from the date of this approval, the applicant/operator shall install a new crossover to service the development in accordance with 'Shire of Gingin Crossover Specifications - SoG-STD10_RevB'. The applicant/operator shall be responsible for all costs associated with the crossover installation.
9. The Bushfire Attack Level (BAL) Assessment prepared by Smith Consulting Bushfire Consultants on 14 September 2018 shall be implemented and maintained thereafter to comply with a maximum BAL-19 rating.

Advice Notes

- Note 1:** If you are aggrieved by the conditions of this approval, you have the right to request that the State Administrative Tribunal (SAT) review the decision under Part 14 of the *Planning and Development Act 2005*.

- Note 2: If the development subject to this approval is not substantially commenced within a period of two years, the approval shall lapse and have no further effect.
- Note 3: Where an approval has so lapsed, no development may be carried out without further approval of the local government having first been sought and obtained.
- Note 4: Further to this approval, the applicant is required to submit working drawings and specifications to comply with the requirements of the *Building Act 2011* and *Health Act 2016*, which are to be approved by the Shire of Gingin.
- Note 5: This approval is not a building permit or an approval under any law other than the *Planning and Development Act 2005*. It is the responsibility of the applicant/owner to obtain any other necessary approvals, consents and/or licences required under any other law, and to commence and carry out development in accordance with all relevant laws.
- Note 6: The applicant/landowner is reminded that this Development Approval is not to be interpreted as an approval to remove native vegetation without a clearing permit issued by the Department of Water and Environmental Regulation (DWER). This includes vegetation to be removed to satisfy bushfire ratings.
- Note 7: It is advised that the proposal should at all times comply with the *Biosecurity and Agriculture Management (Stable Fly) Management Plan 2016* in order to minimise the effects of stable flies on the community.
- Note 8: The operation will be required to comply with the *Environmental Protection (Noise) Regulations 1997*.
- Note 9: It is the landowner's responsibility to implement and maintain bushfire protection and mitigation measures on their property.
- Note 10: It is recommended that cadastral lot boundaries be established by a suitably qualified land surveyor to ensure that all development is carried out within the subject allotment.
- Note 11: The definition of Composting Facility for the purpose of this approval is as follows: "Means the controlled process whereby compostable organic wastes, which may include liquid organic wastes, but not any liquid wastes classed as Listed Waste, Radioactive Waste or Hazardous Waste, are pasteurised and microbiologically transformed under aerobic and thermophilic conditions".

Note 12: It should be noted that the composting facility will require works approval and/or licensing requirements under Part V of the *Environmental Protection Act 1986* which is to be issued by the Department of Water and Environmental Regulation (DWER).

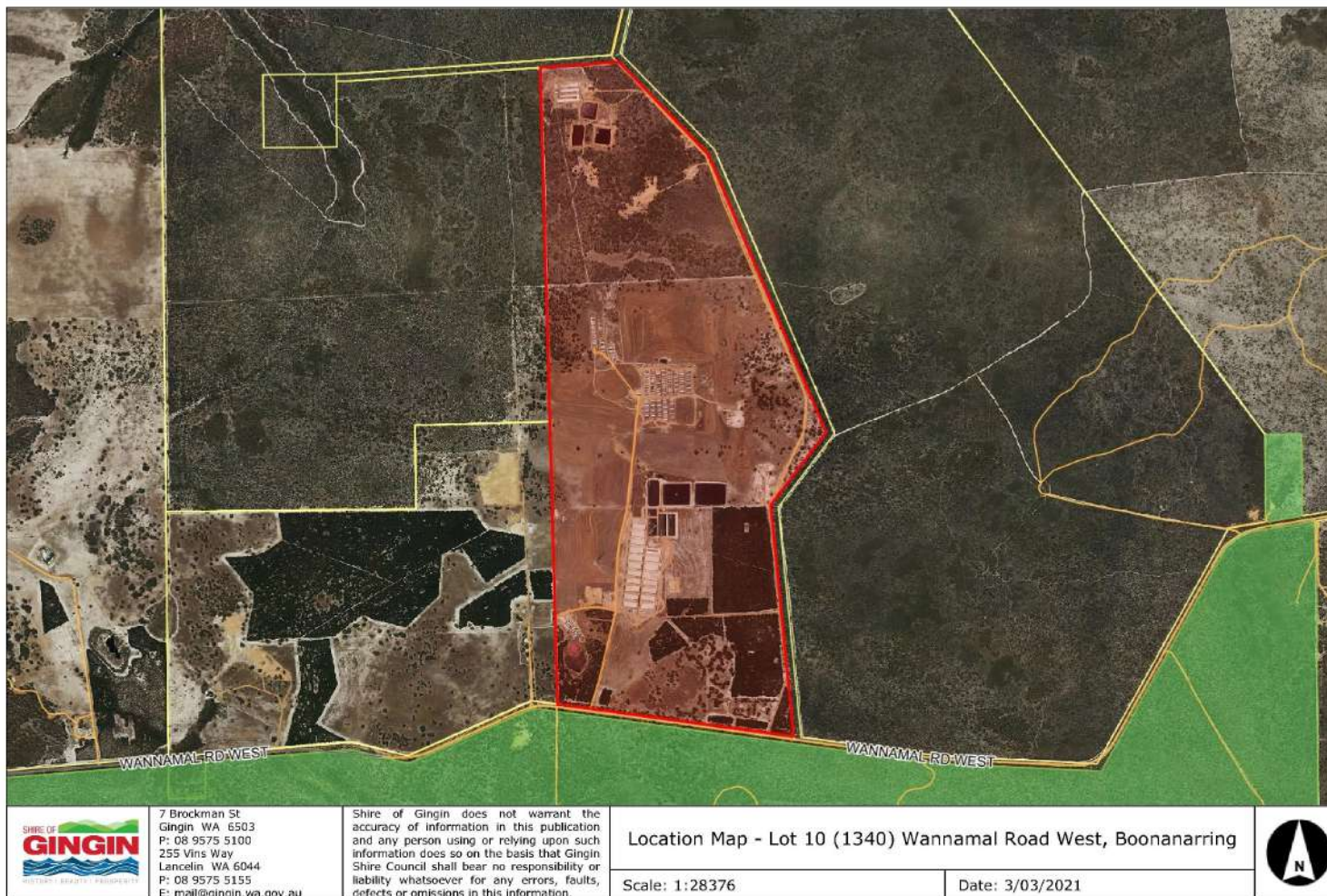
Note 13: It should be noted that the existing water license may require amendment by the Department of Water and Environmental Regulation (DWER).

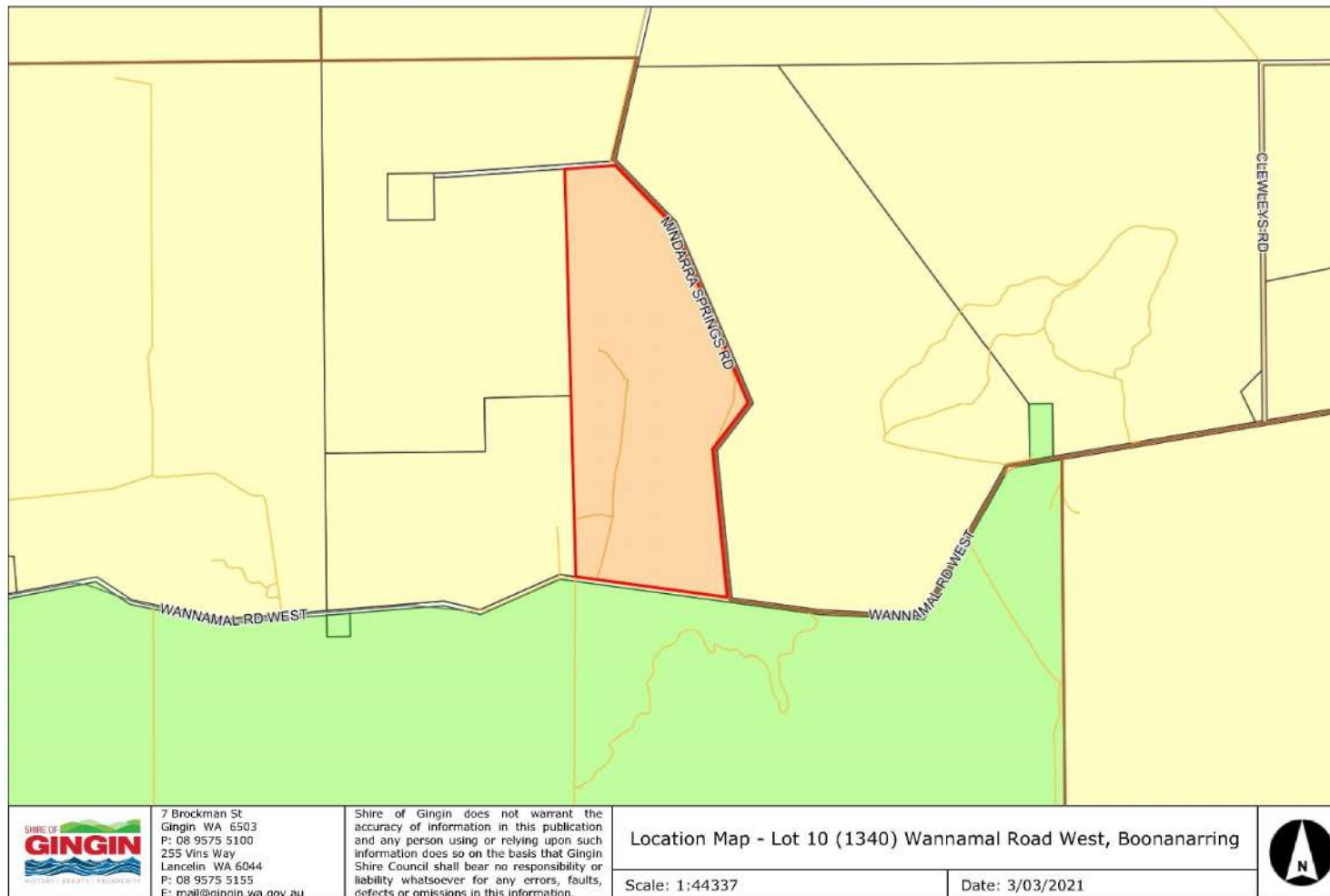
Note 14: Please be advised that further to this approval, an Offensive Trade License may be required prior to commencement of operations. Please contact the Shire of Gingin's Environmental Health Department in this regard.

**CARRIED UNANIMOUSLY
7 / 0**

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*







21 September 2022

Our Ref: POR GIN/220921LLGA_Clearance of Condition 7 & Amendment to Condition 8 v1
LG Ref: BLD/2337 P2121

Chief Executive Officer
Shire of Gingin
PO Box 510
GINGIN WA 6503

Attention: James Bayliss - Coordinator Statutory Planning

Dear Sir/Madam

**RE: REQUEST TO CLEAR CONDITION 7 AND AMEND CONDITION 8 OF
PLANNING APPROVAL FOR COMPOSTING FACILITY AND ASSOCIATED
INFRASTRUCTURE
LOT 10 (#1340) WANNAMAL ROAD WEST, BOONANARRING**

Burgess Design Group, on behalf of our client, Westpork Pty Ltd, writes to the Shire of Gingin requesting the confirmation of the clearance of Condition 7 and seeking an amendment to Condition 8 of Development Approval (Ref: P2121) for a composting facility and associated infrastructure on Lot 10 (No.1340) Wannamal Road West, Boonanarring.

In support of our application, please find enclosed the following:

- One (1) ASIC Company Extract;
- One (1) copy of the Certificate of Title;
- One (1) copy of the amended Transport Impact Statement (dated 7 February 2020); and,
- One (1) copy of Development Approval (Ref: P2121).

A copy of the Clause 86 (1) Form of Application for Development Approval and payment of the requisite application fee, being \$146.00, will be provided and/or arranged as soon as possible.

**BURGESS | DESIGN
GROUP**
TOWN PLANNING + URBAN DESIGN

101 Edward Street Perth WA 6000 PO Box 8779 Perth Business Centre WA 6849 P [08] 9328 6411 F [08] 9328 4062 www.burgessdesigngroup.com.au
ABN 31 790 649 540 ACN 161 577 144 Planovators Pty Ltd ATF Planovators Unit Trust T/A Burgess Design Group

YOUR PROJECT • OUR PASSION

Conditions of Development Approval

The Development Approval (Ref: P2121) issued by the Shire includes the following conditions:

Condition 7

'The Traffic Impact Assessment (TIA) prepared by Shawmac Traffic Engineers shall be updated/amended to the satisfaction of the Shire of Gingin. The landowner(s) shall be responsible for all costs associated with the preparation of the amended TIA (including all drafts).'

Condition 8

'Prior to operation of the development, the landowner shall enter into a deed of agreement for contributions to the maintenance and upgrade of Wannamal Road West", with the Deed to be submitted to Council for final approval." The landowner(s) shall be responsible for all costs associated with the preparation of the deed (including all drafts).'

Clearance of Condition 7

Please find attached an amended Transport Impact Statement (TIS) prepared by Shawmac. This report was sent to the Shire in February 2020. It is our understanding that the report has been referred internally to the Operation Manager for review and comment.

The TIS was revised to reflect the changes requested by the Shire's Operations Department as stated in the minutes of the Ordinary Meeting of Council on 22 January 2019. In this regard, this condition has been satisfied and we respectfully request the Shire's confirmation of the clearance of this condition of approval.

Requested Amendment to Condition 8

Our client seeks the Shire's support to amend Condition 8 of the Development Approval (Ref: P2121) to provide flexibility to allow operations to occur whilst the details covered by the Deed of Agreement for contributions to the maintenance and upgrade of Wannamal Road West are negotiated and road upgrades are arranged.

In this regard, we suggest that the condition be amended as follows:-

Condition 8

The landowner shall enter into a Deed of Agreement for contributions to the maintenance and upgrade of Wannamal Road West", with the Deed to be submitted to Council for final approval." The landowner(s) shall be responsible for all costs associated with the preparation of the Deed (including all drafts). Subject to the discretion of the Shire, operations can commence and continue while the details of the Deed are formulated.

This proposed amendment to remove the statement 'prior to occupation of the development' is requested given that details for contributions to the maintenance and upgrade of Wannamal Road West are anticipated to take additional time to be formulated, agreed and finalised.

Conclusion

In light of the above, we trust that the enclosed TIS will satisfy Condition 7 of development approval and respectfully request the Shire clear this condition. Additionally, we respectfully request the Shire amend Condition 8 to provide flexibility to operate whilst the details within the Deed of Agreement for contributions to the maintenance and upgrade of Wannamal Road West are negotiated and finalised.

Should you require any additional information or wish to discuss this matter further, please do not hesitate to contact the Mark Szabo or Zarina MacDonald on 9328 6411.

Yours faithfully

BURGESS DESIGN GROUP



**MARK SZABO
ASSOCIATE DIRECTOR**

Enc

- 1 x ASIC Company Extract;
- 1 x copy of the Certificate of Title;
- 1 x copy of the amended Transport Impact Statement (dated 7 February 2020); and,
- 1 x copy of Development Approval (Ref: P2121).

CC

- Westpork Pty Ltd



Project:	Proposed Piggery Expansion Lot 10 (1340) Wannamal Road West, Boonanarring
Client:	Westpork Pty Ltd c/o Anchor Legal
Author:	Keli Li
Doc No:	1807016-TIA-001
Revision:	C

CONSULTING CIVIL AND TRAFFIC ENGINEERS
1 ST. FLOOR, 908 ALBANY HIGHWAY, EAST VICTORIA PARK WA 6101.
PHONE|+61 8 9355 1300
FACSIMILE| +61 8 9355 1922
EMAIL| admin@shawmac.com.au



SHAWMAC PTY LTD

Document Status

Revision	Prepared By	Reviewed By	Approved By	Issue	Date
A	K Li	L Dawson	L Dawson	Draft	18/09/18
B	K Li	L Dawson	L Dawson	Final	25/09/18
C	K Li	T Shaw	T Shaw	Final	07/02/20

File Reference: Y:\Jobs Active 2018\T&T - Traffic and Parking\Westpork 1340 Wannamal TIS_1807016\Reports\Westpork_1340 Wannamal Road
Piggery_TIS_Rev C.docx



SHAWMAC PTY LTD

Contents

Glossary of Terms.....	1
1. Introduction	2
1.1. Background.....	2
2. Existing Situation.....	4
2.1. Land Use.....	4
2.2. Road Network	4
2.3. Traffic Volumes	8
2.4. RAV Status	8
2.5. Speed Limit.....	10
2.6. Crash History	10
2.7. Changes to Surrounding Transport Networks.....	10
2.7.1. Brand Highway / Wannamal Road West Intersection Upgrade.....	10
3. Proposed Development.....	11
3.1. Land Use.....	11
3.2. Proposed Haulage Route.....	11
3.3. Operating Hours.....	11
3.4. Proposed Haulage Vehicle.....	11
3.5. Traffic Generation	12
3.6. Traffic Distribution	13
4. Methodology and Inputs.....	14
4.1. Reaction Times and Deceleration	14
5. Assessment	15
5.1. Assessment Years	15
5.2. Time Periods for Assessment	15
5.3. Assignment of Generated Traffic	15
5.4. Impact on Surrounding Roads	16



SHAWMAC PTY LTD

5.4.1. Austroads Guidelines	16
5.5. Impact on Intersections	16
5.5.1. Intersection Capacity	16
5.5.2. Safe Intersection Sight Distance	17
5.5.3. Entering Sight Distance	18
5.5.4. Acceleration Lanes	18
5.6. Road Safety	18
6. Conclusions	19
Appendix A – Site Layout	20
Appendix B – Traffic Count	22



SHAWMAC PTY LTD

Figures

Figure 1 - Site Location	2
Figure 2 - Aerial Imagery	3
Figure 3 - Zoning - Extract from the Shire of Gingin LPS 9	4
Figure 4 - Road Hierarchy	5
Figure 5 - Wannamal Road West (Site Access Looking West).....	6
Figure 6 - Wannamal Road West (Site Access Looking East)	6
Figure 7 - Bindoon-Moora Road Cross-section (Wannamal Road West intersection Looking South).....	7
Figure 8 - Brand Highway Cross-section (Wannamal Road West intersection Looking South).....	7
Figure 9 - Restricted Access Vehicle Network.....	9
Figure 10: Restricted Access Vehicle Network (RAV 4.2)	9
Figure 11 - Typical RAV 2 B-Double (RAV 2).....	11
Figure 12 - Typical RAV 4 Pocket Road Train (RAV 4.2).....	11



Tables

Table 1 - Daily Traffic Volumes 8

Table 2 - Peak Hour Traffic Volumes 8

Table 3 - Crash History..... 10

Table 4 - Traffic Generation - Existing Piggery..... 12

Table 5 - Traffic Generation - Proposed Change..... 12

Table 6 - Predicted Traffic Volumes 15

Table 7 - SISD Estimate at Site Access / Wannamal Road West Intersection - Unsealed..... 17

Table 8 - SISD Estimate at Site Access / Wannamal Road West Intersection - Sealed..... 17



SHAWMAC PTY LTD

Glossary of Terms

Abbreviations

AADT	Annual Average Daily Traffic
ASD	Approach Sight Distance
AWT	Average Weekly Traffic
BAL	Basic Left Turn Treatment
BAR	Basic Right Turn Treatment
ESD	Entering Sight Distance
Km	Kilometre
Km/h	Kilometres per Hour
MRWA	Main Roads Western Australia
RAV	Restricted Access Vehicle
SISD	Safe Intersection Sight Distance
SLK	Straight Line Kilometre
TIS	Traffic Impact Statement
Vpd	Vehicles per Day
Vph	Vehicles per Hour



SHAWMAC PTY LTD

1. Introduction

1.1. Background

Shawmac has been engaged by Westpork Pty Ltd to undertake a Transport Impact Statement for addition of a green waste composting facility to the existing Westpork piggery located at Lot 10 (#1340) Wannamal Road West, Boonanarring in the Shire of Gingin.

The site location is shown in **Figure 1**. An aerial view of the subject site is shown in **Figure 2**. An indicative site plan is included in **Appendix A**.



Figure 1 - Site Location



SHAWMAC PTY LTD



Figure 2 - Aerial Imagery

The Transport Impact Assessment has been undertaken in accordance with the Western Australian Planning Commission's (WAPC) Transport Impact Assessment Guidelines for Developments: Volume 4 – Individual Developments (2016). The assessment includes:

- Collection of background data including traffic counts and crash data;
- Details of the proposed operation as provided by the client;
- Assessment of traffic generation and distribution from the site;
- Assessment of the intersections in the vicinity of the site in accordance with MRWA and Austroads guidelines with regards to capacity, safety, sight distance requirements, geometry and interaction with non-site traffic; and
- Assessment of the development impact on the adjacent road network including any relevant mid-block locations and at nearby intersections.



SHAWMAC PTY LTD

2. Existing Situation

2.1. Land Use

The existing site is developed as a piggery. According to the Shire of Gingin *Local Planning Scheme No 9* (LPS 9), the subject site is zoned as “General Rural” refer **Figure 3** below.

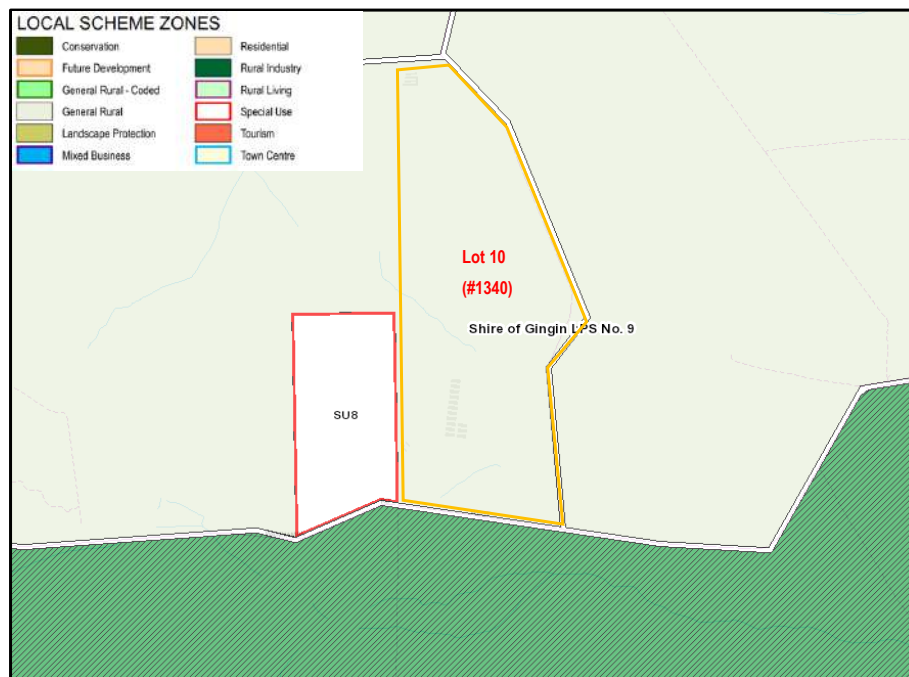


Figure 3 - Zoning - Extract from the Shire of Gingin LPS 9

2.2. Road Network

An extract of the Main Roads *Road Information Mapping* web tool shown in **Figure 4** outlines the road hierarchy surrounding the site.



SHAWMAC PTY LTD

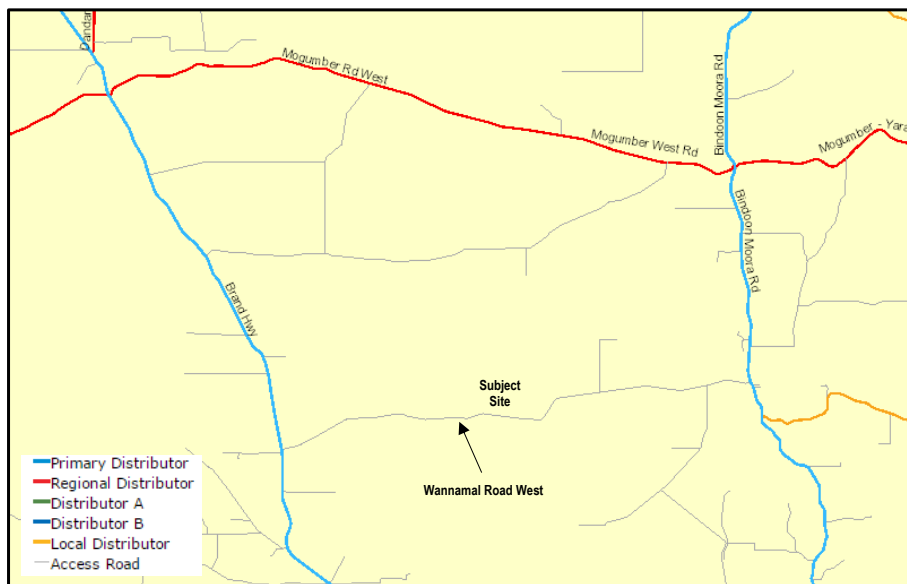


Figure 4 - Road Hierarchy

Wannamal Road West

Wannamal Road West runs generally in an east west direction and is classified as an Access Road under the MRWA *Functional Road Hierarchy*. It is under the care and control of the Shire of Gingin. Wannamal Road West is a two-way, undivided carriageway, surfacing details from Brand Highway to Bindoon-Moora Road are 9.1km of sealed road, 11.4km of unsealed road and another 5.0km of sealed road. The seal width along Wannamal Road West is approximately 7.0m. The crossover to Lot 10 (#1340) is located within the unsealed portion of Wannamal Road approximately 11.0km from Brand Highway. The cross-section of Wannamal Road West, west of the site access is shown in **Figure 5**.



SHAWMAC PTY LTD



Figure 5 - Wannamal Road West (Site Access Looking West)



Figure 6 - Wannamal Road West (Site Access Looking East)

Bindoon-Moora Road

Bindoon-Moora Road is located approximately 14.0 km east of the site access and runs in a north-south direction. In the vicinity of the Wannamal Road West intersection Bindoon-Moora Road is a two-way, two-lane, undivided carriageway with a sealed pavement width of approximately 6.4m and 2.0m of unsealed shoulders on both sides of the road. Bindoon-Moora Road is a Primary Distributor under the MRWA *Functional Road Hierarchy*. The cross-section of Bindoon-Moora Road is shown in **Figure 7**.



SHAWMAC PTY LTD



Figure 7 - Bindoon-Moora Road Cross-section (Wannamal Road West intersection Looking South)

Brand Highway

Brand Highway is located approximately 11.0 km west of the site and is classified as a Primary Distributor under the MRWA *Functional Road Hierarchy*. Brand Highway is a two-way, two-lane, undivided carriageway with a sealed pavement width of approximately 8.5m including 0.5m of sealed shoulders on both sides of the road. Double barrier pavement markings are present along the approaches to the Wannamal Road West intersection. The cross-section of Brand Highway is shown in **Figure 8**.



Figure 8 - Brand Highway Cross-section (Wannamal Road West intersection Looking South)



SHAWMAC PTY LTD

2.3. Traffic Volumes

Average Weekday Traffic (AWT) volumes and Peak Hour volumes for Wannamal Road West and Brand Highway were sourced from MRWA trafficmap and Shire of Gingin and are attached in **Appendix B**. They are also summarised in **Table 1** and **Table 2**.

Table 1 - Daily Traffic Volumes

Road	Location	AWT	% HV	Source
Wannamal Road West – Westbound*	West of Piggery Access*	40	28.6	Shire of Gingin 2017*
Wannamal Road West – Eastbound*	West of Piggery Access*	37	34.3	Shire of Gingin 2017*
Brand Highway - Northbound	North of Dewar Rd	1,215	34.2	MRWA 2019
Brand Highway - Southbound	North of Dewar Rd	1,248	32.6	MRWA 2019

*The shire has provided 2019 traffic count for Wannamal Road West; however the data was recorded 200m west of Bindoon/Moora Road where is considered out of context, and the volume is significantly lower than the 2017 data. For conservatism, the 2017 data have been adopted.

Table 2 - Peak Hour Traffic Volumes

Road / Direction	Location	AM Peak	PM Peak	Source
Wannamal Road West - Westbound	West of Piggery Access	3	12	Shire of Gingin 2017
Wannamal Road West - Eastbound	West of Piggery Access	14	2	Shire of Gingin 2017
Brand Highway - Northbound	North of Dewar Rd	85	77	MRWA 2019
Brand Highway - Southbound	North of Dewar Rd	94	112	MRWA 2019

2.4. RAV Status

As per MRWA HVS network mapping tool, Wannamal Road West has RAV 5 network status from Brand Hwy for 13.0km which then reduces to RAV 4 status through to Bindoon-Moora Road. Bindoon-Moora Road has RAV 4 network status to the north of Wannamal Road West intersection, however no RAV network status has been marked to the south of this intersection. Brand Highway has RAV 7 network status **Figure 9** shows the Restricted Access Vehicle categories for the road network in the vicinity of the subject site.



SHAWMAC PTY LTD

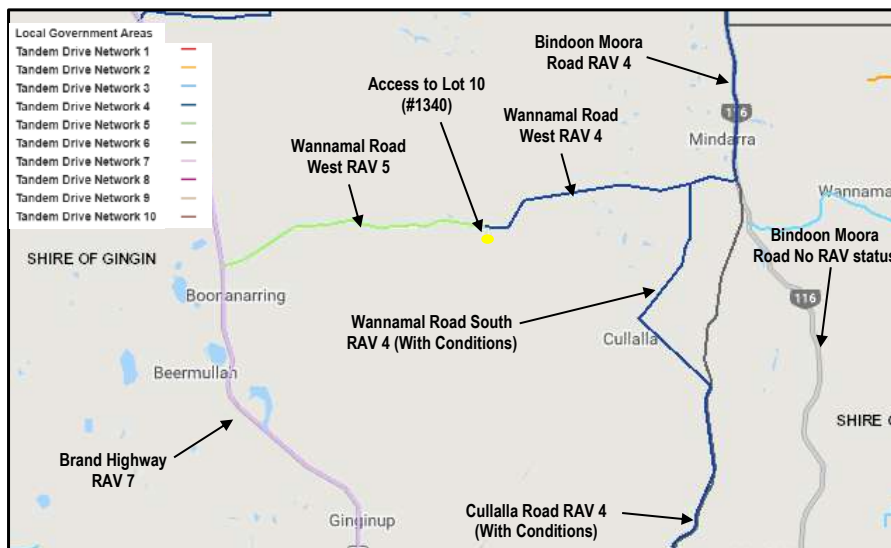


Figure 9 - Restricted Access Vehicle Network

It is understood that the site is currently using concessionally loaded vehicle (RAV 4.2) for feed delivery, manure disposal and the proposed greenwaste delivery will be concessionally loaded vehicles. **Figure 9** shows the RAV 4.2 network in the vicinity of the subject site.

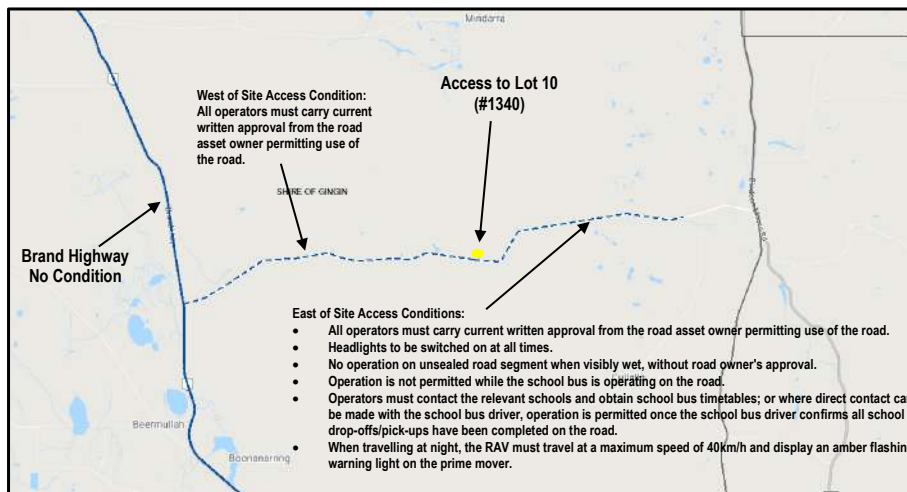


Figure 10: Restricted Access Vehicle Network (RAV 4.2)



SHAWMAC PTY LTD

2.5. Speed Limit

As per MRWA Road Information Mapping System, the sealed sections of Wannamal Road West operate with a speed limit of 110 km/hr. Brand Highway and Bindoon-Moora Road both have posted speed limits of 110 km/h.

2.6. Crash History

Crash data for Wannamal Road West, from Brand Highway (SLK 0.00) to Bindoon Moora Road (SLK 25.69), were sourced from MRWA for the 5-year period ending 31/12/2018. The report is summarised in **Table 3**.

Table 3 - Crash History

Location	Number of Crashes	MR Nature	Severity
Wannamal Road West (SLK 0.00 - 25.69)	1	1 "Non-Collision" (SLK 12.85) (Involving Animal)	1 "Property Damage - Major"

The recorded crashes are considered not atypical and indicate no particular safety issues for the existing site crossover.

2.7. Changes to Surrounding Transport Networks

2.7.1. Brand Highway / Wannamal Road West Intersection Upgrade

It is understood that the Brand Highway / Wannamal Road West Intersection is currently being upgraded to a short channelised right turn lane (CHRS) with a southbound acceleration lane for trucks turning left from Wannamal Road West. The intersection was design to accommodate RAV 7 - Tri-Drive 4.3 trucks access to and from a mineral sands extraction site (5028 Brand Highway) accessed from Wannamal Road West (approximately 900m east of Brand Highway intersection). Construction of the works was commenced recently and is proposed to be completed in November 2018.

The upgrade works will improve the safety and effectiveness for trucks turning right into and turning left out of Wannamal Road West, including haulage traffic from the proposed composting facility.



SHAWMAC PTY LTD

3. Proposed Development

3.1. Land Use

Lot 10 is currently developed as a piggery. The proposed composting facility will be constructed within the central portion of Lot 10 adjacent to the existing piggery and will utilise effluent from the piggery in the composting process. The piggery will continue to operate. There is no public access to the proposed composting facility.

3.2. Proposed Haulage Route

The client has advised that all haulage traffic will be from and to the south via Wannamal Road West and Brand Highway. The majority of staff commuting to and from the site will be using Wannamal Road West and Brand Highway to access the site from Gingin Townsite. For the purpose of this assessment, all staff traffic has been assumed to be from/to Gingin.

3.3. Operating Hours

The piggery operates 7 days a week. The Composting Facility will mainly operate Monday to Saturday 7am to 5pm but may operate on the occasional Sunday in special circumstances.

3.4. Proposed Haulage Vehicle

The existing piggery utilises B-doubles (RAV 2) for delivery of straw and stock and concessionally loaded Pocket Road Trains (RAV 4.2) for delivery of feed and disposal of manure. The addition of the composting facility will reduce the trips required for manure as all manure will go into composting facility, however it will require regular delivery of liquid tanks using B-doubles (RAV 2) and green waste using Pocket Road Trains (RAV 4.2).

The typical configuration of B-double (RAV 2) and Pocket Road Train (RAV 4.2) are as shown in **Figure 11**.

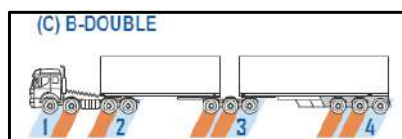


Figure 11 - Typical RAV 2 B-Double (RAV 2)



Figure 12 - Typical RAV 4 Pocket Road Train (RAV 4.2)



SHAWMAC PTY LTD

3.5. Traffic Generation

The addition of the composting facility will require regular delivery of liquid tanks and green waste and reduce haulage required for export of manure, the client has provided the existing transport metrics and the change in vehicle movement due to the composting facility as summarised in **Table 4** and **Table 5**. It is noted that the existing piggery employs 41 staff and they are commuting to and from the site with a high level of car-pooling (approximately 20 vehicles). The client has advised that the composting facility will require up to 10 staff to operate. With a reasonable assumption of carpooling, an additional 6 round-trips will be generated each day.

Table 4 - Traffic Generation - Existing Piggery

Vehicle Type	Purpose	Number of Round-trips per Week	Maximum Number of Round-trips per Day	Maximum Number of Movements per Day (vpd)	Maximum Number of Movements during Peak Hours (vph)
B-Double	Stock Delivery	8	1	2	1
	Straw Delivery (January to March)	10	1	2	1
Pocket Road Train (RAV 4.2)	Feed Delivery	12	2	4	2
	Manure Disposal	8	1	2	1
Semi-Trailer	Stock Delivery	2	1	2	1
Light Vehicles	Staff Commuting	N/A	20	40	20
Total			26	52	26

Table 5 - Traffic Generation - Proposed Change

Vehicle Type	Purpose	Number of Round-trips per Week	Maximum Number of Round-trips per Day	Maximum Number of Movements per Day (vpd)	Maximum Number of Movements during Peak Hours (vph)
B-Double	Stock Delivery	Unchanged			
	Straw Delivery (January to March)	Unchanged			
	Liquid Tank Delivery	27	6	12	2
Pocket Road Train (RAV 4.2)	Feed Delivery	Unchanged			
	Manure Disposal	-8	-1	-2	-1
	Green-waste Delivery	59	10	20	4
Semi-Trailer	Stock Delivery	Unchanged			
Light Vehicles	Staff Commuting	N/A	6	12	6
Total			21	42 (30 Heavy Vehicles and 12 Light vehicles)	11 (5 Heavy Vehicles and 6 Light vehicles)

*A round-trip consists of an inbound movement and an outbound movement.

As shown, the addition of the composting facility will generate additional vehicle movements up to 42 vpd and 11 vph during the AM and PM peak hours.



SHAWMAC PTY LTD

3.6. Traffic Distribution

As advised by the client, the additional traffic will be from / to the south via Wannamal Road West and Brand Highway.



SHAWMAC PTY LTD

4. Methodology and Inputs

The safety and capacity assessment of the intersection was undertaken in accordance with the following documents:

- *Austroads Guide to Road Design Part 4A - Unsignalised and Signalised Intersections;*
- *MRWA Standard Restricted Access Vehicle (RAV) Route Assessment Guidelines;*
- *MRWA Restricted Access Vehicle Route Assessment Guidelines;*
- *Austroads Guide to Road Design Part 3 - Geometric Design; and*
- *MRWA Supplement to Austroads Guide to Road Design - Part 3.*

The intersections will be assessed for:

- Capacity;
- Safe Intersection Sight Distance (SISD);
- Entering Sight Distances (ESD); and
- Acceleration Lanes;

4.1. Reaction Times and Deceleration

In accordance with Section 3.2 of Austroads Part 4A and MRWA RAV Assessment Guidelines the available and required Safe Intersection Sight Distance (SISD) have been assessed for the existing site access based on a reaction time of 2.5s for both light vehicles and heavy vehicles.

Deceleration coefficients on Wannamal Road West (site access is within the unsealed section) for the purpose of SISD calculations are 0.25 for light vehicles and 0.22 for heavy vehicles.

Driver eye height is 2.4m for trucks and 1.1m for cars for the purpose of SISD measurement. The SISD is measured from the driver's eye height to the top of the opposing vehicle. The ESD is measured from the driver's eye height to the top of the opposing vehicle.

The SISD assessment is discussed at **Section 5.5.2**.



SHAWMAC PTY LTD

5. Assessment

5.1. Assessment Years

The development is assessed on current network conditions.

5.2. Time Periods for Assessment

The time periods adopted for assessment are the peak hour on the adjacent road network as these represent the worst-case conditions on the wider road network. This assessment assumes that the peak periods correspond to the AM and PM peak hours of Wannamal Road West which are 5:00 to 6:00 and 14:00 to 15:00, respectively.

5.3. Assignment of Generated Traffic

Based on the calculated traffic generation (shown previously in **Section 3.5**), the post-development traffic volumes are calculated as shown in **Table 6**. Note: additional traffic generated by the sand extraction site at 5028 Brand Highway are also included.

Table 6 - Predicted Traffic Volumes

Road	Time Period	Existing Volumes (vpd)	Volume Increase by the Proposed Composting Facility*	Volume increase by the sand extraction site at 5028 Brand Highway	Post-Development Volume	Existing Volumes (PCE*)	Post-Development Volume (PCE*)
Wannamal Road West West of Site Access	Daily (vpd) Both Directions	77	42	0	119	186	318
	AM Peak (Vph) Westbound	3	6	0	9	7	22
	AM Peak (Vph) Eastbound	14	6	0	20	34	49
	PM Peak (vph) Westbound	12	6	0	18	29	44
	PM Peak (vph) Eastbound	2	6	0	8	5	20
Brand Highway South of Wannamal Road West	Daily (vpd) Both Directions	2,077	42	244	2,363	4,298	5,650
	AM Peak (Vph) Northbound	82	6	7	95	152	202
	AM Peak (Vph) Southbound	88	6	7	101	130	180
	PM Peak (vph) Northbound	74	6	7	87	138	188
	PM Peak (vph) Southbound	105	6	7	118	196	246

*Refer to **Table 5** for heavy vehicle / light vehicle distribution.

**PCE (passenger car equivalent) was calculated in accordance with table 4.5.1 of MRWA Supplement to Austroads Guide to Road Design - Part 3



SHAWMAC PTY LTD

5.4. Impact on Surrounding Roads

5.4.1. Austroads Guidelines

Austroads *Guide to Traffic Management Part 3: Traffic Studies and Analysis* (AGTM03) provides the following advice on the typical lane capacity of different road types:

- Two-lane two-way rural roads and highways 1,700 passenger cars / hour
- Urban roads with interrupted flow 900 - 1,000 passenger cars / hour

The resulting traffic volumes (vpd and PCE) on the road network as shown in **Table 6** are shown to be well within the practical capacity of the existing roads and the proposed development is considered to have minimal impact on the capacity of the road network at mid-block locations.

The roads along the proposed route to the site are all within MRWA RAV network and therefore the existing road geometry is deemed appropriate. The proposed concessionally loaded vehicles to and from the site will need to comply with the RAV network conditions for Wannamal Road West.

5.5. Impact on Intersections

5.5.1. Intersection Capacity

A general guide from WAPC Transport Impact Assessment Guideline indicates the following:

- An increase in traffic of less than 10% of capacity would not normally be likely to have a material impact on any particular section of road; and
- An intersection would generally be considered to be materially affected if flows on any leg increase by more than 10% or any individual movement by more than 20%.

The Wannamal Road West / Site Access intersection and Brand Highway / Wannamal Road West intersection do not meet the warrant for a capacity analysis and are considered to have sufficient capacity to cater for the projected increase in traffic based on the following:

- additional traffic volumes added to the network are considered low;
- Wannamal Road West has a relatively low volume;
- Brand Highway / Wannamal Road West intersection will be channelised with an uninterrupted left-turn slip lane on Wannamal Road West and it connects directly into a southbound acceleration lane.



SHAWMAC PTY LTD

5.5.2. Safe Intersection Sight Distance

The Safe Intersection Sight Distance (SISD) is the minimum distance which should be provided on the major road at any intersection. SISD provides sufficient distance for a driver of a vehicle on the major road to observe a vehicle on a minor road approach moving into a collision situation (e.g. in the worst case, stalling across the traffic lanes) and to decelerate to a stop before reaching the collision point. The SISD is measured from the driver's eye height to the top of the opposing vehicle.

The Safe Intersection Sight Distance (SISD) has been assessed in accordance with Austroads Part 4A (AGRD04A) Equation 2 and the results are summarised in **Table 7**. As per the Unsealed Roads Manual Guidelines to Good Practice 3rd (2009), for unsealed roads, drivers are encouraged to drive the road conditions and not to the speed limits imposed. The road conditions including the quality of ride on unsealed road surfaces, the radius of horizontal curves, road environment and visibility. For this assessment it is considered reasonable to use 80 km/hr (the highest design standard as per the Unsealed Roads Manual). As noted in **Section 5.6**, considering Wannamal Road West is proposed to be sealed an assessment for sealed road has also been included in **Table 8**.

Table 7 - SISD Estimate at Site Access / Wannamal Road West Intersection - Unsealed

Vehicle Type	Design Speed (km/h)	Coefficient of Deceleration	Decision Time (s)	Longitudinal Grade (East / West)	Required SISD from East / West (m)	Available SISD (m)	
						East	West
Trucks	80	0.22	3.0+4.0	-1% / 1%	265 / 276	500+	320
Cars	80	0.25	3.0+2.5	-1% / 1%	219 / 227	500+	320

Table 8 - SISD Estimate at Site Access / Wannamal Road West Intersection - Sealed

Vehicle Type	Design Speed (km/h)	Coefficient of Deceleration	Decision Time (s)	Longitudinal Grade (East / West)	Required SISD from East / West (m)	Available SISD (m)	
						East	West
Trucks	100	0.28	3.0+4.0	-1% / 1%	330 / 340	500+	320
Cars	110	0.362	3.0+2.5	-1% / 1%	296 / 303	500+	320

As shown, there is a shortfall of 20m of SISD towards the west when Wannamal Road West is sealed. It is recommended to clear fringing vegetation on the inside of horizontal curve west of site access as part of the proposed sealing works to improve sight distance.



SHAWMAC PTY LTD

5.5.3. Entering Sight Distance

In accordance with the revised RAV Route Assessment Guideline (updated September 2018), the minimum required ESD is calculated using the formula given in Austroads Guidelines with the following factors:

- Reaction time: 4.0s; and
- Deceleration rate of 0.29g up to 90 km/h, 0.28g at 100 km/h

The SISD calculated as shown in **Table 7** and **Table 8** have already incorporated these factors and therefore the minimum required ESDs at the intersection equal to SISD from **Table 7** and **Table 8**.

In this instance, the available ESD is sufficient towards the east, but requires minimal vegetation clearing to achieve required ESD towards the west.

5.5.4. Acceleration Lanes

To avoid an undue hazard or obstruction to traffic, acceleration lanes should be considered to allow RAVs, when fully loaded, to accelerate close to operating traffic speed at the point where the lane merges with the through road.

With the existing and projected traffic volumes, an acceleration lane for RAV vehicles exiting from the site is not considered warranted.

5.6. Road Safety

Based on a search of five-year period crash history ending December 2017 (as previously outlined in **Section 2.6**), the safety risks existing on the road network is considered low.

Communication with the Shire indicates that heavy vehicles traveling on the unsealed section of Wannamal Road West may promote dust issues and therefore affect driver visibility. The client has advised that the dust should not be an issue as the unsealed sections of Wannamal Road West are proposed to be sealed by the Shire and the Shire is currently seeking cost contributions from Westpork and others for the sealing works

As the additional traffic assigned to the road network is low, it is not considered to increase the likelihood of crashes to unacceptable levels.



SHAWMAC PTY LTD

6. Conclusions

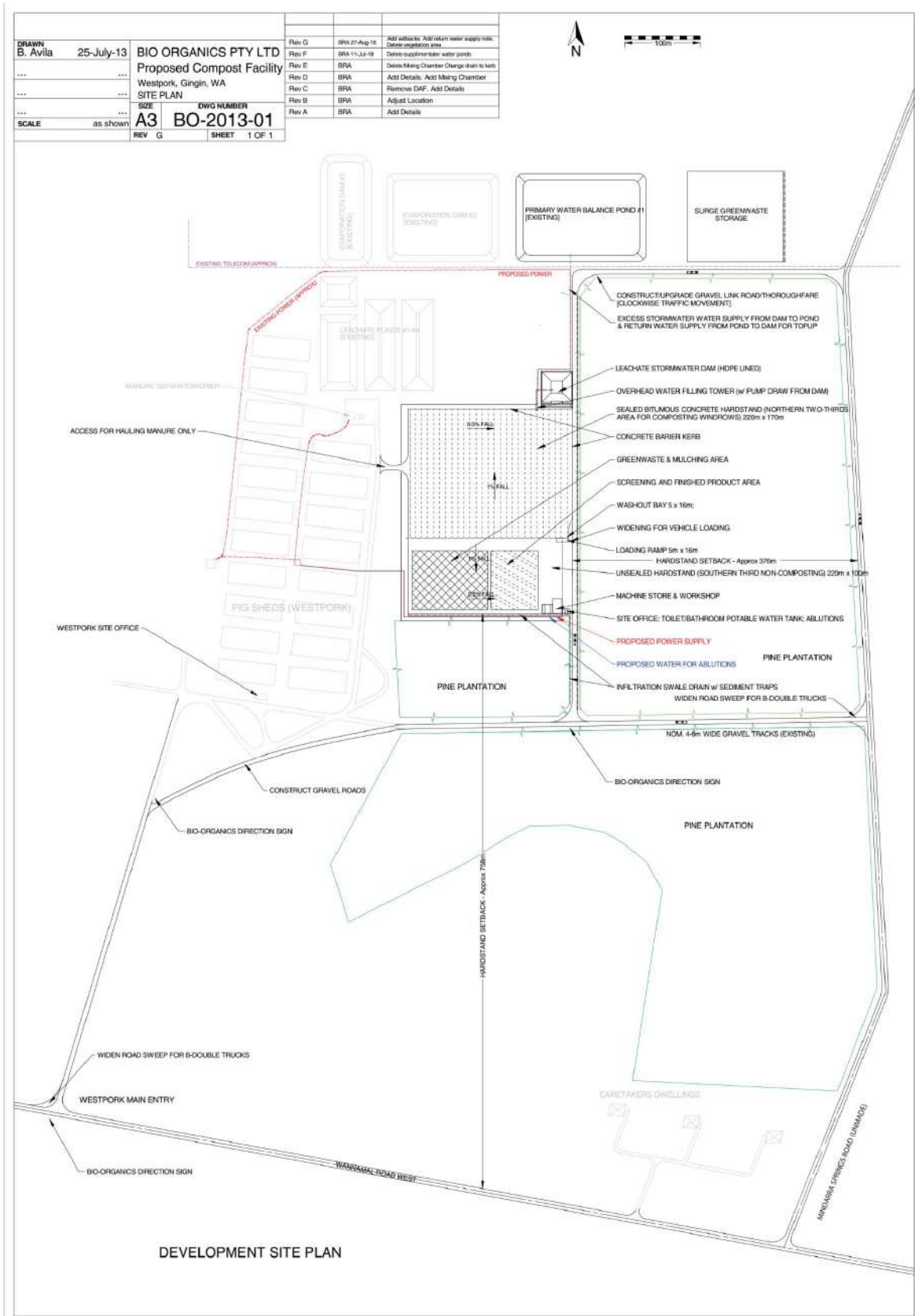
A Transport Impact Statement for addition of a green waste composting facility in the proposed piggery located at Lot 10 (#1340) Wannamal Road West, Boonanarring concluded the following:

- The estimated site traffic generation can be accommodated within the capacity of road network at mid-block and intersection locations;
- The additional traffic generated by the site is not considered to increase the likelihood of crashes to unacceptable levels;
- There is a shortfall of 20m Safe Intersection Sight Distance (SISD) towards west of Site Access / Wannamal Road West intersection and it is recommended clearing minimal fringing vegetation on the inside of the horizontal curve west of site access.as part of the proposed sealing works;
- In accordance with MRWA RAV Assessment Guideline, the Site Access / Wannamal Road West intersection does not require acceleration lanes.



SHAWMAC PTY LTD

Appendix A – Site Layout





SHAWMAC PTY LTD

Appendix B – Traffic Count



SHAWMAC PTY LTD



mainroads
WESTERN AUSTRALIA

SITE 5074

Hourly Volume

Brand Hwy (H004)

2019/20
Monday to Friday

North of Dewar Rd (SLK 37.31)

	All Vehicles				Heavy Vehicles					
	NB	SB	Both		NB	SB	Both			%
00:00	3	5	8		1	3	4			50.0
01:00	4	4	8		3	3	6			75.0
02:00	3	5	8		2	3	5			62.5
03:00	12	6	18		6	3	9			50.0
04:00	39	8	47		14	5	19			40.4
05:00	99	14	113		24	7	31			27.4
06:00	92	38	130		34	15	49			37.7
07:00	92	44	136		32	19	51			37.5
08:00	81	59	140		28	25	53			37.9
09:00	81	69	150		27	26	53			35.3
10:00	85	80	165		28	27	55			33.3
11:00	85	94	179		28	30	58			32.4
12:00	76	100	176		24	30	54			30.7
13:00	77	112	189		25	34	59			31.2
14:00	65	117	182		18	32	50			27.5
15:00	59	115	174		17	32	49			28.2
16:00	61	106	167		19	28	47			28.1
17:00	67	81	148		20	23	43			29.1
18:00	39	87	126		15	20	35			27.8
19:00	28	41	69		12	13	25			36.2
20:00	25	25	50		14	9	23			46.0
21:00	19	18	37		11	9	20			54.1
22:00	14	12	26		9	6	15			57.7
23:00	9	8	17		5	5	10			58.8
TOTAL	1215	1248	2463		416	407	823			33.4



SHAWMAC PTY LTD

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-25

Site: Wannamal Rd. 0.0WE
Description: Wannamal Road West - 100m west of Westpork main access SLK 11.05
Filter time: 0:00 Monday, 23 January 2017 => 0:00 Monday, 30 January 2017
Scheme: Vehicle classification (ARX)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(W) Sp(10,150) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages 1 - 5	1 - 7
Hour									
0000-0100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0100-0200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0200-0300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0300-0400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0400-0500	0.0	0.0	1.0	1.0	0.0	1.0	0.0	0.4	0.4
0500-0600	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.6	0.4
0600-0700	1.0	2.0	3.0	1.0	2.0	1.0	1.0	1.8	1.6
0700-0800	3.0	4.0<	4.0	1.0	1.0	0.0	1.0	2.6	2.0
0800-0900	2.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.7
0900-1000	5.0<	1.0	0.0	2.0	3.0	0.0	0.0	2.2	1.6
1000-1100	0.0	1.0	1.0	0.0	3.0<	0.0	1.0	1.0	0.9
1100-1200	2.0	2.0	6.0<	2.0<	2.0	1.0<	1.0<	2.8<	2.3<
1200-1300	0.0	2.0	5.0	1.0	3.0	4.0	4.0	2.2	2.7
1300-1400	2.0	6.0	1.0	3.0	3.0	4.0	4.0<	3.0	3.3
1400-1500	14.0<	10.0<	15.0<	7.0<	15.0<	6.0<	2.0	12.2<	9.9<
1500-1600	4.0	5.0	3.0	2.0	3.0	0.0	1.0	3.4	2.6
1600-1700	5.0	3.0	3.0	3.0	3.0	1.0	0.0	3.4	2.6
1700-1800	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.6	0.4
1800-1900	2.0	1.0	5.0	0.0	0.0	0.0	1.0	1.6	1.3
1900-2000	1.0	0.0	2.0	0.0	0.0	0.0	0.0	0.6	0.4
2000-2100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2100-2200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2200-2300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2300-2400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Totals									
0700-1900	39.0	37.0	44.0	22.0	38.0	16.0	15.0	36.0	30.1
0600-2200	41.0	39.0	49.0	23.0	40.0	17.0	16.0	38.4	32.1
0600-0000	41.0	39.0	49.0	23.0	40.0	17.0	16.0	38.4	32.1
0000-0000	41.0	39.0	51.0	25.0	41.0	18.0	16.0	39.4	33.0
AM Peak	0900	0700	1100	1100	1000	1100	1100		
	5.0	4.0	6.0	2.0	3.0	1.0	1.0		
PM Peak	1400	1400	1400	1400	1400	1400	1300		
	14.0	10.0	15.0	7.0	15.0	6.0	4.0		



SHAWMAC PTY LTD

Weekly Vehicle Counts (Virtual Week)

VirtWeeklyVehicle-26

Site: WannaWestRd.0.0WE
Description: Wannamal Road West - 100m west of Westpork main access SLK 11.05
Filter time: 0:00 Monday, 23 January 2017 => 0:00 Monday, 30 January 2017
Scheme: Vehicle classification (ARX)
Filter: Cls(1 2 3 4 5 6 7 8 9 10 11 12) Dir(E) Sp(10,160) Headway(>0)

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0100-0200	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0200-0300	0.0	0.0	1.0	1.0	1.0	0.0	0.0	0.6	0.4
0300-0400	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
0400-0500	0.0	4.0	2.0	6.0	3.0	0.0	0.0	3.0	2.1
0500-0600	18.0<	12.0<	16.0<	9.0<	13.0<	5.0	9.0<	13.6<	11.7<
0600-0700	7.0	5.0	5.0	1.0	5.0	6.0<	3.0	4.6	4.6
0700-0800	3.0	4.0	2.0	1.0	4.0	0.0	0.0	2.8	2.0
0800-0900	0.0	1.0	1.0	0.0	3.0	1.0	0.0	1.0	0.9
0900-1000	1.0	1.0	1.0	2.0	3.0	0.0	0.0	1.6	1.1
1000-1100	2.0	0.0	3.0	1.0	2.0	1.0	0.0	1.6	1.3
1100-1200	1.0	0.0	2.0	1.0	0.0	0.0	0.0	0.8	0.6
1200-1300	1.0	1.0	2.0	1.0	0.0	0.0	0.0	1.0	0.7
1300-1400	2.0	2.0	3.0<	0.0	0.0	1.0	0.0	1.4	1.1
1400-1500	0.0	2.0	0.0	0.0	1.0	0.0	0.0	0.6	0.4
1500-1600	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.4	0.3
1600-1700	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.2	0.1
1700-1800	3.0<	3.0<	0.0	0.0	2.0<	0.0	1.0	1.6<	1.3<
1800-1900	0.0	0.0	2.0	0.0	1.0	0.0	0.0	0.6	0.4
1900-2000	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.2	0.1
2000-2100	0.0	0.0	0.0	2.0<	0.0	2.0<	1.0	0.4	0.7
2100-2200	0.0	2.0	1.0	0.0	0.0	0.0	1.0	0.6	0.6
2200-2300	0.0	0.0	0.0	0.0	0.0	0.0	1.0<	0.0	0.1
2300-2400	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Totals									
0700-1900	14.0	15.0	17.0	6.0	16.0	3.0	1.0	13.6	10.3
0600-2200	21.0	22.0	24.0	9.0	21.0	11.0	6.0	19.4	16.3
0600-0000	21.0	22.0	24.0	9.0	21.0	11.0	7.0	19.4	16.4
0000-0000	40.0	38.0	43.0	25.0	38.0	16.0	16.0	36.8	30.9
AM Peak	0500	0500	0500	0500	0500	0600	0500		
	18.0	12.0	16.0	9.0	13.0	6.0	9.0		
PM Peak	1700	1700	1300	2000	1700	2000	2200		
	3.0	3.0	3.0	2.0	2.0	2.0	1.0		



14 REPORTS - OPERATIONS AND ASSETS

14.1 UNBUDGETED EXPENDITURE - REPAIR OF FLOODWAY CROSSINGS ON MARIA AND LAURA ROADS, WANERIE

File	RDS/27
Author	Sam Smith – Roads Technical Officer
Reporting Officer	Vanessa Crispe - Executive Manager Operations and Assets
Refer	Nil
Appendices	Nil

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider amending the adopted 2022/23 Budget to allow for repairs to the flood way crossings on Maria Road and Laura Road, Wanerie.

BACKGROUND

On Friday 26 August 2022 a report was received with reference to extensive flooding that had washed away the culvert crossing on Maria Road and then further downstream the flooding had also washed away the culvert at Laura Road resulting in both sections of road becoming unsafe for traffic. The Executive Manager Operations and Assets inspected the area and Shire staff installed safety signs closing the road.

Maria Road and Laura Road are both currently constructed to single width gravel standard, and both intersect off Wanerie Road. Over the last six financial years (2013/14 to 2020/21), the annual maintenance cost for Maria Road has been \$317 per kilometer per annum and Laura Road has been \$415 per kilometer per annum.

COMMENT

An inspection of both flood ways has confirmed that the existing culverts are damaged and require immediate replacement as follows:

- Maria Road – the entire floodway consisting of a round culvert measuring 6m x 300mm wide (road width) is insufficient for a floodway of this size. The replacement proposed consists of 20m in length of box culverts to facilitate a one in fifty-year event.
- Laura Road – the entire floodway consisting of a mixture of box and round culverts measuring 6m wide (road width) is insufficient for a floodway of this size. The replacement proposed consists of 40m in length of box culverts to facilitate a one in fifty-year event.

A gravel crossing with a High Density Polyethylene (HDPE) pipe has been put in place on both roads as a temporary measure only to allow vehicles to pass.

Culverts are important hydraulic structures used to convey water across a road corridor or in one of a range of other situations. Culverts must be designed to convey this flow in an acceptable way, considering the hydraulic conditions and the required performance (level of flood immunity) of the road.

Below is the breakdown of total costs for both roads.

Contractor	\$35,000
Materials (Box culverts)	\$25,000
Materials (Gravel, cement, blue metal)	\$25,000
Shire staff	\$10,000
TOTAL	\$95,000

The Shire currently does not have allocated funds in the 2022/23 budget to undertake replacement of these assets.

STATUTORY/LOCAL LAW IMPLICATIONS

Local Government Act 1995

s. 6.8 Expenditure from municipal fund not included in annual budget

POLICY IMPLICATIONS

Nil

BUDGET IMPLICATIONS

With no savings identifiable within the early implementation of the 2022/23 capital works program, it is recommended the works be funded from Council's Road Reserve. This Reserve currently has a balance of \$700,374.69 with no proposed use within the 2022/23 Budget. The table below outlines the proposed amendments to Council's adopted 2022/23 Budget.

GL/Project No.	Description	Current Budget	Revised Budget	Surplus/Deficit
DC294	Maria Road Floodway replacement	\$0	\$50,000	\$50,000
DC281	Laura Road Floodway replacement	\$0	\$45,000	\$45,000
151201810	Transfer from Road Reserve Account	\$0	(\$95,000)	(\$95,000)
Net Effect to Closing Surplus				NIL

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	4. Excellence & Accountability - Deliver Quality Leadership and Business Expertise
Strategic Objective	4.1 Management of Assets - Maintain civic buildings, sporting facilities, public places, plant and road and cycleway/pathways based on asset management plans and identified priorities

VOTING REQUIREMENTS - ABSOLUTE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson

SECONDED: Councillor Rule

That Council agree to amend the adopted 2022/23 Budget in accordance with the following table:

GL/Project No.	Description	Current Budget	Revised Budget	Surplus/Deficit
DC294	Maria Road Floodway replacement	\$0	\$50,000	\$50,000
DC281	Laura Road Floodway replacement	\$0	\$45,000	\$45,000
151201810	Transfer from Road Reserve Account	\$0	(\$95,000)	(\$95,000)
Net Effect to Closing Surplus				NIL

**CARRIED BY ABSOLUTE MAJORITY
7 / 0**

FOR: Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen

AGAINST: Nil

15 MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

16 COUNCILLORS' OFFICIAL REPORTS

16.1 JOINT DEVELOPMENT ASSESSMENT PANEL MEETING – 11 OCTOBER 2022

File:	GOV/6
Councillor:	Councillor Frank Johnson
Report Date:	18 October 2022

I attended the Joint Development Assessment Panel (JDAP) meeting on 11 October 2022. It was a very good meeting with the proposal going through after thorough debate. The required ministerial appointment of Councillor Balcombe needs to be followed up with the Department of Planning, Lands and Heritage as a matter of urgency.

16.2 POWER OUTAGES DURING TOTAL FIRE BANS

File:	GOV/6
Councillor:	Councillor Wayne Fewster (Shire President)
Report Date:	18 October 2022

On 12 October 2022 I attended the 'Shepherd Report' consultation day to address Recommendation 4 of the Independent Review into the Christmas 2021 Power Outages. Some changes have been made to exemptions for Western Power on Total Fire Ban days. The issue is that the re-energising of a line poses a fire risk on these days. I argued that other risks associated with power outages are far greater to the wider community than the risk of fire during the re-energising process. The broader issue is lack of communication between Western Power and other government bodies. I believe the State is listening to our concerns but are being over cautious.

16.3 MOST ACCESSIBLE COMMUNITY AWARDS WA

File:	GOV/6
Councillor:	Councillor Wayne Fewster (Shire President)
Report Date:	18 October 2022

On 3 October 2022 I attended the Western Australian Local Government Association (WALGA) AGM where the Shire of Gingin was presented with two Most Accessible Community Awards. We were the winners of the Infrastructure category and the overall winners for the Gingin Outdoor Activity Space (GOAS) project. We beat the City of Fremantle and a number of larger local governments which is a testament to those involved in the project.

17 NEW BUSINESS OF AN URGENT NATURE

Nil

18 MATTERS FOR WHICH MEETING IS TO BE CLOSED TO THE PUBLIC

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson **SECONDED:** Councillor Kestel

That Council move into a Confidential Session to discuss Item 18.1

**CARRIED UNANIMOUSLY
7 / 0**

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*

The meeting was closed to the public and all members of the public and press present in the Gallery left the Council Chambers at 3:51pm

Natasha Jurmann (Statutory Planning Officer) left at 3:51pm

18.1 CUNLIFFE STREET DEVELOPMENT

File	ENV/17
Location	Cunliffe Street, Lancelin
Owner	Shire of Gingin
Author	Danica Todd – Operations Support Officer
Reporting Officer	Vanessa Crispe - Executive Manager Operations and Assets
Refer	Nil
Appendices	Appendix 1 – Staging Plan Appendix 2 – Bill of Quantities

Reasons for Confidentiality

This report is confidential in accordance with Section 5.23(2) of the *Local Government Act 1995* which permits the meeting to be closed to the public for business relating to the following:

- e. a matter that if disclosed, would reveal –i) a trade secret; ii) information that has a commercial value to a person; or iii) information about the business, professional, commercial, or financial affairs of a person. Where the trade secret or information is held by, or is about, a person other than the local government.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson **SECONDED:** Councillor Rule

That Council, subject to the Shire receiving Federal Funding:

1. Acknowledge the quote to complete sections A and D of Cunliffe Street Redevelopment Scope of Works at a cost of \$549,519.66 from Phase 3 Landscape Construction Pty Ltd.
2. Agree to amend the adopted 2022/23 Budget in accordance with the following table:

GL/Project No.	Description	Current Budget	Revised Budget	Surplus/Deficit
OC11293	Lancelin Foreshore	\$488,593	\$588,593	\$100,000
151201810	Transfer from Road Reserve Account	\$0	(\$100,000)	(\$100,000)
			Net Effect to Closing Surplus	Nil

**CARRIED BY ABSOLUTE MAJORITY
7 / 0**

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson

SECONDED: Councillor Balcombe

That the meeting be re-opened to the public.

**CARRIED UNANIMOUSLY
7 / 0**

FOR: *Councillor Fewster, Councillor Rule, Councillor Balcombe, Councillor Johnson, Councillor Kestel, Councillor Peczka and Councillor Sorensen*

AGAINST: *Nil*

The meeting re-opened to the public at 4:01pm. One member of the press returned to the Gallery and was advised of Council's decision.

19 CLOSURE

There being no further business, the Shire President declared the meeting closed at 4:02 pm.

The next Ordinary Council Meeting will be held in Council Chambers at the Shire of Gingin Administration Centre, 7 Brockman Street, Gingin on 15 November 2022, commencing at 3pm.