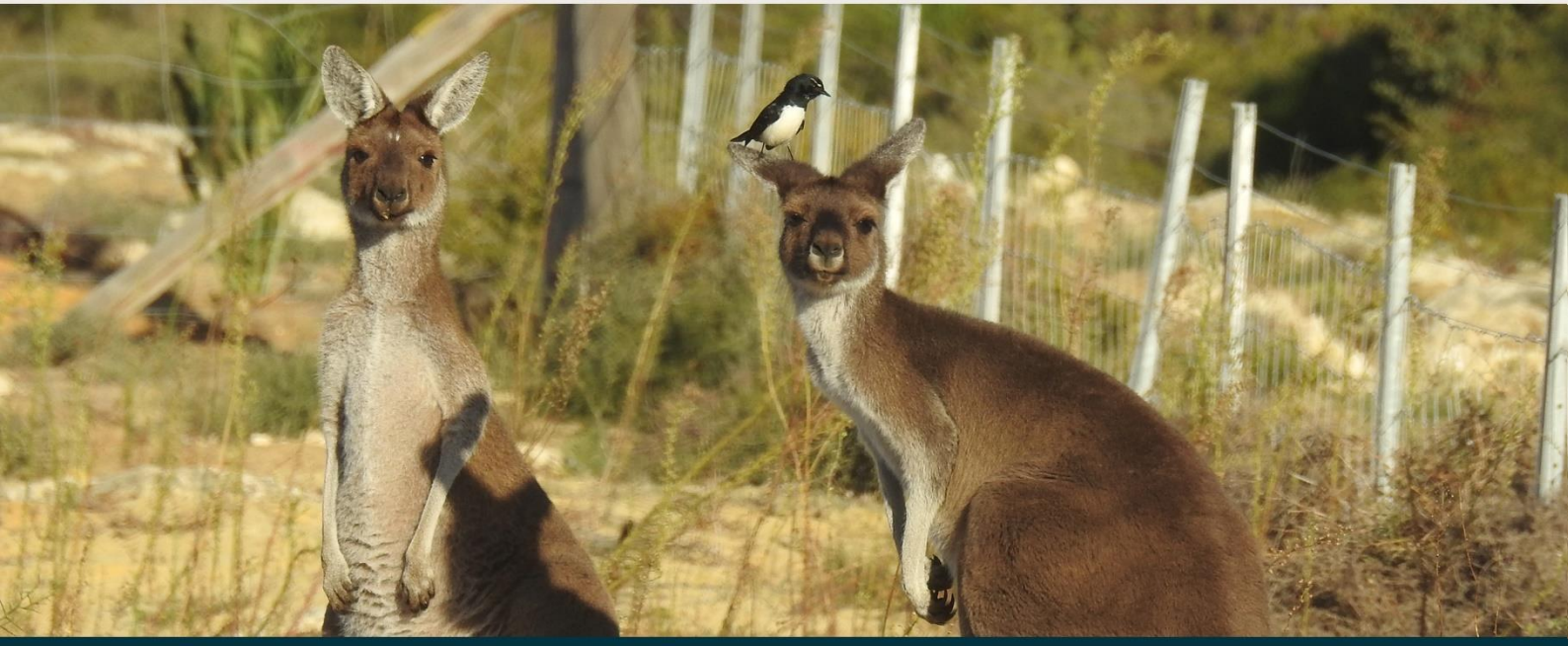
SHIRE OF GINGIN

HISTORY | BEAUTY | PROSPERITY



MINUTES

Special Council Meeting

5 March 2024

CONFIRMATION OF MINUTES

These Minutes have been CONFIRMED as the official record for the Shire of Gingin's Special Council Meeting held on 5 March 2024.

_____
Councillor C W Fewster
PRESIDENT

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

ORDER OF BUSINESS

1 DECLARATION OF OPENING

The President declared the meeting open at 4:21 pm and welcomed all in attendance.

2 RECORD OF ATTENDANCE, APOLOGIES AND LEAVE OF ABSENCE

2.1 ATTENDANCE

Councillors – C W Fewster (President), L Balcombe (Deputy President), F Johnson, R Kestel, F J Peczka, E Sorensen, L Stewart, J Weeks and N Woods

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), J Bayliss (Manager Planning and Building), L Burt (Coordinator Governance), and K Johnston (Governance Support Officer/Minute Officer)

Gallery – There were 3 members of the public present in the Gallery.

2.2 APOLOGIES

Nil

2.3 LEAVE OF ABSENCE

Nil

3 DISCLOSURES OF INTEREST

Councillor Balcombe

Item: 13.1 Application for Development Approval - Proposed Plantation (Carbon Farm) on Various Lots on Karakin Lakes Road and Baramba Road
Interest: Impartiality
Reason: I am a member of the JDAP that will consider this application.

Councillor Johnson

Item: 13.1 Application for Development Approval - Proposed Plantation (Carbon Farm) on Various Lots on Karakin Lakes Road and Baramba Road
Interest: Impartiality
Reason: I am member of the JDAP that will consider this application.

4 PUBLIC QUESTION TIME

4.1 RESPONSES TO PUBLIC QUESTIONS PREVIOUSLY TAKEN ON NOTICE

Nil

4.2 PUBLIC QUESTIONS

Nil

5 PUBLIC STATEMENT TIME

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson SECONDED: Councillor Balcombe

That Council resolve to amend the order of business for the meeting to include Public Statement Time.

CARRIED UNANIMOUSLY
9 / 0

FOR: *Councillor Balcombe, Councillor Fewster, Councillor Kestel, Councillor Sorensen, Councillor Stewart, Councillor Weeks, Councillor Woods, Councillor Johnson and Councillor Peczka*

AGAINST: *Nil*

Nil

6 PETITIONS

Nil

7 APPLICATIONS FOR LEAVE OF ABSENCE

Nil

8 ANNOUNCEMENTS BY THE PRESIDING MEMBER

Councillor Fewster advised that he attended the 100th birthday celebrations for Gingin local resident Mrs Norma Gray and congratulated Mrs Gray on reaching this milestone.

Deputations

One Deputation was heard prior to the meeting commencement, the details of which are as follows:

Item 13.1 Application for Development Approval - Proposed Plantation (Carbon Farm) on Various Lots on Karakin Lakes Road and Baramba Road.

Speakers: Gareth Parry, Nick Jones and Ollie Viant

The deputation was 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

11.1 ASSIGNMENT OF LEASE - PORTION OF LOT 301 KING DRIVE, WOODRIDGE (ECO EXCHANGE CONTAINER DEPOSIT POINT)

File	BLD/5125; A4297
Author	Lee-Anne Burt - Coordinator Governance
Reporting Officer	Aaron Cook - Chief Executive Officer
Refer	17 October 2023 - Item 13.3
Appendices	1. Location Plan [**11.1.1** - 1 page]

DISCLOSURES OF INTEREST

Nil

PURPOSE

To consider a request for an assignment of lease over portion of Lot 301 King Drive, Woodridge from Eco Exchange Pty Ltd to Good Samaritan Industries.

BACKGROUND

At its meeting on 19 October 2021, Council granted development approval to Eco Exchange Pty Ltd for the establishment of a container deposit recycling point on a portion of Lot 301 King Drive, Woodridge. Lot 301 is owned by the Shire of Gingin, and in conjunction with the Development Approval Council also agreed to enter into a lease agreement with Eco Exchange for the area of land concerned for a term of 2 years (consistent with the life of the development approval).

On 17 October 2023 Council considered a further application for development approval in relation to the container deposit point and agreed to both grant a further approval for a period of 3 years and enter into a new lease agreement with Eco Exchange accordingly.

Mr Byron Sartorelli of Eco Exchange Pty Ltd has now advised that the business is being purchased by Good Samaritan Industries and requests that the lease be assigned accordingly.

A location plan showing the site of the lease is provided **(see appendix)**.

COMMENT

Whilst not specifically referenced in this particular lease agreement, it is generally understood that a lessor cannot unreasonably refuse the assignment of a lease.

Both the existing lease and the development approval granted by Council run concurrently and will expire on 19 October 2026. The Shire's Planning Department has confirmed that assignment of the lease will not have any implications with respect to the development approval.

No amendments are proposed to the terms of the lease.

The disposition of property requirements under s. 3.58 of the *Local Government Act 1995* do not apply to the assignment of a lease.

It is suggested that agreement to the proposed assignment be conditional on all costs associated with preparation of the necessary Deed of Assignment being borne by the lessee.

STATUTORY/LOCAL LAW IMPLICATIONS

Nil

POLICY IMPLICATIONS

Nil

BUDGET IMPLICATIONS

There will be costs associated with preparation of the required assignment of lease documentation. It is suggested that these costs should be the responsibility of the lessee.

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2022-2032

Aspiration	3. Planning & Sustainability - Plan for Future Generations
Strategic Objective	3.5 Sustainable Waste Solutions - Incorporate opportunities that support responsible and sustainable disposal of waste

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson SECONDED: Councillor Sorensen

That Council agree to assignment of the current lease between the Shire of Gingin and Eco Exchange Pty Ltd a portion of Lot 301 King Drive, Woodridge for the purpose of providing a container deposit point to Good Samaritan Industries subject to:

1. The current conditions of lease being maintained; and

2. The lessee agreeing to accept responsibility for all costs associated with the preparation of the required assignment of lease documentation.

CARRIED UNANIMOUSLY
9 / 0

FOR: *Councillor Balcombe, Councillor Fewster, Councillor Kestel, Councillor Sorensen, Councillor Stewart, Councillor Weeks, Councillor Woods, Councillor Johnson and Councillor Peczka*

AGAINST: *Nil*

SHIRE OF GINGIN
HISTORY | BEAUTY | PROSPERITY

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Shire of Gingin does not warrant the accuracy of information in this publication and any person using or relying upon such information does so on the basis that Gingin Shire Council shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in this information.

Location Plan - Proposed Lease of Portion of Lot 301 King Drive, Woodridge

LEASE AREA DEPICTED IN RED

Scale: 1:1884

Date: 27/10/2021

N

12 REPORTS - CORPORATE AND COMMUNITY SERVICES

Nil

13 REPORTS - REGULATORY AND DEVELOPMENT SERVICES

13.1 APPLICATION FOR DEVELOPMENT APPROVAL - PROPOSED PLANTATION (CARBON FARM) ON VARIOUS LOTS ON KARAKIN LAKES ROAD AND BARAMBA ROAD

File	BLD/7661
Applicant	Rowe Group
Location	Lot 2 (459) Karakin Lakes Road, Karakin Lot 3 (no.202) Baramba Road, Karakin Lot 5694 on Plan 207688 Lot 1 on Plan 417155, Karakin
Owner	Woodside Energy Carbon (Services) Pty Ltd.
Zoning	General Rural
WAPC No	NA
Author	James Bayliss – Manager Planning and Building
Reporting Officer	Bob Kelly - Executive Manager Regulatory and Development Services
Refer	Nil.
Appendices	1. Responsible Authority Report Plantation Carbon Farm on Karakin Lakes Road and (1) [**13.1.1** - 21 pages] 2. 1 - Aerial Photo [**13.1.2** - 1 page] 3. 2 - Applicants Proposal [**13.1.3** - 106 pages] 4. 3 - DA P 2302606 - RFI - Plantation (carbon farm) on various lots Karakin Lakes Road, Karakin [**13.1.4** - 2 pages] 5. 3 a - Applicants response to RFI [**13.1.5** - 63 pages]

DISCLOSURES OF INTEREST

Councillor Balcombe disclosed an impartiality interest in Item 13.1 as she is a member of the JDAP that will consider this item.

Councillor Johnson disclosed an impartiality interest in Item 13.1 as he is a member of the JDAP that will consider this item.

PURPOSE

To consider endorsing a Responsible Authority Report (RAR) in relation to an Application for Development Approval for a Plantation (Carbon Farm) extending over the following properties:

Lot 2 (459) Karakin Lakes Road, Karakin
Lot 3 (no.202) Baramba Road, Karakin
Lot 5694 on Plan 207688
Lot 1 on Plan 417155, Karakin

BACKGROUND

Immediately prior to circulating this report, the Presiding Member of the Regional Joint Development Assessment Panel (RJDAP) consented to an extension of time to lodge the RAR. This was on the basis that the parties intended to engage in further dialogue to work through perceived deficiencies of the proposal.

The officer has prepared a RAR **(see appendices)**, which now represents a draft version that will likely be altered pending further dialogue with the applicant. It should be noted that Council cannot alter the RAR, as this is the officer's assessment.

The views of Council will be inserted into the finalised RAR for the RJDAPs consideration. This is an opportunity for Council to make the RJDAP aware of whether the proposal/Officer Recommendation is supported, not supported or is recommended to be altered.

The development is proposed to extend over four lots that have a combined area of 3,906 hectares. The development comprises of a Plantation (carbon farm) approximately 3,017 hectares in area, equating to 77% of the total land holding.

The landowner opted to have the proposal determined by the Regional Joint Development Assessment Panel (RJDAP) in lieu of the Gingin Shire Council.

The following details are provided as **appendices**.

Applicant's Proposal
- Cover Letter
- Planning Report
- Preliminary Reforestation Plan
- Existing Infrastructure Plans
- Environmental Conditions
- Heritage Considerations
- Bushfire Management Plan

Shire's Request for Further Information (RFI) and the Applicant's Response which includes:

- Applicant's response to the RFI questions
  - Draft Planation Management Plan (PMP)
  - Response letter prepared by Bushfire Prone Planning
  - Applicants' response to the schedule of submissions

COMMENT

Stakeholder Consultation

The application was advertised in accordance with clause 64 of the *Planning and Development (Local Planning Scheme) Regulations 2015*. This included advertising to surrounding landowners by way of letter, two development sign placed on the verge of either end of the property, a notification on the Shire's website and a notification on the Shire's social media platform. The Shire provided a 28 day consultation period.

The Shire received four (4) written submissions, three (3) in support and one (1) opposed.

The application was referred to the following 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) – Aboriginal Heritage Council;
- Department of Health (DoH);
- Department of Biodiversity, Conservation and Attractions (DBCA);
- Department of Primary Industries and Regional Development (DPIRD); and
- Department of Fire and Emergency Services (DFES).

The comments received from State agencies reinforce the need to impose relevant conditions, however no comments explicitly object to the development.

Further details can be found in the RAR.

PLANNING FRAMEWORK

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

Refer to the RAR for the planning assessment.

Summary

It is suggested that Council support the assessment and recommendation outlined under the RAR.

STATUTORY/LOCAL LAW IMPLICATIONS

See RAR.

POLICY IMPLICATIONS

See RAR.

BUDGET IMPLICATIONS

Nil

STRATEGIC IMPLICATIONS

Shire of Gingin Strategic Community Plan 2019-2029

Aspiration	3. Planning & Sustainability - Plan for Future Generations
Strategic Objective	3.1 Climate Change & Adaption - Understand the impacts of climate change and identify actions to adapt and mitigate those impacts

VOTING REQUIREMENTS - SIMPLE MAJORITY

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Kestel SECONDED: Councillor Woods

1. That Council support deferral of determining the proposed Plantation (Carbon Farm) on Lot 2 (459) Karakin Lakes Road, Lot 3 (no.202) Baramba Road, Karakin, Lot 5694 on Plan 207688 and Lot 1 on Plan 417155, Karakin for the following reason:

    a. The development in its current scale and the supporting documents do not demonstrate that the locality and community a whole is protected from the risk of bushfire in a manner that is acceptable, and which is consistent with the applicable policy framework.

    b. Adequate development plans and clarity regarding ongoing management of the plantation over the life of the development should be resolved prior to support being forthcoming.

2. That Council consent to the final Responsible Authority Report to be presented to the Regional Joint Development Assessment Panel (RJDAP) without further Council consideration.

CARRIED UNANIMOUSLY
9 / 0

FOR: *Councillor Balcombe, Councillor Fewster, Councillor Kestel, Councillor Sorensen, Councillor Stewart, Councillor Weeks, Councillor Woods, Councillor Johnson and Councillor Peczka*

AGAINST: *Nil*

Karakin Lakes Road and Baramba Road, Karakin Plantation (Carbon Farm)

Form 1 – Responsible Authority Report
(Regulation 12)

DAP Name:	Regional Joint Development Assessment Panel (RJDAP)
Local Government Area:	Shire of Gingin
Applicant:	Rowe Group
Owner:	Woodside Energy Carbon (Services) Pty Ltd.
Value of Development:	$6 million ☐ Mandatory (Regulation 5) ☒ Opt In (Regulation 6)
Responsible Authority:	Shire of Gingin
Authorising Officer:	James Bayliss – Manager Planning and Building
LG Reference:	BLD/7661 - P2610
DAP File No:	DAP/23/02606
Application Received Date:	8 December 2023
Report Due Date:	6 March 2024
Application Statutory Process Timeframe:	90 Days 28 Day 'Stop the Clock' Extension provided
Attachment(s):	1. Location Plan and Aerial Plan 2. Applicants Proposal • Cover Letter • Planning Report • Preliminary Reforestation Plan • Existing Infrastructure Plans • Environmental Conditions • Heritage Considerations • Bushfire Management Plan 3. Shire's RFI and Applicants Response • Applicants' response to the RFI questions o Draft Planation Management Plan (PMP) o Response letter prepared by Bushfire Prone Planning o Applicants' response to the schedule of submissions 4. Schedule of Submissions and Recommended Responses

Is the Responsible Authority Recommendation the same as the Officer Recommendation?	☐ Yes ☐ N/A	Complete Responsible Authority Recommendation section
	☐ No	Complete Responsible Authority and Officer Recommendation sections

Responsible Authority Recommendation

That the Regional Joint Development Assessment Panel resolves to:

1. **Accept** that the DAP Application reference DAP/23/02606 is appropriate for consideration as a "Plantation" land use and is compatible with the objectives of the General Rural zone in accordance with Clause 3.2.7 of the Shire of Gingin's Local Planning Scheme No. 9;

2. **Refuse** DAP Application reference DAP/23/02606 in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015,* subject to the following conditions:

Reasons:

1. Having regard to Clauses 67(2) (q) (r) and (m) of the Deemed Provisions, the proposed development is unacceptable given:

    a. The proposed development introduces an unacceptable risk of bushfire that poses a risk to community safety.

    b. The proposal does not demonstrate compliance with State Planning Policy 3.7 – Planning in Bushfire Prone Areas.

    c. The proposal does not demonstrate compliance with State Planning Policy 2.5 – Rural Planning and the accompanying Guidelines.

    d. The proposal does not demonstrate compliance with the Guidelines for Plantation Fire Protection (2011).

Advice Notes

1. If you are aggrieved by this decision, 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*.

Details: outline of development application

Region Scheme	NA
Region Scheme - Zone/Reserve	NA
Local Planning Scheme	Local Planning Scheme No. 9 (LPS 9)
Local Planning Scheme - Zone/Reserve	General Rural

Structure Plan/Precinct Plan	NA
Structure Plan/Precinct Plan - Land Use Designation	NA
Use Class and permissibility:	Plantation 'D' use, which means that the use is not permitted unless the local government has exercised its discretion by granting development approval.
Lot Size:	3906 hectares
Existing Land Use:	Agriculture Extensive (grazing)
State Heritage Register	Yes – Partial
Local Heritage	☐ N/A ☒ Heritage List ☐ Heritage Area European Heritage Place - Limestone Caves Aboriginal Heritage Place – Karakin Lakes 3 and Gingin Brook Waggyl – ID3483 and 20008 respectively.
Design Review	☒ N/A ☐ Local Design Review Panel ☐ State Design Review Panel ☐ Other
Bushfire Prone Area	Yes - Partial
Swan River Trust Area	No

Proposal:

The applicant has provided a report detailing the proposed development. The officer does not seek to duplicate the entirety of the applicant's report, but rather to focus on key components.

The assessment identifies that the primary consideration relates to bushfire implications.

The proposed development seeks to plant local native tree species for the purpose of establishing a native 'forest'. The target of the proposed forest is to achieve a vegetation height of 2 metres, with 20% canopy cover. The planting method is referred to as 'block planting', whereby portions of the property are subdivided by vegetation community type and planted in furrows spaced approximately 6m apart, with cells divided by either 6 metre, 14 metre or 20 metre wide firebreaks.

The proposed native forest will generate Australian Carbon Credit Units (ACCUs) for the landowner. While there are varying ways to secure an ACCU, in this instance the native forest will essentially store and maintain carbon (sequestration) for a period of 100 years. This is referred to as a carbon farm.

The development is proposed to extend over four lots that have a combined area of 3,906 hectares. The carbon farm is approximately 3,017 hectares in area, equating to 77% of the total land holding.

The local native species to be planted include Marri, Coastal Blackbutt, Firewood Banksia, Stout Paperbark and a selection of various native trees and shrubs from those exhibited in the existing remnant vegetation.

A summary of the development activities is outlined in the table below:

Stage 1	**Development Activities**
1. Pre-planting	Weed and pest control Weed and invertebrate pest control would be like that conducted for an agricultural enterprise with potential summer emergent knockdowns and a pre-planting broad spectrum knockdown. Vertebrate pest control is also proposed to be conducted for a period of approximately three years. Pre-planting weed spraying generally occurs from approximately April to June, prior to planting (i.e. April-June 2024)
2. Ground Preparation	The land will be prepared by ripping, scalping and mounding (where required); Furrows and mounds would generally follow existing agricultural workings with approximately 6m spacing between each. Continuous 24h operations may be required to take advantage of ideal weather conditions and up to three tractors may operate simultaneously.
3. Planting	Native trees are planned to be planted by hand at approximately 3m intervals within each furrow. It is estimated that planting will commence in mid-June 2024 and continue for approximately 8 weeks. Direct seeding is not proposed for this project.
4. Post planting weed and pest control	Post-planting spraying is proposed to be conducted using selective herbicides, shielded sprayers, and/or mechanical methods. Within approximately five years, native species are expected to outcompete weed species, and therefore ongoing weed and pest spraying is likely to be minimal or not required. Crash grazing could also be used to manage pre- and post-planting grass and weed growth.
Stage 2	**Ongoing Operational Activities**
5. Monitoring and audit	Permanent monitoring stations are proposed to be established to evaluate. Monitoring will use a combination

	of field and remote sensing (e.g. drones, satellite imagery) techniques. The Clean Energy Regulator (CER) is also expected to undertake periodic audits of the project.
6. Property maintenance	WEC(S) owns property maintenance equipment and employs a full time Carbon Farm Manager, along with several farm assistants and contractors to ensure property maintenance activities (e.g. firebreaks and vertebrate pest control) can be undertaken in a timely and safe manner.
7. Infill planting	Areas that require additional plantings will be infilled on an as need basis.

A Location Plan and Aerial Plan are provided as **Attachment 1**.

A copy of the Applicant's proposal is provided as **Attachment 2** and includes the following components:

- Cover Letter
- Planning Report
- Preliminary Reforestation Plan
- Existing Infrastructure Plans
- Environmental Conditions
- Heritage Considerations
- Bushfire Management Plan

It should be noted that the Shire provided the Applicant with a 'request for further information' (RFI) on 6 February 2024, with additional information being received in response on 21 February 2024. The documents are provided as **Attachment 3** and include the following:

- Shire's RFI letter
- Applicants' response to the RFI questions
    - Draft Planation Management Plan (PMP)
    - Response letter prepared by Bushfire Prone Planning
    - Applicants' response to the schedule of submissions

Background:

The property is located approximately 8.5km south-east of the existing Lancelin townsite, 4km from the Lancelin South Residential Estate (4,000 lots) and 1.6km east of Seaview Park Rural Living Estate.

The land has been used for grazing and broad acre purposes (agriculture extensive) on rolling leases for more than 20 years. The north-western portion of the lot was previously used for irrigated horticulture, however this use ceased many years ago with the water licence since being transferred to a separate entity.

The property accommodates several wetlands, including a Conservation Category Wetland (CCW - Doopiter Swamp) in the north-east, and several small 'Multiple Use' and 'Resource Enhancement' wetlands on the eastern portion of the property. The property abuts Karakin Lakes, which is a CCW and listed in the National Directory of

Important Wetlands by the Federal Department of Climate Change, Energy, the Environment and Water.

The subject land is positioned between KW Road to the west, Cowalla Road to the east and a portion of Baramba Road to the south, and intersected by Karakin Lakes Road through the western central portion of the site.

The property contains one (1) registered European heritage place, which is identified in the Shire of Gingin local heritage survey. The listing is named 'Limestone Caves' and is a 'Category D' heritage place. The Department of Planning, Lands and Heritage (DPLH) Aboriginal Cultural Heritage Information System (ACHIS) indicates that portions of the property are also located within one (1) Registered Aboriginal Heritage Place and one (1) Lodged Aboriginal Heritage Place.

The land abuts multiple landholdings given the large site perimeter, with most adjoining uses consisting of broad acre farming and livestock grazing. Agriculture Intensive (annual horticulture) abuts a portion of the northern boundary (as depicted in the aerial imagery).

There is a communication tower located on the property leased to the Western Australian Police Force (WAPOL) which accommodates Department of Fire and Emergency Service telecommunication infrastructure located on the same tower. The Cowalla Bushfire Station is located on the south-eastern portion of the site.

The proposed development provides a linkage to the Moore River National Park which extends over 12 kilometres to the east of Brand Highway, with a large tract of vegetation to the west that essentially terminates at the ocean.

Legislation and Policy:

Legislation

Planning and Development Act 2005

Planning and Development (Local Planning Scheme) Regulations 2015

- *Schedule 2 (Deemed Provisions)*
  - *Clause 64 – Advertising applications*
  - *Clause 66 – Consultation with other authorities*
  - *The following provisions of Clause 67(2) – Consideration of application by local government:*

    (a) The aims and provisions of this Scheme and any other local planning scheme operating within the Scheme area;

    (c) Any approved State planning policy;

    (e) Any policy of the Commission;

    (f) Any policy of the State;

    (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;

(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;

(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;

(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;

(k) the built heritage conservation of any place that is of cultural significance;

(m) the compatibility of the development with its setting, including - …

(ii) 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.

(x) the impact of the development on the community as a whole notwithstanding the impact of the development on particular individuals;

(y) Any submissions received on the application;

(za) The comments or submissions received from any authority consulted under clause 66;

Shire of Gingin - Local Planning Scheme No.9 (LPS 9)

- Part 3 - Zones and the Use of Land
- Part 4 - General Development Requirements and variations to Site and Development Standards and Requirements

Shire of Gingin - Local Planning Strategy 2012 (the Strategy)

State Government Policies

State Planning Policy 2.5 - Rural Planning (SPP 2.5) and the Accompanying Guidelines (Version 3)

State Planning Policy 3.7 - Planning in Bushfire Prone Areas (SPP3.7)

Guidelines for Plantation Fire Protection (2011)

Tree Farms Information Sheet – DPLH

Consultation:

Public Consultation

The application was advertised in accordance with clause 64 of the *Planning and Development (Local Planning Scheme) Regulations 2015*. This included advertising to surrounding landowners by way of letter, two development signs placed on the verge at either end of the property, a notification on the Shire's website and a notification on the Shire's social media platform. The Shire provided a 28 day consultation period.

The Shire received four (4) written submissions, three (3) in support and one (1) opposed. The objection raised concern in relation to future bee keeping activities that may be incidental and complementary to the native forest and implied buffer zones should be considered. Neither of the concerns relate to the proposal, with any future bee keeping activities being considered at the relevant time.

Referrals/consultation with Government/Service Agencies

The application was referred to the following 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) – Aboriginal Heritage Council;
- Department of Health (DoH);
- Department of Biodiversity, Conservation and Attractions (DBCA);
- Department of Primary Industries and Regional Development (DPIRD); and
- Department of Fire and Emergency Services (DFES).

The comments received from State agencies reinforce the need to impose relevant conditions, however no comments explicitly object to the development.

A copy of the schedule of submissions and recommended responses is included as **Attachment 4**.

Other Advice

The officer referred the proposal to the Shire's Bushfire Advisory Committee (BFAC) on 13 December 2023. No formal comments were received, however feedback through the Shire's Community Emergency Services Manager/Chief Bushfire Control Officer and Bushfire Mitigation Officer are summarised as follows:

- The scale of the native forest in the context of proximity to Seaview Park, Lancelin South Estate and the Lancelin townsite.

- The linkage it provides with the Moore River National Park and the scale of a bushfire event as a result.

- The resource capacity of the landowner to respond to and undertake fire related activities.

- The lack of resources proposed by the landowner in proportion to the scale of the native forest.
- The lack of resources the Shire of Gingin possesses in order to respond to a bushfire onsite due to the scale of the proposed native forest that also connects to a large state forest.
- Reliance on local volunteers and local and state resources to undertake ongoing management obligations such as fuel reduction burning.
- The conflict between the fuel minimisation to ensure public safety, conflicting with the landowner obligation to proactively protect carbon stores.

Planning Assessment:

The development proposal has been assessed against the various requirements of the planning framework as outlined under the 'Legislation and Policy' section of this report. The officer is of the view that the planning framework largely does not contemplate a proposal of this nature, and on that basis a high degree of discretion is to be exercised in determining adherence to the relevant considerations.

The subject lot is zoned General Rural 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*.

Officer comment:

The proposal is viewed as being generally consistent with the objectives of the zone, notwithstanding objective b) seeks to encourage and protect broad acre agricultural activities such as grazing. The proposal is viewed as a form of agricultural activity that is suited to large rural landholdings.

Use Classification

Classification of a proposed use requires a detailed investigation of the character, processes and other related features of a proposal in order to determine its appropriate class.

'Plantation' is defined under LPS 9 as follows:

> *has the same meaning as in the Code of Practice for Timber Plantations in Western Australia (1997) published by the Department of Conservation and Land Management and the Australian Forest Growers;*

The *Code of Practice for Timber Plantations in Western Australia (1997)* defines a 'plantation' as follows*:*

> *a stand of trees of ten hectares (or as defined by the Local Government Authority), or larger, that has been established by sowing or planting of either native or exotic tree species selected and managed intensively for their commercial and/or environmental benefits. A plantation includes roads, tracks, and firebreaks.*

The development proposes a stand of trees (native vegetation) larger than 10 hectares, by planting seedlings for commercial gain, being attaining ACCUs. Whether the proposal is managed 'intensively' remains open to judgement. It is nevertheless viewed as falling within the above parameters for the purpose of assigning the use class under LPS 9.

Plantation is a 'D – discretionary' use within the General Rural zone, which means the use is not permitted unless the local government has exercised its discretion by granting development approval.

Bushfire Risk

The officer is of the view that the broader planning assessment reveals that bushfire consideration is the primary issue to be examined in the context of the below provisions (bolding for emphasis) derived from Clause 67 of the 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****;*
>
> *(m)* ***the compatibility of the development with its setting, including*** *–*
>
> *…*
>
> *(ii)* ***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.*

The applicable framework has been outlined below, with officer comments provided.

SPP 3.7 is largely orientated towards protection of habitable buildings and vulnerable / high risk land uses, with an underlying theme of the protection of life and generally applies when there is an intensification of land use.

By its very nature, planting a native forest is going to increase the risk of bushfire over the life of the development, being at least 100 years. SPP 3.7 provides a reference point, however is not the only tool to guide the bushfire assessment. The

suite of bushfire considerations below outlines that the proposal should identify and address bushfire hazard as if it already exists.

SPP 2.5 provides relevant considerations under clause 5.6 which states:

> *… more recently the planting of trees for carbon sequestration has emerged as a new rural land use. Tree farming which involves harvesting is a primary production activity that also sequesters carbon. The different types of tree farms, i.e. integrated, chip logs or saw logs, require varied planning approaches. WAPC policy in regard to tree farming is:*
>
> *(a) tree farming is supported and encouraged on rural land as a means of diversifying rural economies and providing economic and environmental benefit;*
>
> *(b) tree farming should generally not occur on priority agricultural land;*
>
> *(c) tree farming should generally be a permitted use on rural land**, except where development of a tree farm would create an extreme or unacceptable bushfire risk** or when responding to specific local circumstances as identified in a strategy or scheme;*
>
> *(d) local governments should manage the location, extent and application requirements for tree farming in their communities through local planning strategies, schemes and/or local planning policies;*
>
> *(e) **in planning for tree farming, local government considerations should include but are not limited to, potential bushfire risk**, environmental and economic factors, water availability and recharge, visual landscape impacts, transport impacts of tree farming (where harvesting is proposed), planting thresholds, appropriate buffers, and location relative to conservation estates and sensitive land uses;*
>
> *(f) where tree farm proposals are integrated with farm management for the purpose of natural resource management and occupy no more than 10 per cent of the farm, the proposal should not require local government development approval; and*
>
> *(g) the establishment of tree farms does not warrant the creation of new or smaller rural lots.*

Section 8.1 – Fire Management of SPP 2.5 Guidelines states:

> *Fire control and bushfire risk is a planning consideration governed by State Planning Policy 3.7 - Planning in Bushfire Prone Areas (SPP 3.7). **Some densely planted tree farms may have a substantially higher fire risk than broadacre crops, so the implications of locating tree farms close to fire sensitive land uses such as** hay plants, State forests and **residential development needs to be considered**. **Applications for a proposed tree farm should identify and address bushfire hazard as if it already existed**, in accordance with SPP 3.7.*
>
> *A Notification on Title to the effect that the land is within a bushfire prone area and may be subject to a Bushfire Management Plan should be a condition of*

*approval. The **Bushfire Management Plan should set out the short, medium and long term management strategies for the bushfire hazard** and represent an ongoing commitment by the landowner/proponent or responsible authority to undertake bushfire risk management measures for the life of the development.*

Relevant portions of the Guidelines for Plantation Fire Protection as referenced by DFES are outlined in the table below:

Item	Proposal
Planning for Plantation Fire Management	
2.1 External firebreaks and setback distances Fuel reduction is encouraged where possible taking into account factors such as remnant vegetation, management techniques and natural features. The Guideline lists methods available for managing fire breaks. • Fuel reduction is encouraged where possible taking into account factors such as remnant vegetation, management techniques and natural features. The Guideline lists methods available for managing fire breaks. • 50 metre minimum between any non-habitable structure (shed) and plantation.	50m separation distance is provided.
2.2 Fuel Reduction Fuel reduction is encouraged where possible taking into account factors such as remnant vegetation, management techniques and natural features. The Guideline lists methods available for managing fire breaks. There are a number of factors that increase the risk of fire including: • Permanent landscape features • Local and site-specific conditions may provide decreased/increased fire risk • Management regimes • Surrounding natural vegetation • Internal remnant vegetation	The applicants BMP outlines that fuel reduction through mitigation burns can be addressed in the future and suggests development conditions be imposed to capture future plantation programmed works. Ongoing management regimes between furrows is unclear. Surrounding vegetation considerations have not been outlined.
2.0 Fire Management Plans to Include	
• Landowner and/or occupier information, contact details and 24-hour fire contact number. • Contact details of local fire control agencies.	As above, it is suggested by the bushfire consultant that these details form part of a future management plan, and a

• A firefighting equipment register and details of any cooperative arrangements. • Plantation species, area and layout including compartment size. Fire protection measures such as: ○ Fire detection and reporting mechanisms. ○ Initial response and attack of fires. ○ Potential ignition sources. ○ Access in and around the plantation. ○ Clearly signed access roads. ○ Methods of firebreak maintenance. ○ Measures to protect services (eg powerlines). ○ Water supplies and capacity. ○ Surrounding vegetation type, age since burnt and if the site is being effectively managed (if available). ○ Sites fire history, where available. ○ Harvesting procedures and other measures used to reduce hazards (e.g. slashing, thinning). ○ Fuel reduction programme if applicable such as herbicide use or grazing. • Surrounding local features including existing plantations, proximity to towns, remnant vegetation and significant values relevant to the site. • A plantation map to be held in suitable containers and clearly signposted at the main property entrances and other locations approved by the local government. Fire compartment maps will indicate: • Compartment boundaries and sizes. • Water supplies including dams. • Emergency access/egress (firebreaks). • Structures. • Significant features such as remnant vegetation.	condition is suggested to capture this. Many of these considerations may be able to be addressed in the future, however sufficient information should be provided upfront to provide a high level of confidence that the conditions are capable of being fulfilled. The officer does not have a high level of confidence at this juncture, as no fuel reduction program has been disclosed, no commentary on the connectivity to adjacent state forest has been forthcoming and no comments in relation to the increased risk of bushfire on nearby Residential estate has been contemplated. This has not been addressed and is of significant concern given the vegetation connectivity to nearby (in the context of bushfire) residential uses.
3. Planation Fire Protection Specifications	
4.1 – Compartment size and layout • Compartments should be **no more than 30 hectares where possible** or as prescribed by the local government. • Compartment boundaries should follow roads or natural features. • Fuel load management techniques should be considered such as slashing between rows or	The largest compartment is 100 hectares in area – over three times the recommended size. Of the 50 proposed compartments, only 4 are less than 30 hectares.

grazing. • Topography, slope, access to water etc should be considered. • The layout should ensure that firebreaks are maintained sufficiently for emergency service access. 4.2 – Firebreaks and Access • Firebreaks to be as per the local government fire notice. • Vehicle access to be maintained in the planting layout. • Where possible tracks should be aligned to provide straight through access at junctions. • Access lanes must allow one line of traffic with passing areas where possible. Passing bays are recommended at 200m intervals (20m long by 6m wide). • The minimum trafficable surface must be 6 metres. • There must be horizontal and vertical clearance for vehicle access. 4.3 - Water Supplies • A 50,000 litre minimum to be permanently available. • Water supply to be designed and constructed so that heavy duty water firefighting equipment is able to access the supply. • Water supply to be shown on a plantation map and signposted in the field.	No fuel load management techniques between rows have been proposed, only comment in relation to 'pre-planting' activities. The Shire's Firebreak Notice does not contemplate a ~3500-hectare native forest under private ownership. The proposal does however provide firebreaks and access throughout the property, generally consistent with section 4.2. Over 50,000 litres of water is proposed, as expected, given it should be proportionate to the scale of the development.
4. Equipment and Training	
The Guidelines discuss that it must be possible for every plantation manager to attend a fire on their own plantation. The Guidelines discuss: • ensuring that any personal have adequate training. • Machinery to be fitted with fire extinguishers. • Firefighting equipment to be maintained in good working order. • Adhere to harvest bans.	The Shire is of the view that the equipment outlined in the BMP is inadequate to undertake the required mitigation burns over the life of the development or respond to an uncontrolled bushfire.

It is also relevant to outline aspects of the *Australian Government – Clean Energy Regulator – Reducing the Risk of Fire and Preserving Sequestered Carbon In ERF Projects'* document below:

Participation in the ERF comes with an obligation to proactively protect carbon stores for the permanence period. This includes managing for the risk of fire. ERF proponents must replace carbon stores that have been credited and are lost in significant reversals – either by paying back the ACCUs that have been issued for the lost carbon (relinquishment) or restoring the vegetation on the project.

When project proponents are issued ACCUs for stored carbon, it is on the basis that the carbon will stay out of the atmosphere (or is replaced) for the entire nominated permanence period (25 or 100 years). Fire and other disturbances can release carbon stored in vegetation back into the atmosphere, thereby reversing the sequestration of carbon for which project proponents have been issued credits.

All vegetation-based sequestration project proponents are required to provide the CER with a permanence plan which outlines actions they have taken and will take (or ensure landholders take) to protect the carbon sequestered and credited by the project for the permanence period.

The permanence plan is an explanation of the steps that have and will be undertaken to ensure carbon remains sequestered in the project area for the permanence period. The plan must include any management actions that have or will be undertaken to prevent the risk of fire starting and spreading on project areas, including the frequency and scale of these actions.

Officer Comment:

Planning assessments must consider the 'worst case' or 'maximum development' scenario. In this instance, the development constitutes 3,017 hectares of native forest over a 100-year permanence period. The development comprises of 50 separate plantation cells that will each require fuel reduction activities (i.e. mitigation burns) over the planning timeframe. It is noted that 46 of the plantation cells exceed the maximum recommended cell area of 30 hectares.

The planning assessment must be satisfied, having regard to clause 67 (2) q and r of the Deemed Provisions, that this property is suitable for the proposed development taking into account the increased risk of bushfire, and the suitability of the proposed development taking into account the possible risk to human safety as a result of the increased bushfire risk.

It should be noted that the relationship of the subject land with its setting essentially connects the Moore River National Park from the east to native vegetation to the west and ultimately connecting to the Seaview Park Rural Living Estate located 1.5km to the west. This separation distance is minimal in the context of a bushfire within native forest vegetation.

While the officer accepts that rural land is suitable from a land use perspective for plantations, the scale of the development and lack of technical rigour in the proposal indicates that the plantation will create an extreme and unacceptable bushfire risk.

The officer is of the view that the landowner's operational obligations for the development, such as mitigation burns, must be implemented on a completely standalone basis. It is not appropriate for a commercial business to rely on resources and assistance from volunteer firefighters and local and state funded

firefighting resources to administer their obligatory operational plans. The proposal has not demonstrated with any assurance that the landowner is capable of fulfilling their commitments on a standalone basis.

The officer's concerns are as follows:

- The BMP and additional information provided by Bushfire Prone Planning suggest that development approval conditions should address lodgement of 'Prescribed Burning Operational Plans' and matters such as resourcing can be dealt with at a later time.

  The Shire is of the view that the current proposition of '*5 vehicle mounted fire units, one water truck and one firefighting trailer'* is inadequate to manage mitigation burning of 100 hectare (worst case) cells over the 100 year permanence period. This represents a significant and unacceptable risk to be deferred to a later date, or to be dealt with by a condition.

  The proponent could engage an independent contractor to undertake mitigation activities, as a tender for pre-planting burning has been sought. Pre-planting burning of lovegrass is minor in comparison to mitigation burning of 100 hectares of native vegetation, surrounded by state forest.

  The Shire's understanding, having previously engaged contractors to undertake mitigation burns, is that it would be unrealistic and cost prohibitive for a development of this scale to rely on external contractors. While it is not the role of a planning assessment to probe feasibility, assessment must have 'due regard', which requires a decision-maker to give proper, genuine and realistic consideration to the proposal.

  While mitigation burns are a fuel reduction measure, they are not without risk. The associated risk in the context of the locality (adjoining vegetation and nearby estate) may be an unacceptable risk irrespective of the pre-incident readiness plans. This is not an isolated rural property in the context of bushfire, this site is in relatively close proximity to populated areas, and that population is expected to increase over the next 100 years.

- The landowner's commitment to obtain the ACCUs comes with an *'obligation to proactively protect carbon stores for the permanence period'*. This may be contrary to the Shire's obligation to ensure fuel loading is minimal so as not to create an unacceptable bushfire risk. In the absence of the required 'Permanence Plan' or 'Prescribed Burning Operational Plans', the officer is not satisfied that the opposing objectives can be mutually fulfilled to prevent unacceptable bushfire risk over the next 100 years.

- The BMP outlines that the main access routes to infrastructure within the plantation should '*be constructed on all-weather compacted material trafficable for 2wd vehicles'*. This is a significant upgrade from the existing sandy laneways that currently exist, with the development site being over 10km in length from east to west. The burden of such an upgrade may be cost prohibitive, and the extent and location of those upgrades are unclear based on the submitted plans.

  While the above could be resolved by a condition of approval, imposing a condition is on the basis that there is a high level of confidence that it is a

realistic expectation that can be fulfilled. The officer does not have a high level of confidence as little to no detail in regard to this upgrade have been provided.

- The BMP outlines that *'the plantation should have access to, own or contract light and heavy machinery that can be used in firefighting. Additional heavy plant such as front-end loaders, may be stood up and ready for deployment, particularly during periods of increased fire danger'*.

  This is not a minor burden, with significant capital required for '*front-end loaders'* and '*heavy plant'*. The applicant did not address this concern as part of the RFI response and it is unclear if this is an achievable obligation. Again, the officer does not have a high level of confidence that a condition to this effect is capable of being achieved.

- The outstanding details referenced above are not minor in nature such as ensuring the installation of suitable fittings on water tanks, or making management plans accessible as such matters could otherwise be dealt with by a condition. The outstanding concerns relate to the ability of the development to satisfy the planning framework. The risk associated with this development is significant, and deferral of such key considerations to be addressed by development conditions is not supported by the officer.

- Consultation with the Shire's CESM/Chief Bushfire Control Officer and Bushfire Mitigation Officer indicates that the Shire's firefighting capability in the upper coastal region may be insufficient to provide the level of fire response and suppression required in the event of an uncontrolled bushfire impacting the subject land progressing towards Seaview Park Estate.

  The probability of an uncontrolled bushfire over the permanence period (100 years) is inevitable. This development is introducing an increased risk, with limited resources available to address that increased safety risk to the community as a whole.

- The only reference point for a development of this scale is state forests under the care and control of the Department of Biodiversity, Conservation and Attractions (DBCA). It is noted that the DBCA employs full time firefighters that are well resourced. The same does not apply to the applicant.

- The location of the subject land, by providing a vegetation linkage from the Moore River National Park to vegetation to the west that ultimately connects to residential estates, suggests that the subject site is not a suitable land parcel to accommodate a development of this scale due to the associated bushfire risk.

- The proposal lacks technical rigour as no technical information is provided to outline what resources are required to safely undertake prescribed burning of the proposed cells (up to 100 hectares of forest) and whether the landowner has the capability and resources to undertake the mitigation burning. It must be clear to the Shire how the landowner's obligation to protect the ACCUs in the permanence plan does not impede proactive fuel reduction measures over the life of the development.

The above points generally favour refusal of the proposal as it currently sits.

Given the bushfire risk associated with the development, the officer is inclined to suggest that a precautionary approach should be adopted that favours community safety.

It is emphasised that the main concern is for Seaview Park to the west as this is the most populated area. In the event of a bushfire travelling to the west on an easterly wind, the western portion of the property is critical to suppression efforts to avoid ember attack and spot fires. While it is not for the officer to re-write the proposed development, if a large separation distance of managed grassland was provided along the western perimeter, it may be more palatable from a risk perspective. The overall development may need to reduce in size in response to the presence of nearby uses.

Notwithstanding the above, the officer has concerns that the development as is, given the scale, will inevitably create an additional bushfire risk that may be unacceptable. This is a matter of judgement.

Condition Overview

In the event the RJDAP is inclined to support the proposal, the officer notes that important management plans should be secured via a condition of approval, to ensure ongoing management and operational commitments are able to be administered and enforced if required.

Rather than imposing multiple conditions requiring the submission of individual management plans addressing various matters to the Shire for approval and subsequent implementation, the preferred approach is for a single Plantation Management Plan (PMP) to incorporate all relevant operational aspects.

Alternatives

In view of the above assessment, the officer is mindful that various options are available to the RJDAP.

The following points favour deferral of the proposal to enable the applicant to consider further revisions that may include a reduction in the overall scale of the proposal and increased separation distance along the western perimeter.

- The land use itself is not controversial in a rural setting. This is not priority agricultural land. With further revisions, it may be that the bushfire risk can be reduced to an ‘acceptable’ risk, by providing greater separation from Seaview Park.

- The information lodged in support of the proposal can be revised further to provide the clarity and rigour proportionate to the scale and risk of the development. This would include justification for the proposed plantation cells being three times larger than the size recommended under the Plantation Guidelines.

- The proposal may benefit from staging, so that vegetation reaches maturity at different periods to avoid fuel loading reaching unacceptable levels at the same time.

If this is the preferred approach, the following wording may be used:

That the Regional Joint Development Assessment Panel resolves to **defer** determining DAP Application reference DAP/23/02467 in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015* for the following reason:

1. The development in its current scale and the supporting documents do not demonstrate that the locality and community as whole is protected from the risk of bushfire in a manner that is acceptable, and which is consistent with the applicable policy framework.

In the event the RJDAP prefers to approve the development subject to conditions, the following recommendation is applicable:

That the Regional Joint Development Assessment Panel:

1. **Accept** that the DAP Application reference DAP/23/02606 is appropriate for consideration as a "Plantation" land use and is compatible with the objectives of the General Rural zone in accordance with Clause 3.2.7 of the Shire of Gingin's Local Planning Scheme No. 9;

2. **Approve** DAP Application reference DAP/23/02606 in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, subject to the following conditions:

Conditions

1. This decision constitutes planning approval only and is valid for a period of four (4) years from the date of approval. If the subject development is not substantially commenced within the specified period, the approval shall lapse and be of no further effect.

2. Prior to the commencement of planting, revised development plans are to be submitted to the Shire of Gingin for approval, that at a minimum include the following:

    a. provide information at a legible scale (this may include multiple sets of 'part site plans').
    b. clear delineation of the planation cells and the area of each cell.
    c. The positioning of the water infrastructure and internal roadways (including roadways to be upgraded for 2wd access).

3. Prior to the commencement of planting, a revised Plantation Management Plan (PMP) is to be submitted to the Shire of Gingin for approval on advice from relevant state agencies. The revised PMP is to include, at a minimum, the following:

    a. Accurate and up-to-date development plans.
    b. Inclusion of a plantation management statement over the life of the development, not simply pre-planting management.
    c. Retention and protection measures for remnant vegetation and culturally sensitive sites.
    d. Updated Bushfire Management Plan (BMP) that outlines, at a minimum:

i. Confirmation that existing bores onsite are operational and will remain so for the life of the development.
ii. The location and extent of internal road upgrades to cater for all weather access for 2wd vehicles.
iii. Full site post development vegetation assessment.
iv. Updated mapping and figures as referenced in Bushfire Prone Planning response to DFES comments dated 19 February 2024.
v. Fuel mitigation measures, hazard reduction, an emergency response plan and increased levels of monitoring in accordance with the Guidelines for Plantation Fire Protection (2011).

e. Evidence of an ability to mobilise heavy plant as outlined under the BMP.
f. Evidence of an ability to undertake mitigation burns, or engage an external contractor to do so, for the duration of the development (i.e. 100 years).
g. A copy of the Permanence Plan submitted to the Clean Energy Regulator.

The approved PMP shall form part of the development approval issued and is to be implemented to the satisfaction of the Shire of Gingin thereafter.

4. Prior to mitigation burns, a Prescribed Burning Operational Plan (PBOP) prepared by a suitably qualified consultant is to be submitted to the Shire of Gingin for approval, on advice from relevant state agencies. The approved PBOP is to be implemented thereafter for the duration of the prescribed burning activity.

5. The landowner is to ensure that a copy of the approved Bushfire Management Plan and Development Plans are stored at both entrances to the property (i.e. Cowalla Fire Station and KW Road) in secure, weatherproof and clearly labelled containers at all times.

6. Internal firebreaks, access tracks and turnaround areas are to be adequately installed and maintained with a trafficable surface at all times to the satisfaction of the Shire of Gingin for access by emergency fire vehicles.

7. Prior to the commencement of planting, the landowner shall execute and provide to the Shire of Gingin a notification pursuant to Section 70A of the *Transfer of Land Act 1893* to be registered on the title to the land as notification to prospective purchasers as follows:

Bushfire Prone Area – This lot is located within a bushfire prone area and is subject to a Bushfire Management Plan relating to the operation of an approved plantation.

Further information may be obtained from the offices of the Shire of Gingin.

Advice Notes

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*.

2. Where an approval has lapsed, no development may be carried out without further approval of the RJDAP having first been sought and obtained.

3. Further to this approval, the applicant may be 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.

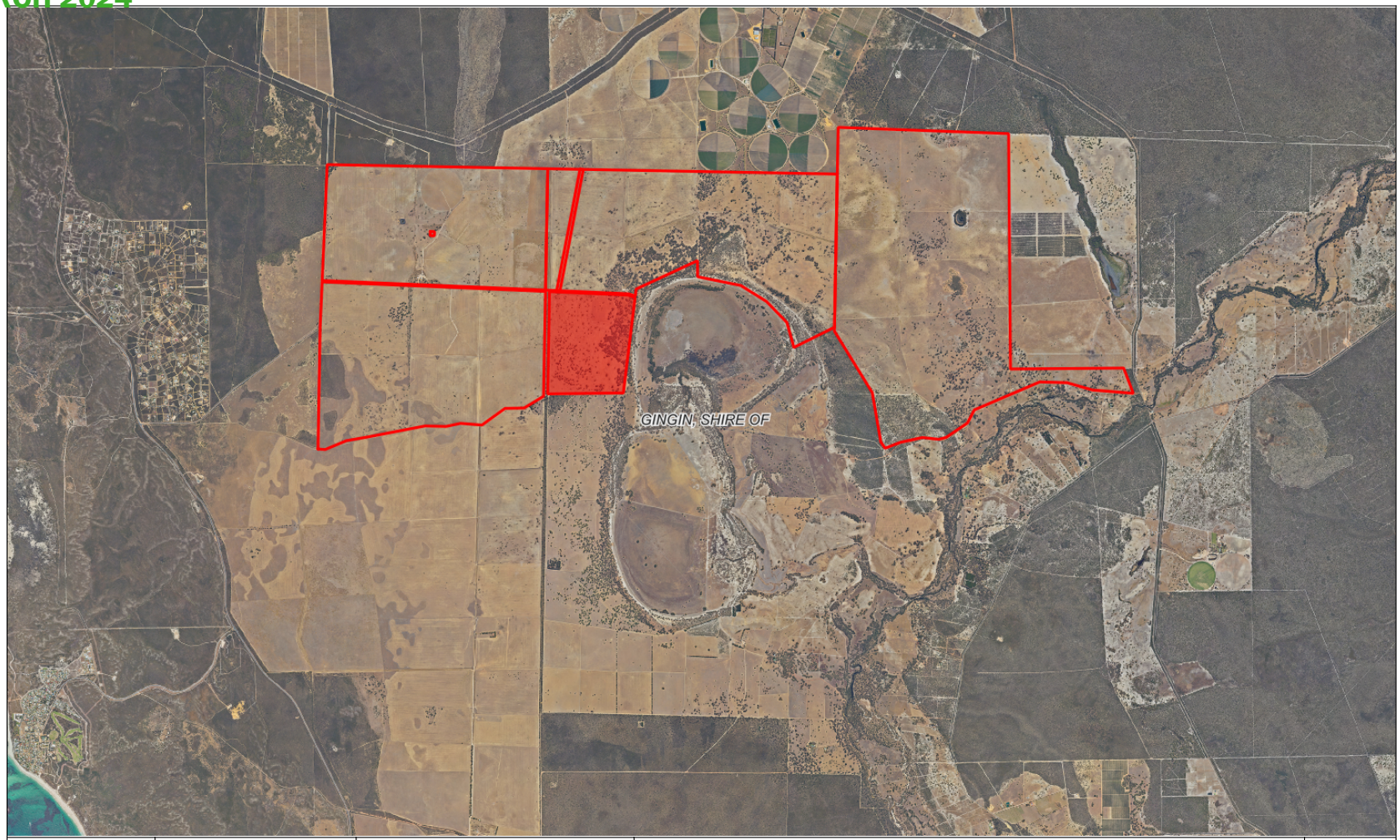
4. Please be advised that the property may be re-rated to reflect the change in intensification and use approved as part of this application.

5. Please be advised that approval under the *Aboriginal Heritage Act 1972* may be required. Further information can be obtained from the Department of Planning, Lands and Heritage website: www.wa.gov.au

Conclusion:

In view of the above assessment, based on the proposal as is, the officer is not satisfied that an unacceptable risk to community safety by way of bushfire risks has been adequately addressed.

The officer is somewhat satisfied that a development of this nature, with a reduced scale, may be capable of being approved on the subject property if sufficient supporting information and accurate development plans are provided. By addressing the deficiencies outlined in the preceding report, the relevant policy framework could potentially be satisfied. However, to impose conditions that address the above would likely be viewed as a significant alteration from the development as applied for.



SHIRE OF GINGIN HISTORY | BEAUTY | PROSPERITY	7 Brockman St Gingin WA 6503 P: 08 9575 5100 255 Vins Way Lancelin WA 6044 P: 08 9575 5155 E: mail@gingin.wa.gov.au	Shire of Gingin does not warrant the accuracy of information in this publication and any person using or relying upon such information does so on the basis that Gingin Shire Council shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in this information.	Scale: 1:81356	Date: 28/02/2024

Karakin Development Application

Woodside Native Reforestation Project - Phase 5

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1. Existing Land Use

The 3,906.33ha "Karakin Farm" property located at 459 Karakin Lakes Road, Karakin, WA was purchased by Woodside Energy Carbon (Services) Pty Ltd (WEC(S)) in May 2023. The property consists of the following lots;

- Lot 1 on Deposited Plan #417155, Volume 2969 Folio 912;
- Lot 2 on Diagram #26681, Volume 1369 Folio 40;
- Lot 3 on Plan #8327, Volume 1367 Folio 998; and
- Lot 5694 on Deposited Plan #207688, Volume 172 Folio 39A.

Karakin Farm is located approximately 8.5km south-east of Lancelin. The property features the Pinjar Terminal to Kerr McGee Cataby 132kV line running north south through the property. There are three dwellings, sheds and silos on site with an active farming lease agreement on Lots 2, 3 and 5694. There is also a communication tower leased to WAPOL and FESA and the Nilgen brigade fire station is located at the eastern end of the property.

The property has been farmed on rolling leases for over 20 years and has previously employed a centre-pivot irrigation system, but the terms of the water licence were modified to exclude its use for large-scale irrigation. The remaining water rights on the property were moved to the Lancelin Golf Club land titles prior to WEC(S) acquiring the property. There is a mix of soil types including brown siliceous soils, yellowish-brown sands, weak clay sand and limestone outcrops. The sandy soils covering much of the property are generally highly alkaline and are not conducive to high productivity cereal cropping.

2. Proposed Land Use

It is proposed that the property will be repurposed into a carbon farming system with options to include additional activities such as seasonal grazing in addition to honey and wax production. A preliminary design is provided in Appendix A. Carbon farming on undesirable sandy soils is expected to provide additional benefits including linking remnant vegetation, increasing biodiversity and reducing impacts of wind erosion.

Carbon farming is proposed to be conducted by WEC(S) using the Carbon Farming initiative (CFI) Act - Reforestation by Environmental or Mallee Plantings-FullCAM 2020 method. This method involves seeding and/or planting using local native species of plants with the objective of establishing a native forest. The key target characteristics are for the forest to achieve 2m height with 20% canopy cover. A "block planting" method is proposed to be used whereby portions of the property are subdivided by vegetation community type and planted in furrows spaced approximately 6m apart such that continuous forest cover is achieved.

Species will include Marri (*Corymbia calophylla*), Coastal Blackbutt (*Eucalyptus todtiana*), Firewood Banksia (*Banksia menzeisii*), Stout Paperbark (*Melaleuca preissiana*) and a selection of native trees and shrubs from those exhibited in the existing remnant vegetation. A permanence period of 100 years has been nominated for the project. This means that WEC(S) is required under the Carbon Credits (Carbon Farming Initiative) Rule 2015 to ensure the carbon stock established is maintained *in situ* for this period.

Suitable existing dwellings on the property are proposed to be retained and, once planting and establishment is completed, is planned to be offered for long-term lease. There are several structures on the property, three dwellings and multiple sheds. One of the dwellings (depicted in **Appendix C**) will need to be demolished due to pre-existing fire and structural damage.

3. Land Use Compatibility

Under the Shire of Gingin Local Planning Scheme No. 9 (LPS 9)[1], the property and adjoining lands are zoned 'General Rural', as depicted in Appendix E.

The proposed land use is best classified as a 'Plantation' under LPS 9, which is defined as follows:

> *has the same meaning as in the Code of Practice for Timber Plantations in Western Australia (1997) published by the Department of Conservation and Land Management and the Australian Forest Growers;*

Subsequently, the Code of Practice for Timber Plantations in Western Australia defines a 'Plantation' as follows:

> *a stand of trees of ten hectares (or as defined by the Local Government Authority), or larger, that has been established by sowing or planting of either native or exotic tree species selected and managed intensively for their commercial and/or environmental benefits. A plantation includes roads, tracks, and firebreaks.*

The project is planned to involve the planting of native tree species in sections larger than 10ha for environmental purposes, including carbon sequestration with the benefit of re-linking of remnant vegetation. The proposal also includes roads and firebreaks.

The 'Plantation' land use is a 'D' use within the 'General Rural' Zone of LPS 9, meaning it is capable of approval subject to the discretion of the local government.

In this regard, Section 3.2.7 of LPS 9 defines the objectives of the 'General Rural' Zone to be:

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.*

This project is considered consistent with these objectives for the following reasons:

a. Returning land of lower agricultural productivity to native vegetation increases biodiversity of the region whilst maintaining aesthetics compatible with adjacent land uses.

b. The viability of the land is proposed to be maintained by planting the low productivity land for the benefits of a forest system mentioned below. The lack of water license in conjunction with low quality soils is not conducive to high productivity agriculture.

c. The project is proposed to re-link small remnants of vegetation on the property and provide broader linkages to neighbouring vegetation remnants. A mixed native forest system is expected to assist in stabilising soil and supporting biodiversity in the region.

d. Carbon farming is a diversification of traditional farming practices that provides additional benefits, including linking reserves and remnant vegetation, reducing wind erosion, and providing varied community opportunities through local purchasing of goods and services.

[1] https://www.gingin.wa.gov.au/lps9

WEC(S) intends to continue investigating complementary land uses such as bee keeping and bush foods where these are acceptable to the Clean Energy Regulator (CER).

The project is also consistent with the relevant Natural Resource Management Plan for the region (NARvis: the regional natural resource management strategy for the Northern Agricultural Region 2021 – 2030) as it contains several climate change related goals. Goal 2 of the strategy is to implement 30 ecosystem-based climate change adaptation projects by 2030.

4. Development Activities

The activities required can be described as follows:

1. Building rationalisation (e.g. renovation and demolition);
2. Pre-planting weed and pest control;
3. Ground preparation – consisting of machine ripping, scalping and mounding (where required);
4. Planting; and
5. Post-planting weed and pest control.

Demolition of redundant structures would be required in order to minimise ongoing maintenance costs and reduce any risks associated with older structures with loose sheeting or corroded structural elements. Specialist contractors are proposed to be engaged to undertake these activities. Existing fixed infrastructure is depicted in Appendices B, C and D.

Weed and invertebrate pest control would be like that conducted for an agricultural enterprise with potential summer emergent knockdowns and a pre-planting broad spectrum knockdown. Vertebrate pest control is also proposed to be conducted for a period of approximately three years. Post-planting spraying is proposed to be conducted using selective herbicides, shielded sprayers, and/or mechanical methods. Within approximately five years, native species are expected to outcompete weed species, and therefore ongoing weed and pest spraying is likely to be minimal or not required. Crash grazing could also be used to manage pre- and post-planting grass and weed growth. Pre-planting weed spraying generally occurs from approximately April to June, prior to planting (i.e. April-June 2024).

Operations could be considered typical farming activities with typical broad-acre farming equipment. Ground preparation is expected to involve a tractor-pulled rip and scalp attachment over most of the property. Furrows and mounds would generally follow existing agricultural workings with approximately 6m spacing between each. Continuous 24h operations may be required to take advantage of ideal weather conditions and up to three tractors may operate simultaneously.

Native trees are planned to be planted by hand at approximately 3m intervals within each furrow. It is estimated that planting will commence in mid-June 2024 and continue for approximately 8 weeks. Direct seeding is not proposed for this project.

In relation to the existing houses, all required building health and safety checks including structural, electrical, and water have been conducted.

5. Ongoing Activities

Once initial establishment is complete, ongoing carbon farming activities would consist of:

1. Monitoring and audit;
2. Property maintenance; and
3. Infill planting (if required).

Permanent monitoring stations are proposed to be established to evaluate. Monitoring will use a combination of field and remote sensing (e.g. drones, satellite imagery) techniques. The Clean Energy Regulator (CER) is also expected to undertake periodic audits of the project.

WEC(S) owns property maintenance equipment and employs a full time Carbon Farm Manager, along with several farm assistants and contractors to ensure property maintenance activities (e.g. firebreaks and vertebrate pest control) can be undertaken in a timely and safe manner.

6. Products and Services

The primary product generated by this development would be Australian Carbon Credit Units (ACCUs) which will be issued by the CER to WEC(S). Other products are dependent on successful leasing of portions of the property for agricultural purposes but would be consistent with surrounding land use.

7. Employment and Local Content

Wherever practicable WEC(S) intends to seek to employ local contractors/community and purchase local goods and services. Key opportunities are expected to include:

- Farm maintenance equipment which has been procured from a local shire business.
- Chemicals are likely to be procured from local shire businesses.
- Contractor executing all 2024 projects across WA will achieve at least 25% Indigenous participation.

It is anticipated that timing of planting activities will be slightly later than agricultural seeding activities in the region as the less labour-intensive tasks of weed management and ground preparation will occur prior following the first substantial winter rains. Demand for local accommodation during summer harvest periods will be minimal.

8. Waste Management

The primary source of waste from the project would be associated with demolition of the condemned dwelling. A specialist demolition contractor would be engaged, with waste sent to a licensed facility for disposal and recycling. It is likely that demolition of any buildings would require asbestos management by specialised, licenced contractors.

Other waste types would be consistent with the property's existing agricultural use such as spent herbicide and pesticide containers, which are proposed to be sent to a licensed waste management facility or returned to suppliers.

9. Fire Management

A suitably accredited bushfire practitioner[2] has been engaged to prepare a Bushfire Management Plan (BMP) for the property. The BMP outlines how planting design would be completed according to bushfire management requirements from both the Shire of Gingin and FESA Guidelines for Plantation Fire Protection. The BMP has been submitted to the Shire as part of this Development Application and is planned to be reviewed and updated prior to the commencement of the annual bushfire season. A property layout map and contact details are proposed to be stored at the main property entrances in a red waterproof tube.

WEC(S) owns three vehicle mounted firefighting units, one water truck and one firefighting trailer. A combination of these are proposed to be present during property maintenance activities in summer months. Additionally, WEC(S) has made the DFES 0995 bushfire safety awareness training or equivalent a priority for all members of the permanent woodside carbon farm team. With ambitions to be available for volunteering in the local brigade.

10. Environmental Considerations

The Department of Biodiversity, Conservation and Attractions datasets identify threatened ecological communities across the property, as well as a number of threatened and priority flora and fauna along the perimeter and in proximity to the property. These can be found in Appendix F.

The property accommodates several wetlands, including a 'Conservation' category wetland (Doopiter Swamp) in the north-east, and several small 'Multiple Use' and 'Resource Enhancement' category wetlands, toward the east of the property. The property is also situated adjacent to Karakin Lakes, which is a 'Conservation' category wetland and listed in the National Directory of Important Wetlands by the Federal Department of Climate Change, Energy, the Environment and Water.

In the process of restoring the natural environment to pre-farming vegetation types, measures are proposed to be taken to ensure no net harm on surrounding areas. The use of fertiliser would be applied to seedlings prior to planting to minimise any chances of leaching. Herbicide sprays will not greatly deviate to current business as usual, ensuring spraying occurs during dry periods to reduce chances of runoff. To quantify the positive benefits of this project WEC(S) is also in the process of commissioning baseline biodiversity monitoring. This monitoring is intended to subsequently inform ongoing measures to protect biodiversity at the property.

While all proposed activities are outside the required setbacks of waterways and conservation category wetlands, a Wetland Management Plan will be considered prior to planting if deemed necessary.

11. Heritage Considerations

A review of the Department of Planning, Lands and Heritage Aboriginal Cultural Heritage Information System (ACHIS) indicates that portions of the property are also located within one (1) Registered Aboriginal Heritage Place and one (1) Lodged Aboriginal Heritage Place, as outlined in the below table:

Place ID	20008	3483
Name	Gingin Brook Waggyl Site	Karakin Lakes 3
Type	Historical, Mythological, Camp, Hunting Place, Plant Resource, Water Source	Artefacts / Scatter
Status	Registered	Lodged
Gender Restrictions	No	No
File Restricted	Yes	No
Location Restricted	Yes	No
Boundary Reliable	Yes	No
Protected Area	No	No

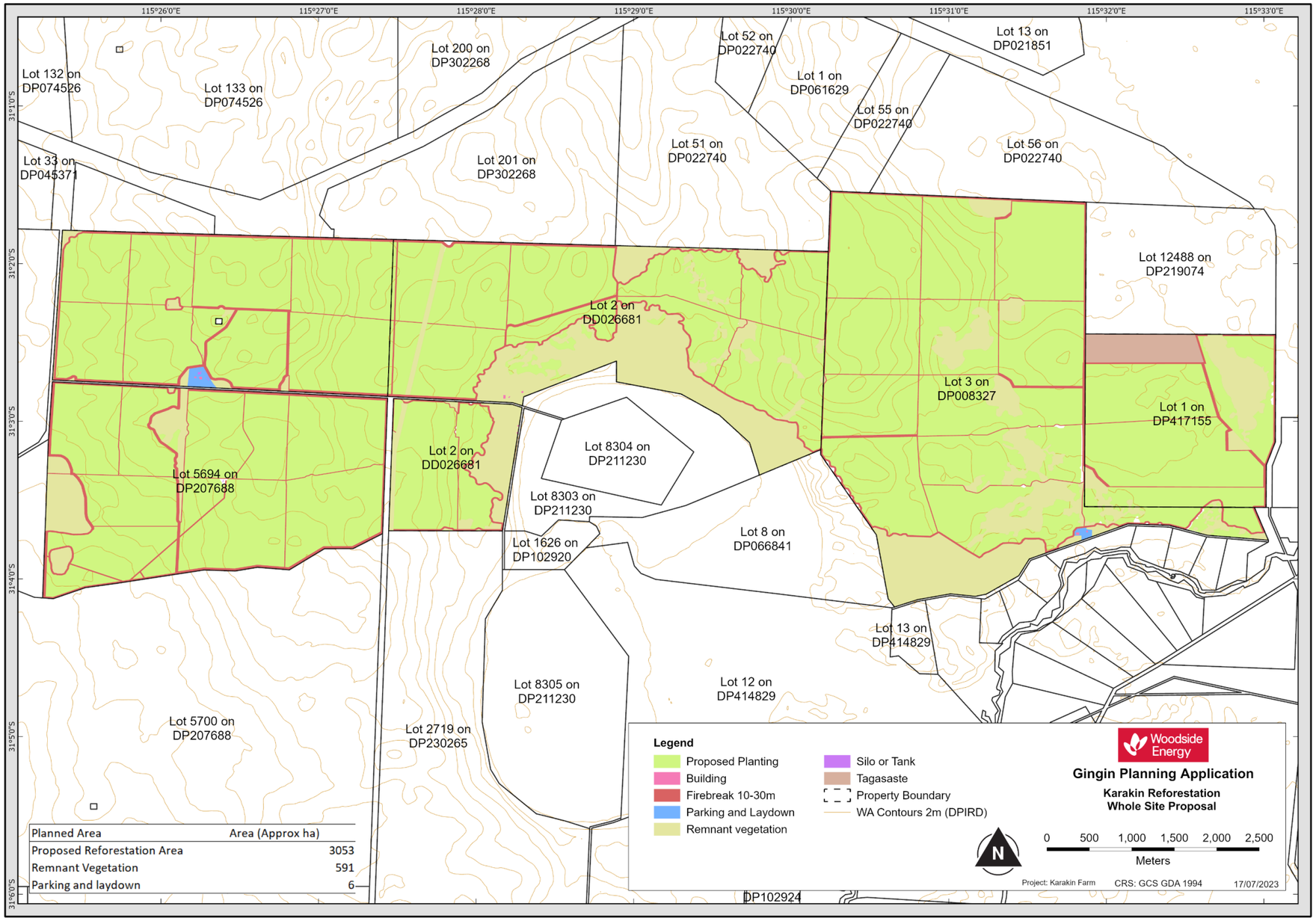
Woodside will comply with the *Aboriginal Cultural Heritage Act 2021* (ACHA) and the *Aboriginal Heritage Act 1972* (AHA) (and any amendments) when ACHA 2021 is fully repealed. Woodside is engaging with the Yued Aboriginal Corporation as the development is within the Yued Indigenous Land Use Agreement (ILUA). Whilst we understand that both Place ID 20008 and 3483 are suitable for revegetation, Woodside intends to seek to consult with the Yued Aboriginal Corporation order to consider if planting is possible within the boundaries. If it is determined that approval is needed under AHA 1972 (as amended), Woodside will reassess planting plans and may seek appropriate approvals, or exclude these areas from planting in order to avoid any impact to the Place(s).

The property contains one (1) registered European heritage place, which is identified in the Shire of Gingin local heritage survey. The listing is named 'Limestone Caves' and is a 'Category D' heritage place, being the lowest category of heritage significance. The place is located on Lot 3, toward the south-east of the site and approximately 110m north of Baramba Road. As displayed in Appendix G the European heritage overlaps the Gingin Brook Waggyl Site. The heavy rock load means the ground conditions within this area are not conducive to planting, hence the site is not proposed to be planted.

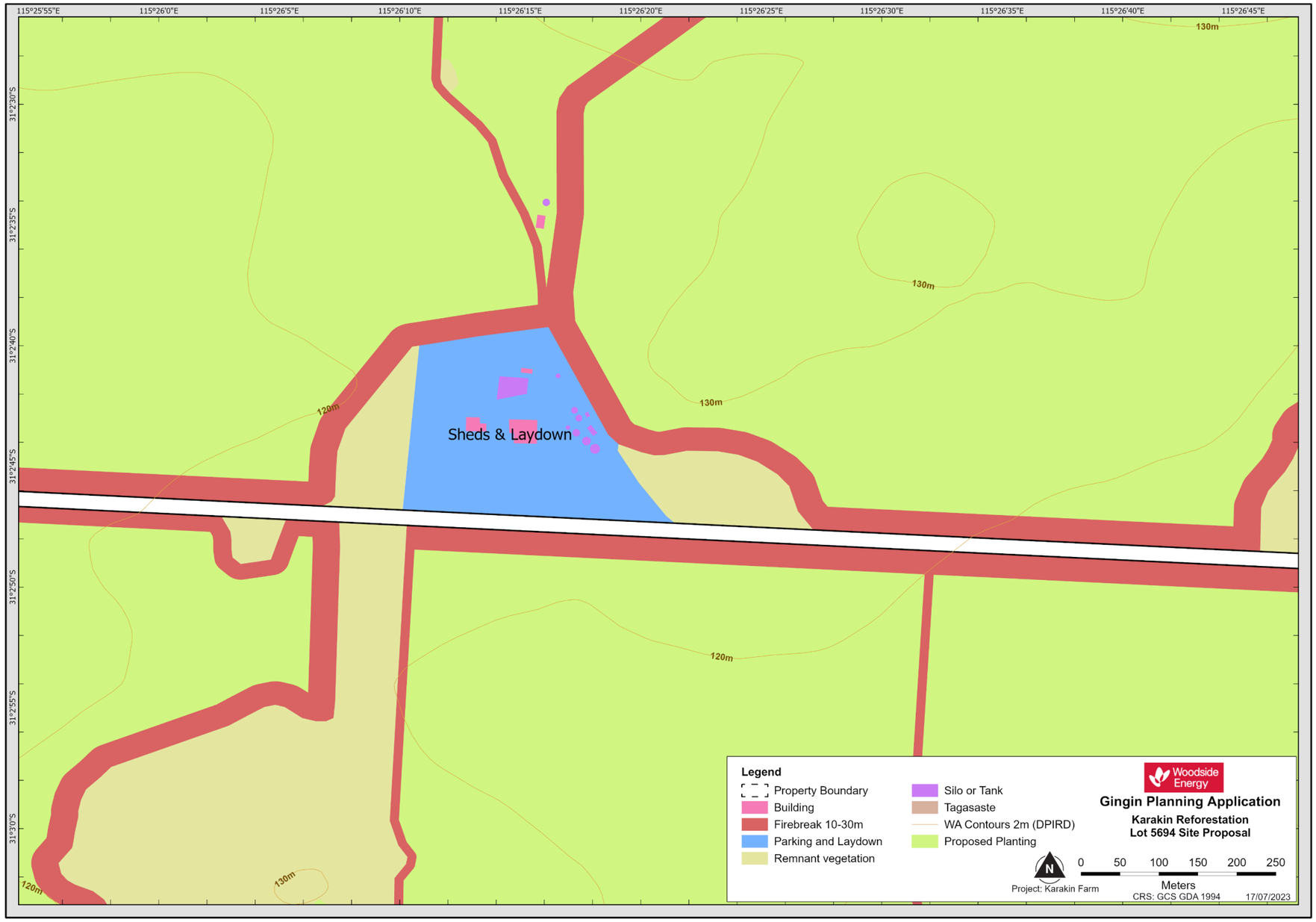
12. Traffic Management

Traffic associated with the project is expected to be similar to other agricultural activities in the region (e.g. tractor and broad acre sprayer movements) during the 1-2 year period of development activities. Beyond this period, negligible levels of traffic movement are anticipated in relation to the reforested regions of the property. Any land that remains as traditional agriculture would experience traffic levels consistent with local farming practices.

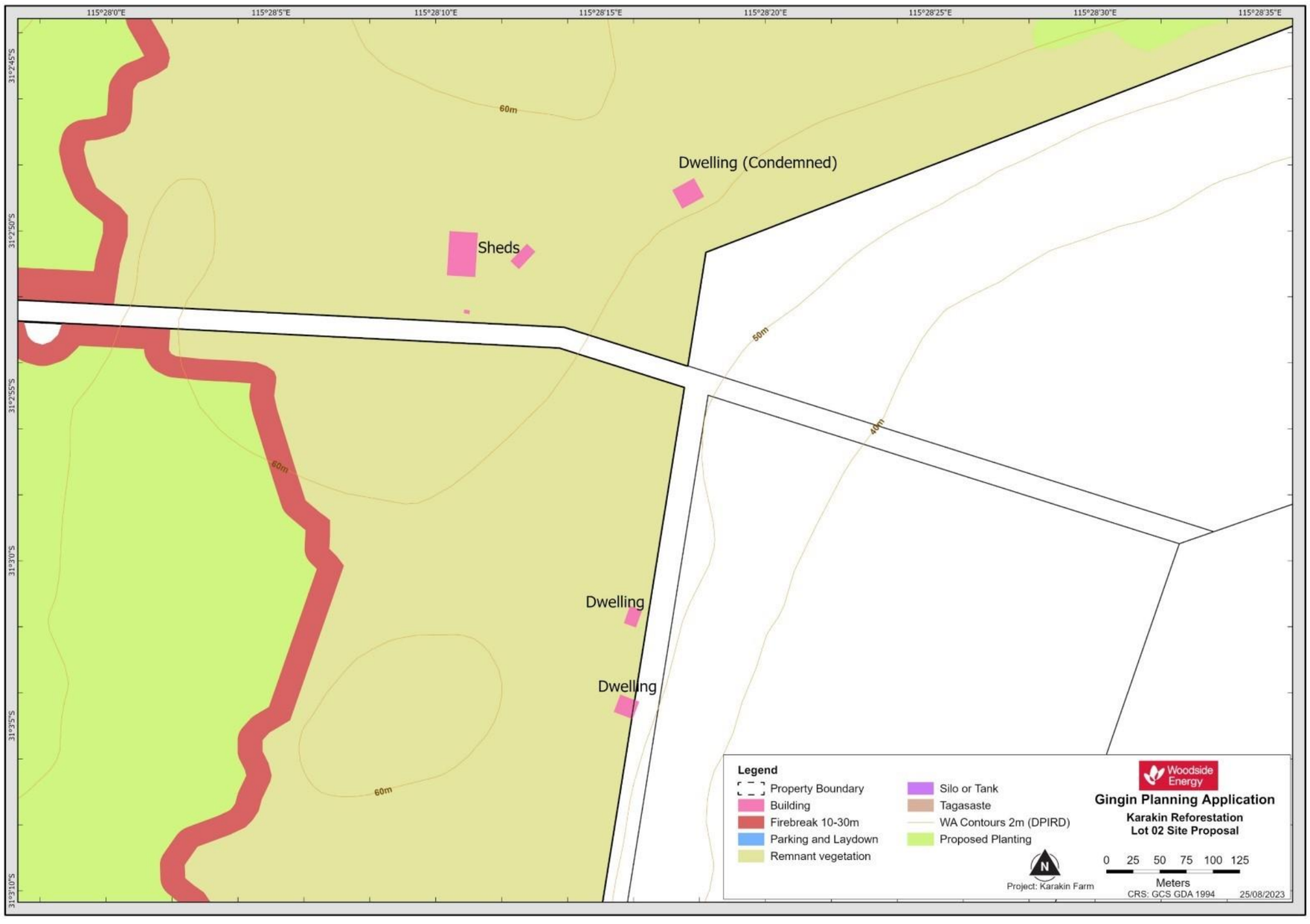
APPENDIX A: Proposed Preliminary Reforestation Plan



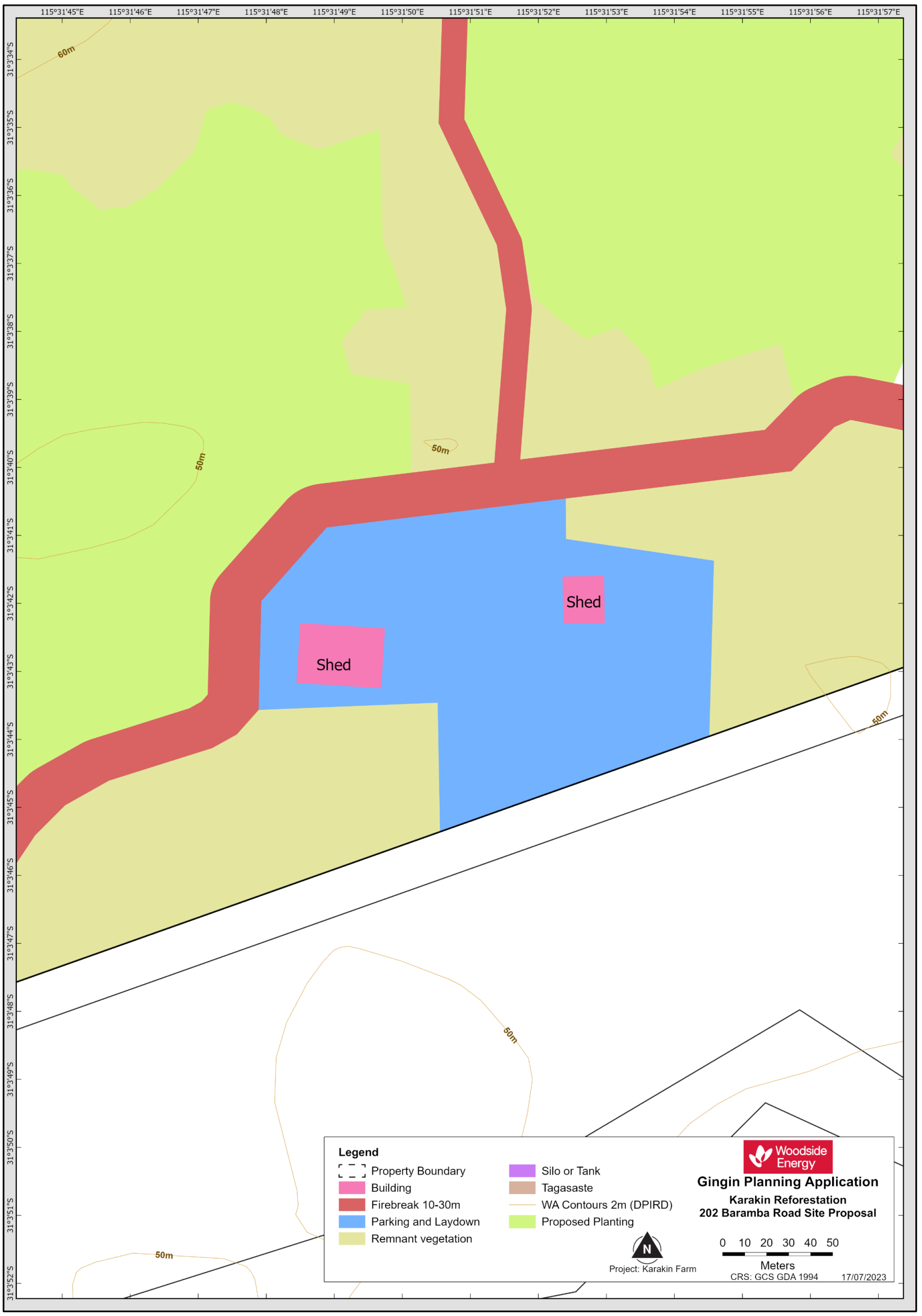
APPENDIX B: Existing Infrastructure – Lot 5694



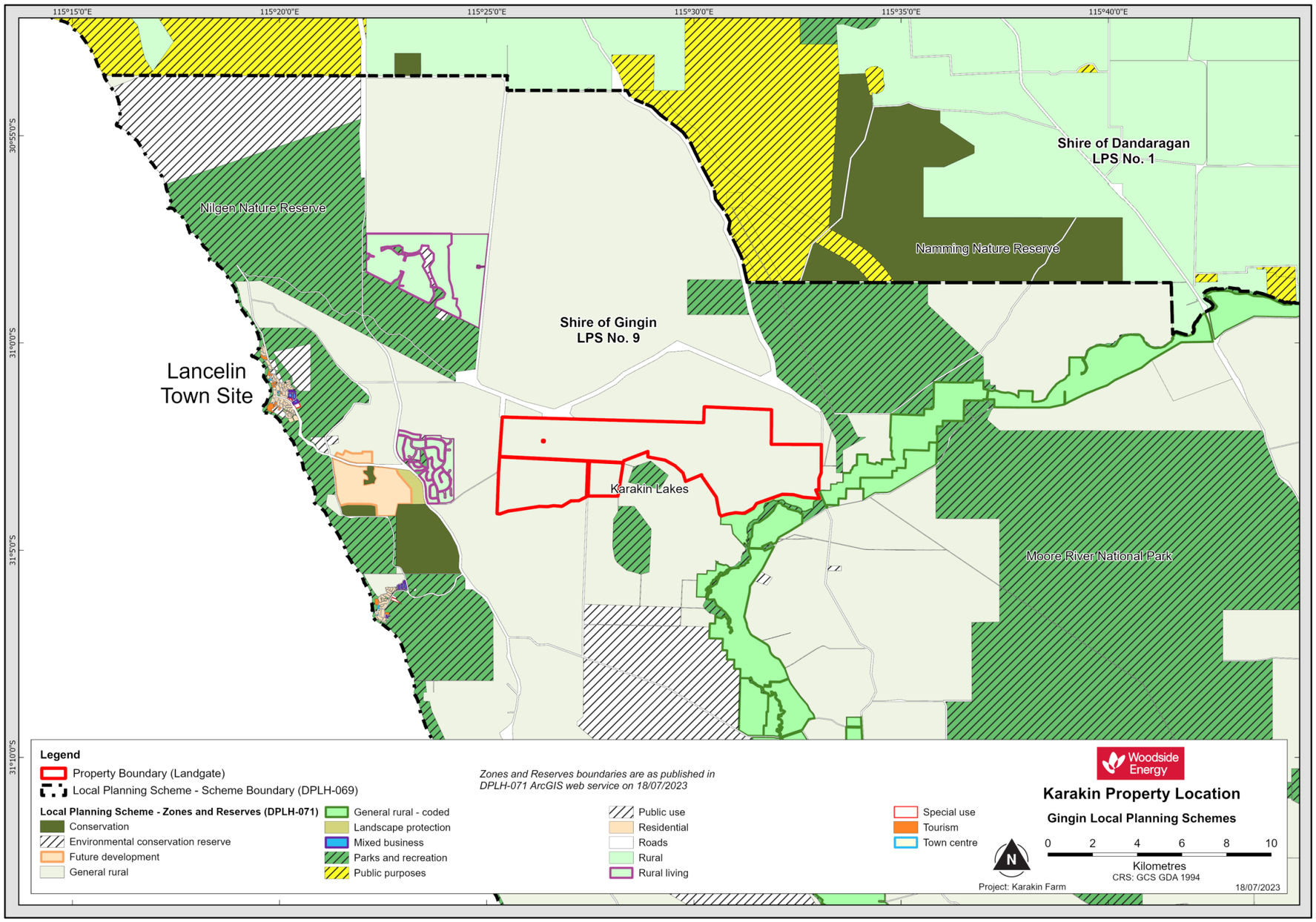
APPENDIX C: Existing Infrastructure – Lot 02



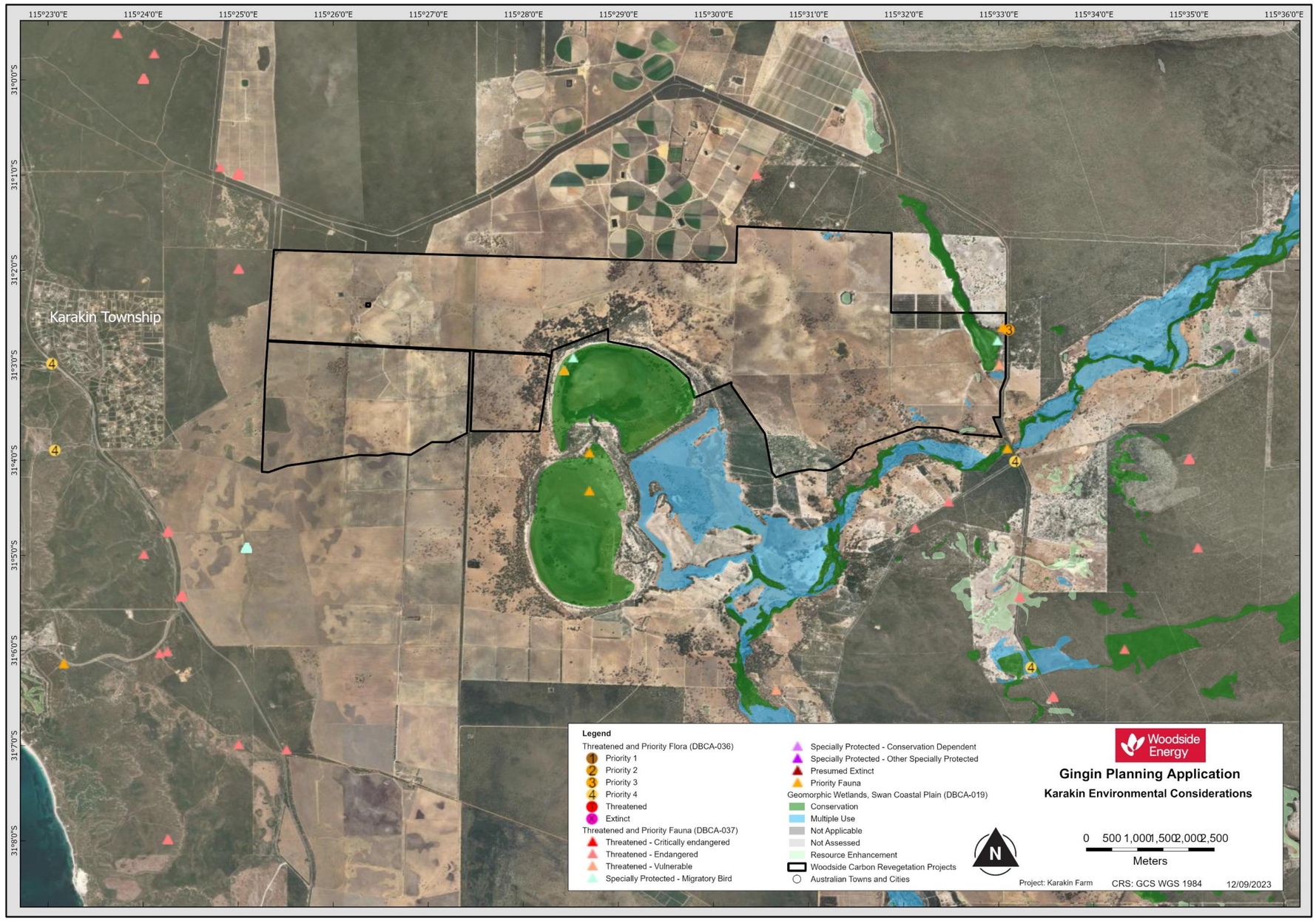
APPENDIX D: Existing Infrastructure – 202 Baramba Road, Lot 03



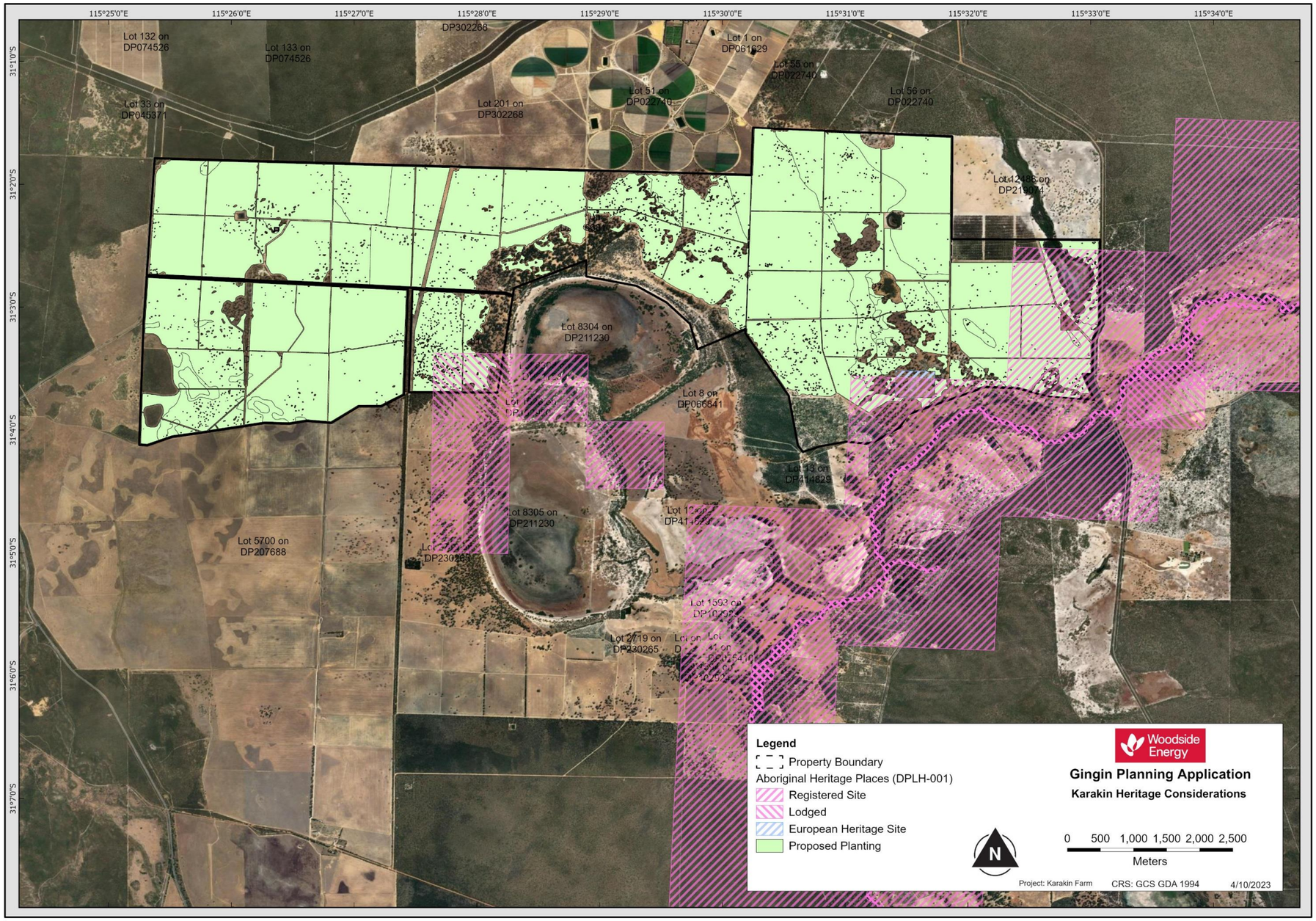
APPENDIX E: Local Planning Scheme



APPENDIX F: Environmental Consideration



APPENDIX G: Heritage Considerations



Karakin Development Application

Head Office
Mia Yellagonga
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Perth WA

Postal address:
GPO Box D188
Perth WA 6840
Australia

T: +61 8 9348 4000
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Bushfire management plan/Statement addressing the Bushfire Protection Criteria coversheet

Site address: Lot 2 & Lot 5694 Karakin Lakes Road, Lot 3 Baramba Road & Lot 1 Cowalla Road, KARAKIN

Site visit: Yes ☑ No ☐

Date of site visit (if applicable): Day 29 Month June Year 2023

Report author or reviewer: Kathy Nastov

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: 27794 Accreditation expiry: Month August Year 2023

Bushfire management plan version number: #230563 (v1.1)

Bushfire management plan date: Day 17 Month October Year 2023

Client/business name: Woodside Energy Ltd

	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)?		✓
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)?		✓

Is the proposal any of the following (see SPP 3.7 for definitions)?	Yes	No
Unavoidable development (in BAL-40 or BAL-FZ)		
Strategic planning proposal (including rezoning applications)		
High risk land-use		
Vulnerable land-use		

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.)?

Not Applicable

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

Signature of report author or reviewer: K. Nastov

Date: 17 / 10 / 2023

BUSHFIRE PRONE PLANNING

Woodside Native Reforestation Stored Carbon Project

(Kakarin)

Bushfire Management Plan (BMP)

Produced to meet the relevant requirements of Guidelines for Plantation Fire Protection

Lot 5694 Karakin Lakes Road, Karakin
Lot 2 Karakin Lakes Road, Karakin
Lot 3 Baramba Road, Karakin
Lot 1 Cowalla Road, Karakin

Shire of Gingin

Change in Land Use – Plantations

17 October 2023

Job Reference No: 230563

BPP GROUP PTY LTD T/A BUSHFIRE PRONE PLANNING

ACN: 39 166 551 784 | ABN: 39 166 551 784

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DOCUMENT CONTROL

PREPARATION		
Author:	Greg Dunstan (BPAD Level 1 No. 16382)	
Reviewed:	Kathy Nastov (BPAD Level 3 No. 27794)	

VERSION HISTORY		
Version	Details	Date
1.0	Original	19 July 2023
1.1	Updates to firebreak detail	17 October 2023

BMP (Master) Template v9.1

DISTRIBUTION					
Destination		Version	No. Copies	Hard Copy	Electronic Copy
Person	Email				
Gareth Parry	gareth.parry@woodside.com	1.1		☐	☒
Jeffrey Ball	jeffrey.ball@woodside.com	1.1		☐	☒

Limitations: *The protection measures contained in this Bushfire Management Plan are minimum requirements and they do not guarantee that buildings or infrastructure 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 recommended 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.*

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.

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.

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LIST OF FIGURES

SUMMARY STATEMENTS

THIS DOCUMENT – STATEMENT OF PURPOSE

The Bushfire Management Plan (BMP)

The BMP sets out the required package of bushfire protection measures to lessen the risks associated with a bushfire event. It establishes the responsibilities to implement and maintain these measures.

The BMP also identifies the potential for any negative impact on any environmental, biodiversity and conservation values that may result from the application of bushfire protection measures or that may limit their implementation.

Risks Associated with Bushfire Events

The relevant risks are the potential for loss of life, injury, or destroyed or damaged assets which results in personal loss and economic loss. For a given site, the level of that risk to persons and assets (the exposed elements) is a function of the potential threat levels generated by the bushfire hazard, and the level of exposure and vulnerability of the at risk elements to the threats.

Bushfire Protection Measures

The required package of protection measures is established by State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7), its associated Guidelines and any other relevant guidelines or position statements published by the Department of Planning, Lands and Heritage. These measures are limited to those considered by the WA planning authorities as necessary to be addressed for the purpose of land use planning. They do not encompass all available bushfire protection measures as many are directly relevant to a planning approval stage. For example:

- Protection measures to reduce the vulnerability of buildings to bushfire threats is primarily dealt with at the building application stage. They are implemented through the process of applying the Building Code of Australia in accordance with WA building legislation and the application of construction requirements based on a building's level of exposure - determined as a Bushfire Attack Level (BAL) rating); or
- Protection measures to reduce the threat levels of consequential fire (ignited by bushfire and involving combustible materials surrounding and within buildings) and measures to reduce the exposure and vulnerability of elements at risk exposed to consequential fire, are not specifically considered.

The package of required bushfire protection measures for plantations established by the Guidelines for Plantation Fire Protection 2011 includes:

- Planning for Plantation Fire Management.
- Plantation Fire Protection Specifications.
- Equipment and Training.

The set of fire protection standards for plantations aims to protect human life and local community interests, while minimising fire risk to plantation assets.

Compliance of the Proposed Land Use with 'Guidelines for Plantation Fire Protection' Requirements

The BMP indicates how the proposed land use is able to implement and maintain the required 'acceptable' measures and any additionally recommended bushfire protection strategies - or its capacity to satisfy the Guidelines intent through the justified application of additional bushfire protection measures as supportable 'alternative' solutions.

Compliance of the Proposed Development or Use with SPP 3.7 Requirements

The BMP assesses the capacity of the proposed development or use to implement and maintain the required 'acceptable' solutions and any additionally recommended bushfire protection measures - or its capacity to satisfy the policy intent through the justified application of additional bushfire protection measures as supportable 'alternative' solutions.

The package of required bushfire protection measures established by the Guidelines includes:

- The requirements of the bushfire protection criteria which consist of:
  - Element 1: Location (addresses threat levels).
  - Element 2: Siting and Design of Development (addresses exposure levels of buildings).
  - Element 3: Vehicular Access (addresses exposure and vulnerability levels of persons).
  - Element 4: Water (addresses vulnerability levels of buildings).

THE PROPOSED DEVELOPMENT/USE – BUSHFIRE PLANNING COMPLIANCE SUMMARY		
Environmental Considerations		**Assessment Outcome**
Will identified environmental, biodiversity and conservation values limit the full application of the required bushfire protection measures?		No
Will identified environmental, biodiversity and conservation values need to be managed in the implementation and maintenance of the bushfire protection measures - but not limit their application?		Yes
Summary Statement: The proposal will include revegetation of native plant assemblages. The establishment and maintenance of the required Asset Protection Zone(s) around existing buildings or assets of value will be implemented.		
Required Bushfire Protection Measures The Acceptable Solutions of the Bushfire Protection Criteria (Guidelines)		**Assessment Outcome**
Element	The Acceptable Solutions	
1: Location	A1.1 Development location	Fully Compliant
2: Siting and Design of Development	A2.1 Asset Protection Zone (APZ)	Fully Compliant
3: Vehicular Access	A3.1 Public roads	Fully Compliant
	A3.2a Multiple access routes	Fully Compliant
	A3.2b Emergency access way	N/A
	A3.3 Through-roads	N/A
	A3.4a Perimeter roads	N/A
	A3.4b Fire service access route	N/A

	A3.5 Battle-axe legs	N/A
	A3.6 Private driveways	Fully Compliant
4: Water	A4.1 Identification of future water supply	N/A
	A4.2 Provision of water for firefighting purposes	Fully Compliant
Other Documents Establishing Bushfire Protection Measure Variations or Additions		N/A
The Methodology Applied to the Development of an Alternative Solution The necessity for an alternative solution is in response to non-compliance with the applicable acceptable solutions.		N/A
Other 'Bushfire Planning' Documents to Be Produced		N/A

This BMP indicates how the proposed land use is able to implement and maintain the required 'acceptable' measures as detailed in the Guidelines for Plantation Fire Protection. Elements of the DPLH Guidelines for Planning in Bushfire Prone Areas are not specifically relevant where the development proposal is for plantation purposes only and no built infrastructure or subdivision land use proposed. A pragmatic approach in the consideration of the bushfire mitigation measures and intent of both 'Guidelines' is in this instance warranted.

The Department of Fire and Emergency Services and the Department of Planning Lands and Heritage endorse the Guidelines for Plantation Fire Protection and encourage local authorities to adopt them.

1 PROPOSAL DETAILS AND THE BUSHFIRE MANAGEMENT PLAN

1.1 The Proposed Land Use Details, Plans and Maps

Land use type:	Reforestation Plantation for the purposes of carbon stores.
Factors that have identified the proposal's bushfire planning requirements:	Compliance with applicable local government legislation obligations. State Planning Policy 3.7 and the associated Guidelines for Planning in Bushfire Prone Areas. Australian Government Clean Energy Regulator requirements for proponents to manage the risk of bush fire in Emissions Reduction Fund vegetation projects. Department of Fire and Emergency Services (DFES) Guidelines for Plantation Fire Protection (as agreed upon by the Forest Industries Federation of Western Australia (FIFWA)).
Subject lot/site total area:	Landgate Lot on Plan: P207688 5694 (1327.8553 hectares) Landgate Lot on Plan: D026681 2 (1014.3091 hectares) Landgate Lot on Plan: P008327 3 (1180.3631 hectares) Landgate Lot on Plan: P417155 1 (383.7984 hectares)
Plantation type(s):	Native Mixed Species – Mallee dominant
Description of the proposed development/use:	
Objective: Provide bushfire protection standards for the Plantation that aim to protect life and local community interests, while minimising fire risk to the plantation assets. This Bushfire Management Plan contains both an operational component and a Development Application planning component. The intent of the Plantation for carbon stores is to retain native vegetation where possible, avoid unnecessary clearing and minimise environmental impact on the site. The bushfire management plan provides specific detail on the management and configuration of 'Cells' with the intent on minimising the ignition sources and potential for bushfire originating within the site. The Plantation landowner is required to comply with elements of the Shire of Gingin Firebreak Orders & Bushfire Information (Firebreak Notice), in conjunction with the Guidelines for Plantation Fire Protection. The bushfire mitigation methods include a combination of low fuel zones/non-planting buffers to compliment mineral earth firebreaks where soil erosion issues are problematic. Areas outside of site are not under the control of the landowner. The management of these areas is limited generally to unprogrammed or un-coordinated seasonal planned burning (where undertaken by an adjoining landowner) and firebreak maintenance. The landowner is responsible for the ongoing management of the plantation site. Future responsibilities for implementation and management of the bushfire protection measures may be established through contractor mutual agreement and contracted obligations for the project duration, in line with a project activity timelines schedule. As such, on formal cessation of the project works by either party, the responsibilities for the continued management of the bushfire protection measures detailed within the bushfire management plan for the site remains the responsibility of the landowner.	

Figure 1.0-

Proposed Plantation Area

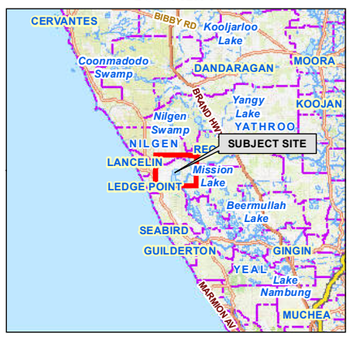
KARAKIN SITE
KARAKIN
SHIRE OF GINGIN

------ **LEGEND** ------

- Subject Site
- Other Lots
- Proposed Plantation Area
- Bush Fire Brigade
- Dwelling
- Shed
- 110,000 Water Tank
- 50,000 Water Tank
- Gate
- 3m Permimeter Firebreak

0 500 1,000 1,500 2,000
Metres

------ **LOCALITY** ------



Aerial Imagery : Landgate/SLIP
Image Date : Feb 2022

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Ian Ross 19/07/2023
Map updated by: Ian Ross 19/07/2023
A3 Scale 1:45,000

BUSHFIRE PRONE PLANNING

Map Document Path / Name: K:\Projects\Jobs 2023\230563 - Woodside - Karakin (BMP)\Mapping\MXD\230563_Fig1-0_DEV_Woodside Karakin.mxd

Figure 1.1

Location Plan

KARAKIN SITE
KARAKIN
SHIRE OF GINGIN

------ **LEGEND** ------

- Subject Site
- Local Government Authority
- Locality / Suburb
- Bush Fire Brigade
- Volunteer Fire & Rescue Service

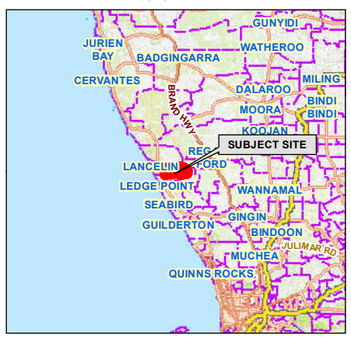
Reserves
- Reserves

Legislated Lands and Waters
- Nature Reserve
- Marine Park
- National Park
- Section 5(1)(g) Reserve
- Section 5(1)(h) Reserve
- State Forest

DBCA Lands of Interest
- Crown Freehold - Dept Interest
- Bush Forever

0 1,000 2,000
Metres

------ **LOCALITY** ------



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BUSHFIRE PRONE PLANNING

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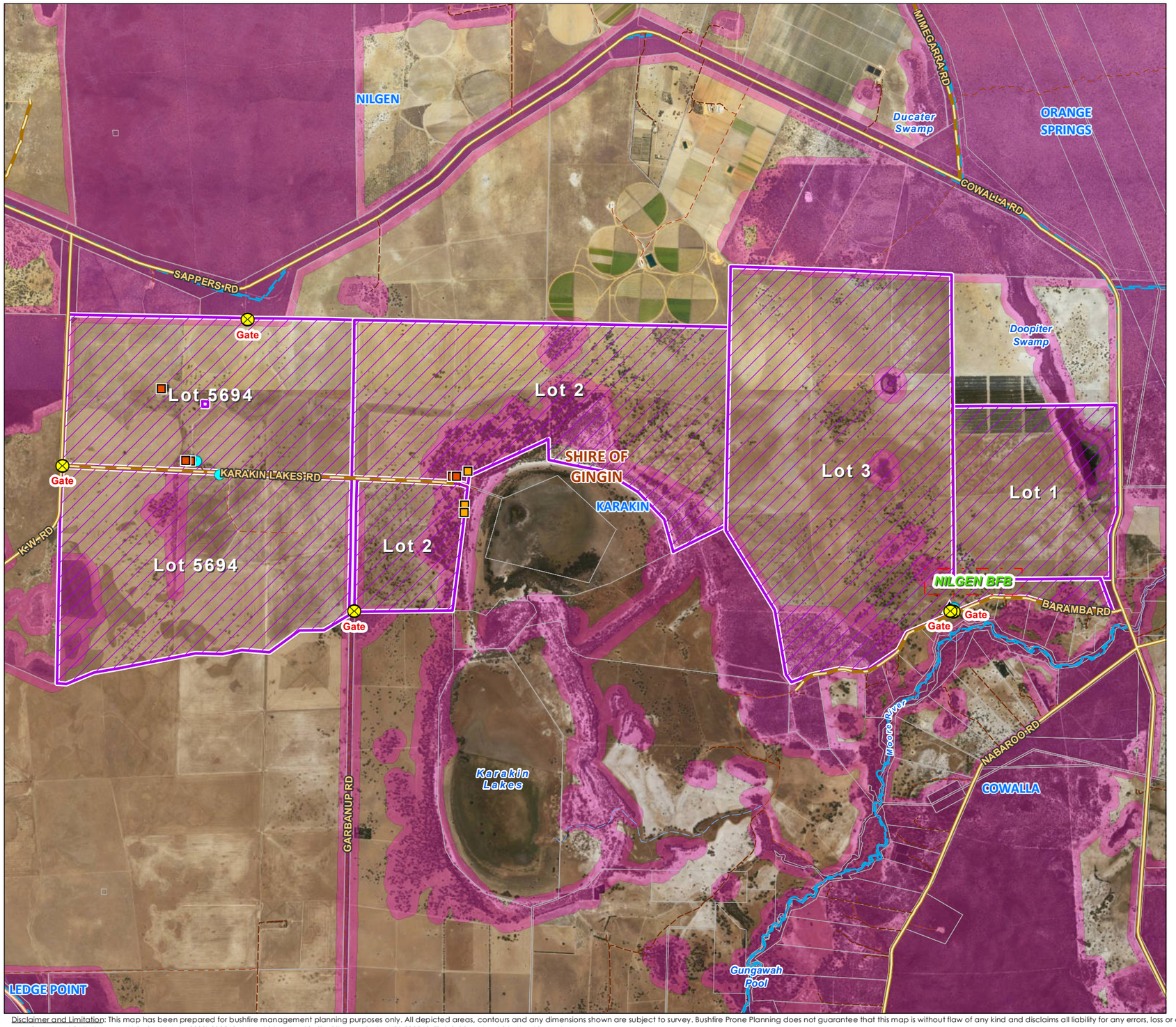


Figure 1.2

Bushfire Prone Area

KARAKIN SITE
KARAKIN
SHIRE OF GINGIN

------ **LEGEND** ------

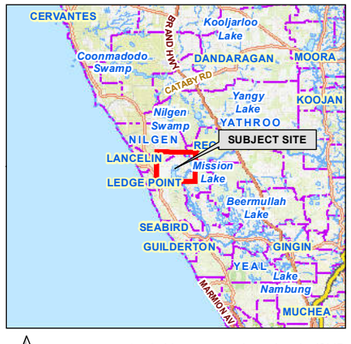
- Subject Site
- Other Lots
- Local Government Authority
- Locality / Suburb
- Bush Fire Brigade
- Dwelling
- Shed
- 110,000 Water Tank
- 50,000 Water Tank
- Gate

Bush Fire Prone Areas

- Bushfire Prone Areas (2021)

0 500 1,000 1,500 2,000
Metres

------ **LOCALITY** ------



Aerial Imagery : Landgate/SLIP
Image Date : Feb 2022

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
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Map updated by: Ian Ross 19/07/2023
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BUSHFIRE PRONE PLANNING

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1.2 The Bushfire Management Plan (BMP)

1.2.1 Commissioning and Purpose

Landowner / proponent:	Woodside Energy Ltd Mia Yellagonga Karlak, 11 Mount Street Perth WA 6000
Bushfire Prone Planning commissioned to produce the BMP by:	Woodside Energy Ltd Mia Yellagonga Karlak, 11 Mount Street Perth WA 6000
Purpose of the BMP:	Development Application - To identify and subsequently implement the minimum standards responding to the local risk and local government requirements of the proposed re-vegetation (Plantation) area.
Local Govt. Area:	Shire of Gingin

1.3 Bushfire Management Objectives

A major impact to the site assets (Plantation) is bushfire. Obligations for bushfire management arise from the *Bush Fires Act 1954 and* the *Code of Practice for timber Plantations in Western Australia*. The 'Act' and 'Code' place a responsibility on the landowner/plantation management to:

- Protect life and property from bushfire;
- Minimise the spread of bushfire originating from the plantation land, and
- Protect surrounding properties, community interests and State forests from the damaging effects of bushfire.

In addition to these responsibilities, Local Governments have a statutory ability to consider the impact of plantations or large areas of re-vegetation with local species and implement provisions to ensure the safe management through their town planning scheme which may require additional considerations.

This Bushfire Management Plan describes the measures developed to implement bushfire management strategies on the land to meet its obligations and business priorities. The Plan provides the base framework for how the site manager/s intends to manage the accumulative fuel loads, firebreaks and access, water supplies for fire-fighting and respond to bushfire originating on or from an external impact to the site. It is not intended to repeat existing plans, policies or procedures, but to provide overarching guidance to the bushfire management arrangements. Included are strategies, and approaches to minimise the fire risks to the assets of value on the site and to neighbours and wider community.

The broad range of vegetation types, fire history, climate change, weather conducive to bushfire, unpredictability between years and seasons and local vegetation values across the local area mean that the risk posed by bushfire varies significantly therefore there is a requirement for a planned approach to site management.

The term 'bushfire management' includes both fire prevention and fire suppression activities. It is recommended that a cooperative bushfire management and response arrangement is established between key local fire authorities and forms part of the annual reviewing of the bushfire management planning for the site. These arrangements assist the site landowner and manager to lessen accumulative bushfire fuel on their land and to adequately respond to and control bushfire where conditions are tenable to do so. It also facilitates high levels of support and coordination between the agencies to ensure sufficient resources to respond to escalating bushfire situations which are beyond the capability of the site manager or any one agency. It provides for a shared responsibility and ability to operate within an inter-agency coordinated system.

Any substantial loss of plantation resources has long term implications. In order to deliver bushfire protection to the greatest extent possible, Woodside recognises that it needs to:

- Work collaboratively with local fire authorities to develop bushfire management and operations plans;
- Implement programs for bushfire prevention, mitigation, preparedness, response and recovery;
- Work cooperatively with local fire authorities to respond to bushfires to minimise the adverse impacts on human life, on social, economic and environmental values;

- Use fire under appropriate conditions to promote ecosystem health, diversity and resilience in native vegetation areas, and as a risk reduction strategy;
- Maintain appropriate levels of bushfire management capability to effectively discharge its responsibilities as an organization, recognising that bushfire mitigation is a responsibility of the landowner/plantation management for this site.

1.4 Environmental Considerations

Many bushfire prone areas also have high biodiversity values. Consideration of environmental priorities within the boundaries of the land being developed can avoid excessive or unnecessary modification or clearing of vegetation. Approval processes (and exemptions) apply at both Commonwealth and State levels.

Any 'modification' or 'clearing' of vegetation to reduce bushfire risk is considered 'clearing' under the ***Environmental Protection Act 1986*** (EP Act) and requires a clearing permit under the ***Environmental Protection (Clearing of Native Vegetation) Regulations 2004*** (Clearing Regulations) – unless for an exempt purpose.

Clearing native vegetation is an offence, unless done under a clearing permit or the clearing is for an exempt purpose. Exemptions are contained in the EP Act or are prescribed in the Clearing Regulations (note: these do not apply in environmentally sensitive areas).

The ***Department of Water and Environmental Regulation*** (DWER) is responsible for issuing 'clearing' permits and the framework for the regulation of clearing. Approvals under other legislation, from other agencies, may also be required, dependent on the type of flora or fauna present.

Local Planning Policy or Local Biodiversity Strategy: Natural areas that are not protected by the above Act and Regulations (or any other National or State Acts) may be protected by a local planning policy or local biodiversity strategy. Permission from the local government will be required for any modification or removal of native vegetation in these Local Natural Areas (LNA's). Refer to the relevant local government for detail.

For further Information refer to Guidelines v1.4, the Bushfire and Vegetation Factsheet - WAPC, Dec 2021 and https://www.der.wa.gov.au/our-work/clearing-permits

Woodside (and any future landowner/s) are to adopt principles of environmental care when planning and conducting bushfire management activities in line with the following:

- Protect water quality and quantity by implementing measures designed to minimise the impact of bushfire on swampy ground and bodies of standing water, and their physical, chemical, and biological qualities;
- Protect soil to maintain its physical and chemical properties and promote stabilisation of bare or disturbed earth;
- Consider landscape values, geomorphologic features, and cultural and historical sites when planning operations;
- Protect indigenous flora and fauna following bushfire suppression by measures which promote the re-establishment of the ecological processes existing prior to the bushfire;
- Avoid the possible introduction and spread of pest plants and animals, plant diseases, and insect pests;
- Address air quality by measures which diminish the impacts of smoke generated by prescribed burning;
- Maintain the dynamism and diversity in WA's indigenous flora and fauna species populations and communities through use of appropriate fire regimes and bushfire mitigation activities.

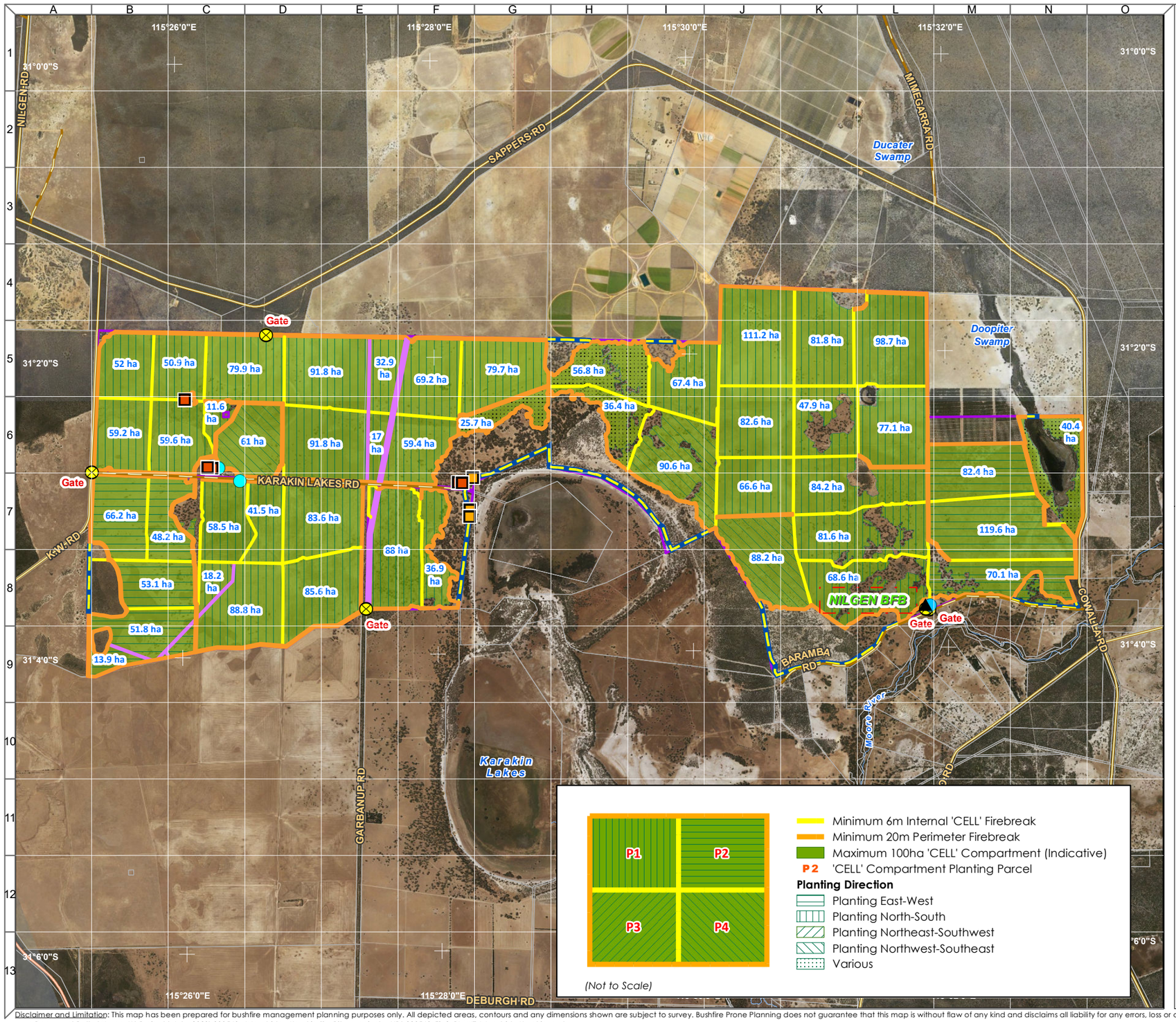


Figure 2.0

Indicative Planting Cells, Limited to Areas Under 100 ha

KARAKIN SITE
KARAKIN
SHIRE OF GINGIN

------ LEGEND ------

- Subject Site
- Other Lots
- Bush Fire Brigade
- Inidcative Cells To Be Confirmed in Final Planting Plan Detail
- Dwelling
- Shed
- 110,000 Water Tank
- 50,000 Water Tank
- Gate
- 3m Permimeter Firebreak

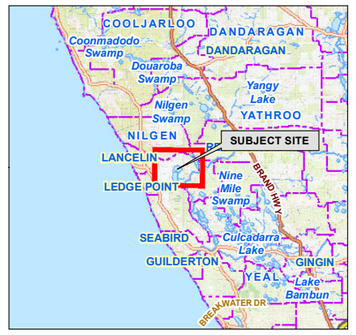
Proposed Firebreaks

- Firebreak 6m wide
- Firebreak 14m wide
- Firebreak 20m wide

Total planting area approx 3038 ha

0 500 1,000 1,500 2,000
Metres

------ LOCALITY ------



Aerial Imagery : Landgate/SLIP
Image Date : 2016

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Ian Ross 19/10/2023
Map updated by: Ian 19/10/2023
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BUSHFIRE PRONE PLANNING

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1.5 Risk Management (basic)

Woodside is to adopt a risk management approach throughout its plantation maintenance programs and bushfire operations. The main risk categories for bushfire management considerations are described below.

1.5.1 People

Bushfire presents risks to the health, safety and welfare of personnel, contractors and visitors to the site. Fire and associated smoke can also impact the local community and neighbours. Woodside may also develop partnerships with First Nations peoples as the Traditional Owners and ongoing custodians of the land to insure the maintenance and protection of their culture and values.

1.5.2 Resources

Maintain bushfire management resources according to that defined in 'future' site Pre-Incident Plans and Preparedness Guidelines (which are formulated around daily Australian Fire Danger Ratings - AFDR).

1.5.3 Air quality

Bushfire can have a significant impact on air quality causing detrimental impacts on major population centers, airports, major roads, neighbours and other sensitive areas.

Planning and risk analysis are to be undertaken for each prescribed burn to determine the comparative risk of smoke impacts from burns on the local community and air quality with the risks to public safety and natural assets from potential bushfire. Information on weather, fire behaviour, smoke trajectory predictions, burn location and size of the area to be fuel reduced are of strategic importance in determining the most suitable burn prescription and ignition application to achieve an effective burn outcome with low smoke impacts.

1.5.4 Water quality

Planning and operations are to be assessed by risk to minimise the impact on water quality, and reduce risks associated with increased chance of sedimentation.

1.5.5 Habitat modification

Habitat modification includes destruction of ground cover and subsequent accelerated erosion (land degradation), changes in ground cover species composition (perennial grasses to annual weeds), physical modification of stream profiles and water quality and physical destruction of individual plants.

1.5.6 Soil quality

Bushfire can lead to increased erosion through the removal of ground cover. Prescribed burn planning must consider the impacts of fire on soils and aim to deliver mosaic burn patterns that maintain soil cover while at the same time reducing fuel loads. Plantation operations and earthworks are to be undertaken in accordance with strict "best practice guidelines" to ensure soil quality is not degraded. Post fire recovery operations should also be undertaken to insure soil stability.

1.5.7 Commercial imperatives

One of the greatest risks to the plantation for carbon stores is the impact of unplanned bushfire. The loss of significant areas of plantation or native forest regrowth ultimately impacts the ability to meet the carbon store commitments.

The Plantation which is intended to incorporate local native species is susceptible to bushfire, particularly at regular intervals. History shows a tolerance to mild fire once native vegetation is established. However, when not killed outright, fire can damage plantation trees or greatly reduce growth rates. Whilst it may still be possible to recover plantation

cell areas, it will be at a much-reduced carbon offset value until fully established again. There is a significant loss of resource and time to re-establish these areas if they are impacted by bushfire.

1.6 Safety

Safety is a key driver in the management of the plantation site. Keeping 'Woodside' people safe and ensuring that they get home safely to their families at the end of each day is a priority.

Woodside shall:

- Ensure the safety of all firefighting and support personnel is given the highest priority in the planning and application of all fire management operations;
- Review and apply standards for the medical and physical fitness requirements of all fire management personnel in accordance with current information and experience as set out for the workplace.

Guidelines for managing the personnel tasked with bushfire responsibilities:

- Make available critical incident stress debriefing to personnel subjected to traumatic events or circumstances;
- Give personnel sufficient time to rest to relieve fatigue and stress arising from their involvement in bushfire suppression operations as far as is reasonably practical;
- Random drug and alcohol testing can be undertaken at any time and at any part of the workplace, including on the fire ground, as per the alcohol and drug policy for the site.

The following initiatives and procedures are suggested to further enhance and promote the safety of all personnel working at the plantation site.

1.6.1 Fitness for fire-fighting

It is recommended that Plantation personnel involved in fire-fighting activities including planned/prescribed burning programs and bushfire management measures, should undertake a fitness assessment to ensure they are fit for task.

Fire operational personnel should be required to undertake further medical checks annually or as recommended by a medical practitioner.

1.6.2 Personal Protective Equipment (PPE)/Personal Protective Clothing (PPC)

All plantation personnel involved in fire prevention and fire operations are to be supplied with, and expected to wear or carry, standard firefighting PPE/ PPC. PPE/ PPC is to meet Australian Standards and it is the responsibility of the wearer to ensure it is maintained and worn or carried in accordance with plantation policy and protocols.

1.6.3 Standard Operating Procedures (SOP's) and Guidelines

Fire-related Standard Operating Procedures and Guidelines are to be developed and updated as required.

All firefighting personnel are expected to be aware of and abide by these SOPs and Guidelines.

1.6.4 Very High Hazard Areas

The safety of firefighters is always paramount in firefighting operations, and dangerous areas within the site must be identified and included on the response/site plan for the plantation.

1.6.5 Fatigue Management

Fatigue management guidelines apply within the Plantation site for management teams and personnel accordingly. Woodside should implement a procedure for managing personnel fatigue during bushfire operations.

1.6.6 Vehicles and Driving

The location of the plantation and operations means that personnel are likely required to drive long distances as part of their workday. Driving is considered one of the highest critical risks. This is exacerbated in fire management because of the work environment, which can include night-time operations and extended periods of work. Woodside are to limit this risk by enforcing fatigue management guidelines, monitoring vehicle movements and safe driving practice. Personnel are to be regularly reminded of the risks and controls to minimize accidents and incidents associated with driving.

1.6.7 Capability

Woodside are to ensure capability for bushfire response within the plantation site to be defined and established in accordance with the Woodside risk-minimisation approach. The approach should incorporate a daily readiness and preparedness which is informed by the Australian Fire Danger Rating (AFDR) and status of fire activity in the surrounding areas on any given day. Preparedness should include:

- A pre-incident readiness for the bushfire season, which considers resources and procedures for daily activities and requirements for fire preparedness and response or to assist local bushfire brigades with bushfire operations such as 'mop up';
- Hazardous fuel load reduction mitigation works, revised annually, with scheduled mitigation activities that reduce the risk of bushfire ignition and impact or support operational activities in terms of ability to respond effectively to extinguishment of bushfire.

The Woodside Farm Manager and two assistant farm managers are members in volunteer bush fire brigades and are able to establish communication with the Shire of Gingin local brigades on local bushfire issues. Fire fighting capabilities include equipment on the property, water available for fire fighting activities at strategic locations near roadways and central to the plantings, maintained accessways, maps at key entrances for fire and equipment information on the property.

1.6.8 Personnel

Capability requirements for the plantation site should define the number of fire operations and support personnel that are necessary to undertake programed mitigation works and provide assistance at fires on site at any given time. Woodside personnel are expected to be bushfire trained where required to respond directly or to support the firefighting effort in other ways. Seasonal personnel may be necessary to supplement firefighting capacity to meet the seasonal operational requirement numbers.

It is recommended that Personnel are to be trained in a range of competencies to enable plantation resources to assist with the management of fires, with roles ranging from on ground basic fire fighters through to senior management roles. Once fires go beyond Woodside capability, local government and DFES resources are likely to take over operational control of an incident.

1.6.9 Training

Bushfire training is an essential component of safe, efficient and effective fire management operations. Woodside are to:

- Apply national standards as the basis of competency definition, or where these do not exist, accepted industry standards;
- Define competency requirements;
- Review the competencies of personnel according to established currency requirements;
- Provide and/or facilitate training programs and competency assessments for skills acquisition, maintenance and personal and professional development to ensure personnel have the required competencies.
- Maintain systems to record training and competency for all fire management activities.

- Training requirements and review/expiry dates are to be tracked and monitored through an appropriate system for all operational Plantation firefighting personnel.

1.7 Equipment

Woodside has a legal responsibility to prevent fire from escaping their land in accordance with the Bush Fire Act 1954. It must be possible for Woodside personnel to attend a bushfire on the plantation site.

As a minimum for the plantation site, Woodside is to ensure 2 x suitably constructed 4WD vehicle mounted 'slip-on' units and 1 x trailer mounted fire pump/water tank unit, to ensure sufficient mobile water capacities and fire-fighting ability, is available for responding to bushfire within the plantation site boundaries. This equipment will be on-site whilst Woodside personnel/workers during the bushfire season or where on-site activities are conducive to bushfire.

1.7.1 Fire Appliances and Machinery

The Plantation should have access to, owns, or contracts light and heavy machinery that can be used in firefighting. Additional Heavy plant such as front-end loaders (FEL) may be specifically stood-up and ready for deployment, particularly during periods of increased fire danger.

Heavy plant to be fit for purpose, that is Roll Over Protection (ROP's), Falling Object Protection (FOP's) and (OPG) Operator Protection Guarding compliant, which meets the relevant Australian or International Standard. Personnel (Heavy Plant Operators) must be trained and highly experienced in operating and supervising heavy plant. To the greatest extent possible, site managers should always provide a heavy Plant Supervisor (machine supervisor) to direct and work with heavy plant on the fire ground to ensure communications with the plant operator and to also provide fire protection for plant working on fire lines.

- Firefighting equipment must be in good working order and well maintained;
- All machinery is to be fitted with approved, serviceable fire extinguisher in line with Australian Standards (This is a requirement of the Bush Fires Act 1954 and Bush Fires Regulations 1954);
- Refueling of machinery and equipment will not occur in the planted area. Refueling must be undertaken on a hardstand area, free from flammable material;
- Vehicles and machinery operating in the plantation during the bushfire season must comply with the Bush Fires Act 1954 and must adhere to the requirements of Harvest and Vehicle Movement Bans and Total Fire Bans when set by the Local Government and/or Fire and Emergency Services Commissioner.

Radio Communications and Technology:

Woodside to maintain its own radio network which can be used in bushfire control situations and daily operational requirements. Liaison with local fire agencies is required to develop a working relationship to ensure that during a bushfire incident plantation personnel can communicate effectively with other agencies to ensure inter-operability.

Procedures relating to appropriate radio installation, upkeep and maintenance should be developed.

DFES has implemented the WAERN (Western Australian Emergency Response Network) throughout the Wheatbelt and southern Western Australia provide bushfire appliances the ability to communicate with UHF (CB) radios (these dual band radios allow communications on both the UHF and VHF band and can be setup as a repeater if required).

In addition, Telstra GO Repeaters are network coverage extension devices that maximise mobile signal in areas of low coverage. Telstra GO Repeaters receive a signal from a nearby Telstra mobile base station before amplifying and distributing this improved mobile signal to the desired area via an antenna. Mobile & Vehicle Cel Fi Go Repeater Kit can be installed in site vehicles as appropriate.

1.8 Bushfire Management Program

The "Prevention, Preparedness, Response, Recovery model" is suggested as the framework for delivery of bushfire management planning and programs undertaken by Woodside on plantation sites.

1.8.1 Bushfire Prevention

The objective for Woodside plantation management is to work cooperatively with Department of Biodiversity, Conservation and Attractions (DCBA), Department of Fire and Emergency Service (DFES), local government authorities and other stakeholders on programs to prevent the occurrence of unplanned fires.

Measures for bushfire prevention are determined and implemented at a Management Area/Plantation Protection Area level. Measures applied are:

- Compliance with the Shire of Gingin Firebreak Orders and Bushfire Information (Firebreak Notice) and DEFS declared Total Fire Ban days to prevent ignition by machinery and enforce fire use restrictions to reduce accidental ignition.
- Systems for ceasing plantation operations during extreme fire weather to reduce accidental ignitions.
- Surveillance (if appropriate) of selected areas of the site to stop/regulate access into the plantation or other areas of the property during adverse conditions.
- Undertaking fuel reduction planned burning programs. (This should be undertaken in accordance with state fire legislation and local fire permit requirements.

1.8.2 Planning and Preparedness

Woodside should aim to undertake fire prevention and preparedness activities in a planned and cohesive manner, delivering the best possible level of bushfire protection, as required by legislation, while simultaneously maximising ecological and other land management outcomes.

Measures applied are:

- Annual pre-readiness for the bushfire season, fire suppression strategies and priorities, and
- Annual hazardous fuel mitigation works, to mitigate the risk of bushfires on its managed land.

This provides for a consistent and cohesive approach for both suppression and fuel management activities.

Management activities must:

- Include an assessment of risk to life and property, economic risk to commercial assets, and risks to rare and threatened species and communities
- Describe the priorities for fire protection works for a five-year period.

1.8.3 Pre-Incident Plans

Prior to fire season commencement each year, pre-incident preparedness is undertaken, to ensure effective response to bushfires on the site. Levels of preparedness and defined numbers of personnel and equipment required for initial attack are determined in accordance to predicted fire danger rating. (Refer Appendix 'L').

Pre-incident preparedness is to consider the following information:

- Fire preparedness guidelines and fire danger information (AFDR);
- Response arrangements (communication with local brigades and the local government);
- Local emergency services (volunteer bush fire brigades) contact information;
- Links to weather information;
- Reviewed annually any recommendations or current strategies, prior to the commencement of the fire season.

1.8.4 Hazardous Fuel Management

Hazardous fuel management considers the range of fire protection strategies and practices available and adopts those which best meet both fire protection objectives and the principles of environmental management. These may include use of fire in a controlled environment.

- At an overall property scale, excluding the use of fire to sensitive areas on site;
- A means to achieve ecological outcomes by altering habitat structure and composition of flora and fauna species;
- To protect or enhance water catchment on the site, historical, Indigenous and other cultural values;
- Accommodating fire protection objectives outlined in the Shire of Gingin Firebreak Orders and Bushfire Information (Firebreak Notice)

Hazardous fuel management should consider rolling targets for seasonal prescribed burning subject to weather conditions or seasonal mechanical methods of hazardous fuel reduction areas within the site, including weed management by slashing, ploughing or other environmentally approved technique.

Fuel Management Plan components:

Geographical Information System Mapping (GIS)

- GIS allows analysis of spatial information such as the planning area, fire history, built, natural and cultural assets and values.
- Layers can be periodically reviewed and updated to incorporate new data and fire history or site detail as required.
- Map layers are to be stored in the Corporate GIS database.

Each Plantation Area to have a series of Risk Based Maps which identify the following:

Assets at risk

- This map identifies fire-vulnerable asset location.
- Settlements/townships adjoining State Forest.
- Plantations high value young regrowth areas.
- Land tenure boundaries.
- Probable high-intensity fire paths to plantation areas and fire-vulnerable assets on site.

Hazard reduction constraints

- Identify areas that are hazard reduction treatable and non-treatable land/ vegetation classification map.
- Non-burnable area categories (such as hazardous areas or areas such as peatlands).
- Land excluded from planned burning by environmental regulations.
- Plantation high value young regrowth areas.
- Fire sensitive area types in which mechanical fuel reduction is preferred to burning as a fuel management treatment *(Note: Grazing may also be a suitable option)*.
- Land not tenable for hazard reduction burning due to operational constraints (neighbour fencing/assets not feasible to protect, no reliable burn boundaries, access issues etc.).

1.8.5 Prescribed Burn Plans

This bushfire management plan details a suite of measures that will be undertaken to ensure carbon remains sequestered in the project area. The plan includes management actions that have or will be undertaken to prevent the risk of fire starting and spreading within the project site, including the frequency and scale of these actions. The management of accumulative fuel loads to reduce the intensity and spread of fires includes hazard reduction burning (prescribed/planned burning). Ensuring managed burning will have a far lower impact on the site over the life of the project than an uncontrolled bushfire. All planned burns will have an approved operational plan prior to burning. Safety and environmental considerations and potential impacts on other stakeholders are assessed as part of the planning process (due diligence).

Operational plans include:

- Burn objectives;
- An operational map;
- Environmental approvals;
- Burn area details;
- Resources required;
- Standards to be met;
- Checks and notifications to be undertaken;
- Authorisations to be obtained; and
- Post burn appraisals to be conducted.

Operational Plans for planned burning remain current for 5 years but should be reviewed prior to each planned burn.

1.8.6 Approving Prescribed Burn Plans

All site-specific burn plans must be approved by Woodside designated officer, or their delegate, and all burns must be authorized prior to commencement of burning. All planned burning to be undertaken in accordance with State Legislation and Local Government requirements pursuant to provisions of the Bush Fires Act 1954.

1.8.7 Bushfire

Details for each individual bushfire including situation reports, communication, mapping, photos, video, documents, predictions, and Incident Action Plans (IAP) should be developed and archived.

All detail including logs, maps and planning should be captured and stored in case it needs to be produced later, where appropriate.

1.8.8 Bushfire Recovery

Directly, or assist other agencies to, undertake recovery activities of bushfire affected areas on site in reconstruction of the physical infrastructure and restoration of plantation areas.

Other bushfire recovery actions may include operations to salvage, repair, rehabilitate or replace fire damaged assets and sites disturbed by fire control operations.

All recovery operations and actions post bushfire should be carried out in accordance with an Incident Action Plan for the bushfire.

Further significant recovery operations may include salvage operations for recoverable vegetation and replanting of plantation or silvicultural operations to facilitate regeneration.

1.8.9 Rehabilitation

Undertake rehabilitation of disturbance resulting from firefighting operations as soon as practical after the bushfire is contained. Where substantial rehabilitation works are or will be required, a rehabilitation plan is prepared and implemented. In some circumstances, the bushfire may be declared a natural disaster and funding for rehabilitation and recovery works may be available under the Natural Disasters Recovery Fund. Where possible, rehabilitation activities such as erosion control measures should be undertaken in conjunction with control activities.

1.8.10 Enforcement

Where there is sufficient evidence to suggest that a person (or persons) was responsible for deliberately lighting or negligently causing a fire on the site or a fire that subsequently enters onto plantation managed areas, this must be reported to the relevant authorities, DFES and WA Police. Action may be taken to recover the costs of suppression and/or damage caused by the fire.

1.9 Data capture, monitoring and reporting

1.9.1 Currency and competency

Personnel who participate in fire related operational activities including both bushfire and prescribed burning should log the details of their hours and operational roles in an appropriate system. This enables capture of activity for maintenance of currency and competency against fire qualifications.

1.9.2 Post Incident and End-Of-Season Debriefs and Reports

Major fire suppression events undertaken by Plantation personnel may be subject to a post incident debrief.

End of season debriefs are also undertaken and actions or 'lessons learnt' identified and addressed in training, procedure review and/or development or communicated out to all firefighting personnel.

The format and scope of the post incident debrief depends on the incident level and the nature of events during the incident. The style of debriefing can range from an informal discussion between plantation manager and personnel on a small incident, to a formal debriefing with relevant agencies on a complex incident.

1.9.3 Monitoring and Recording

All data, such as fire histories, prescribed burning and results of management programs to be recorded on a regular basis to update GIS layers and to inform annual planning and reporting.

Requirements for additional records or reporting, such as a fire investigation, planning developments, training and Quality Assurance Audits/Operational Inspection Reports will be maintained in a format that complies with the Woodside Records Management Policy.

Evidence to support any claims must be kept ensuring these records provide details of land management actions with respect to activities that reduce bushfire risk on the site. This might include copies of prescribed burn permits, date stamped photos of fire hazard reduction activities or receipts from service providers.

Figure 3.1

Classified Vegetation & Topography

KARAKIN SITE
KARAKIN
SHIRE OF GINGIN

------ **LEGEND** ------

- Subject Site
- Other Lots
- Photo & Direction
- Dwelling
- Shed
- 110,000 Water Tank
- 50,000 Water Tank
- Gate
- 3m Permimeter Firebreak

150m Vegetation Assessment Area

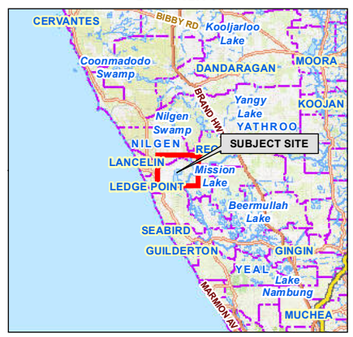
- 150m from Subject Site

Classified Vegetation

- Class (A) Forest
- Class (B) Woodland
- Class (C) Shrubland
- Class (D) Scrub
- Class (G) Grassland
- Exclusion 2.2.3.2

0 500 1,000 1,500 2,000
Metres

------ **LOCALITY** ------



Aerial Imagery : Landgate/SLIP
Image Date : Feb 2022

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Ian Ross 19/07/2023
Map updated by: Ian Ross 19/07/2023
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BUSHFIRE PRONE PLANNING

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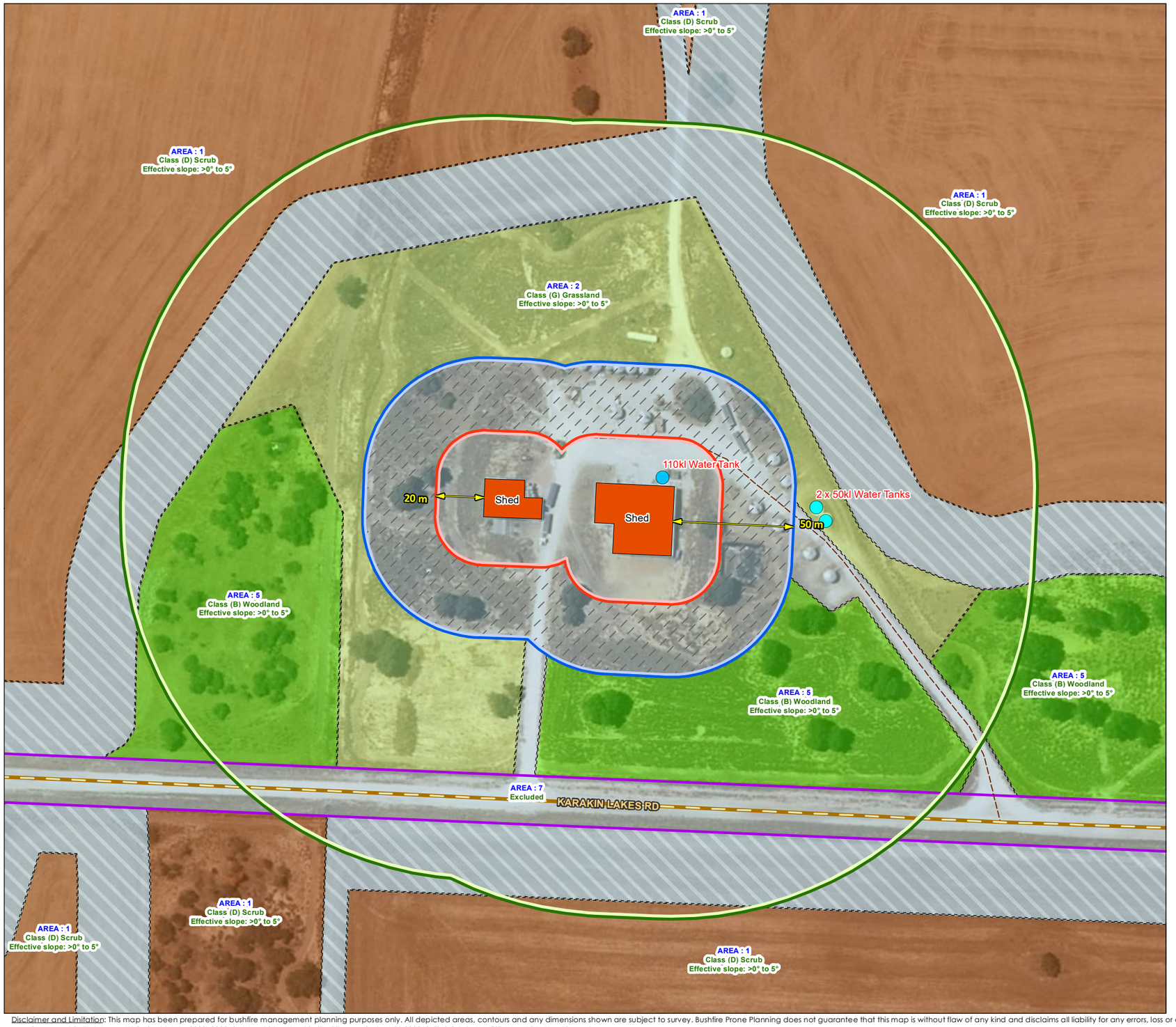


Figure 3.2.1

BAL Assessment Map
Western Sheds

KARAKIN SITE
KARAKIN
SHIRE OF GINGIN

------ LEGEND ------

- Subject Site

Existing Building

- Shed
- 110,000 Water Tank
- 50,000 Water Tank

150m Vegetation Assessment Area

- 150m from Subject Site

Description

- Low Fuel Zone <8ta/ha

Asset Protection

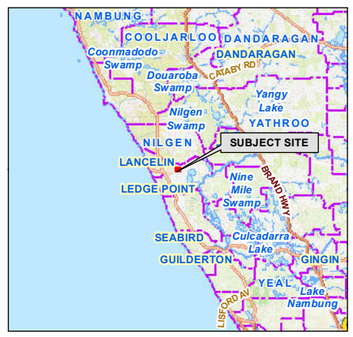
- 50m Plantation HSZ
- Indicative 20m APZ
- APZ Distance
- Firebreaks

Classified Vegetation

- Class (B) Woodland
- Class (D) Scrub
- Class (G) Grassland
- Exclusion 2.2.3.2

0 20 40 60 80 100
Metres

------ LOCALITY ------



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BUSHFIRE PRONE PLANNING

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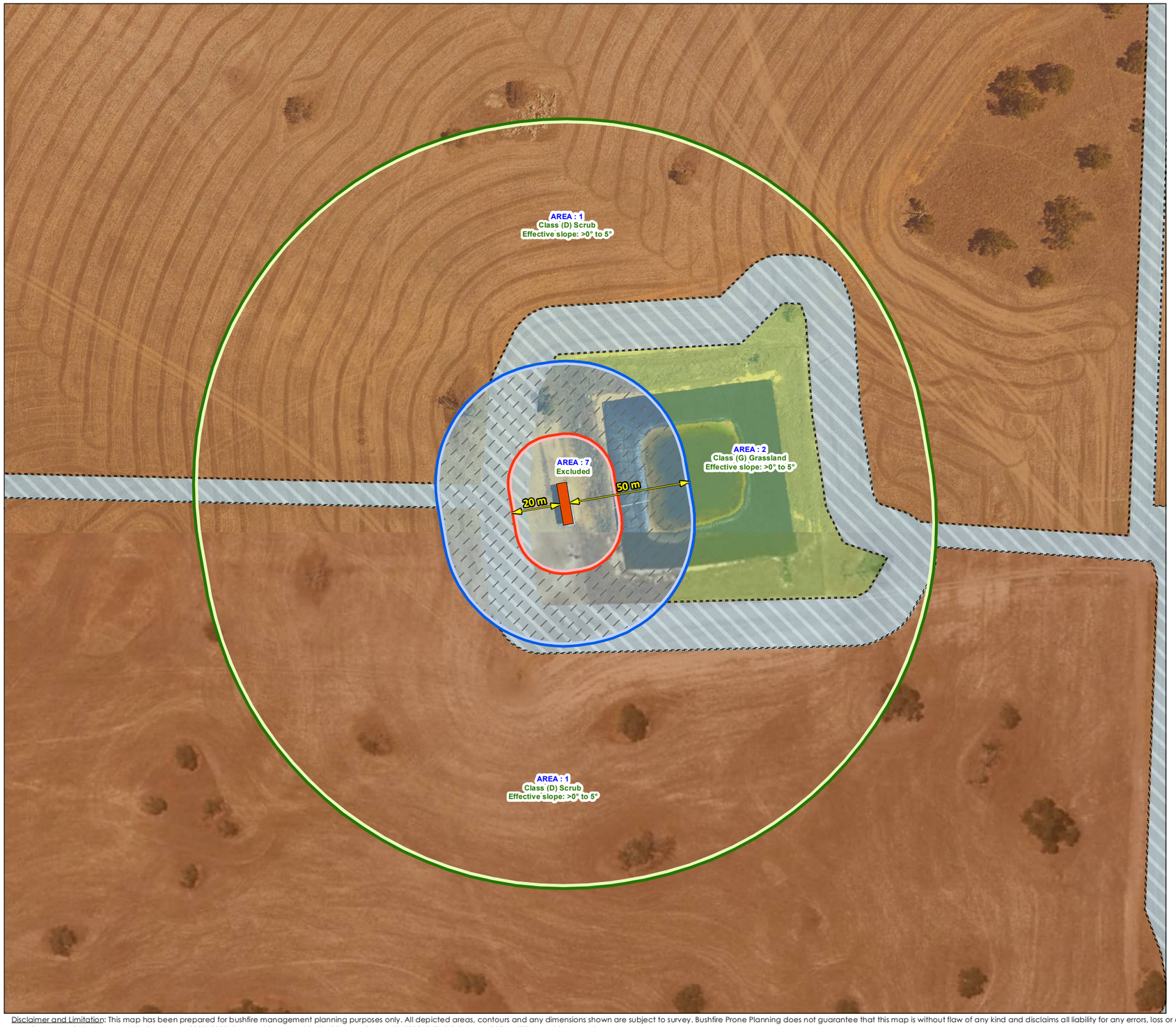


Figure 3.2.2

BAL Assessment Map
North Western Shed

KARAKIN SITE
KARAKIN
SHIRE OF GINGIN

------ **LEGEND** ------

Existing Building
- Shed

150m Vegetation Assessment Area
- 150m from Subject Site

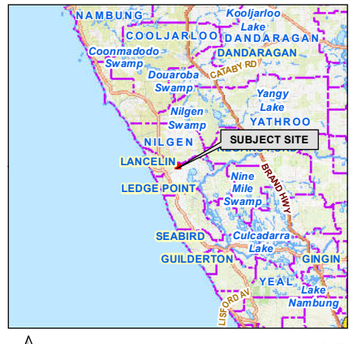
Description
- Low Fuel Zone <8ta/ha

Asset Protection
- 50m Plantation HSZ
- Indicative 20m APZ
- APZ Distance
- Firebreaks

Classified Vegetation
- Class (D) Scrub
- Class (G) Grassland
- Exclusion 2.2.3.2

0 20 40 60 80 100
Metres

------ **LOCALITY** ------



Aerial Imagery : Landgate/SLIP
Image Date : Feb 2022

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Ian Ross 19/07/2023
Map updated by: Ian Ross 19/07/2023
A3 Scale 1:1,500

BUSHFIRE PRONE PLANNING

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Figure 3.2.3

BAL Assessment Map
Central Buidlings

KARAKIN SITE
KARAKIN
SHIRE OF GINGIN

------ LEGEND ------

- Subject Site
- Other Lots

Existing Building

- Dwelling
- Shed
- Driveway
- 3m Permimeter Firebreak

150m Vegetation Assessment Area

- 150m from Subject Site

Description

- Low Fuel Zone <8ta/ha

Asset Protection

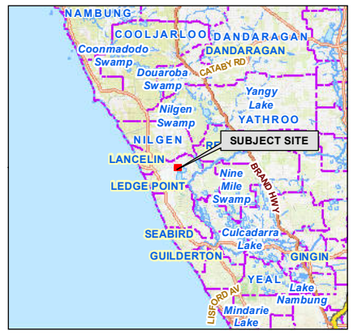
- 100m Plantation HSZ
- Indicative BAL-29 APZ
- 50m Plantation HSZ
- Indicative 20m APZ
- APZ Distance
- Firebreaks

Classified Vegetation

- Class (A) Forest
- Class (D) Scrub
- Class (G) Grassland
- Exclusion 2.2.3.2

0 50 100 150 200
Metres

------ LOCALITY ------



Aerial Imagery : Landgate/SLIP
Image Date : Feb 2022

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Ian Ross 19/07/2023
Map updated by: Ian Ross 19/07/2023
A3 Scale 1:3,000

BUSHFIRE PRONE PLANNING

Map Document Path / Name: K:\Projects\Jobs 2023\230563 - Woodside - Karakin (BMP)\Mapping\MXD\230563_Fig3-2-3_BAL_CENTRAL_Woodside Karakin.mxd

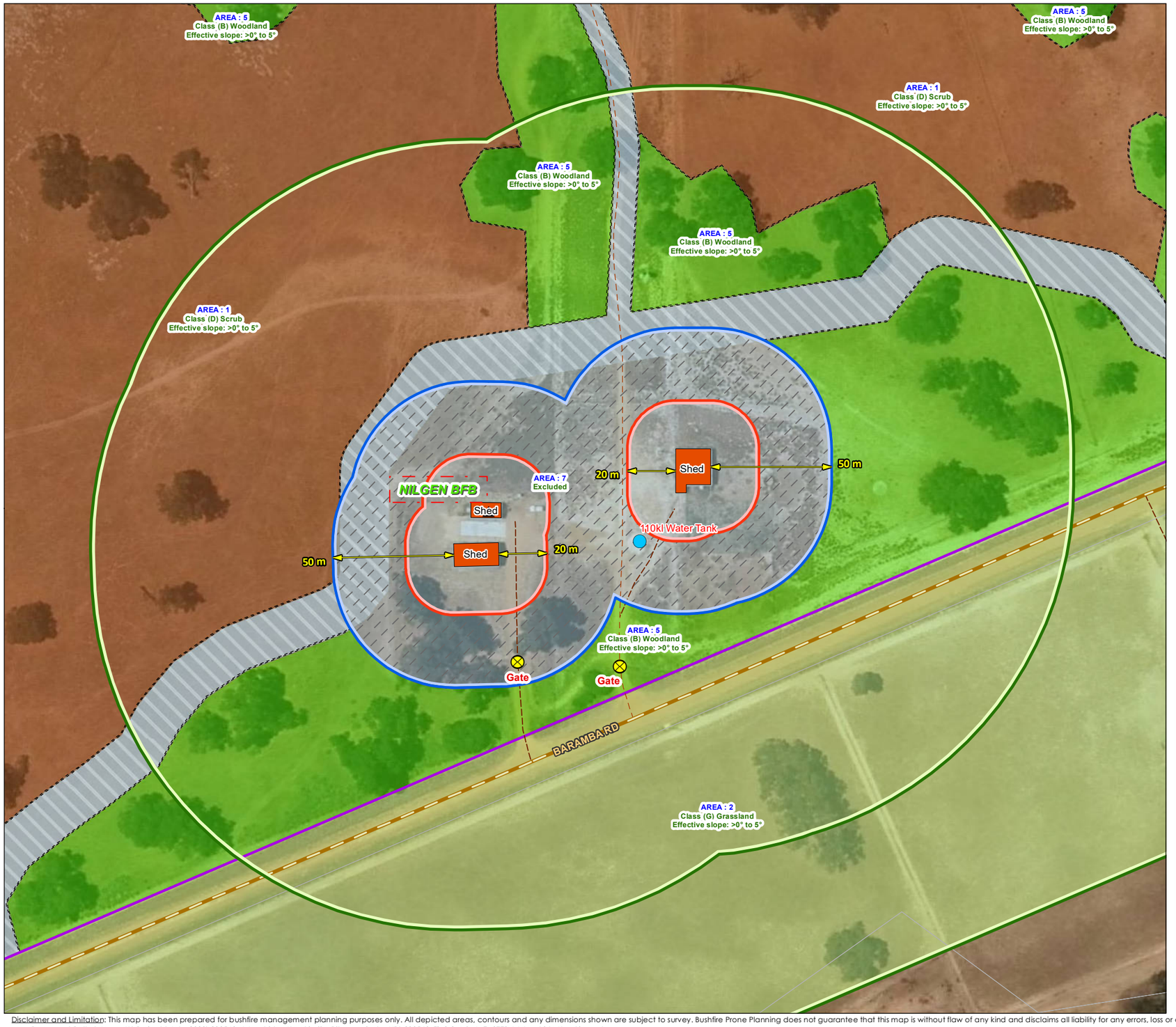


Figure 3.2.4

BAL Assessment Map Eastern Buidlings

KARAKIN SITE
KARAKIN
SHIRE OF GINGIN

------ **LEGEND** ------

- Subject Site
- Other Lots

Existing Building

- Shed
- 110,000 Water Tank
- Gate
- Bush Fire Brigade

150m Vegetation Assessment Area

- 150m from Subject Site

Description

- Low Fuel Zone <8ta/ha

Asset Protection

- 50m Plantation HSZ
- Indicative 20m APZ
- APZ Distance
- Firebreaks

Classified Vegetation

- Class (B) Woodland
- Class (D) Scrub
- Class (G) Grassland
- Exclusion 2.2.3.2

0 20 40 60 80 100
Metres

------ **LOCALITY** ------

Aerial Imagery : Landgate/SLIP
Image Date : Feb 2022

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map compiled by: Ian Ross 19/07/2023
Map updated by: Ian Ross 19/07/2023
A3 Scale 1:1,500

BUSHFIRE PRONE PLANNING

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1.10 Vegetation Assessment and Classification

Vegetation Types and Classification

In accordance with AS 3959:2018 clauses 2.2.3 and C2.2.3.1, all vegetation types within 100 metres of the 'site' (defined as "the part of the allotment of land on which a building stands or is to be erected"), are identified and classified. Any vegetation more than 100 metres from the site that has influenced the classification of vegetation within 100 metres of the site, is identified and noted. The maximum excess distance is established by AS 3959: 2018 cl 2.2.3.2 and is an additional 100 metres.

Classification is also guided by the Visual Guide for Bushfire Risk Assessment in WA (WA Department of Planning February 2016) and any relevant FPA Australia practice notes.

Modified Vegetation

The vegetation types have been assessed as they will be in their natural mature states, rather than what might be observed on the day. Vegetation destroyed or damaged by a bushfire or other natural disaster has been assessed on its expected re-generated mature state. Modified areas of vegetation can be excluded from classification if they consist of low threat vegetation managed in a minimal fuel condition, satisfying AS 3959:2018 s2.2.3.2(f), and there is sufficient justification to reasonable expect that this modified state will exist in perpetuity.

The Influence of Ground Slope

Where significant variation in effective slope exists under a consistent vegetation type, these will be delineated as separate vegetation areas to account for the difference in potential bushfire behaviour, in accordance with AS 3959:2018 clauses 2.2.5 and C2.2.5.

THE INFLUENCE OF VEGETATION GREATER THAN 100 METRES FROM THE SUBJECT SITE	
Vegetation area(s) within 100m of the site whose classification has been influenced by the existence of bushfire prone vegetation from 100m – 200m from the site:	Area No.4
Assessment Statement:	Vegetation comprising shrubland interface with scrub within the relevant broader area influences the classification of vegetation within 100 metres of the subject site. Where shrubland is not isolated, a worst case scenario approach has been considered and scrub classification applied.

VEGETATION AREA 1						
Classification (Existing)	**D. SCRUB**		On-site Classification (Post-Development)		**D. SCRUB**	
Types Identified	Closed scrub D-13		Low shrubland C-12			
Effective Slope	Measured	~1.5 degrees	Applied Range (Method 1)		Downslope >0-5 degrees	
Foliage Cover (all layers)	>30%	Shrub/Heath Height	<2m	Tree Height	Up to 3m	
Additional Justification:	Mixed scrub composition Banksia and Melaleuca species. Understory of low shrubs in areas of undulating land. Broader landscape fire impact/indication - continuous scrub vegetation abutting site boundaries. Photo ID: 4 & 6					
Post Development Assumptions:	Grassland areas on-site classified as Scrub post development works as these areas are identified as changing in land use for reforestation (Mallee).					

PHOTO ID: 1

PHOTO ID: 2

PHOTO ID: 3

PHOTO ID: 4

PHOTO ID: 5

PHOTO ID: 6

VEGETATION AREA 1						
Classification (Existing)	**D. SCRUB**		On-site Classification (Post-Development)		**D. SCRUB**	
Types Identified	Closed scrub D-13		Tussock grassland G-22		Low shrubland C-12	
Effective Slope	Measured	~1.5 degrees	Applied Range (Method 1)		Downslope >0-5 degrees	
Foliage Cover (all layers)	>30%	Shrub/Heath Height	<2m	Tree Height	Up to 4m	
Additional Justification:	Mixed species scrub composition Banksia and Melaleuca. Broader landscape fire impact/indication - continuous scrub vegetation abutting site boundaries. Photo ID: 7 & 8. Tagaasate planted area Photo ID: 11. Scrub immediately around wet area Photo ID: 12, interface with grassland/forest (tall Paper Bark and Marri trees).					
Post Development Assumptions:	Grassland areas on-site classified as Scrub post development works as these areas are identified as changing in land use for reforestation (Mallee).					

PHOTO ID: 7

PHOTO ID: 8

PHOTO ID: 9

PHOTO ID: 10

PHOTO ID: 11

PHOTO ID: 12

VEGETATION AREA 1						
Classification (Existing)	**D. SCRUB**		On-site Classification (Post-Development)		**D. SCRUB**	
Types Identified	Closed scrub D-13		Tussock grassland G-22		Low shrubland C-12	
Effective Slope	Measured	~1.5 degrees	Applied Range (Method 1)		Downslope >0-5 degrees	
Foliage Cover (all layers)	>30%	Shrub/Heath Height	<2m	Tree Height	Up to 4m	
Additional Justification:	Mixed species scrub composition Banksia and Melaleuca. Broader landscape fire impact/indication - continuous scrub vegetation on site and abutting site boundaries. Photo ID: 16, 17 & 18.					
Post Development Assumptions:	Grassland areas on-site classified as Scrub post development works as these areas are identified as changing in land use for reforestation (Mallee).					

PHOTO ID: 13

PHOTO ID: 14

PHOTO ID: 15

PHOTO ID: 16

PHOTO ID: 17

PHOTO ID: 18

VEGETATION AREA 2						
Classification (Existing)	**G. GRASSLAND**		On-site Classification (Post-Development)		**D. SCRUB**	
Types Identified	Sown pasture G-26	Tussock grassland G-22		Open herbfield G-27		
Effective Slope	Measured	~1.5 degrees	Applied Range (Method 1)		Downslope >0-5 degrees	
Foliage Cover (all layers)	<10%	Shrub/Heath Height	N/A	Tree Height	N/A	
Additional Justification:	Large areas of gently undulating grass and cropping land with sparse trees. Off-site grassland/paddock areas likely to remain as such.					
Post Development Assumptions:	On-site land will be re-vegetated with Mallee species. Proposed planting densities constitute a 'Scrub' vegetation for the Cells. Class G Grassland will be revegetated into Class D Scrub mix.					

PHOTO ID: 19

PHOTO ID: 20

PHOTO ID: 21

PHOTO ID: 22

PHOTO ID: 23

PHOTO ID: 24

VEGETATION AREA 2						
Classification (Existing)	**G. GRASSLAND**		On-site Classification (Post-Development)		**D. SCRUB**	
Types Identified	Sown pasture G-26	Tussock grassland G-22		Open herbfield G-27		
Effective Slope	Measured	~1.5 degrees	Applied Range (Method 1)		Downslope >0-5 degrees	
Foliage Cover (all layers)	<10%	Shrub/Heath Height	N/A	Tree Height	N/A	
Additional Justification:	Large areas of gently undulating grass and cropping land with sparse trees. Off-site grassland/paddock areas likely to remain as such.					
Post Development Assumptions:	On-site land will be re-vegetated with Mallee species. Proposed planting densities constitute a 'Scrub' vegetation for the Cells. Class G Grassland will be revegetated into Class D Scrub mix.					

PHOTO ID: 25

PHOTO ID: 26

PHOTO ID: 27

PHOTO ID: 28

PHOTO ID: 29

PHOTO ID: 30

VEGETATION AREA 2						
Classification (Existing)	**G. GRASSLAND**		On-site Classification (Post-Development)	**N/A**		
Types Identified	Sown pasture G-26 Tussock grassland G-22					
Effective Slope	Measured	~1.5 degrees	Applied Range (Method 1)	Downslope >0-5 degrees		
Foliage Cover (all layers)	<10%	Shrub/Heath Height	N/A	Tree Height	N/A	
Additional Justification:	Large areas of gently undulating grassland.					
Post Development Assumptions:	Vegetation is off-site and not under the control of the landowner. Classified as grassland in its current condition.					

PHOTO ID: 31	PHOTO ID: -

VEGETATION AREA 4					
Classification (Existing)	**C. SHRUBLAND**	On-site Classification (Post-Development)	**N/A**		
Types Identified	Low shrubland C-12	Open heath C-11	Tussock grassland G-22		
Effective Slope	Measured	~1.5 degree	Applied Range (Method 1)	Downslope >0-5 degrees	
Foliage Cover (all layers)	>30%	Shrub/Heath Height	<2m	Tree Height	N/A
Additional Justification:	Mixed species shrub composition including Grass trees. Understory of unmanaged grass in areas of undulating land. Scattered scrub >2m in height within shrubland.				
Post Development Assumptions:	Classified as Shrubland as these areas are not identified as changing in land use or further reforestation.				

PHOTO ID: 32

PHOTO ID: 33

PHOTO ID: 34

PHOTO ID: 35

PHOTO ID: 36

PHOTO ID: 37

VEGETATION AREA 4						
Classification (Existing)	**C. SHRUBLAND**		On-site Classification (Post-Development)		**N/A**	
Types Identified	Low shrubland C-12		Open heath C-11		Tussock grassland G-22	
Effective Slope	Measured	~1.5 degree	Applied Range (Method 1)		Downslope >0-5 degrees	
Foliage Cover (all layers)	>30%	Shrub/Heath Height	<2m	Tree Height	N/A	
Additional Justification:	Mixed species shrub composition including Grass trees. Understory of unmanaged grass in areas of undulating land. Scattered scrub >2m in height within shrubland.					
Post Development Assumptions:	Classified as Shrubland as these areas are not identified as changing in land use or further reforestation. Photo ID: 40 – Shrubland interface with Scrub in the broader landscape.					

PHOTO ID: 38

PHOTO ID: 39

PHOTO ID: 40

PHOTO ID: -

VEGETATION AREA 5						
Classification (Existing)	**B. WOODLAND**		On-site Classification (Post-Development)		**B. WOODLAND**	
Types Identified	Woodland B-05		Tussock grassland G-22			
Effective Slope	Measured	~1.0 degree	Applied Range (Method 1)		Downslope >0-5 degrees	
Foliage Cover (all layers)	<30%	Shrub/Heath Height	N/A	Tree Height	Up to 30m	
Additional Justification:	Mixed species Eucalypts, Flooded Gum and Marri dominant. Understory of unmanaged grass in areas of undulating land.					
Post Development Assumptions:	Classified as Woodland as these areas are not identified as changing in land use or further reforestation. Photo ID 42: On-site vegetation in proximity to existing sheds and water tanks.					

PHOTO ID: 41

PHOTO ID: 42

PHOTO ID: 43

PHOTO ID: 44

PHOTO ID: 45

PHOTO ID: 46

VEGETATION AREA 5						
Classification (Existing)	**B. WOODLAND**		On-site Classification (Post-Development)		**B. WOODLAND**	
Types Identified	Woodland B-05		Tussock grassland G-22			
Effective Slope	Measured	~1.5 degree	Applied Range (Method 1)		Downslope >0-5 degrees	
Foliage Cover (all layers)	<30%	Shrub/Heath Height	N/A	Tree Height	Up to 30m	
Additional Justification:	Mixed species Eucalypts, Marri dominant. Understory of unmanaged grass in areas of undulating land.					
Post Development Assumptions:	Classified as Woodland as these areas are not identified as changing in land use or further reforestation.					

PHOTO ID: 47

PHOTO ID: 48

VEGETATION AREA 6						
Classification (Existing)	**A. FOREST**		Classification (Post-Development)		**A. FOREST**	
Types Identified	Open forest A-03		Tussock grassland G-22		Open shrubland G-09	
Effective Slope	Measured	~1.5 degree	Applied Range (Method 1)		Downslope >0-5 degrees	
Foliage Cover (all layers)	>30%	Shrub/Heath Height	1-2m	Tree Height	Up to 30m	
Additional Justification:	Mixed species Eucalypts, tall Paper Bark, Flooded Gum and Marri. Understory of unmanaged grass and shrubs in areas of undulating land. Open areas of grassland and some woodland interface with forest.					
Post Development Assumptions:	Classified as Forest as these areas are not identified as changing in land use or further reforestation.					

PHOTO ID: 49

PHOTO ID: 50

PHOTO ID: 51

PHOTO ID: 52

PHOTO ID: 53

PHOTO ID: 54

VEGETATION AREA 6						
Classification (Existing)	**A. FOREST**		On-site Classification (Post-Development)	**A. FOREST**		
Types Identified	Open forest A-03		Sown pasture G-26			
Effective Slope	Measured	~1.5 degree	Applied Range (Method 1)	Downslope >0-5 degrees		
Foliage Cover (all layers)	>30%	Shrub/Heath Height	N/A	Tree Height	Up to 30m	
Additional Justification:	Mixed species of Pine and Eucalypts, Marri. Understory of unmanaged grass in areas of undulating land.					
Post Development Assumptions:	Classified as Forest as these areas are not identified as changing in land use or further reforestation.					

PHOTO ID: 55	PHOTO ID: -

2 ASSESSMENT AGAINST THE BUSHFIRE PROTECTION CRITERIA (GUIDELINES V1.4)

2.1 Bushfire Protection Criteria Elements Applicable to the Proposed Development/Use

APPLICATION OF THE CRITERIA, ACCEPTABLE SOLUTIONS AND PERFORMANCE ASSESSMENT

The criteria are divided into five elements – location, siting and design, vehicular access, water and vulnerable tourism land uses. Each element has an intent outlining the desired outcome for the element and reflects identified planning and policy requirements in respect of each issue.

The example acceptable solutions (bushfire protection measures) provide one way of meeting the element's intent. Compliance with these automatically achieves the element's intent and provides a straightforward pathway for assessment and approval.

Where the acceptable solutions cannot be met, the ability to develop design responses (as alternative solutions that meet bushfire performance requirements) is an alternative pathway that is provided by addressing the applicable performance principles (as general statements of how best to achieve the intent of the element).

A merit based assessment is established by the SPP 3.7 and the Guidelines as an additional alternative pathway along with the ability of using discretion in making approval decisions (sections 2.5, 2.6 and 2.7). This is formally applied to certain development (minor and unavoidable – sections 5.4.1 and 5.7). Relevant decisions by the State Administrative Tribunal have also supported this approach more generally.

Elements 1 – 4 should be applied for all strategic planning proposals, subdivision or development applications, except for vulnerable tourism land uses which should refer to Element 5. Element 5 incorporates the bushfire protection criteria in Elements 1 – 4 but caters them specifically to tourism land uses. (Guidelines DPLH 2021v1.4)

The Bushfire Protection Criteria	Applicable to the Proposed Development/Use
Element 1: Location	Yes
Element 2: Siting and Design	Yes
Element 3: Vehicular Access	Yes
Element 4: Water	Yes
Element 5: Vulnerable Tourism Land Uses	No

2.2 Local Government Variations to Apply

Local governments may add to or modify the acceptable solutions to recognise special local or regional circumstances (e.g., topography / vegetation / climate). These are to be endorsed by both the WAPC and DFES before they can be considered in planning assessments. (Guidelines DPLH 2021v1.4).	
Do endorsed regional or local variations to the acceptable solutions apply to the assessments against the Bushfire Protection Criteria for the proposed development /use?	No

The local government will advise the proponent of other applicable specifications such as signage and gates where they apply and "the technical construction requirements" for each access type/component can and will be complied with.

2.3 Assessment Statements for Element 1: Location

LOCATION	
Element Intent	To ensure that strategic planning proposals, subdivision and development applications are located in areas with the least possible risk of bushfire to facilitate the protection of people, property and infrastructure.
Proposed Development/Use – Relevant Planning Stage	(Do) Development application other than for a single dwelling, ancillary dwelling or minor development
Element Compliance Statement	The proposed development/use achieves the intent of this element by being fully compliant with all applicable acceptable solutions.
Pathway Applied to Provide an Alternative Solution	N/A

Acceptable Solutions - Assessment Statements

All details of acceptable solution requirements are established in the Guidelines for Planning in Bushfire Prone Areas, DPLH v1.4 (Guidelines) and apply the guidance established by the Position Statement: 'Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design' (WAPC Nov 2019) and the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (WA Department of Planning, Lands and Heritage, 2021 Rev B) as relevant. These documents are available at https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas.

Solution Component Check Box Legend	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant

A1.1 Development location	**Applicable:**	Yes	**Compliant:**	Yes

ASSESSMENT AGAINST THE REQUIREMENTS ESTABLISHED BY THE GUIDELINES

☑ ☐ ☐ The development application is located in an area that is or will, on completion, be subject to either a moderate or low bushfire hazard level, or BAL-29 or below.

Supporting Assessment Details: No new buildings proposed, however, the proposed development is able to provide an area of land within the subject site that can be considered suitable for development should buildings be proposed in the future, as BAL-40 or BAL-FZ construction requirements will not be required to be applied. Where new buildings are required to comply with increased building construction standards, the appropriate sized APZ can be implemented within the subject Lot. This meets the requirements established by Acceptable Solution A1.1.

ASSESSMENTS APPLYING THE GUIDANCE ESTABLISHED BY THE WAPC ELEMENT 1 & 2 POSITION STATEMENT (2019)

"Consideration should be given to the site context where 'area' is the land both within and adjoining the subject site. The hazards remaining within the site should not be considered in isolation of the hazards adjoining the site, as the potential impact of a bushfire will be dependent on the wider risk context, including how a bushfire could affect the site and the conditions for a bushfire to occur within the site."

Strategic Planning Proposals: Consider the threat levels from any vegetation adjoining and within the subject site for which the potential intensity of a bushfire in that vegetation would result in it being classified as an Extreme Bushfire Hazard Level (BHL). Identify any proposed design strategies to reduce these threats.

Structure Plans (lot layout known) and Subdivision Applications: As for strategic planning proposals but within the subject site the relevant threat levels to consider are the radiant heat levels represented by BAL-FZ and BAL-40 ratings.

The planning proposal is a development application, consequently the referenced position statement is not applicable to the Element 1 assessment.

2.4 Assessment Statements for Element 2: Siting and Design

SITING AND DESIGN OF DEVELOPMENT	
Element Intent	To ensure that the siting and design of development minimises the level of bushfire impact.
Proposed Development/Use – Relevant Planning Stage	(Do) Development application other than for a single dwelling, ancillary dwelling or minor development
Element Compliance Statement	The proposed development/use achieves the intent of this element by being fully compliant with all applicable acceptable solutions.
Pathway Applied to Provide an Alternative Solution	N/A

Acceptable Solutions - Assessment Statements

All details of acceptable solution requirements are established in the Guidelines for Planning in Bushfire Prone Areas, DPLH v1.4 (Guidelines) and apply the guidance established by the Position Statement: 'Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design' (WAPC Nov 2019) and the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (WA Department of Planning, Lands and Heritage, 2021 Rev B) as relevant. These documents are available at https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas.

Solution Component Check Box Legend	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant

A2.1 Asset Protection Zone (APZ)	**Applicable**: Yes	**Compliant**: Yes

APZ DIMENSIONS – DIFFERENCES IN REQUIREMENTS FOR PLANNING ASSESSMENTS COMPARED TO IMPLEMENTATION

A key required bushfire protection measure is to reduce the exposure of buildings/infrastructure (as exposed vulnerable elements at risk), to the direct bushfire threats of flame contact, radiant heat and embers and the indirect threat of consequential fires that result from the subsequent ignition of other combustible materials that may be constructed, stored or accumulate in the area surrounding these structures. This reduces the associated risks of damage or loss.

This is achieved by separating buildings (and consequential fire fuels as necessary) from areas of classified bushfire prone vegetation. This area of separation surrounding buildings is identified as the Asset Protection Zone (APZ) and consists of no vegetation and/or low threat vegetation or vegetation continually managed to a minimal fuel condition. The required separation distances will vary according to the site specific conditions and local government requirements.

The APZ dimensions stated and/or illustrated in this Report can vary dependent on the purpose for which they are being identified.

> *Note: Appendix B 'Onsite Vegetation Management' provides further information regarding the different APZ dimensions that can be referenced, their purpose and the specifications of the APZ that are to be established and maintained on the subject lot.*

THE 'PLANNING BAL-29' APZ DIMENSIONS

Purpose: To provide evidence of the development or use proposal's ability to achieve minimum vegetation separation distances. To achieve 'acceptable solution' planning approval for this factor, it must be demonstrated that the minimum separation distances corresponding to a maximum level of radiant transfer to a building of 29 kW/m^2, either exist or can be implemented (with certain exceptions). These separation distances are the 'Planning BAL-29' APZ dimensions.

The 'Planning BAL-29' APZ is not necessarily the size of the APZ that must be physically implemented and maintained by a landowner. Rather, its sole purpose is to identify if an acceptable solution for planning approval can be met.

THE 'REQUIRED' APZ DIMENSIONS

Purpose: Establishes the dimensions of the APZ to be physically implemented by the landowner on their lot: These will be the minimum required separation distances from the subject building(s) to surrounding bushfire prone vegetation (identified by type and associated ground slope). These are established by:

A. The 'BAL Rating APZ' of the subject building(s) when distances are greater than 'B' below (except when 'B' establishes a maximum distance); or

B. The 'Local Government' APZ' derived from the Firebreak/Hazard Reduction Notice when distances are greater than 'A' above, other than when a maximum distance is established, in which case this will apply; or

C. A combination of 'A' and 'B'.

*Within this Report/Plan it is the **'Planning BAL-29' APZ** that will be identified on maps, diagrams and in tables as necessary – unless otherwise stated.*

*The **'Required' APZ** dimension information will be presented in Appendix B1.1 and on the Property Bushfire Management Statement, when required to be included for a development application.*

ASSESSMENT AGAINST THE REQUIREMENTS ESTABLISHED BY THE GUIDELINES

☑ ☐ ☐	**APZ Width:** The proposed (or a future) habitable building(s) on the lot(s) of the proposed development - or an existing building for a proposed change of use – can be (or is) located within the developable portion of the lot and be surrounded by a 'Planning BAL-29' APZ of the required dimensions (measured from any external wall or supporting post or column to the edge of the classified vegetation), that will ensure their exposure to the potential radiant heat impact of a bushfire does not exceed 29 kW/m^2.
☐ ☐ ⦸	**Restriction on Building Location:** It has been identified that the current developable portion of a lot(s) provides for the proposed future (or a future) building/structure location that will result in that building/structure being subject to a BA-40 or BAL-FZ rating. Consequently, it may be considered necessary to impose the condition that a restrictive covenant to the benefit of the local government pursuant to section 129BA of the Transfer of Land Act 1893, is to be placed on the certificate(s) of title of the proposed lot(s) advising of the existence of a restriction on the use of that portion of land (refer to Code F3 of Model Subdivision Conditions Schedule, WAPC June 2021 and Guidelines s5.3.2).
☑ ☐ ☐	**APZ Location:** The required dimensions for a 'Planning BAL-29' APZ can be contained solely within the boundaries of the lot(s) on which the proposed (or a future) habitable building(s) - or an existing building(s) for a proposed change of use – is situated.
☐ ☐ ⦸	**APZ Location:** The required dimensions for a 'Planning BAL-29' APZ can be partly established within the boundaries of the lot(s) on which the proposed (or a future) habitable building(s) - or an existing building(s) for a proposed change of use – is situated. The balance of the APZ would exist on adjoining land that satisfies the exclusion requirements of AS 3959:2018 cl 2.2.3.2 for non-vegetated areas and/or low threat vegetation and/or vegetation managed in a minimal fuel condition.
☐ ☐ ⦸	**APZ Location:** It can be justified that any adjoining (offsite) land forming part of a 'Planning BAL-29' APZ will: • If non-vegetated, remain in this condition in perpetuity; and/or • If vegetated, be low threat vegetation or vegetation managed in a minimal fuel condition in perpetuity.
☑ ☐ ☐	**APZ Management:** The area of land (within each lot boundary), that is to make up the required 'Landowner' APZ dimensions (refer to Appendix B, Part B1), can and will be managed in accordance with

	the requirements of the Guidelines Schedule 1 'Standards for Asset Protection Zones' (refer to Appendix B).
☐ ☐ ⊘	**Subdivision Staging:** There are undeveloped future stages of subdivision, containing bushfire prone vegetation, that have been taken into consideration for their potentially 'temporary' impact on the ability to establish a 'Planning BAL-29' APZ on adjoining developed lots. A staging plan is developed to manage this.
☑ ☐ ☐	**Firebreak/Hazard Reduction Notice:** Any additional requirements established by the relevant local government's annual notice to install firebreaks and manage fuel loads (issued under s33 of the Bushfires Act 1954), can and will be complied with.
Supporting Assessment Details: No buildings proposed for this site. Existing infrastructure and buildings to comply with Guidelines for Plantation Fire Protection and the Local Government Firebreak Notice, asset protection zone requirements. Consideration to be given to existing infrastructure and buildings within 100m of the plantation site so as not to adversely impact these buildings, ensuring separation from plantation vegetation meets the Guidelines for Plantation Fire Protection and the Local Government Firebreak Notice, asset protection zone requirements.	
ASSESSMENTS APPLYING THE GUIDANCE ESTABLISHED BY THE WAPC ELEMENT 1 & 2 POSITION STATEMENT (2019)	
Strategic Planning Proposals: "At this planning level there may not be enough detail to demonstrate compliance with this element. The decision-maker may consider this element is satisfied where A1.1 is met." **Structure Plans (lot layout known) and Subdivision Applications: "**Provided that Element 1 is satisfied, the decision-maker may consider approving lot(s) containing BAL-40 or BAL-FZ under the following scenarios.	

The planning proposal is a development application, consequently the referenced position statement is not applicable to the proposed development.

2.5 Assessment Statements for Element 3: Vehicular Access

VEHICULAR ACCESS	
Element Intent	To ensure that the vehicular access serving a subdivision/development is available and safe during a bushfire event.
Proposed Development/Use – Relevant Planning Stage	(Do) Development application other than for a single dwelling, ancillary dwelling or minor development
Element Compliance Statement	The proposed development/use achieves the intent of this element by being fully compliant with all applicable acceptable solutions.
Pathway Applied to Provide an Alternative Solution	N/A

Acceptable Solutions - Assessment Statements

All details of acceptable solution requirements are established in the Guidelines for Planning in Bushfire Prone Areas, DPLH v1.4 (Guidelines) and apply the guidance established by the Position Statement: 'Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design' (WAPC Nov 2019) and the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (WA Department of Planning, Lands and Heritage, 2021 Rev B) as relevant. These documents are available at https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas.

The technical construction requirements for access types and components, and for each firefighting water supply component, are also presented in Appendices 2 and 3. The local government will advise the proponent where different requirements are to apply and when any additional specifications such as those for signage and gates are to apply (these are included in the relevant appendix if requested by the local government).

Solution Component Check Box Legend	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant

A3.1 Public roads	**Applicable**: Yes	**Compliant**: Yes

☑ ☐ ☐	The technical construction requirements of vertical clearance and weight capacity (Guidelines, Table 6) can and will be complied with (Refer also to Appendix C in this BMP).
☑ ☐ ☐	All other applicable technical requirements of trafficable width, gradients and curves, are required to be in "accordance with the class of road as specified in the IPWEA Subdivision Guidelines, Liveable Neighbourhoods, Ausroad Standards and/or any applicable standard in the local government area" (Guidelines, Table 6 and E3.1. Refer also to Appendix C in this BMP). The assessment conducted for the bushfire management plan indicates that it is likely that the proposed development can and will comply with the requirements. However, the applicable class of road, the associated technical requirements and subsequent proposal compliance, will need to be confirmed with the relevant local government and/or Main Roads WA.
☑ ☐ ☐	A traversable verge is available adjacent to classified vegetation (Guidelines, E3.1), as recommended.

Supporting Assessment Details: No new roads being constructed as part of the development proposal. Existing local roads provide emergency services and public access relevant to the local conditions and local government planning requirements.

A3.2a Multiple access routes	**Applicable**: Yes	**Compliant**: Yes

☑ ☐ ☐	For each lot, two-way public road access is provided in two different directions to at least two different suitable destinations with an all-weather surface.

☐ ☐ ⊘	The two-way access is available at an intersection no greater than 200m from the relevant boundary of each lot, via a no-through road.
☐ ☐ ⊘	The two-way access is not available at an intersection within 200m from the relevant boundary of each lot. However, the available no-through road satisfies the established exemption for the length limitation in every case. These requirements are: • Demonstration of no alternative access (refer to A3.3 below); • The no-through road travels towards a suitable destination; and • The balance of the no-through road that is greater than 200m from the relevant lot boundary is within a residential built-out area or is potentially subject to radiant heat levels from adjacent bushfire prone vegetation that correspond to the BAL-LOW rating (<12.5 kW/m^2).
Supporting Assessment Details: Karakin West (K.W.) Road, Sappers Road and Cowalla Road enables travel in two different directions via the local road network. These local roads, where unsealed, provide a trafficable surface with two-way traffic capability.	
A3.2b Emergency access way	**Applicable**: No **Compliant**: -
☐ ☐ ⊘	The proposed or existing EAW provides a through connection to a public road.
☐ ☐ ⊘	The proposed or existing EAW is less than 500m in length and will be signposted and gated (remaining unlocked) to the specifications stated in the Guidelines and/or required by the relevant local government.
☐ ☐ ⊘	The technical construction requirements for widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.2b. Refer also to Appendix C in this BMP), can and will be complied with.
Supporting Assessment Details: 'None Required'	
A3.3 Through-roads	**Applicable**: No **Compliant**: -
☐ ☐ ⊘	A no-through public road is necessary as no alternative road layout exists due to site constraints.
☐ ☐ ⊘	The no-through public road length does not exceed the established maximum of 200m to an intersection providing two-way access (Guidelines, E3.3).
☐ ☐ ⊘	The no-through public road exceeds 200m but satisfies the exemption provisions of A3.2a as demonstrated in A3.2a above.
☐ ☐ ⊘	The public road technical construction requirements (Guidelines, Table 6 and E3.1. Refer also to Appendix C in this BMP), can and will be complied with as established in A3.1 above.
☐ ☐ ⊘	The turnaround area requirements (Guidelines, Figure 24) can and will be complied with.
Supporting Assessment Details: 'None Required'	
A3.4a Perimeter roads	**Applicable**: No **Compliant**: -
☐ ☐ ⊘	The proposed greenfield or infill development consists of 10 or more lots (including those that are part of a staged subdivision) and therefore should have a perimeter road. This is planned to be installed.

☐ ☐ ⊘	The proposed greenfield or infill development consists of 10 or more lots (including those that are part of a staged subdivision). However, it is not required on the established basis of: • The vegetation adjoining the proposed lots is classified Class G Grassland; • Lots are zoned rural living or equivalent; • It is demonstrated that it cannot be provided due to site constraints; or • All lots have existing frontage to a public road.
☐ ☐ ⊘	The technical construction requirements of widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.4a) can and will be complied with.
Supporting Assessment Details: 'None Required'	
A3.4b Fire service access route	**Applicable**: No **Compliant**: -
☐ ☐ ⊘	The FSAR can be installed as a through-route with no dead ends, linked to the internal road system every 500m and is no further than 500m from a public road.
☐ ☐ ⊘	The technical construction requirements of widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.4b. Refer also to Appendix C in this BMP), can and will be complied with.
☐ ☐ ⊘	The FSAR can and will be signposted. Where gates are required by the relevant local government, the specifications can be complied with.
☐ ☐ ⊘	Turnaround areas (to accommodate type 3.4 fire appliances) can and will be installed every 500m on the FSAR.
Supporting Assessment Details: 'None Required'	
A3.5 Battle-axe access legs	**Applicable**: No **Compliant**: -
☐ ☐ ⊘	A battle-axe leg cannot be avoided due to site constraints.
☐ ☐ ⊘	The proposed development is in a reticulated area and the battle-axe access leg length from a public road is no greater than 50m. No technical requirements need to be met.
☐ ☐ ⊘	The proposed development is not in a reticulated area. The technical construction requirements for widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.5. Refer also to Appendix C in this BMP), can and will be complied with.
☐ ☐ ⊘	Passing bays can and will be installed every 200m with a minimum length of 20m and a minimum additional trafficable width of 2m.
Supporting Assessment Details: 'None Required'	
A3.6 Private driveways	**Applicable**: Yes **Compliant**: Yes
☐ ☐ ⊘	The private driveway to the most distant external part of the development site is within a lot serviced by reticulated water, is accessed via a public road with a speed limit of 70 km/hr or less and has a length is no greater than 70m (measured as a hose lay). No technical requirements need to be met.

☑ ☐ ☐	The technical construction requirements for widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.6. Refer also to Appendix C in this BMP), can and will be complied with.
☑ ☐ ☐	Passing bays can and will be installed every 200m with a minimum length of 20m and a minimum additional trafficable width of 2m.
☑ ☐ ☐	The turnaround area requirements (Guidelines, Figure 28, and within 30m of the habitable building) can and will be complied with.
Supporting Assessment Details: Driveways to be constructed to meet the technical construction requirements for widths, clearances, capacity, gradients and curves (Guidelines, Table 6 and E3.6. Refer also to Appendix F in this BMP), can and will be complied with. Note: The plantation will be serviced by firebreaks and access tracks that shall be constructed to the horizontal surface and vertical height standards to meet the Guidelines for Plantation Fire Protection and Shire of Gingin Firebreak Notice requirements. The site has access to two different points of entry/exit via K.W./Karakin Lakes Road to the west and via Barambard/Cowalla Road to the east.	

2.6 Assessment Statements for Element 4: Water

FIREFIGHTING WATER	
Element Intent	To ensure water is available to enable people, property and infrastructure to be defended from bushfire.
Proposed Development/Use – Relevant Planning Stage	(Do) Development application other than for a single dwelling, ancillary dwelling or minor development
Element Compliance Statement	The proposed development/use achieves the intent of this element by being fully compliant with all applicable acceptable solutions.
Pathway Applied to Provide an Alternative Solution	N/A

Acceptable Solutions - Assessment Statements

All details of acceptable solution requirements are established in the Guidelines for Planning in Bushfire Prone Areas, DPLH v1.4 (Guidelines) and apply the guidance established by the Position Statement: 'Planning in bushfire prone areas – Demonstrating Element 1: Location and Element 2: Siting and design' (WAPC Nov 2019) and the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (WA Department of Planning, Lands and Heritage, 2021 Rev B) as relevant. These documents are available at https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas.

The technical construction requirements for access types and components, and for each firefighting water supply component, are also presented in Appendices 2 and 3. The local government will advise the proponent where different requirements are to apply and when any additional specifications such as those for signage and gates are to apply (these are included in the relevant appendix if requested by the local government).

Solution Component Check Box Legend	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant

A4.1 Identification of future firefighting water supply	**Applicable**: No	**Compliant**: -

☐ ☐ ⃠	It can be demonstrated that reticulated or sufficient non-reticulated water for firefighting can be provided at the subdivision and/or development application stage in accordance with the specifications of the relevant water supply authority or the requirements of Schedule 2.

Supporting Assessment Details: 'None Required'

A4.2 Provision of water for firefighting purposes	**Applicable**: Yes	**Compliant**: Yes

☐ ☐ ⃠	A reticulated water supply is available to the proposed development. The existing hydrant connection(s) are provided in accordance with the specifications of the relevant water supply authority.
☐ ☐ ⃠	A reticulated water supply will be available to the proposed development. Hydrant connection(s) can and will be provided in accordance with the specifications of the relevant water supply authority.
☑ ☐ ☐	A static water supply (tank/s) for firefighting purposes will be installed on the lot that is additional to any water supply that is required for drinking and other domestic purposes.
☐ ☐ ⃠	A strategic water supply (tank or tanks) for firefighting purposes will be installed within or adjacent to the proposed development that is additional to any water supply that is required for drinking and other domestic purposes. The required land will be ceded free of cost to the local government and the lot or road reserve where the tank is to be located will be identified on the plan of subdivision.

☐ ☐ ⦸	The strategic static water supply (tank or tanks) will be located no more than 10 minutes travel time from a subject site (at legal road speeds).
☑ ☐ ☐	The technical requirements (location, number of tanks, volumes, design, construction materials, pipes and fittings), as established by the Guidelines (A4.2, E4 and Schedule 2) and/or the relevant local government, can and will be complied with.

Supporting Assessment Details: Water supplies in accordance with the Department of Fire and Emergency Services (DFES) **Guidelines for Plantation Fire Protection** (as agreed upon by the Forest Industries Federation of Western Australia (FIFWA)), will be provided. This is in addition to any water supply that is required for drinking and other domestic purposes.

A minimum of 50,000L strategic water supply and hard stand, no further than 20 minutes turnaround from the area of coverage, is to be available for fire fighting operations.

Additional water tank/s are to be installed, (2 x 110,000 ltrs) dedicated for fire-fighting purposes including the required couplings, access, turn-around and hardstand area.

The tank strategic water point sites will be sign posted as identified water sources for fire fighting operations.

All above ground exposed pipes and fittings to be modified to non-combustible material.

An asset protection zone will be constructed around the tank/s devoid of vegetation (all grasses and combustible materials removed) to maintain the integrity throughout a bushfire. The required couplings, access, turn-around and hardstand area will be provided at this water point site.

Refer to information contained in Appendix D for the firefighting water supply specifications and technical requirements.

3 RESPONSIBILITIES FOR IMPLEMENTATION AND MANAGEMENT OF THE BUSHFIRE PROTECTION MEASURES

The landowner is responsible for the ongoing management of the plantation site. Future responsibilities for implementation and management of the bushfire protection measures may be established through mutual agreement and contracted obligations for the project duration, in line with the project activity timelines schedule. As such, on formal cessation of the project by either party, the responsibilities for the continued management of the bushfire protection measures detailed within the bushfire management plan for the site is the responsibility of the landowner.

3.1 Developer/Landowner Responsibilities – Prior to Operation

DEVELOPER/LANDOWNER RESPONSIBILITIES – PRIOR TO OPERATION	
No.	Implementation Actions
1	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. This will be done pursuant to Section 70A *Transfer of Land Act 1893* 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. This condition ensures that: 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; and 2. 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	Establish the Asset Protection Zone (APZ) around habitable buildings (and other structures as required) to satisfy: • The dimension requirements established by the assessed site specific conditions and the building's determined BAL rating, or the dimensions established by the annually issued local government Firebreak Notice – whichever is greater; and • The standards established by the Guidelines DPLH, 2021 v1.4, Schedule 1, or as varied by the local government through their annually issued Firebreak Notice. This is the responsibility of the developer/landowner before occupancy.
3	The subject lot is to be compliant with current version of the Shire of Gingin Firebreak Orders & Bushfire Information (Firebreak Notice) issued under s33 of the Bushfires Act 1954. This may include specifications for asset protection zones that differ from Schedule 1 in the Guidelines DPLH, 2021 v1.4, with the intent to better satisfy local conditions.
4	Construct the internal private driveways to comply with the technical requirements referenced in the BMP.
5	Install/Maintain the required firefighting static water supply to comply with the technical requirements stated in the BMP.
6	Implement the bushfire protection measures that have been established within this BMP as measures additional to those established by the acceptable solutions.

7	Indicate on plantation map and erect signage to show compartment (Cell) name/number, to be prominently displayed within the site that informs those persons onsite the Cell location in the event of a bushfire. This will include evacuation route information.
8	All actions contained within the 'Pre-Season Preparation Procedure' established by the Bushfire Management Plan, must be completed.
9	A BAL assessment report may be required for new building works to confirm determined ratings and will be required when ratings are indicative. BAL certificates will need to be issued to accompany building applications. The BMP may also establish, as an additional bushfire protection measure, that construction requirements to be applied will be those corresponding to a specified higher BAL rating. Compliance with the Building Code of Australia (Volumes 1 and 2 of the National Construction Code), will require certain bushfire resistant construction requirements be applied to residential buildings in bushfire prone areas (i.e., Class 1, 2 and 3 and associated Class 10a buildings and decks). Other classes of buildings may also be required to comply with this construction when established by the relevant authority or if identified as an additional bushfire protection measure within the BMP. The deemed to satisfy solutions that will meet the relevant bushfire performance requirements are found in AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended).

3.2 Landowner/Occupier Responsibilities – Ongoing Management

LANDOWNER/OCCUPIER – ONGOING MANAGEMENT	
No.	Management Actions
1	Maintain the Asset Protection Zone (APZ) around habitable buildings (and other structures as required) to satisfy: • The dimension requirements established by the assessed site specific conditions and the building's determined BAL rating, or the dimensions established by the annually issued local government Firebreak Notice – whichever is greater; and • The standards established by the Guidelines DPLH, 2021 v1.4, Schedule 1, or as varied by the local government through their annually issued Firebreak Notice.
2	Comply with the Local Government/s Fire Break and Fuel Hazard Reduction Notice issued under s33 of the Bush Fires Act 1954. Check the notice annually for any changes.
3	Maintain vehicular access routes within the lot to comply with the technical requirements referenced in the BMP and the relevant local government annual firebreak notice.
4	Maintain the signposted 'Cell' indicators.
5	Maintain the static firefighting water supply tanks and associated pipes/fittings/pump and vehicle hardstand in good working condition.
6	Ensure that builders engaged to construct dwellings/additions and/or other relevant structures on the lot, are aware of the existence of this approved Bushfire Management Plan (BMP). The plan identifies that the development site is within a designated bushfire prone area and states the indicative (or determined) BAL rating(s) that may (or will) be applied to buildings/structures. A BAL assessment report may be required to confirm determined ratings and will be required when ratings are indicative. BAL certificates will need to be issued to accompany building applications. The BMP may also establish, as an additional bushfire protection measure, that construction requirements to be applied will be those corresponding to a specified higher BAL rating. Compliance with the Building Code of Australia (Volumes 1 and 2 of the National Construction Code), will require certain bushfire resistant construction requirements be applied to residential buildings in bushfire prone areas (i.e., Class 1, 2 and 3 and associated Class 10a buildings and decks). Other classes of buildings may also be required to comply with this construction when established by the relevant authority or if identified as an additional bushfire protection measure within the BMP. The deemed to satisfy solutions that will meet the relevant bushfire performance requirements are found in AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended).
7	Ensure all future buildings the landowner has responsibility for, are designed and constructed in full compliance with: • The bushfire resistant construction requirements of the Building Code of Australia (Volumes 1 and 2 of the National Construction Code), as established by the Building Regulations 2012 (WA Building Act 2011); and Any additional bushfire protection measures this Bushfire Management Plan has established are to be implemented.

8	Maintain the bushfire protection measures that have been established within this BMP as measures additional to those established by the acceptable solutions.
9	Annually review the Bushfire Management Plan and complete all actions at the appropriate times of the year.
10	The bushfire specific content of the operation's site emergency plan must be reviewed annually, relevant information updated and ensure all bushfire related preparation procedures are carried out.
11	Implement the bushfire protection measures that have been established within this BMP as strategies additional to those established by the acceptable solutions: 1. Seasonal Prescribed Burning Planning; 2. Seasonal Hazardous Fuel Management; 3. Seasonal Pre Incident Preparedness.

3.3 Local Government - Ongoing Management

LOCAL GOVERNMENT – ONGOING MANAGEMENT	
No.	Management Actions
1	Monitor landowner compliance with the annual Local Government Fire Break & Fuel Hazard Reduction Notice and with any bushfire protection measures that are: • Established by this BMP; • Are required to be maintained by the landowner/occupier; and • Are relevant to local government operations.

APPENDIX A: PLANTATION SPECIES

Mixed species composition (Various Mallee Species) for long duration non-harvesting carbon stores requires the long term management of fuel loads in these plantings and may be limited due to contract restrictions which needs to be factored. Most plantations have a high grassy fuel understory for the first few years after planting which will require management strategies to be implemented. It is assumed that plantation areas may be managed to some degree (through fuel load reduction) in a reduced fuel condition in the understory with a predominance of emergent grasses, which will support fragmented wind-driven grassland fire behaviour in the early phases of plant establishment. The vegetation classifications given below assume insufficient management for classification as Low Threat vegetation, and thus classification follows AS3959-2018. Species with mature heights of maximally ~6m or less, or where heights of >6m are rare, are considered shrubs, and classified to either Class C Shrubland or Class D Scrub depending on predicted mature heights. Species with mature heights are commonly >6m are considered as trees, Class A Forest (AS3959-2018).

Planting Management Guide – Canopy >2m tall and cover up to 20% at maturity over the planting area

Lifecycle situation	Fuel Description	Bushfire Hazard
e.g. Young plantation up to 2 years after planting	Grassy fuels dominate. Fuel load: <5 tonnes per hectare. Vulnerable to grass fires. Grass and weed control required.	Low Hazard
e.g. Developing plantation 3 to 6 years after planting	Grassy fuel cover. Fuel rates depend on site location and will be a mixture of grass and some leaf litter and fine limbs. Fuel load: <5 tonnes per hectare.	Low Hazard
e.g. Plantation 6 to 10 years after planting	Continuous fuel cover, primarily of grass and leaf litter. Leaf litter will be around 2 to 3 tonnes per hectare. Grass fuels will be around 5 tonnes per hectare unless harvested/slashed.	Low Hazard
	Planting format will result in canopy closure within plantation.	
	Continuous fuel cover, primarily of grass and leaf litter. Leaf litter will be greater than 3 tonnes per hectare. Grass fuels will be around 5 tonnes per hectare unless harvested/slashed. When combined available grass fuels and leaf litter exceed 10 tonnes per hectare, hazard reduction work must be undertaken. It is acceptable for between 20 to 40 percent of the area to be > 8t/ha in any year, but the fuel load must be < 5t/ha in the 300 metres adjacent to any external compartment boundary.	
	Planting format will permit canopy closure across the site. When this occurs the fuel accumulation rate will increase.	
e.g. Plantation greater than 10 years after planting		Moderate Hazard unless fuel loads are reduced

Additional Considerations:

- Develop a planned burning program. Plan for low intensity burns, during autumn or late spring, that create a mosaic of fuels and will not scorch canopy or kill trees so they can regenerate.
- Implement good hygiene measures to minimise risk of dieback spread during activities.
- Plan for post-fire weed control to assist regeneration after fire.
- If you are undertaking a planned burn for bushfire mitigation purposes then you are able to undertake burning at intervals which will be influenced by fuel loads. However, where possible and without compromising any bushfire mitigation requirements, it is better to extend the period between burns to assist in maintaining vegetation health.
- The planned fire regime should be developed to consider the frequency, season, intensity and pattern characteristics of fire. These can be influenced by decisions including how, when and under which conditions fires are lit.
- Fire exclusion can also be classed as a fire regime as plant and animal compositions will continue to change in the absence of fire.

Plantation Hazard Separation and Asset Protection Zone:

1. The Shire of Gingin standard requirement for an asset protection zone (APZ) dimension around a building or an asset of value is 20m.

2. Guidelines for Plantation Fire Protection require an asset protection zone (APZ) between the plantation and an existing or approved habitable building must be a minimum of 100 metres, unless the building has been constructed to an approved higher standard.

3. Guidelines for Plantation Fire Protection require an asset protection zone (APZ) between the plantation and an existing or approved non- habitable structure (i.e. sheds and enclosed storage areas) must be a minimum of 50 metres.

The above Guidelines for Plantation Fire Protection requirements for an APZ comprise the following (Refer Figures 3.2):

PLANTATION AREA Hazard Separation Zone/Low Fuel Zone <8t/ha + Firebreak 6m + APZ 20m < 2t/ha **HABITABLE BUILDING**

Total 100m

A1.2: Summary Site Data Applied to Construction of the BAL Map(s)

Table A1.2: Summary of applied calculation input variables applied to determining the site specific separation distances corresponding to each bushfire attack level.

SUMMARY OF CALCULATION INPUT VARIABLES (INCLUDING SITE DATA) APPLIED TO THE DETERMINATION OF SEPARATION DISTANCES CORRESPONDING TO BUSHFIRE ATTACK LEVELS [1]												
Applied BAL Determination Method		METHOD 1 - SIMPLIFIED PROCEDURE (AS 3959:2018 CLAUSE 2.2)										
Calculation Variables Corresponding to BAL Determination Method												
Methods 1 and 2		Method 1	Method 2									
Vegetation Classification		FDI	Effective Slope		Site Slope	FFDI or GFDI	Flame Temp.	Elevation of Receiver	Flame Width	Fireline Intensity	Flame Length	Modified View Factor
			Applied Range	Measured								
Area	Class		degree range	degrees	degrees		K	metres	metres	kW/m	metres	% Reduction
1	(D) Scrub	80	Upslope or flat 0	0								
1	(D) Scrub		Downslope >0-5	1.5								
2	(G) Grassland		Upslope or flat 0	0								
2	(G) Grassland		Downslope >0-5	1.5								
3	(D) Scrub		Upslope or flat 0	0								
3	(D) Scrub		Downslope >0-5	1.5								

[1] All data and information supporting the determination of the classifications and values stated in this table and any associated justification, is presented in Appendix A.

Where the values are stated as 'default' these are either the values stated in AS 3959:2018, Table B1 or the values calculated as intermediate or final outputs through application of the equations of the AS 3959:2018 BAL determination methodology. They are not values derived by the assessor.

Measured slope across the site average 1.5 degrees – undulating land <5 degrees slope

Table A1.2: Summary of applied calculation input variables applied to determining the site specific separation distances corresponding to each bushfire attack level.

SUMMARY OF CALCULATION INPUT VARIABLES (INCLUDING SITE DATA) APPLIED TO THE DETERMINATION OF SEPARATION DISTANCES CORRESPONDING TO BUSHFIRE ATTACK LEVELS [1]												
Applied BAL Determination Method		METHOD 1 - SIMPLIFIED PROCEDURE (AS 3959:2018 CLAUSE 2.2)										
Calculation Variables Corresponding to BAL Determination Method												
Methods 1 and 2		Method 1	Method 2									
Vegetation Classification		FDI	Effective Slope		Site Slope	FFDI or GFDI	Flame Temp.	Elevation of Receiver	Flame Width	Fireline Intensity	Flame Length	Modified View Factor
			Applied Range	Measured								
Area	Class		degree range	degrees	degrees		K	metres	metres	kW/m	metres	% Reduction
4	(C) Shrubland	80	Upslope or flat 0	0								
4	(C) Shrubland		Downslope >0-5	1.5								
5	(B) Woodland		Upslope or flat 0	0								
5	(B) Woodland		Downslope >0-5	1.5								
6	(A) Forest		Upslope or flat 0	0								
6	(A) Forest		Downslope >0-5	1.5								

[1] All data and information supporting the determination of the classifications and values stated in this table and any associated justification, is presented in Appendix A.

Where the values are stated as 'default' these are either the values stated in AS 3959:2018, Table B1 or the values calculated as intermediate or final outputs through application of the equations of the AS 3959:2018 BAL determination methodology. They are not values derived by the assessor.

Measured slope across the site average 1.5 degrees – undulating land <5 degrees slope

Table A1.3: Vegetation separation distances corresponding to radiant heat levels and illustrated as BAL contours in Figure 3.2.

THE CALCULATED VEGETATION SEPARATION DISTANCES CORRESPONDING TO THE STATED LEVEL OF RADIANT HEAT [1]									
Vegetation Classification		Separation Distances Corresponding to Stated Level of Radiant Heat (metres)							
		Bushfire Attack Level						Maximum Radiant Heat Flux	
Area	Class	BAL-FZ	BAL-40	BAL-29	BAL-19	BAL12.5	BAL-LOW	10 kW/m^2	2 kW/m^2
1	(D) Scrub (Flat or Upslope)	<10	10-<13	13-<19	19-<17	17-<100	>100	-	-
1	(D) Scrub (Downslope >0-5)	<11	11-<15	15-<22	22-<31	31-<100	>100		
2	(G) Grassland (Flat or Upslope)	<6	6-<8	8-<12	12-<17	17-<50	>50	-	-
2	(G) Grassland (Downslope >0-5)	<7	7-<9	9-<14	14-<20	20-<50	>50		
3	(D) Scrub (Flat or Upslope)	<10	10-<13	13-<19	19-<17	17-<100	>100		
3	(D) Scrub (Downslope >0-5)	<11	11-<15	15-<22	22-<31	31-<100	>100		
4	(C) Shrubland (Flat or Upslope)	<7	7-<9	9-<13	13-<19	19-<100	>100		
4	(C) Shrubland (Downslope >0-5)	<7	7-<10	10-<15	15-<	22-<100	>100		
5	(B) Woodland (Flat or Upslope)	<10	10-<14	14-<20	20-<29	29-<100	>100		
5	(B) Woodland (Downslope >0-5)	<13	13-<17	17-<25	25-<35	35-<100	>100		
6	(A) Forest (Flat or Upslope)	<16	16-<21	21-<31	31-<42	42-<100	>100		
6	(A) Forest (Downslope >0-5)	<20	20-<27	27-<37	37-<50	50-<100	>100		
[1] All calculation input variables are presented in Table A1.2									

APPENDIX B: PLANTATION BUSHFIRE PROTECTION SPECIFICATIONS

Install and maintain external perimeter and internal firebreaks that form compartment cells and engage in hazard reduction measures that reduce fuel loads so as to protect neighbouring communities and essential infrastructure, including any additional requirements determined by the Local Government.

Compartment Size (Cell)	Up to ~100 hectares each 'Cell' based on local conditions (sandy soils, moderate rainfall, existing remnant vegetation, plantation species (scrub) and density of the proposed planting (500 stems per hectare).		
Firebreaks & Access	A minimum 10 metre to 20 metre bare earth immediately inside all external boundaries of the plantation areas. (The 20 metre perimeter firebreak will comprise a low fuel zone/low threat buffer (no planting) incorporating a mineral earth firebreak of not less than 10 metres where soil erosion issues are problematic, up to 20 metres in width where soil conditions are suitable for mineral earth firebreak construction. A minimum width of 6 metres of bare earth for all internal firebreaks for compartments (Cells) not larger than ~100 hectares. (Internal firebreaks will be 6 metre mineral earth with some areas having up to 14 metre additional low fuel zone/low threat buffer.) Maintained in a trafficable condition for emergency vehicles (fire appliances) with a vertical axis clearance of 4 metres for all firebreaks. Firebreaks must be maintained in line with the annual firebreak notice developed by the Local Government. Firebreaks and Access to meet the technical requirements as detailed in Appendix F		
Water Supplies	Maintain a strategic water supply of minimum 50,000ltrs (tank/s) dedicated to fire fighting on site). Water sources are required to be positioned to provide a maximum 20 minute refill turnaround from anywhere within the plantation. The water source point must have a hardstand area for heavy trucks to park on whilst drawing water. Suitable metal fittings must be available on the water tank for fire appliance connection.		
Dwellings and assets of value	Habitable Buildings:100 metre hazard separation zone incorporating 6 metre firebreak. Non-Habitable Buildings/Sheds: 50 metre hazard separation zone incorporating 6 metre firebreak.		
Western Power – Both sides from centreline	Power – Single pole support up to 33kV	Horizontal Clearance 7 metres	Vertical Clearance 3 metres around lines
	Power – Double pole support up to 66 - 132kV	Horizontal Clearance 7 metres	Vertical Clearance 4 metres around lines
	Power – Steel pylon support up to 330kV	Contact service provider	Vertical Clearance Contact service provider
Telstra (No heavy machinery to turn around on lines)	Telephone (Copper)	5 metres both sides or 6 metres total if accurately line marked	
	Telephone (Fibre optic)	10 metres both sides	
Water/sewer pipelines (Water Corporation)	6 metres		
Gas pipeline	30 metres easement plus additional setbacks as required by the WAPC Planning Bulletin 87 and the Department of Planning Land Use Guidelines in pipeline corridors or subsequent versions of these documents.		

*All clearance/separation distances may be subject to changes and must be confirmed with the relevant agency.

APPENDIX C: RESPONSIBLE PERSONS ONSITE

RESPONSIBILITIES

The landowner is responsible for the ongoing management of the plantation site. Future responsibilities for implementation and management of the bushfire protection measures may be established through mutual agreement and contracted obligations for the project duration, in line with the project activity timelines schedule. As such, on formal cessation of the project by either party, the responsibilities for the continued management of the bushfire protection measures detailed within the bushfire management plan for the site is the responsibility of the landowner.

A property layout map is to be provided to the local government and local brigades containing fire equipment locations and contacts. These are updated annually and submitted at the commencement of bushfire season. Copies of this information are placed in fire information tubes at key entrances the property (plantation site).

CONTACTS:

This contact list must be updated regularly with any changes of responsibility

WOODSIDE AUSTRALIA PROJECT MANAGEMENT

Gareth Parry

Australian Business Development
and Land Asset Manager | Carbon Business
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Mila Yellagonga
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Perth WA 6000
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WOODSIDE AUSTRALIA SITE MANAGEMENT

Murray Gmeiner

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APPENDIX D: EMERGENCY CONTACTS & INFORMATION TO MONITOR

EMERGENCY CONTACTS

EMERGENCY SERVICES

AGENCY/AUTHORITY	SERVICES	CONTACT
Department of Fire and Emergency Services / Police / Ambulance	Will respond to life threatening emergencies. Use to report a fire.	**Phone call: triple zero '000'** **Phone app: EMERGENCY PLUS**
State Emergency Service (SES)	Emergency assistance - securing your property, rescuing persons.	13 2500

FACILITY/PREMISES PERSONNEL WITH EMERGENCY RESPONSIBILITIES

EMERGENCY ROLE	POSITION HELD AT FACILITY/PREMISES	LOCATION	CONTACT
A property layout map is to be provided to the local government and local brigades containing fire equipment locations and contacts. These are updated annually and submitted at the commencement of bushfire season. Copies of this information are placed in fire information tubes at key entrances the property (plantation site). (Refer Appendix C)			

UTILITIES / MEDICAL / ASSISTANCE

AGENCY/ORGANISATION	SERVICES	CONTACT
Lancelin Medical Centre	Medical services	(08) 9655 2202
Gingin Medical Centre	Medical Service	(08) 9575 2300
Western Power	Response to electricity supply outages and damage.	13 1351
Crisis Care	Crisis accommodation	1800 199 008
Australian Red Cross	Humanitarian assistance	1800 733 276 **Website:** redcross.org.au/emergencies
Salvation Army	Social services care	13 72 58 (13 SALVOS) **Website:** salvationarmy.org.au/need-help/disasters-and-emergencies/

SHIRE OF GINGIN BUSH FIRE CONTACTS

CHIEF BUSH FIRE CONTROL OFFICER / COMMUNITY EMERGENCY SERVICES MANAGER		
Phillip Barret		0408 943 576
DEPUTY CHIEF BUSH FIRE CONTROL OFFICERS		
Wayne Fewster (Beermullah)		0428 574 017
Murray Hyne (Gingin Town Site)	08 9575 2250	0407 380 708
James Morton (Gingin West/Neergabby/Woodridge)		0427 141 078
Gary Barret (Ledge Point)	08 9655 1456	0419 961 048
BUSH FIRE CONTROL OFFICERS		
Brad Alp (Beermullah)		0427 476 529
David Roe (Beermullah)		0427 754 059
Peter Crowe (Gingin Area)		0427 385 287
Craig Hyne (Gingin Area)		0448 825 833
Tom Kusters (Lancelin/Seaview Park)		0438 943 156
Brendon Ladner (Seabird/Guilderton/Sovereign Hill/Redfield Park/Ledge Point)		0410 540 190
Rod Croucher (Ocean Farm)		0427 085 499
Mike Regan (Ocean Farm)		0400 852 477
Allister Butcher (Red Gully)		0409 591 244
After Hours (Shire Rangers)		08 9575 5140

To be updated annually

INFORMATION TO MONITOR AND INFORM DECISION MAKING

IMPORTANT - AWARENESS OF YOUR SURROUNDINGS

Know the types of vegetation that grow on surrounding land. Be aware of the potential behaviour of a fire in this vegetation and the threats it can present under different conditions.

Relevant information is included in **Appendix 5**.

Knowledge and current environment awareness is a valuable source of information that will assist with decision making. Stay alert to current and immediate past weather conditions (hot/dry presenting the worst conditions). Lookout for any evidence of fire (smoke) within your surrounding landscape, for as far as you can see. Be aware of the current and forecast wind direction as any fire will be likely to spread in the direction to which the wind is blowing.

SOURCE	INFORMATION	CONTACT
Emergency WA	Alerts & Warnings. Incidents, fire danger ratings, total fire bans, prescribed burns, preparation, and recovery information.	**Website:** emergency.wa.gov.au
Department of Fire & Emergency Services	General public emergency information.	**Information Line:** 13 3337 (13 DFES) dfes_wa dfeswa **Website (during a bushfire):** dfes.wa.gov.au/hazard-information/bushfire/during **Website (recovering from a bushfire):** dfes.wa.gov.au/hazard-information/bushfire/recovery
Local Radio	Bushfire alerts, warnings, and information.	**Local Radio Stations:** ABC (AM/digital) or 6PR (882) **Website:** abc.net.au/radio/stations
Emergency Alert on Phone	Voice messages (landline) and text messages (mobile) can be sent within a defined area under an immediate threat.	An automated government telephone warning system.
Bushfire.IO	Map based bushfire warnings, bushfire incidents and wind forecasts. Good visual tool run privately – crosscheck with other sources.	**Website:** bushfire.io

Bureau of Meteorology	Current / forecast fire weather and fire danger ratings.	**Website:** bom.gov.au/wa/index.shtml
Parks and Wildlife Service	Bushfire alerts and warnings, prescribed burns in national parks.	**Website:** dpaw.wa.gov.au
Main Roads WA	Incidents, issues and roadworks.	13 8138 **Website:** travelmap.mainroads.wa.gov.au/Home/Map

Understanding Certain Fire Behaviours: The information below will assist decision making by making persons aware of potential limitations to the time available to conduct the designated Primary Procedure. This is important information to be aware of - particularly in the absence of any Emergency Warnings. If evacuating, it must be conducted early to be safe. Leaving late is a high risk action as the likelihood of the facility/premises or the evacuation route being impacted by fire increases significantly. Being on roads when a bushfire is close is a high risk action.

DAILY FORECAST FIRE DANGER RATING	BUSHFIRE		GRASSFIRE
	Potential Forward Rate of Spread	Potential Spotting Ahead Distance	Potential Forward Rate of Spread
Catastrophic	>2km/hr can be expected, possibly	20-30 km	>8km/hr can be expected, possibly
Extreme	0.7km/hr to 3km/hr	12 km	5km/hr to 16km/hr
High	0.3km/hr to 1km/hr	4 km	2.5km/hr to 10km/hr
Moderate	60 to 600m/hr	2 km	0.5km/hr to 6km/hr
No rating	20 to 110m/hr	<150 m	<1.3km/hr

Slope: Fire in vegetation will travel quicker up a slope. For every 10 degrees, the forward rate of spread will double.
Vegetation Spotting Potential: Bark fuels are the greatest contributor. Fine fibrous bark = massive ember quantity and short distance spotting; ribbon/candle bark = substantial quantities of spotting at distances greater than 2km and shorter distances; smooth/platy/papery/course fibre barks = limited quantities of short distance spotting.

APPENDIX E: ONSITE VEGETATION MANAGEMENT - THE APZ

THE ASSET PROTECTION ZONE (APZ)

This is an area surrounding a habitable building containing either no fire fuels and/or low threat fire fuels that are maintained in a minimal fuel condition. The primary objectives include:

- To ensure the building is sufficiently separated from the bushfire hazard to limit the impact of its direct attack mechanisms. That is, the dimensions of the APZ will, for most site scenarios, remove the potential for direct flame contact on the building, reduce the level of radiant heat to which the building is exposed and ensure some reduction in the level of ember attack (with the level of reduction being dependent on the vegetation types of present);
- To ensure any vegetation retained within the APZ presents low threat levels and prevents surface fire spreading to the building;
- To ensure other combustible materials that can result in consequential fire (typically ignited by embers) within both the APZ and parts of the building, are eliminated, minimised and/or appropriately located or protected. The explanatory notes in the Guidelines provide some guidance for achieving this objective and other sources are available. This is a primary cause of building loss in past bushfire events; and
- Provide a defendable space for firefighting activities.

E1: The Dimensions and Location of the APZ to be Established and Maintained

THE APZ DIMENSIONS

The determined BAL rating of the relevant building/structure will establish the corresponding bushfire construction requirements that are to apply. The minimum required APZ dimensions must be those that will ensure the retention of the determined BAL rating. This ensures that the potential radiant heat exposure of the building/structure will be limited to the level that the applied construction requirements are designed to resist.

The size of the APZ that is to be established and maintained surrounding the subject building/structure, will be the largest that is defined by either:

- The dimensions corresponding to the determined BAL rating stated on the BAL Certificate and which accounts for the specific site conditions; or
- The dimensions established by the relevant local government's annual firebreak notice as can be issued under s33 of the Bushfires Act 1954. This may state a required single minimum dimension for an APZ surrounding a building, or a dimension that varies with slope of the land under the different areas of bushfire prone vegetation that impact the building. Check the notice annually for revisions to requirements.

THE APZ LOCATION

The APZ should be contained solely within the boundaries of the lot, except in instances where the neighbouring lot(s) or adjacent public land is non-vegetated or will be maintained to a low-fuel state in perpetuity, and this can be justified. Where possible, planning for siting and design of development should incorporate elements that include non-vegetated areas (e.g., roads / parking / drainage / water body) 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 for each lot or to additionally increase separation distances to reduce exposure further.

E2: The Standards for the APZ as Established by the Guidelines (DPLH, v1.4)

Within the Guidelines (source: https://www.wa.gov.au/government/document-collections/state-planning-policy-37-planning-bushfire-prone-areas), the management Standards are established by:

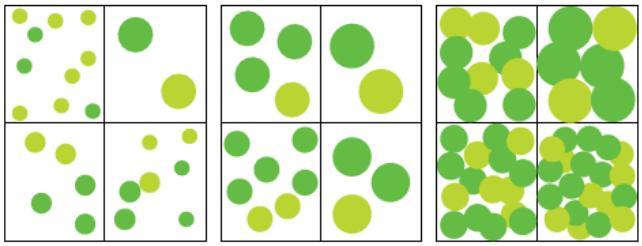
- Schedule 1: Standards for Asset Protection Zones (see extract below) established by the Guidelines; and
- The associated explanatory notes (Guidelines E2) that address (a) managing an asset protection zone (APZ) to a low threat state (b) landscaping and design of an asset protection zone and (c) plant flammability.

ELEMENT 2: SITING AND DESIGN OF DEVELOPMENT

SCHEDULE 1: STANDARDS FOR ASSET PROTECTION ZONES

OBJECT	REQUIREMENT
Fences within the APZ	• Should be constructed from non-combustible materials (for example, iron, brick, limestone, metal post and wire, or bushfire-resisting timber referenced in Appendix F of AS 3959).
Fine fuel load (Combustible, dead vegetation matter <6 millimetres in thickness)	• Should be managed and removed on a regular basis to maintain a low threat state. • Should be maintained at <2 tonnes per hectare (on average). • Mulches should be non-combustible such as stone, gravel or crushed mineral earth or wood mulch >6 millimetres in thickness.
Trees* (>6 metres in height)	• Trunks at maturity should be a minimum distance of six metres from all elevations of the building. • Branches at maturity should not touch or overhang a building or powerline. • Lower branches and loose bark should be removed to a height of two metres above the ground and/or surface vegetation. • Canopy cover within the APZ should be <15 per cent of the total APZ area. • Tree canopies at maturity should be at least five metres apart to avoid forming a continuous canopy. Stands of existing mature trees with interlocking canopies may be treated as an individual canopy provided that the total canopy cover within the APZ will not exceed 15 per cent and are not connected to the tree canopy outside the APZ.

Figure 19: Tree canopy cover – ranging from 15 to 70 per cent at maturity



Shrub* and scrub* (0.5 metres to six metres in height). Shrub and scrub >6 metres in height are to be treated as trees.	• Should not be located under trees or within three metres of buildings. • Should not be planted in clumps >5 square metres in area. • Clumps should be separated from each other and any exposed window or door by at least 10 metres.
Ground covers* (<0.5 metres in height. Ground covers >0.5 metres in height are to be treated as shrubs)	• Can be planted under trees but must be maintained to remove dead plant material, as prescribed in 'Fine fuel load' above. • Can be located within two metres of a structure, but three metres from windows or doors if >100 millimetres in height.
Grass	• Grass should be maintained at a height of 100 millimetres or less, at all times. • Wherever possible, perennial grasses should be used and well-hydrated with regular application of wetting agents and efficient irrigation.
Defendable space	• Within three metres of each wall or supporting post of a habitable building, the area is kept free from vegetation, but can include ground covers, grass and non-combustible mulches as prescribed above.
LP Gas Cylinders	• Should be located on the side of a building furthest from the likely direction of a bushfire or on the side of a building where surrounding classified vegetation is upslope, at least one metre from vulnerable parts of a building. • The pressure relief valve should point away from the house. • No flammable material within six metres from the front of the valve. • Must sit on a firm, level and non-combustible base and be secured to a solid structure.

** Plant flammability, landscaping design and maintenance should be considered – refer to explanatory notes*

E3: The Standards for the APZ as Established by the Local Government

Refer to the Firebreak Notice issued annually (under s33 of the Bushfires Act 1954) by the relevant local government. It may state Standards that vary from those established by the Guidelines and that have been endorsed by the WAPC and DFES as per Section 4.5.3 of the Guidelines.

A copy of the relevant annual notice is not included here as they are subject to being reviewed and modified prior to issuing each year. Refer to ratepayers notices and/or the local government's website for the current version.

E4: Maintaining Low Threat and Non-Vegetated Areas Excluded from Classification

AS 3959 establishes the methodology for determining a bushfire attack level (BAL). The methodology includes the classification of the subject site's surrounding vegetation according to their 'type' and the application of the corresponding bushfire behaviour models to determine the BAL. Certain vegetation can be considered as low threat and excluded from classification. Where this has occurred in assessing the site, the extract from AS3959:2018 below state the requirements (including the size of the vegetation area if relevant to the assessment) for maintenance of those areas of land.

2.2.3.2 *Exclusions—Low threat vegetation and non-vegetated areas*

The following vegetation shall be excluded from a BAL assessment:

(a) Vegetation of any type that is more than 100 m from the site.

(b) Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified vegetation.

(c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other or of other areas of vegetation being classified vegetation.

(d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m 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, 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.

NOTES:

1 Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100 mm).

2 A windbreak is considered a single row of trees used as a screen or to reduce the effect of wind on the leeward side of the trees.

APPENDIX F: LANDSCAPING DESIGN & CONSTRUCTION PRINCIPLES TO APPLY

Where initial or renovation landscaping of grounds surrounding buildings and assets of value is being conducted, apply the directions and principles of the following measures to the greatest extent possible.

For additional guidance, refer to:

- The *Guidelines for Planning in Bushfire Prone Areas within the Explanatory Notes for Element 2 of the Bushfire Protection Criteria and Schedule 1: Standards for Asset Protection Zones (WAPC 2021); and*
- The DFES *'Bushfire Preparation Toolkit'* publication. Website: publications.dfes.wa.gov.au/?hazard=Bushfire

☐ **Use of Non-Vegetated Areas:**

Reduce the exposure of the facility/premises to the direct and indirect threats of bushfire by incorporating low threat uses of land adjoining the facility/premises and/or the bushfire hazard. These uses create robust and easier managed asset protection zones and include:

- Non-vegetated areas e.g. footpaths, paved areas, roads, driveways, parking, drainage.
- Formally managed areas of vegetation (public open space and other recreation areas), including irrigated areas; and
- Services installed in a common section of non-vegetated land.

☐ **Landscaping – Non-Combustible Construction:** Ensure non-combustible materials are used for fencing and any other landscaping construction, including retaining walls.

☐ **Landscaping – Tree and Plant Species Selection**

Utilise trees and plants with characteristics that are more resistant to burning. Refer to *Guidelines for Planning in Bushfire Prone Areas, Appendix 4 'Explanatory Notes E2: Plant Flammability' (WAPC 2021) for initial guidance.*

Avoid planting trees with ribbon or stringy barks (ember/firebrand production). Preference for smooth bark.

☐ **Landscaping – Tree and Plant Separation from Buildings/Assets of Value (Location):**

Trees (greater than 6 metres in height: Minimise the potential for tree strike damage (falling or blown) to the buildings/assets of value (allowing flame, radiant heat and ember entry to internal spaces), and debris accumulation on, in and around the facility/premise. Principles to apply are:

- Ideally trees will be separated from buildings/structures by a distance of at least 1.5 times the height of the tallest tree;
- As a minimum, trunks at maturity should be at least 6 metres from all elevations of the building, branches at maturity should not touch or overhang a building or powerlines. Mature tree canopies should be separated at least 5m with total canopy cover not exceeding 15% and not connected to tree canopy outside the APZ;
- Species of trees that produce significant quantities of debris (fine fuels) during the bushfire season should be located a sufficient distance away from vulnerable exposed elements to ensure debris cannot drop and accumulate within at least 4m of buildings/structures or be likely to be relocated by wind to closer than 4m to buildings / structures.

Shrubs and scrub (0.5 metres to 6 metres in height):

- Should not be located under trees or within 3 metres of buildings;
- Should not be planted in clumps greater than 5m^2 in area;
- Clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres (unless they can be classified as low flammability plants); and
- Shrubs greater than 6 metres in height are to be treated as trees.

Ground covers (less than 0.5 metres in height):

- Can be planted under trees but and no closer than two metres from a structure but 3 metres from doors or windows if greater than 100 mm in height; and
- Ground covers greater than 0.5 metres in height are to be treated as shrubs.

Grass: Where possible utilise irrigated perennial species.

Mulches should be non-combustible e.g., stone, gravel and crushed rock. Where wood mulch is used it should be greater than 6mm in thickness.

☐ **Separation Between the Buildings/Assets of Value and the Consequential Fire Fuels of Stored Flammable Products (Fuels / Other Hazardous Materials):**

If applicable, establish sufficient separation distance between the consequential fire fuels and the facility/premises. The required separation distance will be dependent on the fuel and storage type and will need to be determined.

☐ **Separation Between the Buildings/Assets of Value and the Consequential Fire Fuels of Stored and Constructed Combustible Items:**

These consequential fire fuels include:

- Stored Combustible Items - Heavy Fuels (greater than 6mm diameter) e.g. building materials, packaging materials, firewood, branches, sporting/playground equipment, outdoor furniture, garbage bins etc:
- Stored Combustible Items – Large Heavy Fuels e.g. vehicles, caravans, boats, trailers and large quantities of dead vegetation materials stored as part of site use.
- Constructed Combustible Items – Heavy Fuels e.g. landscaping structures including fences, screens, walls, plastic water tanks.
- Constructed Combustible Items – Large Heavy Fuels e.g. adjacent buildings/structures including houses, sheds, garages, carports. (Note: If the adjacent structure is constructed to BAL-29 requirements or greater and can implement a significant number of additional bushfire protection measures associated with reducing exposure and vulnerability, these minimum separation distances could be reduced by 30%).

Apply the rule of thumb "assume flames produced from a consequential fire source will be twice as high as the object itself … where the consequential fire source is a structure, then the maximum eave height is a reasonable measure of maximum height".

Apply the following separation distances from the subject building/structure as a multiple of the height of the consequential fire source and dependent on the bushfire construction standard applied to the building/structure:

- At least six times the height when the facility/premises construction incorporates design and materials that is only intended to resist low levels of radiant heat up to 12.5 kW/m^2 and no flame contact (BAL-12.5);
- Between 4 and 6 six times the height when the facility/premises construction incorporates design and materials intended to resist radiant heat up to 29 kW/m^2 and no flame contact (BAL-29).
- Between 2 and 4 times the height when the facility/premises construction incorporates design and materials intended to resist up to 40kW/m^2 and potential flame contact (BAL-40).
- Less than 2 times the height when the facility/premises construction incorporates design and materials intended to resist extreme levels of radiant heat and flame contact (BAL-FZ).
- Zero separation distance is required if the facility/premises is separated by a non-combustible FRL 60/60/60 rated wall, or the potential consequential fire source is fully enclosed by the facility/premises.

☐ **Constructed Barriers to Shield Buildings/Assets of Value from Bushfire:** Where applicable, install walls, fences and/or landforms to shield the buildings/Assets of Value (or any identified consequential fire fuels – refer to previous item) from direct and indirect bushfire attack mechanisms and reduce the potential impact of these threats.

These barriers should be constructed using appropriate fire resistant / non-combustible construction materials (e.g. masonry, steel, earthworks). These are to withstand the impact of direct bushfire attack mechanisms for the required period.

- **Constructed Barriers to Shield Buildings/Assets of Value from Consequential Fire:** Applicable to all identified consequential fire fuel sources. Install a non-combustible barrier (including complete enclosure when appropriate), of required robustness, that will reduce the exposure of the buildings/assets of value to the threats of consequential fire.

- **Planted Vegetation Barrier to Shield Buildings/Assets of Value:** Use appropriate species (lower flammability) of hedges and trees strategically to reduce the buildings/assets of value exposure to radiant heat, to filter/trap embers and firebrands, and to lower wind speeds (prevailing synoptic and/or fire driven).

- **Shield Non-Structural Essential Elements:** These are vulnerable elements essential to the continued operation of the buildings/assets of value which are potentially exposed to the fire attack mechanisms of both bushfire and consequential fire. They include electricity cabling and water plumbing and also applies to any installed firefighting equipment / water storage.

  When the use of fire rated materials to the degree necessary is not possible or practical, the application of non-combustible shielding can be applied to reduce exposure to the bushfire threats. Shielding includes underground installation.

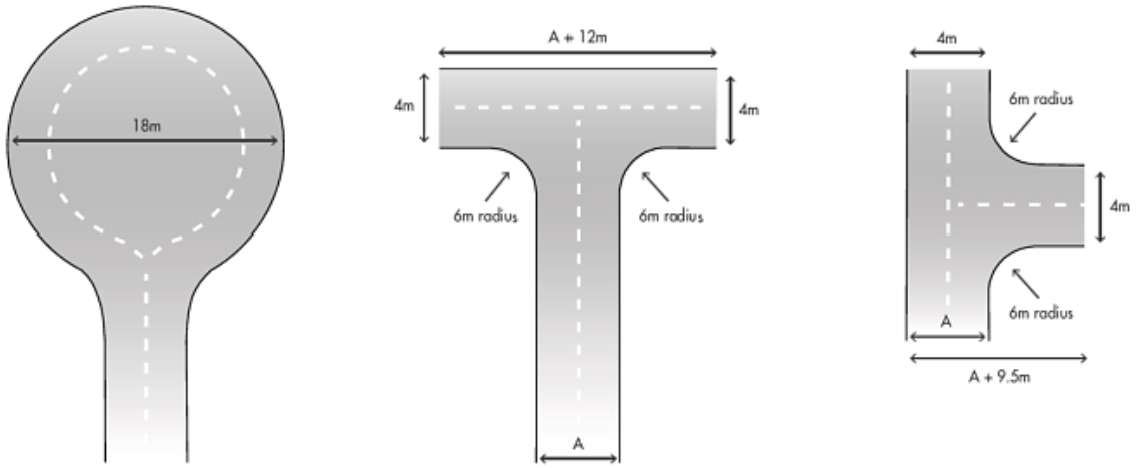
APPENDIX G: TECHNICAL REQUIREMENTS FOR VEHICULAR ACCESS

The design/layout requirements for access are established by the acceptable solutions of the Guidelines (DPLH, 2021 v1.4) Element 3 and vary dependent on the access component, the land use and the presence of 'vulnerable' persons. Consequently, the best reference source are the Guidelines. The technical requirements that are fixed for all components and uses are presented in this appendix.

GUIDELINES TABLE 6, EXPLANATORY NOTES E3.3 & E3.6 AND RELEVANT ACCEPTABLE SOLUTIONS

Technical Component	Vehicular Access Types / Components			
	Public Roads	Emergency Access Way [1]	Fire Service Access Route [1]	Battle-axe and Private Driveways [2]
Minimum trafficable surface (m)	In accordance with A3.1	6	6	4
Minimum Horizontal clearance (m)	N/A	6	6	6
Minimum Vertical clearance (m)	4.5			
Minimum weight capacity (t)	15			
Maximum Grade Unsealed Road [3]	As outlined in the IPWEA Subdivision Guidelines	1:10 (10%)		
Maximum Grade Sealed Road [3]		1:7 (14.3%)		
Maximum Average Grade Sealed Road		1:10 (10%)		
Minimum Inner Radius of Road Curves (m)		8.5		

Turnaround Area Dimensions for No-through Road, Battle-axe Legs and Private Driveways [4]



Passing Bay Requirements for Battle-axe leg and Private Driveway

When the access component length is greater than the stated maximum, passing bays are required every 200m with a minimum length of 20m and a minimum additional trafficable width of 2m (i.e. the combined trafficable width of the passing bay and constructed private driveway to be a minimum 6m).

Emergency Access Way – Additional Requirements

Provide a through connection to a public road, be no more than 500m in length, must be signposted and if gated, gates must be open the whole trafficable width and remain unlocked.

[1] To have crossfalls between 3 and 6%.

[2] Where driveways and battle-axe legs are not required to comply with the widths in A3.5 or A3.6, they are to comply with the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision.

[3] Dips must have no more than a 1 in 8 (12.5% or 7.1 degree) entry and exit angle.

[4] The turnaround area should be within 30m of the main habitable building.

APPENDIX H: TECHNICAL REQUIREMENTS FOR FIREFIGHTING WATER SUPPLY

H1: Reticulated Areas – Hydrant Supply

The Guidelines state "where a reticulated water supply is existing or proposed, hydrant connection(s) should be provided in accordance with the specifications of the relevant water supply authority."

The main scheme water suppliers / authorities in WA are The Water Corporation, AqWest – Bunbury Water Corporation and Busselton Water Corporation. Various local authority exists in other non-scheme and regional areas. However, most existing fire hydrants are connected to Water Corporation water mains.

Consequently, the hydrant location specifications from The Water Corporation's 'No 63 Water Reticulation Standard' (Ver 3 Rev 15) are provided in the extract below with the key distances relevant to bushfire planning assessments being highlighted. This Standard is deemed to be the baseline criteria for developments and should be applied unless different local water supply authority conditions apply. Other applicable specification will be found in the Standard.

Note: The maximum distance from a hydrant to the rear of a lot/building is generally interpreted as not applicable to large lot sizes where the maximum distance becomes an impractical limitation i.e., typically rural residential areas.

Design Standard DS 63
Water Reticulation Standard

2.2.1.5 Appurtenances

c. Hydrants

Hydrants shall be screw-down hydrant with built-in isolation valve and installed only on DN100 or larger pipes. Hydrants shall be located:

- so that the maximum distance between a hydrant and the rear of a building envelope, (or in the absence of a building envelope the rear of the lot) shall be 120m;
- so that spacing (as measured by hose-run) between hydrants in non-residential or mixed use areas shall be maximized and no greater than 100m;
- so that spacing (as measured by hose-run) between hydrants in residential areas with lots per dwelling <10,000m² shall be maximized and no greater than 200m;
- so that spacing between hydrants (as measured by hose-run) in rural residential areas where minimum lots per dwelling is >10,000 m² (1ha) shall be maximized and no greater than 400m;
- centrally along the frontage of a lot to avoid being under driveways, unless the lot features a frontage 6m or less, in which case it shall be placed to the side opposite the driveway;
- at lots that have the widest frontage in the local area;
- where appropriate at the truncation of road junctions or intersections so that they can serve more than one street and can be readily located;
- on both sides of the major roads at staggered intervals where there are mains on both sides of the road;
- at major intersections on dual multi-lane roads, where two hydrants are to be sited on diagonally opposite corners;
- hydrants should be located at least 20m from traffic calming devices i.e., median slow points or chokers, chicanes, mini traffic circles, and intersection 'pop-outs' to ensure traffic is not impeded;
- in a position not less than 10m from any high voltage main electrical distribution equipment such as transformers and distribution boards, liquefied petroleum gas or other combustible storage;
- directly on top of the main using a tee unless proved to be impractical.

Uncontrolled if Printed
Ver 3 Rev15

Page 17 of 49

H2: Non-Reticulated Areas – Static Supply

For specified requirements, refer to the Guidelines Element 4: Water – Acceptable Solution A4.2 , Explanatory Notes E4 (that provide water supply establishment detail under the headings of water supply; independent water and power supply; strategic water supplies, alternative water sources and location of water tanks) and the technical requirements established by Schedule 2 (reproduced below).

SCHEDULE 2: WATER SUPPLY DEDICATED FOR BUSHFIRE FIREFIGHTING PURPOSES

2.1 Water supply requirements

Water dedicated for firefighting should be provided in accordance with Table 7 below, and be in addition to water required for drinking purposes.

Table 7: Water supply dedicated for bushfire firefighting purposes

PLANNING APPLICATION	NON-RETICULATED AREAS
Development application	10,000L per habitable building
Structure Plan / Subdivision: Creation of 1 additional lot	10,000L per lot
Structure Plan / Subdivision: Creation of 3 to 24 lots	10,000L tank per lot **or** 50,000L strategic water tank
Structure Plan / Subdivision: Creation of 25 lots or more	50,000L per 25 lots or part thereof Provided as a strategic water tank(s) or 10,000L tank per lot

2.2 Technical requirements

2.2.1 Construction and design

An above-ground tank and associated stand should be constructed of non-combustible material. The tank may need to comply with AS/NZS 3500.1:2018.

Below ground tanks should have a 200mm diameter access hole to allow tankers or emergency service vehicles to refill direct from the tank, with the outlet location clearly marked at the surface. The tank may need to comply with AS/NZS 3500.1:2018. An inspection opening may double as the access hole provided that the inspection opening meets the requirements of AS/NZS 3500.1:2018. If the tank is required under the BCA as part of fire hydrant installation, then the tank will also need to comply with AS 2419.

Where an outlet for an emergency service vehicle is provided, then an unobstructed, hardened ground surface is to be supplied within four metres of any water supply.

2.2.2 Pipes and fittings

All above-ground, exposed water supply pipes and fittings should be metal. Fittings should be located away from the source of bushfire attack and be in accordance with the applicable section below, unless otherwise specified by the local government.

2.2.2.1 Fittings for above-ground water tanks:

- Commercial land uses: 125mm Storz fitting; or
- Strategic water tanks: 50mm or 100mm (where applicable and adapters are available) male camlock coupling with full flow valve; or
- Standalone water tanks: 50mm male camlock coupling with full flow valve; or
- Combined water tanks: 50mm male camlock coupling with full flow valve or a domestic fitting, being a standard household tap that enables an occupant to access the water supply with domestic hoses or buckets for extinguishing minor fires.

2.2.2.2 Remote outlets

In certain circumstances, it may be beneficial to have the outlet located away from the water supply. In such instances in which a remote outlet is to be used, the applicant should consult the local government and DFES on their proposal.

EXAMPLE CONSTRUCTION AND FITTINGS	
	
Strategic 47,000 Litre Concrete Tank & Protected Fittings	
	
10,000 Litre Concrete Tank	Storz and Camlock Couplings
	
Full Flow 50mm Ball Valve	Full Flow 50mm Gate Valve and Male Camlock

APPENDIX I: BUSHFIRE WARNINGS – WHEN A BUSHFIRE IS IDENTIFIED

APPENDIX J: FIRE DANGER RATINGS – FORECAST BUSHFIRE RISK

THE HIGHER THE RATING, THE MORE DANGEROUS THE CONDITIONS AND THE GREATER THE CONSEQUENCES IF A FIRE STARTS.

APPENDIX K: BUSHFIRE RISKS AND DANGERS

BUSHFIRE RISKS AND DANGERS

BUSHFIRES HAPPEN EVERY SUMMER; THEY CAN START SUDDENLY AND WITHOUT WARNING.
If you live in or near bushland you need to understand the risks and dangers that bushfires cause.
Remember that flames are not the only risk you face in a bushfire.

EMBER ATTACK

Ember attack occurs before, during and after a fire front passes.

Embers are pieces of burning bark, leaves or twigs that are carried by the wind around the main fire creating spot fires.

Spotting can be carried over half a kilometre from a fire.

Embers can land in areas around your home such as your garden, under or in the gutters of your home and on wooden decks.

If not extinguished, your house could catch fire.

RADIANT HEAT

The hotter, drier and windier the day, the more intense a bushfire will be and the more radiant heat it will generate.

Radiant heat can cause injury and death from burns and cause the body's cooling system to fail, leading to heat exhaustion and possible heart failure.

It is important that you include water and appropriate clothing in your emergency kit and consider where you will shelter during a bushfire to protect yourself from radiant heat.

SMOKE

Lung injuries and suffocation can occur where the body is exposed to smoke and super-heated air.

It is important to seek shelter when heat and smoke are most intense.

Your nose and mouth should be covered with a dust mask, wet towel or scarf.

A special filter mask should be included in your survival kit for people in your family who suffer respiratory conditions such as asthma.

For more information visit
dfes.wa.gov.au/bushfire
or contact DFES Community Preparedness:
Community.Preparedness@dfes.wa.gov.au
or **9395 9816**

DFES Department of Fire & Emergency Services

HOW FIREPROOF IS YOUR PLAN?

APPENDIX L: GUIDELINES FOR TRAVELLING IN CARS DURING A BUSHFIRE

TRAVELLING DURING A BUSHFIRE

BUSHFIRES CAN START WITHOUT WARNING. People have been killed or seriously injured during bushfires. If you are travelling or staying near bushland, fire is a real risk to you. Pack an emergency kit including important items such as woollen blankets, drinking water and protective clothing.

IF THERE IS A LOT OF SMOKE

- ◯ Slow down as there could be people, vehicles and livestock on the road.
- ◯ Turn your car headlights and hazard lights on.
- ◯ Close the windows and outside vents.
- ◯ If you can't see clearly, pull over and wait until the smoke clears.

IF YOU BECOME TRAPPED BY A FIRE

Sheltering inside a vehicle is a very high risk strategy. It is unlikely that a person will survive in all but the mildest circumstances.

- ◯ Park the vehicle off the roadway where there is little vegetation, with the vehicle facing towards the oncoming fire front.
- ◯ Turn the engine off.
- ◯ Close the car doors, windows and outside vents, and call 000.
- ◯ Stay in the car until the fire front has passed. Stay as close to the floor as possible and cover your mouth with a damp cloth to avoid inhalation of smoke.
- ◯ Stay covered in woollen blankets, continue to drink water and wait for assistance.
- ◯ Once the front has passed and the temperature has dropped, cautiously exit the vehicle.

IMPORTANT INFORMATION

- ◯ Find the local ABC radio frequency in the area. Stay up to date in a major emergency, when lives and property are at risk, ABC radio will issue broadcast warnings at a quarter to and a quarter past the hour.
- ◯ Main Roads provides updated information on road closures throughout WA. Call 138 138 or www.mainroads.wa.gov.au
- ◯ Check the weather forecast and current fire restrictions. Be aware of the Fire Danger Rating for the area you are travelling to and be prepared to reassess your plans.
- ◯ Download the Bushfire Traveller's Checklist at www.dfes.wa.gov.au

For more information visit **dfes.wa.gov.au/bushfire**

or contact DFES Community Preparedness: **Community.Preparedness@dfes.wa.gov.au**

or **9395 9816**

November/2021/V1.0

GOVERNMENT OF WESTERN AUSTRALIA

DFES Department of Fire & Emergency Services

HOW FIREPROOF IS YOUR PLAN?

APPENDIX M: INDICATIVE BUSHFIRE BEHAVIOUR TO IMPACT THE SITE

Information Relevance: This information is included in the Bushfire Plan to inform and assist the decision making of those persons onsite who have the responsibility to manage a bushfire emergency for the subject facility/premises.

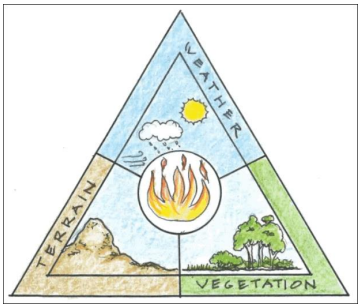
The information establishes the key factors to be considered in understanding the types and scale of key bushfire behaviours that can be expected to impact the site on a given day. These factors are the type of vegetation that exists on the land surrounding the subject premises/facility, the relevant surrounding terrain, and the forecast Fire Danger Rating (FDR) that applies to the locality.

Information Source: The information is taken from the bushfire behaviour modelling applied within the **Australian Fire Danger Rating System (AFDRS).** Within this system, eight accepted bushfire behaviour models, describing mathematically the way fire moves and spreads through different vegetation types, are currently available and are applied to twenty two different vegetation types across Australia.

The modelling is used to derive the Fire Behaviour Index (FBI) that assists firefighting operational decision making. From the FBI, Fire Danger Ratings (FDR) are derived which provide the broad categories needed to communicate fire danger to the community. The determination of the daily FDR considers the vegetation types present and the forecast fire weather conditions. The higher the rating, the more dangerous the conditions and the greater the consequences if a fire starts. (Source: AFDRS project led by NSW RFS, Australian Bureau of Meteorology and AFAC).

The Fire Behaviour Triangle

The behaviour of a bushfire, including the types of threats, intensity and how quickly it moves, depends on the three factors of vegetation, weather and terrain.



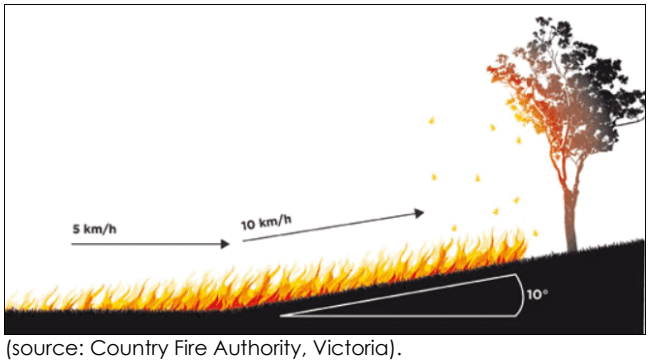
This is known as the fire behaviour triangle – because all three factors combine to shape the characteristics of the bushfire (source: CSIRO 'Bushfire best practice guide' at … research.csiro.au/bushfire/).

The influence of fire weather (FDR) and vegetation types (as per AFDRS) on the potential bushfire impact to the subject facility/premises, can be derived from the tables presented on the following page(s). Greater fuel loads will result in behaviours at the higher end of stated values.

The influence of terrain can be derived by considering the existence and degree of sloping ground and changes in changes in relief (e.g., flat, undulating or rugged land), surrounding the subject facility/premises and particularly under the vegetation.

The Influence of Terrain (topography)

A fire will burn faster uphill. This is because the flames can easily reach more unburnt fuel in front of the fire. Radiant heat pre-heats the fuel in front of the fire, making the fuel even more flammable.



For every 10˚ slope, the fire will double its speed. For example, if a fire is travelling at 5 km per hour along flat ground and it hits a 10˚ slope it will double in speed to 10 km per hour up the hill. By increasing in speed the fire also increases in intensity, becoming even hotter.

The opposite applies to a fire travelling downhill. The flames reach less fuel, and less radiant heat pre-heats the fuel in front of the fire. For every 10˚ of downhill slope, the fire will halve its speed. Fires tend to move more slowly as the slope decreases (source: Country Fire Authority, Victoria).

Terrain should be considered for its potential to increase adverse fire behaviour including flame heights, forward rates of spread and ember production (in relevant vegetation i.e., primarily bark fuels). Essentially, where vegetation exists on sloping land near your site, assume that the higher end of adverse fire behaviours is much more likely to apply.

VEGETATION TYPES IDENTIFIED SURROUNDING AND WITHIN THE SUBJECT SITE		
As Applied in the AFDRS		Vegetation Location Relative to the Site
Fire Behaviour Model (short name)	Fuel Types / Description	
Forest	Dry eucalypt forests, shrubby understorey/litter surface fuel. Forests with high moisture content due to structure, topography or inundation.	Forest vegetation is located in the surrounding area. (Karakin Lakes)
Grassy Woodland (Savanna)	Woodland and shrubland with a continuous grass understorey. Arid woodland/shrubland with short lasting (seasonal) grass understorey. Perennial woody horticulture with grass understorey (orchard/vineyard). Rural/Urban residential areas of grass with variable tree cover.	The structure of vegetation comprising medium canopy trees with shrubland and grass understorey exists on and external to the site, generally resulting from agricultural practices and historic clearing of land.
Shrubland	Temperate shrublands and heathlands of varying heights. Includes wet heathlands.	Low lying areas within the site and external to the site are made up of low shrubland interface with Scrub and Grassland.
Grassland	Continuous/tussock grasslands. Modified/native pasture (grazing). Non-irrigated cropping. Low shrublands (wet or arid) with no overstorey.	Grassland exists in the form of cropping land and pasture paddock areas within and external to the site, in the broader landscape.
Mallee-Heath	Semi-arid woodland and shrubland with shrub understorey.	The planting density and arrangement on site is likely to constitute a Scrub arrangement in its mature state.
Spinifex	Woodland and shrubland with a hummock grass understorey. Includes mallee if spinifex understorey.	N/A
Pine	Pine plantations	N/A

BUSHFIRE PRONE PLANNING

SAVANNA
(GRASSY WOODLAND)

THE INDICATIVE FIRE BEHAVIOUR CORRESPONDING TO THE FIRE BEHAVIOUR INDEX (0-100) AND THE ASSOCIATED FIRE DANGER RATING (FDR)

Source: AFDRS v. 2022_6

FDR	INDICATIVE BUSHFIRE BEHAVIOUR		
NO RATING	MAX FLAME HEIGHT <0.5 m; 0-5; RATE OF SPREAD 0-50 m/hr	Fire difficult to ignite and sustain. Fires generally unlikely to spread and likely to self-extinguish.	**SPOTTING POTENTIAL** Potential for any spotting is extremely limited
	<0.5-1.5 m; 6-11; <1.5km/hr	Fire easily sustained. Typically wind driven fires that can spread quickly. Fires mostly only partially consuming fuels, typically creating a mosaic of burnt and unburnt patches (decreasing patchiness with increasing intensity).	Potential for spotting is limited
MODERATE HIGH	1.5-2.5 m; 12-49; 1-8 km/hr	Wind driven, rapidly spreading fires with potential for development into large fire area/size and with the potential for short distance spotting and long flame lengths. Fires typically consuming all available fuel. Increasing scorch height of tree canopy (up to 20-25 m) and char height (up to 3-4 m).	Possible short distance spotting occurring
EXTREME CATASTROPHIC	>2.5m; 50+; >5 and likely >8 km/hr	Extremely rapid fire growth and increasing likelihood of large final fire area/size. Possibility for fire behaviour to become erratic and plume driven. Strong convective column formation. Wind speed and direction likely to be erratic at times. Fires consuming all available fuel.	Likely short distance spotting

SHRUBLAND

THE INDICATIVE FIRE BEHAVIOUR CORRESPONDING TO THE FIRE BEHAVIOUR INDEX (0-100) AND THE ASSOCIATED FIRE DANGER RATING (FDR)

Source: AFDRS v. 2022_6

FDR	INDICATIVE BUSHFIRE BEHAVIOUR			
NO RATING	MAX FLAME HEIGHT <0.5 m	0-5	RATE OF SPREAD 0-20 m/hr	Flame dimensions are generally insufficient to breach sparse and discontinuous fuels or inter-hummock gaps.	**SPOTTING POTENTIAL** Potential for any spotting is extremely limited
	<0.5-1.5 m	6-11	20-150 m/hr	Sustained spread of fire.	Potential for spotting is limited
MODERATE	1-4 m	12-23	150-1300 m/hr	Fast moving, wind-driven fires that are mostly actively crowning.	Potential for spotting is limited except where eucalypt/mallee trees are present where spotting is likely to be minimal and limited
HIGH	2-8 m	24-49	up to 6.5 km/hr	Fast moving, wind-driven, crown fires with high potential for large fire areas. Mostly complete combustion of fuels and few unburnt patches.	Possible short distance spotting mostly <20 m or where eucalypt/mallee trees are present where spotting is likely to be minimal and limited to short distances (<100 m). Any spot fires are typically overrun by the main head fire
EXTREME CATASTROPHIC	>4m and likely >8m	50+	>1.5 and likely >6.5 km/hr	Rapid fire growth, extremely fast moving, wind-driven fires. High potential for large fire areas with complete combustion of fuels and few unburnt patches.	Possible short distance spotting mostly <40 m except where eucalypt/ mallee trees are present where spotting may be up to 200 m with spot fires typically quickly overrun by the main head fire

GRASSLAND

THE INDICATIVE FIRE BEHAVIOUR CORRESPONDING TO THE FIRE BEHAVIOUR INDEX (0-100) AND THE ASSOCIATED FIRE DANGER RATING (FDR)

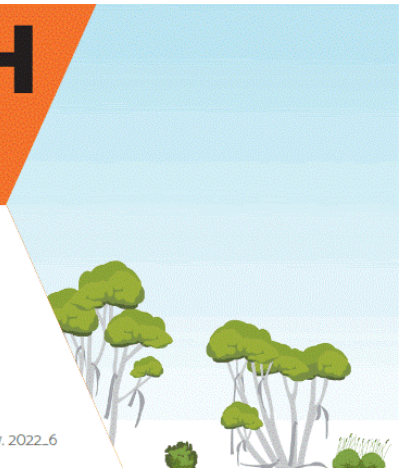
Source: AFDRS v. 2022_6

FDR	INDICATIVE BUSHFIRE BEHAVIOUR			
NO RATING	MAX FLAME HEIGHT <1 m	0-5	RATE OF SPREAD 0-30 m/hr	Fire difficult to ignite and sustain. Fires generally unlikely to spread and likely to self-extinguish.
	<1.5 m	6-11	<1.3 km/hr	Fire easily sustained. Typically wind driven fires that can spread quickly.
MODERATE	1.5-2.5 m	12-23	0.5-6 km/hr	Typically wind driven and rapidly spreading fires with the potential to gain size quickly.
HIGH	2-3 m	24-49	2.5-10 km/hr	Wind driven, rapidly spreading fires with potential for development into large fire area/size and with the potential for short distance spotting and long flame lengths.
EXTREME	2.5-3.5m	50-99	5-16 km/hr	Extremely rapid fire growth and increasing likelihood of large final fire area/size. Possibility for fire behaviour to become erratic and plume driven. Strong convective column formation. Wind speed and direction likely to be erratic at times.
CATASTROPHIC	>3m	100+	>8 km/hr can be expected, possibly >16 km/hr	Extremely rapid fire growth and high likelihood of large final fire area/size. Possibility for fire behaviour to become erratic and plume driven. Strong convective column formation. Wind speed and direction likely to be erratic at times.

SPOTTING POTENTIAL
Potential for any spotting is very limited.
Potential for spotting Potential for short distance spotting is limited.
Possible short distance spotting occurring.
Short distance spotting occurring with increasing frequency.
Likely short distance spotting occurring with increasing frequency.
Likely short distance spotting occurring with increasing frequency.

MALLEE-HEATH

THE INDICATIVE FIRE BEHAVIOUR CORRESPONDING TO THE FIRE BEHAVIOUR INDEX (0-100) AND THE ASSOCIATED FIRE DANGER RATING (FDR)



Source: AFDRS v. 2022_6

FDR	INDICATIVE BUSHFIRE BEHAVIOUR		
NO RATING	MAX FLAME HEIGHT <1 m; 0-5; RATE OF SPREAD 0-40 m/hr	Probability of self-sustained, surface fire is low.	**SPOTTING POTENTIAL** Potential for any spotting is extremely limited
	<5 m; 6-11; <2 km/hr	Surface fires whereby the flame front is able to overcome fine scale fuel discontinuities. Isolated torching of overstorey fuels.	Short range spotting possible up to 10 m
MODERATE	<6 m; 12-23; 1-3 km/hr	Intermittent crown fire. The passage of the flame front on surface fuels is followed by torching of overstorey fuels. Canopy fuel combustion occurs somewhat behind the leading edge of the flame front. Average flame front properties not affected by the level of torching and rate of fire spread largely determined by surface phase.	Short range spotting up to 50 m likely, allowing fire to cross small areas of fuel discontinuity such as roads or small fuel breaks
HIGH	<8 m; 24-49; 1.5-5.5 km/hr	Active or dependent crown fires with crown phase determining the overall rate of spread. Fire propagates faster than observed for a surface or intermittent crown fire under same environmental conditions. A reduction of the surface phase heat output below a certain level will lead the fire to an intermittent crown fire regime1.	Escalation in fire activity is typically accompanied by an increase in the number of firebrands generated and possible distances >50 m ahead of the flame front
EXTREME	>8m; 50+; >3 and likely >5.5 km/hr	Active or dependent crown fire.	Escalation in fire activity is typically accompanied by an increase in the number of firebrands generated and possible distances >50 m ahead of the flame front
CATASTROPHIC			

6 February 2024

Belle Smithies
Rowe Group
Level 3, 369 Newcastle Street
Northbridge WA 6003

Via email: Belle.Smithies@rowegroup.com.au

Dear Sir/Madam,

DEVELOPMENT APPLICATION: PROPOSED PLANTATION (CARBON FARM)
ADDRESS: KARAKIN LAKES ROAD

Reference is made to the above matter.

In accordance with clause 65A and 65B of the *Planning and Development (Local Planning Scheme) Regulations 2015 (Deemed Provisions)*, the following information is requested, and a response/clarification provided:

Plans

1. Please submit a revised Site Plan that depicts the vegetation 'cells' as outlined within the written proposal.

The Shire notes that a Site Plan is outlined within the Bushfire Management Plan (BMP) that more accurately reflects the proposed development as opposed to Appendix A.

Monitoring stations

2. The proposal (pg 5.) outlines that 'permanent monitoring stations' are proposed to be established. Can you please advise what the proposed monitoring stations comprise of?

Bushfire Considerations

The Shire views bushfire considerations as a key consideration to the suitability of the proposal. The development connects a large tract of vegetation located east, with a large tract of vegetation located to the west, that ultimately connects to Seaview Park (Rural Living Estate).

The proposal outlines that the landowner owns three vehicle mounted fire units, one water truck, and one firefighting trailer (pg. 6). Section 1.7 of the BMP outlines that as a minimum, the landowner is to ensure that 2x suitably constructed 4wd vehicle mounted 'slip on' units and 1 trailer mounted fire pump/water tank is provided.

3. Can you confirm why the BMP requires the appliances listed and provide commentary as to why the equipment is viewed as being sufficient to prevent fire escaping from the land, either from controlled or uncontrolled burns?

4. Have prescribed burning plans and the associated operational plans referenced in the BMP been prepared?

5. Has a rehabilitation plan been prepared for post controlled/uncontrolled burns?

A: PO Box 510, Gingin WA 6503
T: (08) 9575 5100
E: mail@gingin.wa.gov.au
ABN: 85 697 704 946
W: www.gingin.wa.gov.au

6. Are the Carbon Credit Units generated by the development affected by plantation damage from bushfire?

7. What material will the vehicle access routes be constructed from?

8. How will the water tanks be replenished?

9. The BMP requires the development to have access to, own or contract light and heavy machinery such as front-end loaders to be used in firefighting efforts. Can you confirm the landowner has access to such equipment?

10. Please provide a response to submissions received on the application, with particular regard to the comments received from DFES.

The Shire is generally of the view that the infrastructure and equipment proposed is inadequate to respond to a bushfire within the planation, or to manage prescribed burning of 100-hectare cells.

For context and comparison, a recent fire in Gingin burnt an area similar in size to the proposed plantation. This fire was attended by more than 500 vehicle appliances (combination of configurations), multiple fixed wing aircraft, Helitaks, Large Air Tankers (LAT), bull dozers, loaders, graders and involved hundreds of volunteer and professional firefighters. In comparison, the proposed BMP provides for two 4wd vehicle mounted slip on fire units and one firefighting trailer.

It seems the landowner is relying upon the resources of the Shire of Gingin (limited resources), Department of Fire and Emergency Services (DFES), Dept of Biodiversity, Conservation & Attractions and local volunteers. While these agencies may respond to an uncontrolled bushfire, the landowner should have capability to undertake prescribed burns without assistance.

Based on the proposal, the Shire is of the view that the appliances proposed are inadequate. Furthermore, the Shire is of the view that the water infrastructure proposed is inadequate.

The proposal introduces a significant bushfire risk, through increased vegetation that ultimately provides a connection to a rural living estate. It is noted that the development lifespan is in excess of 100 years and the probability of a bushfire is inevitable.

The Shire of Gingin is concerned that the proposal does demonstrate compliance with Clause 67 q of the Deemed Provisions, as it introduces an unacceptable bushfire risk that impacts the community as a whole and may impose an unsustainable burden on limited fighting appliances, assets and resources of the Shire over the life of the development.

In view of the above, please contact the officer below to discuss a mutually agreed timeframe to respond.

Should you require any further information on this matter, please contact the Planning Department on (08) 9575 5100 or email mail@gingin.wa.gov.au.

Yours sincerely,

JAMES BAYLISS
MANAGER PLANNING AND BUILDING

Our Ref: BLD/7661 P2610
DAP Ref: DAP/23/02606

ROWE GROUP

Level 3
369 Newcastle Street
Northbridge 6003
Western Australia

p: 08 9221 1991
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info@rowegroup.com.au
rowegroup.com.au

Job Ref: 8640AA
20 February 2024

Shire of Gingin
7 Brockman Street
Gingin WA 6503

Sent via email: james.bayliss@gingin.wa.gov.au

Attention: Mr James Bayliss – Manager Planning and Building

Dear Sir

Application for Development Approval – Plantation (Carbon Farm)
Response to Request for Further Information
Karakin Lakes Rd & Baramba Rd, Karakin (BLD/7661-P261)

Rowe Group acts on behalf of Woodside Energy Carbon (Services) Pty Ltd ('WEC(S)'), the owner of Lot 1 on Plan 417155, Lot 2 (No. 459) Karakin Lakes Road, Lot 3 (No. 202) Baramba Road, and Lot 5694 On Deposited Plan 207688 ('subject site'), in relation to the Application for Development Approval currently being assessed by the Shire of Gingin ('Shire') for a proposed carbon farm or "plantation" at the subject site.

We refer to the Shire's letter requesting further information on the Application, dated 6 February 2024. Please find the following documents attached in response to this request:

- Draft Plantation Management Plan ('PMP') prepared by WEC(S) (Attachment 1);
- Response letter prepared by the bushfire consultant, Bushfire Prone Planning ('BPP') (Attachment 2); and
- Completed schedule of submissions (Attachment 3).

For ease of review, the following letter outlines each of the items requested by the Shire followed by the project team's response with reference to the above documents.

Plans

Please submit a revised Site Plan that depicts the vegetation 'cells' as outlined within the written proposal.

The Shire notes that a Site Plan is outlined within the Bushfire Management Plan (BMP) that more accurately reflects the proposed development as opposed to Appendix A.

Please refer to Appendix A – Plantation Design of the attached draft PMP, being a revised site plan which depicts the areas of each individual vegetation "cell", separated by fire breaks. The site plan also depicts the proposed locations of water tanks throughout the property.

Monitoring Stations

1. ***The proposal (pg 5.) outlines that 'permanent monitoring stations' are proposed to be established. Can you please advise what the proposed monitoring stations comprise of?***

WEC(S) advises that the proposed permanent monitoring stations relate to requirements from the Clean Energy Regulator for determining stem density and canopy cover. They will be comprised of a quadrant-style monitoring plot marked by steel posts.

Bushfire Considerations

2. ***Can you confirm why the BMP requires the appliances listed and provide commentary as to why the equipment is viewed as being sufficient to prevent fire escaping from the land, either from controlled or uncontrolled burns?***

BPP provides the following justification for the minimum number of appliances required on site, as identified in the BMP:

Section 1.6.7 and 1.8 of the BMP highlights the need to Maintain bushfire management resources according to that defined in 'future' site Pre-Incident Plans and Preparedness Guidelines. Minimum appliance/equipment on-site is identified to ensure general site operations can be undertaken limiting ignition sources and capability to extinguish fire ignition resulting from those site operations or other ignition sources where conducive to do so. Operational Plans will also consider daily Australian Fire Danger Ratings - AFDR and scaling of response to expected conditions. Noting also that the additional Woodside purchased 2 slip-on firefighter units will be incorporate into the updated bushfire management plan and subsequent operation response plans.

Prescribed burning section 1.8.5 of the BMP details a list of requirements that; all planned burns will have an approved operational plan prior to burning. Safety and environmental considerations and potential impacts on other stakeholders are assessed as part of the planning process (due diligence).

Prescribed Burning Operational plans include:

- *Burn objectives;*
- *An operational map;*
- *Environmental approvals;*
- *Burn area details;*
- ***Resources required**;*

- *Standards to be met;*
- *Checks and notifications to be undertaken;*
- *Authorisations to be obtained; and*
- *Post burn appraisals to be conducted.*

3. Have prescribed burning plans and the associated operational plans referenced in the BMP been prepared?

Mitigation burning is one of several risk prevention actions which will be undertaken by WEC(S) at the subject site where appropriate. Prescribed burn plans and other operational plans have not been prepared at this juncture, for the reasons outlined by BPP in its response, as follows:

> *Operational and site management plans can subsequently be prepared as part of the development conditions and future plantation programmed works. This is to ensure that operational and site management plans are able to be updated as required to capture current practices that will be implemented for the plantation site in consultation with the relevant agencies and in accordance with legislation at that time.*

Section 5.11 of the draft PMP confirms that mitigation burns will be undertaken post-planting where required, and notes the following with regard to planning for these activities:

> *WEC(s) proposes annual qualitative fuel load assessment. Any subsequent fuel reduction activity will be undertaken in accordance with State fire legislation and local fire notification and permit requirements.*
>
> *WEC(s) is currently tendering for a suitable on-ground/ operational fire management consultant. The priority is to engage additional resources to undertake any mitigation burning outside Woodsides training, experience and equipment.*
>
> *Prior to undertaking larger mitigation burns WEC(s) will consult with and notify the Shire of Gingin Mitigation Burn Coordinator and Community Emergency Services Manager*

Lastly, section 7.6 of the draft PMP outlines key risk control actions with respect to fire, noting that "'cool season' mitigation burns" are one of several preventative measures which will be undertaken where appropriate.

4. Has a rehabilitation plan been prepared for post controlled/uncontrolled burns?

Similarly to the above, a rehabilitation plan has not yet been prepared for controlled or uncontrolled burns, for the reasons provided by BPP in its response:

> *The BMP identifies in Section '1.8.9 Rehabilitation' that there is a requirement to undertake rehabilitation of disturbance resulting from firefighting operations as soon as practical after the bushfire is contained. Where substantial rehabilitation works are or will be required, and it is considered relevant at that time, a rehabilitation plan can be prepared and implemented.*

5. Are the Carbon Credit Units generated by the development affected by plantation damage from bushfire?

WEC(S) advises that any Carbon Credit Units generated by the development are affected by plantation damage from bushfire, and notes that as the project will be registered under the Emission Reduction Fund, any loss of carbon during a fire event within the crediting period will need to be modelled. WEC(S) is also obligated under the emission reduction fund to maintain carbon stored for a 100-year period.

However, this does not prevent WEC(S) from conducting mitigation burning at the subject site, as required, throughout the 100-year period. The Australian Government Clean Energy Regulator, in its fact sheet titled 'Reducing the risk of fire and preserving sequestered carbon in Emissions Reduction Fund vegetation projects', provides the following advice in this regard:

> *In some cases, management actions to prevent the risk of reversal of carbon stores by fire could seem counter to the permanence obligations or proponents might be concerned that carbon credits will be reduced. For example, where prescribed burns in the off-fire season are used to reduce fuel loads in project areas.*
>
> *This is not a valid reason to avoid undertaking reasonable and/or mandated fire prevention activity within project areas. In the example given, well planned and conducted prescribed burning will have a far lower impact on credited carbon stores over the life of the project than an uncontrolled bushfire. The same is likely to be said for most fire risk reduction activity. In addition, any fire prevention activity required by state and territory legislation must be complied with and modelled appropriately.*

6. What material will the vehicle access routes be constructed from?

BPP provides the following information with regard to the specifications of vehicle access routes:

> *Firebreaks are to be install/constructed in accordance with the Shire of Gingin Firebreak Order and Bushfire Information.*
>
> *The main access routes are to be capable of a minimum load limit of 15 tonnes and meet the vehicle access technical requirements as detailed within the Guidelines for Planning in Bushfire Prone Areas.*
>
> *The Guidelines do not specify surface construction material for driveways or access routes. The main access routes to infrastructure within the Plantation site (e.g. water tanks) should be constructed of an all-weather compacted material trafficable surface suitable for 2WD vehicles, or as specified by the Shire of Gingin.*

7. How will the water tanks be replenished?

Section 5.1 of the draft PMP provides the following information regarding the proposed water tanks and their connection to bores at the subject site:

There are several high-capacity bores at the western and eastern ends of Karakin. The bore located at the Cowalla Fire Station is a high flow, mains powered bore capable of delivering material volumes of water for herbicide treatments, mitigation burns and wildfire response.

There are two medium capacity bores at the western end and middle of Karakin which will be flow tested and upgraded as required in early 2024.

Woodside have pre-ordered seven 25kL Polyethylene tanks which will be installed at strategic locations across Karakin. The provisional location of these tanks is indicated in Appendix A, but the final location of the tanks will be chosen in consultation with experience bushfire planners and, where appropriate, local brigade responders and Shire Fire Control Officers. The use of polyethylene tanks enables them to be moved to optimal locations as the finer details of the plantation are finalised. The Cowalla Fire Station water storage is currently 25 kL and will be increased to 50kL in early 2024.

8. ***The BMP requires the development to have access to, own or contract light and heavy machinery such as front-end loaders to be used in firefighting efforts. Can you confirm the landowner has access to such equipment?***

Section 5.9 of the draft PMP advises the following with regard to access to firefighting equipment by WEC(S):

WEC(S) owns five vehicle mounted firefighting units, one water truck and one firefighting trailer.

Woodside is currently tendering for a suitable on-ground/ operational fire management consultant. Supplemental equipment (e.g. Light Tankers, 1x4s and 2x4s) for support of potential pre-planting mitigation burning will be a priority for this scope of works.

The BPP response also provides the following information regarding planning for the bushfire season:

Pre-incident readiness for the bushfire season, will consider resources and procedures for daily activities and requirements for fire preparedness and response. Existing machinery suitable for on-site works can be included in pre-incident machinery list and seasonal contractor machinery arrangements can be identified within these plans and the contractor contact details updated annually or as required.

9. ***Please provide a response to submissions received on the application, with particular regard to the comments received from DFES.***

Please refer to the attached Schedule of Submissions and Response letter from BPP, which provide detailed responses to all submissions including those received from the Department of Fire and Emergency Services ('DFES').

We note that an updated Bushfire Management Plan ('BMP') has not been prepared at this time, but we would accept a condition of approval requiring the provision of an updated BMP. The response letter from BPP

outlines the modifications and additions which can be made to the BMP in order to address the comments received from DFES.

We trust the above and attached is sufficient to enable the Shire to complete its assessment of the subject Application.

Should you require any further information or clarification in relation to this matter, please contact the undersigned on 0432 007 256.

Yours faithfully,

Belle Smithies
Rowe Group

Attachment One

Draft Plantation Management Plan

Karakin Farm
Plantation Management Plan

Woodside Energy Carbon (Services) Pty Ltd

February 2024

Confidential

Table of Contents

1. Summary

This Plantation Management Plan (PMP) provides an explanation of the activities that will be undertaken to protect sequestered carbon stored in native trees at the Karakin farm in Western Australia. This document should be read in conjunction with the current Bushfire Management Plan (BMP) which provides additional information regarding fire mitigation efforts and management.

This PMP describes the assessment of key risks to the plantation and outlines preventative and mitigative control actions.

The PMP also explains how Woodside and contractors, as operators of the plantation at Karakin, delivers against these actions and provides a summary of all activities to date.

2. Plantation Details

Property:	Karakin
Plantation type:	Native reforestation
Proprietor:	Woodside Energy Carbon (Services) Pty Ltd
Plantation Manager	Woodside Communication Centre
ABN:	91 625 509 450
Primary Contact:	Woodside Communication Centre **24 hour Phone:** 1300 833 333 **M:** +61 8 9348 7184 **E:** wcc@woodside.com.au **Woodside Carbon Solutions team** **E:** carbon@woodside.com.au
Address:	459 Karakin Lakes Road, Karakin, WA 202 Baramba road, Karakin, WA
Land Titles:	Lot 1 on Deposited Plan #417155, Volume 2969 Folio 912; Lot 2 on Diagram #26681, Volume 1369 Folio 40; Lot 3 on Plan #8327, Volume 1367 Folio 998; and Lot 5694 on Deposited Plan #207688, Volume 172 Folio 39A
Local Government Area:	Shire of Gingin
GPS Location:	-31.040121 S, 115.481779 E -31.062587 S, 115.530551 E
Local Fire Control Agencies:	Chief Bushfire Control Office / Community Emergency Services Manager (CESM): Phil Barrett: **M:** +61 (0) 408 943 576 Gingin West Deputy Chief Bushfire Control Officer: James Morton: **M:** +61(0) 427 141 078 Gingin Mitigation Burn Coordinator: Evan Lawrence: **M:** +61 (0) 487 624 698
Volunteer Fire Brigade	Cowalla Bushfire Brigade

(Located at eastern end of Karakin property)	Jen French (Captain) 0417 171 425

3. Property Overview

3.1 Area

The 3,906 ha “Karakin Farm” property located between 459 Karakin Lakes Road, Karakin, WA and 202 Baramba road, Karakin, WA, was purchased by Woodside Energy Carbon (Services) Pty Ltd (WEC(S)) in May 2023. Woodside is currently assessing the feasibility of using the property to generate Australian Carbon Credit Units (ACCUs) under the Federal Government’s Emissions Reduction Fund (ERF).

The planned project is an Environmental Planting (EP) project undertaken on freehold land approximately 8.5km south-east of Lancelin townsite. This project establishes permanent plantings of a mix of native tree species. The tree species will be selected to be representative of the remnant vegetation in the local area. It will provide biodiversity and ecological benefits including restored landscape linkages, habitat creation and protection of fauna species. The existing native vegetation on the property will not be modified or altered by the project. Natural surface water points on the property will also not be modified or altered because of the project.

The property has been farmed on rolling leases for over 20 years and has previously employed a centre-pivot irrigation system. Prior to Woodside owning the property, the terms of the water abstraction licence were modified to exclude its use for large-scale irrigation. WEC(S) understands the remaining water rights on the property were moved to the Lancelin Golf Club land titles prior to WEC(S) acquiring the property in April 2023. The property was purchased with large areas of untreated African love grass (Eragrostis curvula) (Appendix B).

3.2 Locality Map and Access Roads

Located in the Shire of Gingin the property trends in and West to east direction and is accessible by two different points of entry/exit via K.W./Karakin Lakes Road to the west (459 Karakin Lakes Road, Karakin, WA) and via Baramba/Cowalla Road to the east (202 Baramba road, Karakin, WA).

3.3 Buildings

The Pinjar Terminal to Kerr McGee Cataby 132kV line runs north-south through the property. There are three dwellings, sheds and silos on site with an active farming lease agreement on Lots 2, 3 and 5694. This lease is due to expire at the end of February 2024. There is also a

communication tower leased to WAPOL and DEFS and an area of land at the eastern end of the leased to the Cowalla Volunteer Fire brigade, for their fire station equipment sheds and emergency response centre. There are several structures on the property, three dwellings and multiple sheds. One of the dwellings (depicted in Appendix E) will need to be demolished due to pre-existing fire and structural damage. Two of the dwellings will retained and renovated, and, once planting and establishment is completed, these will be considered for long-term lease. Firebreaks around these structures will be set to 6m with no plantation within 100m.

3.4 Natural Features

The property accommodates several wetlands, including a 'Conservation' category wetland (Doopiter Swamp) in the north-east, and several small 'Multiple Use' and 'Resource Enhancement' category wetlands, toward the east of the property. The property is also situated adjacent to Karakin Lakes, which is a 'Conservation' category wetland and listed in the National Directory of Important Wetlands by the Federal Department of Climate Change, Energy, the Environment and Water.

The Department of Biodiversity, Conservation and Attractions (DBCA) datasets identify Threatened Ecological Communities (TECs) across the property, as well as a number of threatened and priority flora and fauna along the perimeter and in proximity to the property. These can be found in Appendix C.

In the process of restoring the natural environment to pre-farming vegetation types, measures are proposed to be taken to ensure no net harm on surrounding areas. Fertiliser will be applied to seedlings prior to planting to minimise any chances of leaching. Herbicide sprays will be applied using industry norms to reduce drift and maximize efficacy. Spraying will generally occur during dry periods to reduce chances of runoff. To quantify the positive benefits of this project WEC(S) is also in the process of commissioning baseline biodiversity monitoring. This monitoring is intended to subsequently inform ongoing measures to protect biodiversity at the property.

3.5 Sensitive Areas

A review of the Department of Planning, Lands and Heritage Aboriginal Cultural Heritage Information System (ACHIS) indicates that portions of the property are also located within one (1) Registered Aboriginal Heritage Place and one (1) Lodged Aboriginal Heritage Place, as outlined in the below table:

Place ID	20008	3483
Name	Gingin Brook Waggyl Site	Karakin Lakes 3

Type	Historical, Mythological, Camp, Hunting Place, Plant Resource, Water Source	Artefacts / Scatter
Status	Registered	Lodged
Gender Restrictions	No	No
File Restricted	Yes	No
Location Restricted	Yes	No
Boundary Reliable	Yes	No
Protected Area	No	No

Woodside will comply with the *Aboriginal Cultural Heritage Act 2021* (ACHA) and the *Aboriginal Heritage Act 1972* (AHA) (and any amendments) when ACHA 2021 is fully repealed. Woodside is engaging with the Yued Aboriginal Corporation as the development is within the Yued Indigenous Land Use Agreement (ILUA).

The property contains one (1) registered European heritage place, which is identified in the Shire of Gingin local heritage survey. The listing is named 'Limestone Caves' and is a 'Category D' heritage place, being the lowest category of heritage significance. The place is located on Lot 3, toward the south-east of the site and approximately 110m north of Baramba Road. As displayed in Appendix G the European heritage overlaps the Gingin Brook Waggyl Site. The heavy rock load means the ground conditions within this area are not conducive to planting, hence the site is not proposed to be planted.

4. Environmental Plantings Establishment Plan

4.1 Planting

Carbon farming is proposed to be conducted by WEC(S) using the Carbon Farming initiative (CFI) Act - Reforestation by Environmental or Mallee Plantings-FullCAM 2020 method. This method involves seeding and/or planting using local native species of plants with the objective of establishing a native forest. The key target characteristics are for the forest to achieve 2m height with 20% canopy cover. A "block planting" method is proposed to be used whereby portions of the property are subdivided by vegetation community type and planted in furrows. This planting best fits the description of a Kyoto compliant plantings carbon farming initiative. However, will differ from the indicative planting format outlined in the Guidelines for Plantation Fire Protection with a lower density planting of up tp500 stems per hectare (spha) as opposed to 1500 spha detailed in the definition and trees approximately 3m apart in rows spaced 6m

apart as opposed to 2.2 meters. A three-year-old planting from one of Woodside's farms in the Watheroo-Namban area of WA is shown in Figure 1.

Figure 1. Three-year-old planting from one of Woodside's farms in the Watheroo-Namban area of WA.

4.2 Species

Planting will include a mixture of species built from surveys of the native remnant vegetation on Karakin and some of the surrounding area. Species mixes will be matched as far as possible with soil types on which different native vegetation systems grow. See below for a complete species list:

Acacia blakelyi	*Acacia pulchella*	*Acacia rostellifera*	*Acacia saligna*
Allocasuarina campestris	*Allocasuarina humilis*	*Banksia burdetii*	*Banksia grandis*
Banksia ilicifolia	*Banksia menzeisii*	*Banksia prionotes*	*Banksia sessilis*
Callitrix leschenaultii	*Calothamnus quadrifidus*	*Calothamnus sanguineus*	*Casuarina obesa*
Chamelaucium uncinatum	*Corymbia calophylla*	*Daviesia divaricata*	*Dodonaea hackettiana*
Dodonaea aptera	*Eremaea pauciflora*	*Eucalyptus decipiens*	*Eucalyptus erythrocorys*
Eucalyptus gomphocephala	*Eucalyptus rudis*	*Eucalyptus todtiana*	*Hakea lissocarpha*

Hakea prostrata	*Hakea trifurcata*	*Hakea varia*	*Jacksonia sternbergiana*
Kunzea glabrescens	*Labichea lanceolata*	*Leucopogon parviflorus*	*Macrozamia riedlei*
Melaleuca cardiophylla	*Melaleuca huegelii*	*Melaleuca preissiana*	*Melaleuca rhaphiophylla*
Melaleuca systena	*Melaleuca viminea*	*Templetonia retusa*	

5. Plantation Management

5.1 Site Design and Preparation

Site design enables the implementation of fire controls in conjunction to meeting the specific requirements of an environmental planting outlined by the Carbon Farming initiative (CFI). This includes appropriate compartment sizing and firebreaks designed in consultation with a suitably accredited bushfire practitioner. This practitioner, and local Fire Control Officers, will also be engaged to identify appropriate water points to align with the guidelines for plantation fire protection. Indicative planting designs are included in Appendix A.

Post property purchase, an assessment is completed of key bushfire risks. This includes fuel loads, fire breaks and potential ignition sources. Often properties need to have firebreaks re-established over several seasons to be strictly in line with the Shire annual firebreak notices. Site preparation can also include initial fuel reduction activities such as:

- Controlled grazing

  Leasing of specific paddocks to reduce standing fuel loads.

- Slashing

  Certain areas of Karakin (e.g. laneways and around infrastructure) supported significant love grass densities. The first step to managing these areas is to mechanically reduce the standing grass load using a tractor-towed slasher. When the weather conditions support the re-growth of love grass, high-rates of specific herbicides can be applied to take advantage of new leaf chemical uptake. Repeated slashing and herbicide treatment is often required to reduce love grass numbers significantly.

- Clearing and heaping

Karakin included a medium sized tagasaste plantation. As this area included reasonable volumes of dead timber and as tagasaste is a weed, these areas have been cleared and will be replated with native trees and shrubs.

- Chopper rolling

Due to the large continuous areas of love grass on Karakin at the time of purchase, a network of internal and external firebreaks was installed prior to the bushfire season. Chopper rolling will continue to be used to compartmentalise love grass and other weeds in preparation for potential mitigation burning and bushfire season.

- Weed control

Broad-acre knockdown herbicide treatment will be used to prepare the property for planting and selectively used post-planting to manage weed growth in the inter-rows and along firebreaks. Repeated mechanical control or mitigation burning, followed by herbicide treatment has been found to be the most effective method to manage dense areas of love grass.

- Mitigation burning

Mitigation burning is widely used to reduce fuel loads in areas with high loads of annual or perennial grasses. Prior to the 2023/24 bushfire season, dense areas of love grass (Appendix B) on Karakin have been mechanically compartmentalised in preparation for potential 'cool season' mitigation burning. Two mitigation burns were completed in October 2023, with the assistance of volunteers from the Gingin West, Ledge Point and Cowalla Brigades. These mitigation burns remove the bulk of the standing biomass of the love grass and stimulates new leaf growth, with the new leaves more efficiently up taking subsequent herbicide treatment.

Properly managed mitigation burning is likely to be a key pre-planting activity on Karakin with burns planned for Autumn and late Spring 2024. The areas of extensive love grass on Karakin (Appendix B) are not scheduled for planting in 2024 to enable planned mitigation burns and follow-up herbicide treatment in the three cool season windows prior to planting in May-June 2025 (e.g. Autum 2024, late Spring 2024 and Autumn 2025).

Post-planting use of mitigation burning in the 'cool season' will be assessed bi-annually once native trees have been determined to have built a resistance to cool grass fires.

- Water Tanks and Bores

There are several high-capacity bores at the western and eastern ends of Karakin. The bore located at the Cowalla Fire Station is a high flow, mains powered bore capable of

delivering material volumes of water for herbicide treatments, mitigation burns and wildfire response.

There are two medium capacity bores at the western end and middle of Karakin which will be flow tested and upgraded as required in early 2024.

Woodside have pre-ordered seven 25kL Polyethylene tanks which will be installed at strategic locations across Karakin. The provisional location of these tanks is indicated in Appendix A, but the final location of the tanks will be chosen in consultation with experience bushfire planners and, where appropriate, local brigade responders and Shire Fire Control Officers. The use of polyethylene tanks enables them to be moved to optimal locations as the finer details of the plantation are finalised. The Cowalla Fire Station water storage is currently 25 kL and will be increased to 50kL in early 2024.

5.2 Weed Management

Pre-planting weed management has been focused on love grass with slashing and mitigation burning mechanisms deployed. With the large love grass load on this property slashing, herbicide treatment and potential for further burns is set to continue until planting. Additionally, a site-wide knockdown spray will occur prior to planting with a follow-up treatment of grasses post-planting. Broadleaf selective herbicide will also be used post-planting, with a targeted spray the following year to be conducted if required.

Weed status will be monitored on a regular basis throughout the first year after establishment and on an annual basis after that.

5.3 Harvest

The environmental plantings at this location will not be harvested.

Under the Emissions Reduction Fund (ERF) scheme, the plantings from this project will be subject to a 100-year permanence period. During this time, an obligation remains to maintain carbon stores in the project area.

5.4 Monitoring and Contingencies for disease and pests

Monitoring for disease and pests will be conducted regularly during establishment, and annually during routine maintenance.

Rabbit control will likely be required through baiting stations, and kangaroo control potentially required through shooting. Insect control will be done using residual insecticides if required. Any insecticide spraying will be done by licensed professional sprayers under contract.

5.5 Road and Firebreak Maintenance

Appropriate setback distances in the area plan include:

- The plantation will not be within 100m of the existing habitable building and 50m for sheds.
- Developments within 1km of the plantation have been outlined in (appendix A). The developments are a mixture of small rural lots along Baramba Rd on the southern boundary and centre-pivot irrigation enterprises to the north. The Seaview Park development is approximately 1.7km west of the western boundary of Karakin (Appendix C). Spraying of firebreaks with herbicide will be completed annually between August and September, with further maintenance and grader blading to be conducted as necessary. The existing firebreaks have not been maintained to bare earth by the previous owner and, while re-establishment works commenced post property settlement in 2023, it will take several seasons of sustained works to fully re-establish.

Roads will be subject to annual inspections with maintenance programs developed to address any issues identified. Road will be maintained to a trafficable standard, i.e the quality of terrain will permit continue movement of 4WD.

5.6 Grazing Strategy

There are currently no plans to undertake grazing activities in the project area. However, some managed ‘crash’ grazing of 2-3 week time periods could be used after establishment to help control grasses.

5.7 Firebreak Pruning

Edges of the plantations will be maintained to ensure fire breaks have sufficient fire vehicle access.

5.8 Pruning and Thinning Schedule

With the planned species mix, it is unlikely that any pruning or thinning will be permitted or required.

5.9 Firefighting Equipment Register

WEC(S) owns five vehicle mounted firefighting units, one water truck and one firefighting trailer.

Woodside is currently tendering for a suitable on-ground/ operational fire management consultant. Supplemental equipment (e.g. Light Tankers, 1x4s and 2x4s) for support of potential pre-planting mitigation burning will be a priority for this scope of works.

5.10 Training and Experience

WEC(S) has made the DFES 0995 bushfire safety awareness training or equivalent a priority for all members of the permanent Woodside carbon farm team. WEC(S) employs three full time farm managers with significant land management and firefighting awareness in a farming context.

Woodside is currently tendering for a suitable on-ground/ operational fire management consultant. DFES equivalent training of Woodside on-ground staff and provision of mitigation burn Risk Assessments (RAs), pre-ops planning and command and control of operations will be a priority for this scope of works.

5.11 Mitigation burning

WEC(s) proposes annual qualitative fuel load assessment. Any subsequent fuel reduction activity will be undertaken in accordance with State fire legislation and local fire notification and permit requirements.

WEC(s) is currently tendering for a suitable on-ground/ operational fire management consultant. The priority is to engage additional resources to undertake any mitigation burning outside Woodsides training, experience and equipment.

Prior to undertaking larger mitigation burns WEC(s) will consult with and notify the Shire of Gingin Mitigation Burn Coordinator and Community Emergency Services Manager.

6. Risks

Woodside's Risk Management policy is shown in **Error! Reference source not found.**. This policy applies to Woodside's Carbon Projects. The key risks to carbon stored at the Karakin property for the permanence obligation period are outlined in Table 6.1. The risks are ordered into a broadly chronological sequence, not by importance or impact.

Table 6.1 - Key Risk Areas

Risk	Description
Site Preparation	Site preparation aims to provide the best conditions possible for establishing project trees and shrubs. Activities include weed and ex-crop biomass control, invertebrate pest control, installation of furrows and mounds to aid water management and provide clear areas for ease of plant installation. Site preparation is critical given the often degraded or challenging soils where projects are established. Site preparation not only impacts early establishment but effects longer term growth and resilience of plantings.
Plant Selection	Plant selection aims to supply healthy seed and seedlings ready for planting. By selecting species which are endemic, and sourcing seed local to the areas they will be planted, there is a greater likelihood that the seed/seedling will be suited to the ground and climatic conditions. Plant selection must also be cognisant of local site issues including salinity, water logging, water run-off and frost. The viability of seed is a significant risk for projects with a large proportion of direct seeding. Seedling quality is managed in nurseries. Ensuring seedlings are delivered of merchantable quality, healthy and free of disease is essential.

Risk	Description
Planting	Planting aims to install a seed or seedling into an environment which maximises its chances of healthy and enduring establishment. Skilled planting of a seed is typically performed via a mechanical “Direct seeding” machine. Like all agricultural equipment these machines require proper setup and continuous monitoring to ensure they continue to plant seeds in line with target specification (e.g. depth, backfill, seed distribution, etc). Skilled planting of seedlings can be performed by “Hand Planting” or mechanical means. Care must be taken to install seedlings in the correct locations (e.g. position in furrows and mounts), at the right depth and with appropriate care to ensure holes are backfilled with soil to avoid air pockets. Planting must also be undertaken at the right time in the season. Typically, at the commencement of the break into winter, or the Noongar Makuru season. Planting at this time will maximise time for seeds/seedlings to access water and nutrients prior to the main growing season of spring and early summer, or Djilba and Kambarang. During planting, steps can be taken to ensure critical nutrients and trace elements are available. These are also essential for healthy plant establishment.

Risk	Description
Weeds	Weed control post planting is critical to ensure that sufficient water and nutrients are available for the establishing plants and not being consumed by weeds. In addition, removal of all weeds can be counterproductive as weeds can provide a useful interim role in stabilising soil and preventing wind erosion of topsoil. Principle means of controlling weeds is through chemical and mechanical weed management. The application of weed control post planting must be conducted carefully to ensure weeds are impacted and trees and shrubs are not. Many controls are implemented to minimise the impact, this includes spraying in ideal conditions, shielded spraying and through chemical selection. Once plants are established, grazing stock may be introduced onto properties to graze on grass and weeds. In addition to supporting weed control, it has the added advantage of reducing fire-prone biomass load on properties. By grazing at the right times and during relatively short bursts the grazing can be focussed on grass and weeds and not move onto the plantings. All forms of weed management are underpinned by good monitoring and timely response. Woodside meets the requirements of the *Biosecurity and Agriculture Management Act 2007 Weed management* when dealing with 'Declared Weeds'.

Risk	Description
Pests	Pest control aims to minimise the impact of both vertebrate and invertebrate pests on the early establishment of plantings. Invertebrate pests include most commonly locusts and weevils, and if left unchecked can have a significant impact on germinates and seedlings in a few weeks. Timely monitoring and application of pest treatments to impacted areas is critical. Vertebrate pests include both non-native (e.g. rabbits, mice, foxes, feral goats, donkeys, pigs and sheep) and native species (kangaroos, emus and some bird species). These pests are typically found in large tracts of neighbouring remnant vegetation. Timely monitoring and implementation of vertebrate pest management is critical. Pests can impact large areas and effective co-ordination with stakeholders including neighbours, Shire representatives and managers of State parks and reserves is important. Pest management is most critical during the establishment of plantings. Once established the impact of pests is likely to be minor.
Disease	The impact of disease on mixed diverse native plant species is managed through good monitoring and timely response. Introduction of disease is limited by good nursery practice and inspection prior to site delivery. Disease will typically exist in small patches and have limited impact on plantings.

Risk	Description
Weather & Climate	Poor rainfall during the establishment period can have a significant impact on plant mortality. Scarce water resources, including the impact of weed competition make them more susceptible to damage from pests and disease, will limit growth and will increase mortality. Addressing all previously mentioned risks will increase survivability during extended periods of low rainfall. Once plants are established the risks are reduced as species selected are typically adapted to a degree of variable climatic condition. Climatic change, especially a shift to longer, drier, hotter periods will present additional risk to the survivability of plants. However as previously mentioned, the most susceptible period is during establishment. Extreme weather events may also impact plantings. There are limited opportunities to respond to extended drought, some ground works may be considered to optimise the capture of rainfall, and/or irrigate plants, however these are typically cost prohibitive.
Fire	Environmental planting projects typically sit in agricultural areas and are susceptible to fire, especially during the hot, dry summer months. The highest priority in fire management is to prevent harm to people. All Woodside properties have Bushfire Management Plans (BMPs). These are developed in consultation with fire management experts and typically reviewed by Local Shires as part of Planning Applications to conduct the project. The objective of the management plan is to: • avoid any increase in the threat of bushfire to people and assets; • reduce vulnerability to bushfire through design; and • incorporate bushfire protection measures.

7. Prevention and mitigation of risks

The key risk control actions that will prevent the loss of carbon stored in the Woodside Native Reforestation Project – Phase 1 project area for the permanence obligation period are outlined in the following tables. They are common to both Sukey Hill and Cowcher properties in their description and so have not been separated.

7.1 Site Preparation

Table 7.1 – Site Preparation

Control	Preventative Control Description	Mitigative Control Description	Residual Risk
1.1	Perform weed and biomass control	As per preventative control	Low
1.2	Perform invertebrate pest control		
1.3	Perform mechanical ground preparation	Limited mitigative control	

7.2 Plant Selection

Table 7.2 – Plant Selection

Control	Preventative Control Description	Mitigative Control Description	Residual Risk
2.1	Perform appropriate species selection for the area	Limited mitigative controls	Low
2.2	Perform seed collection proximal to site		
2.3	Perform testing of seed for viability		

Control	Preventative Control Description	Mitigative Control Description	Residual Risk
2.4	Perform quality checks on seedlings	*Control 3.4 in Planting will provide some mitigation*	

7.3 Planting

Table 7.3 – Planting

Control	Preventative Control Description	Mitigative Control Description	Residual Risk
3.1	Perform effective seed installation	Limited mitigative controls	Low
3.2	Perform effective seedling installation		
3.3	Perform planting during seasonal planting window		
3.4	Provide nutrient and trace elements at planting		

7.4 Weeds, Pest and Disease

Table 7.4 – Weeds, Pests and Disease

Control	Preventative Control Description	Mitigative Control Description	Residual Risk
4.1	Perform timely weed, pest and disease monitoring	Limited mitigative controls	Low
4.2	Perform post planting weed and biomass control		
4.3	Perform post planting pest control		
4.4	Perform post planting disease control		

7.5 Weather and Climate

Table 7.5 – Weather and Climate

Preventative Control Description	Control	Mitigative Control Description	Residual Risk
All other controls represent preventative controls to the risk of drought	5.1	Perform mechanical groundwork to change water capture	Low
	5.2	Perform irrigation of drought impacted areas	

7.6 Fire

Table 7.6 – Fire

Control	Preventative Control Description	Control	Mitigative Control Description	Residual Risk
6.1	Perform project design incorporating fire management requirements and following the Guidelines for Plantation Fire Protection.		*As per preventative control*	Low

Control	Preventative Control Description	Control	Mitigative Control Description	Residual Risk
6.2	Perform annual fire management planned activities inclusive of maintaining fire breaks and, where appropriate, reducing fuel loads. Fuel load reduction operations can include mechanical reduction of standing biomass, 'cool season' mitigation burns and herbicide treatment of early stage annual weed loads.			
6.3	Installation of Fire tubes which includes emergency contact details and corresponding maps.			
6.4	Increase Capabilities		WEC(S) has made the DFES 0995 bushfire safety awareness training or equivalent a priority for all members of the permanent woodside carbon farm team. With ambitions to be available for volunteering in the local brigade. WEC(S) owns five vehicle mounted firefighting units, one water truck and one firefighting trailer. Woodside is currently tendering for a suitable on-ground/ operational fire management consultant to supplement Woodside capability and equipment, when and where required.	

Control	Preventative Control Description	Control	Mitigative Control Description	Residual Risk
	All other controls represent mitigative controls in situations where the preventive controls fail.	6.5	Perform emergency response plan to fire events	
		6.6	Post fire event action plan	

8. Organisation

This section provides an overview of the accountability for delivery of this Plantation Management Plan.

Woodside Energy Carbon (Services) Pty Ltd are a wholly owned subsidiary of Woodside Energy Ltd, an ASX, LSE and NYSE listed entity.

Woodside Energy Carbon (Services) Pty Ltd is the Project Proponent and is accountable for delivery of this Permanence Plan.

Within Woodside, the activities required to acquire, establish, and manage this Project are performed by the Carbon Services organisational unit.

This organisational unit contains capability either directly or through contracted organisations and individuals that enable it to perform the required Permanence Plan activities.

Woodside has established and maintains a significant capability and capacity so that timely and performance critical activities can be conducted without delay. This provides significant risk reduction benefits and has a direct influence on the ability of Woodside to deliver on the Permanence Plan. Examples of Woodside performed activities relevant to this Permanence Plan are shown in Table 8.1Table 8.1 – Woodside performed activities

Table 8.1 – Woodside performed activities

Area	Typical Woodside Activities
Site Preparation	• weed / biomass control • invertebrate pest control via spraying • some mechanical groundworks • contracting of site preparation activities
Plant Selection	• input to species identification and selection • contracting of quality seed and seedlings • quality checks on seedlings prior to and when delivered to site
Planting	• planning of planting requirements • contracting of quality planting contractors • quality checks on planting performance • some planting activities
Weeds, Pest and Disease	• timely weed, pest and disease monitoring • weed / biomass control

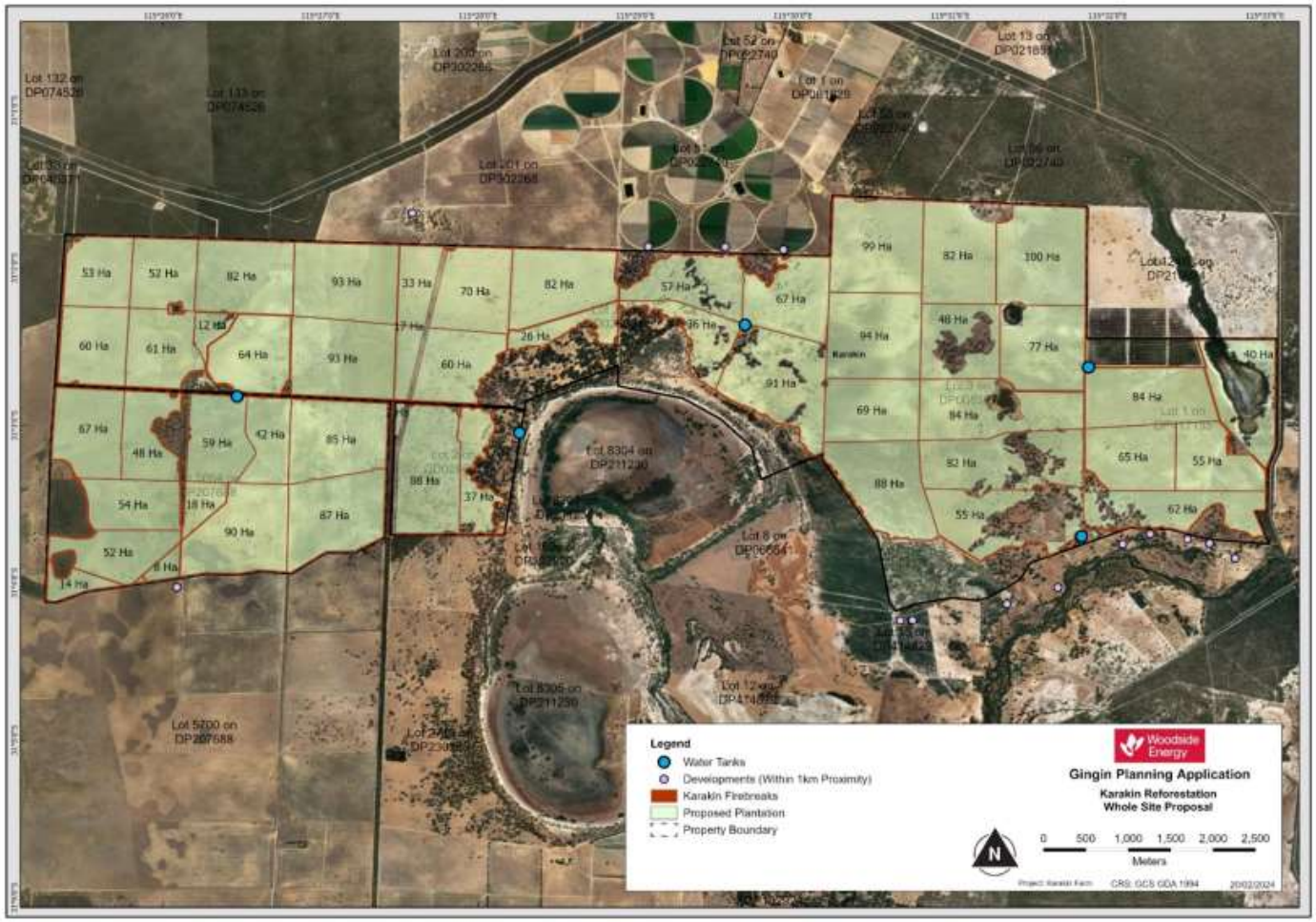
	• invertebrate pest control via spraying • contracting of vertebrate pest control
Fire	• Input to design in fire management plan • Annual fire management activities include firebreaks, checks on water infrastructure, fuel load management, review of bushfire readiness. • Fit-for-purpose capabilities and equipment • Emergency response management plan. • Post fire event action plan

Contracted activities are provided by proven, capable individuals and companies to a specification requested by Woodside. There are several overlaps between Woodside and Contractor performed activities which provides added flexibility and coverage to ensure timely delivery of activities. Examples of Contractor performed activities relevant to this Permanence Plan are shown in Table 8.2.

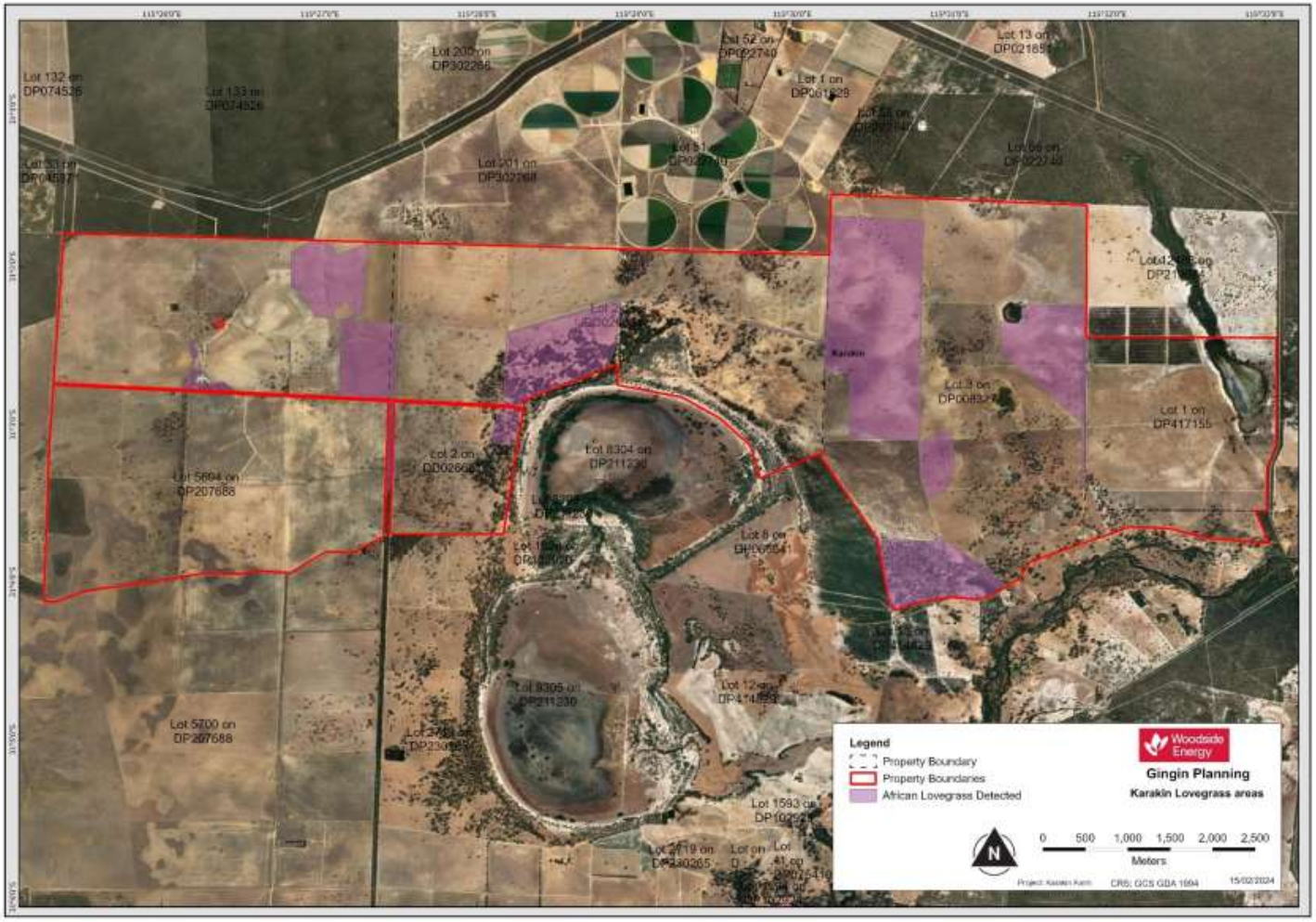
Table 8.2 – Contracted activities

Area	Typical Contracted Activities
Site Preparation	• weed / biomass control • invertebrate pest control via spraying • large scale mechanical groundworks
Plant Selection	• expert species identification and selection • provision of quality seed and seedlings
Planting	• expert input to planning of planting requirements • provision of quality planting execution
Weeds, Pest and Disease	• timely weed, pest and disease monitoring • invertebrate pest control via spraying • provision of vertebrate pest control
Fire	• expert input to design in fire management plan • Training, supplemental capability and equipment

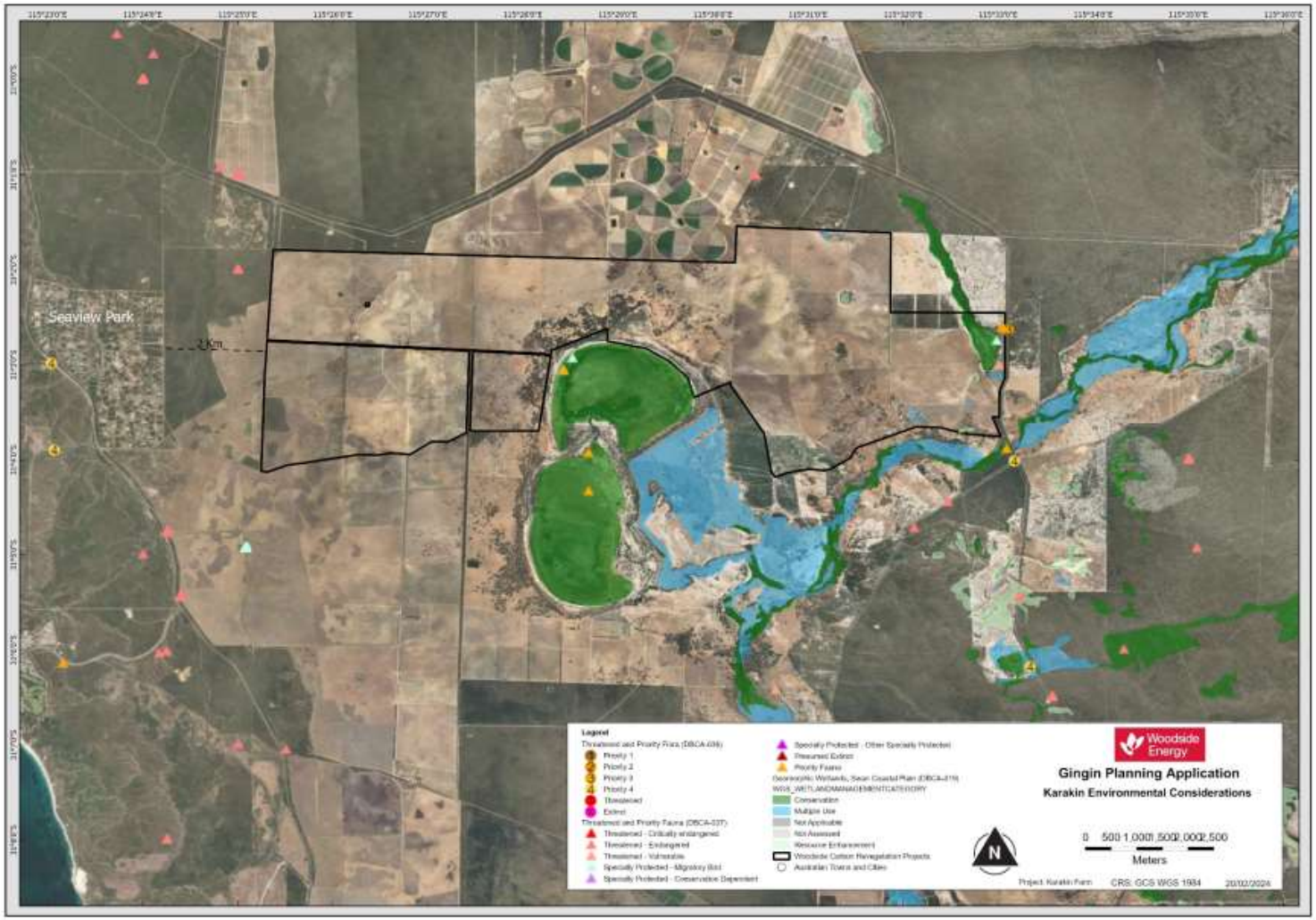
9. Appendix A: Plantation Design



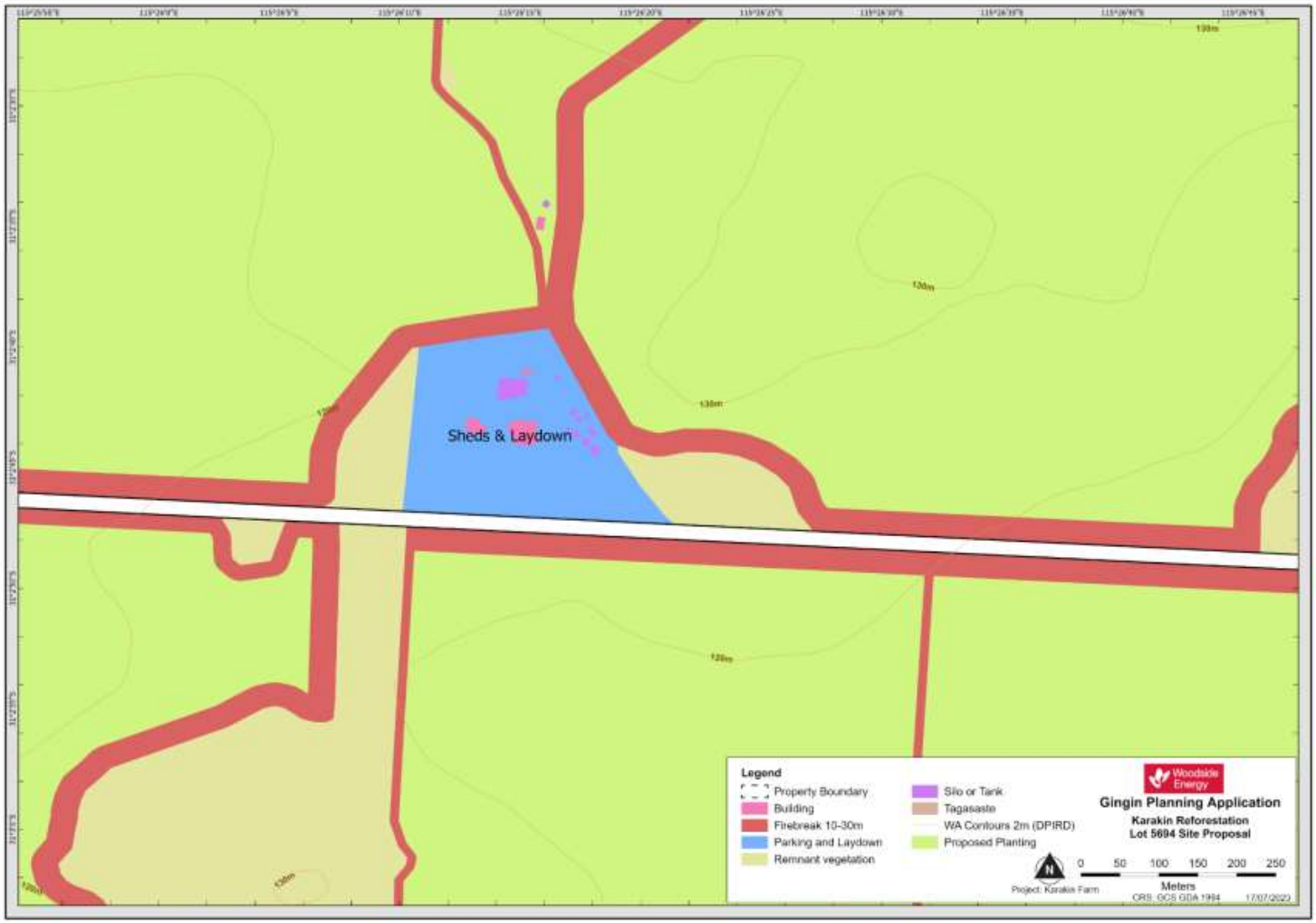
10. Appendix B: Love grass Occurrence



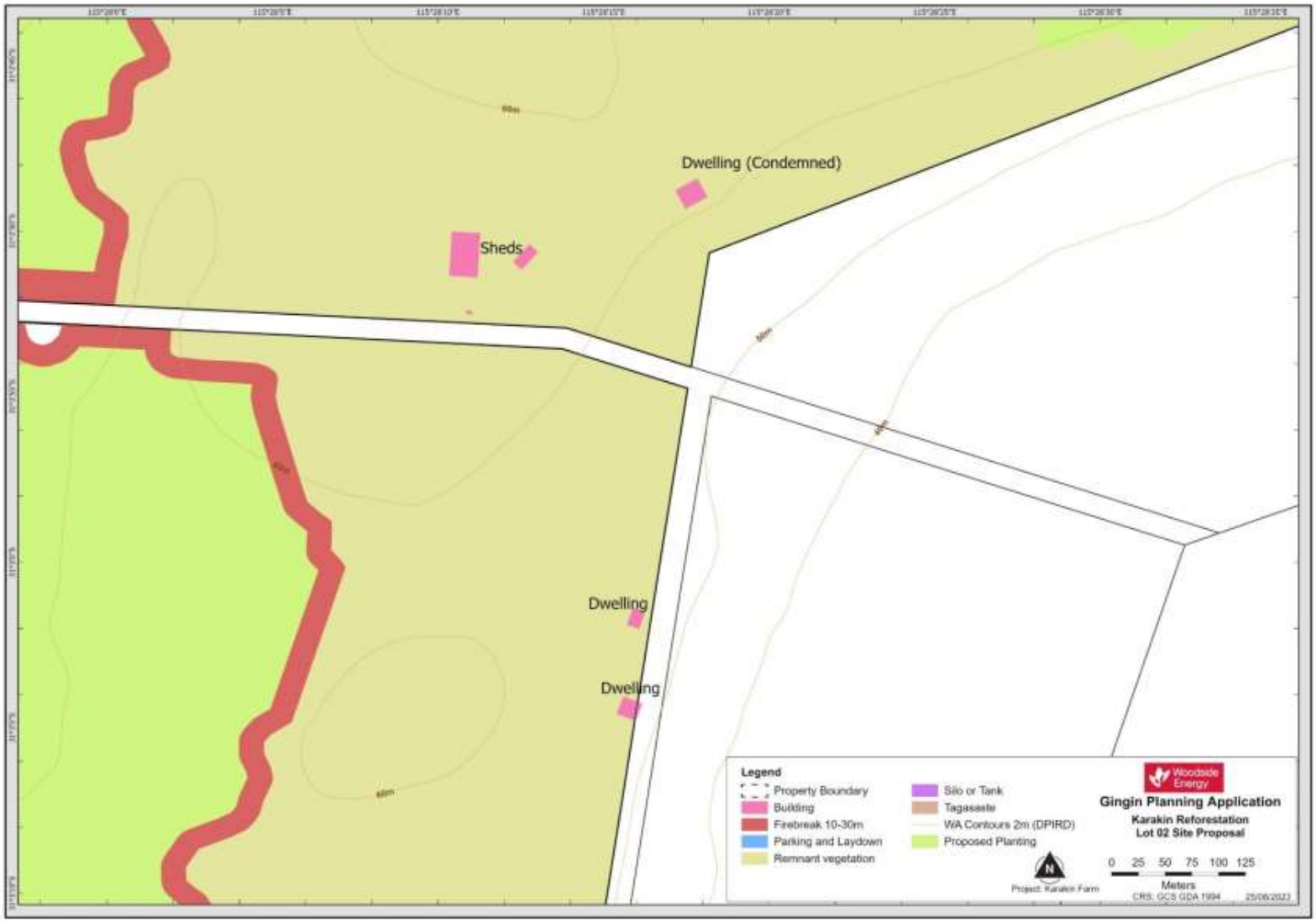
11. APPENDIX C: Environmental Consideration



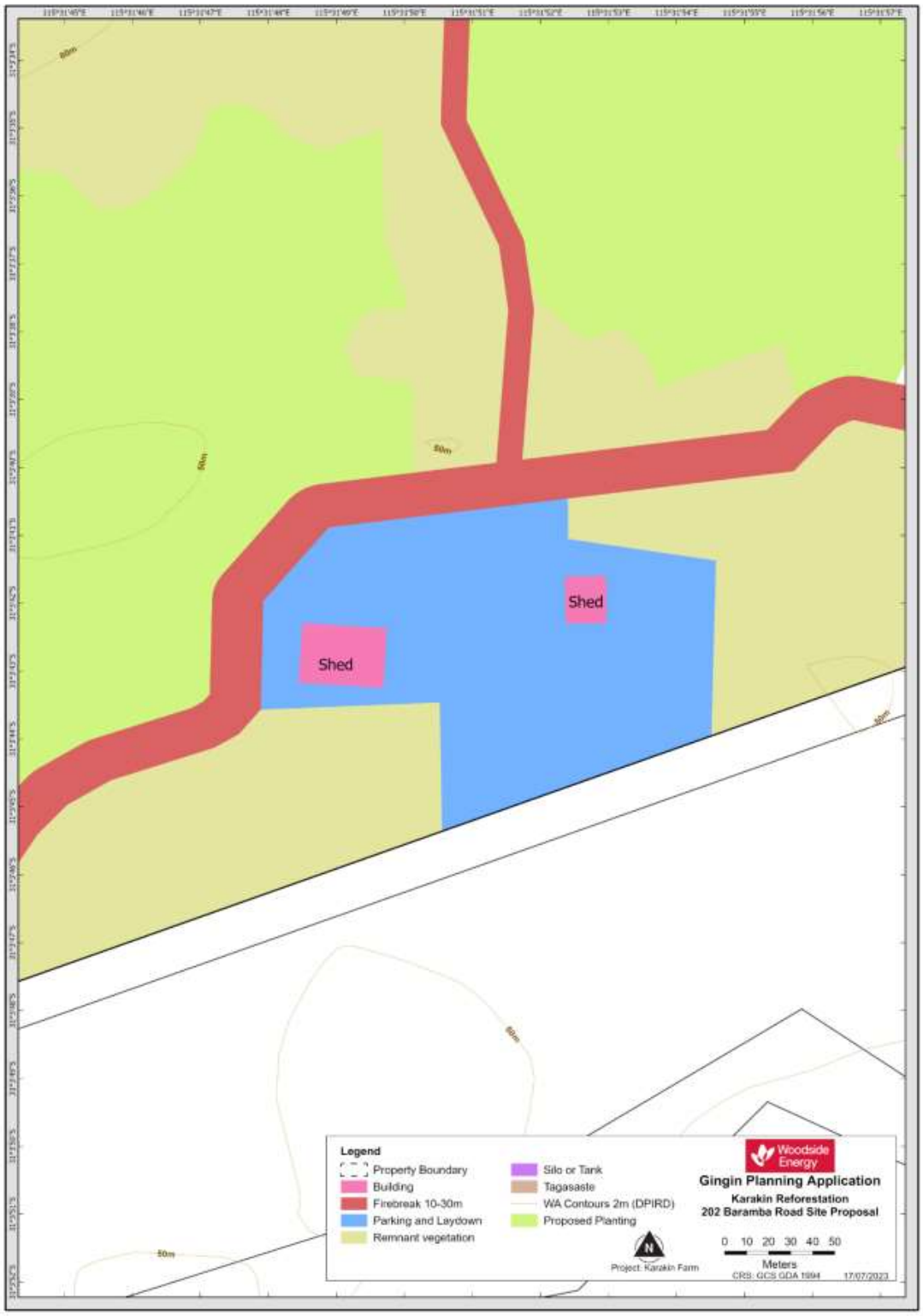
12. APPENDIX D: Existing Infrastructure – Lot 5694



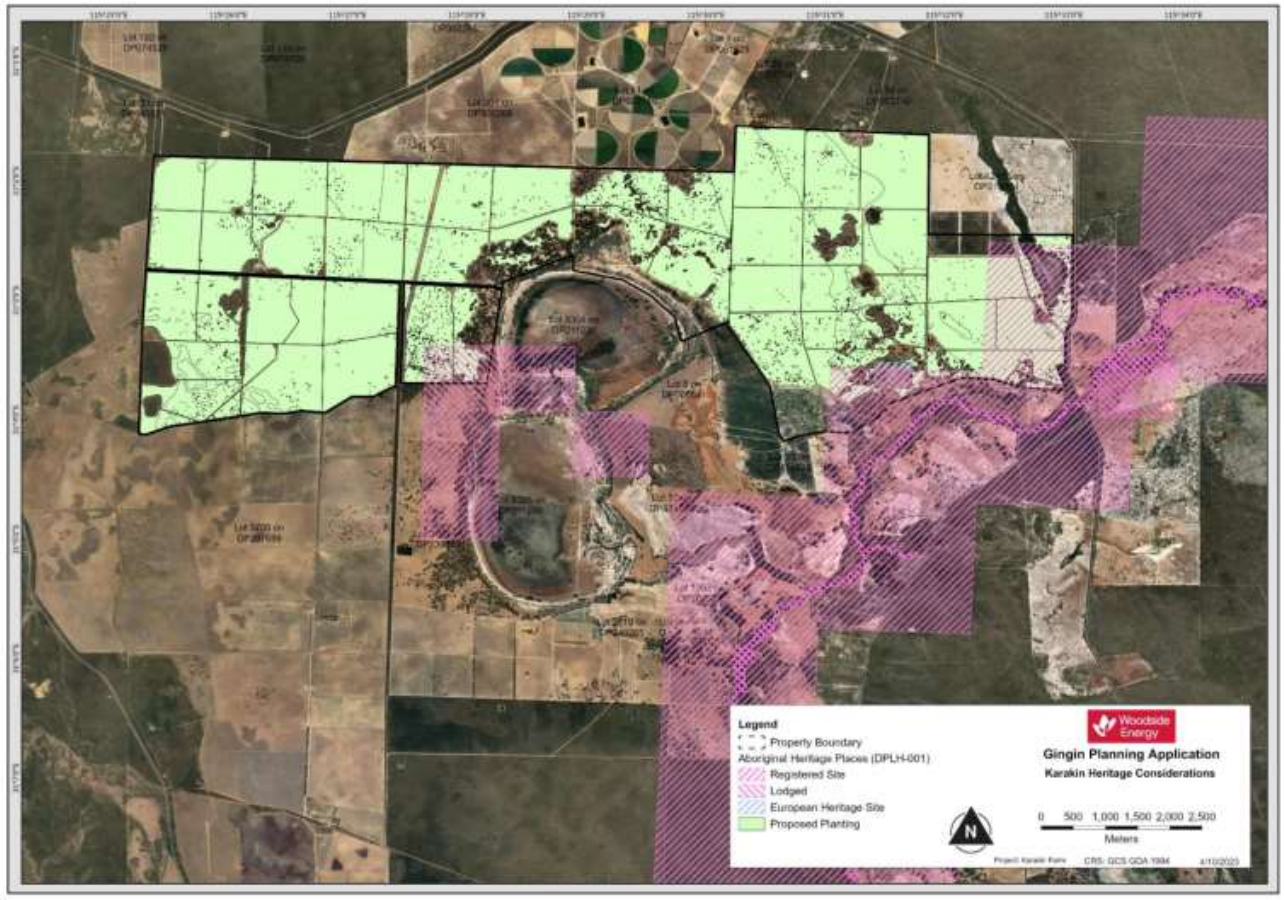
13. APPENDIX E: Existing Infrastructure – Lot 02



14. APPENDIX F: Existing Infrastructure – 202 Baramba Road, Lot 03



15. APPENDIX G: Heritage Considerations



16. APPENDIX H – Risk Management Policy

WOODSIDE POLICY

Woodside Energy

Risk Management Policy

OBJECTIVES

Woodside recognises that risk is inherent in our business and the effective management of risk is vital to deliver our strategic objectives, continued growth and success. We are committed to managing risks in a proactive and effective manner as a source of competitive advantage.

Our approach protects us against potential negative impacts, enables us to take risk for reward and improves our resilience against emerging risks. The objective of our risk management framework is to provide a single consolidated view of risks across the company to understand our full risk exposure and prioritise risk management and governance.

The success of our approach lies in the responsibility placed on everyone at all levels to proactively identify, assess and treat risks relating to the objectives they are accountable for delivering.

PRINCIPLES

Woodside achieves these objectives by:

- Applying a structured and comprehensive framework for the identification, assessment and treatment of current risks and response to emerging risks;
- Ensuring line of sight of financial and non-financial risks at appropriate levels of the organisation;
- Demonstrating leadership and commitment to integrating risk management into our business activities and governance practices;
- Recognising the value of stakeholder engagement, best available information and proactive identification of potential changes in external and internal context;
- Embedding risk management into our critical business processes and control framework;
- Understanding our exposure to risk and tolerance for uncertainty to inform our decision making and assure that Woodside is operating with due regard to the risk appetite endorsed by the Board; and
- Evaluating and improving the effectiveness and efficiency our approach.

APPLICABILITY

The Managing Director of Woodside is accountable to the Board of Directors for ensuring this Policy is effectively implemented.

Responsibility for the application of this Policy rests with all Woodside employees, contractors and joint venturers engaged in activities under Woodside operational control. Woodside managers are also responsible for promotion of this Policy in non-operated joint ventures.

This Policy will be reviewed regularly and updated as required.

Reviewed by the Woodside Energy Group Ltd Board in December 2022.

Karakin Farm
Plantation Management Plan

Head Office
Mia Yellagonga
11 Mount Street
Perth WA

Postal address:
GPO Box D188
Perth WA 6840
Australia

Contact:
Gareth Parry
E: carbon@woodside.com.au

Attachment Two

Bushfire Consultant Response Letter

BUSHFIRE PRONE PLANNING

Suite 11, 36 Johnson Street Guildford WA 6055
PO Box 388 Guildford WA 6935
T: 08 6477 1144 | E: admin@bushfireprone.com.au

Our Ref: 230563
Your Ref: -

19 February 2024

Gareth Parry
Woodside Energy
Mia Yellagonga Karlak
11 Mount Street
Perth WA 6000

Dear Gareth

RE: DEVELOPMENT APPLICATION: PROPOSED PLANTATION (CARBON FARM) – KARAKIN LAKES ROAD

Please find my response to the Shire of Gingin request for comment on the BMP prepared for the development proposal and our proposed actions for consideration in the following detail.

If you wish to discuss further, please do not hesitate to contact me.

Yours sincerely

Kathy Nastov | *BSc. Env Man, GradDip Bushfire Protection*
Director
Bushfire Prone Planning
(Accredited Practitioner BPAD Level 3)

230563 – WOODSIDE – KARAKIN BMP UPDATES

Response to the RFI specifically question 1, 3-5, 7-10.

Responses to the comments from the schedule of submissions (DEFS comments).

SHIRE COMMS REQUIRING RESPONSE

In accordance with clause 65A and 65B of the Planning and Development (Local Planning Scheme) Regulations 2015 (Deemed Provisions), the following information is requested, and a response/clarification provided:

Plans

1. Please submit a revised Site Plan that depicts the vegetation 'cells' as outlined within the written proposal.

The Shire notes that a Site Plan is outlined within the Bushfire Management Plan (BMP) that more accurately reflects the proposed development as opposed to Appendix A.

Bushfire Prone Planning Response: Update the Plantation Cells map and site plans within the BMP in accordance with the latest plans provided by Woodside.

Bushfire Considerations

The Shire views bushfire considerations as a key consideration to the suitability of the proposal. The development connects a large tract of vegetation located east, with a large tract of vegetation located to the west, that ultimately connects to Seaview Park (Rural Living Estate).

The proposal outlines that the landowner owns three vehicle mounted fire units, one water truck, and one firefighting trailer (pg. 6). Section 1.7 of the BMP outlines that as a minimum, the landowner is to ensure that 2 x suitably constructed 4wd vehicle mounted 'slip on' units and 1 trailer mounted fire pump/water tank is provided.

2. Can you confirm why the BMP requires the appliances listed and provide commentary as to why the equipment is viewed as being sufficient to prevent fire escaping from the land, either from controlled or uncontrolled burns?

Bushfire Prone Planning Response: Section 1.6.7 and 1.8 of the BMP highlights the need to Maintain bushfire management resources according to that defined in 'future' site Pre-Incident Plans and Preparedness Guidelines. Minimum appliance/equipment on-site is identified to ensure general site operations can be undertaken limiting ignition sources and capability to extinguish fire ignition resulting from those site operations or other ignition sources where conducive to do so. Operational Plans will also consider daily Australian Fire Danger Ratings - AFDR and scaling of response to expected conditions. Noting also that the additional Woodside purchased 2 slip-on firefighter units will be incorporate into the updated bushfire management plan and subsequent operation response plans.

Prescribed burning section 1.8.5 of the BMP details a list of requirements that; all planned burns will have an approved operational plan prior to burning. Safety and environmental considerations and potential impacts on other stakeholders are assessed as part of the planning process (due diligence).

Prescribed Burning Operational plans include:

- Burn objectives;
- An operational map;

- Environmental approvals;
- Burn area details;
- **Resources required**;
- Standards to be met;
- Checks and notifications to be undertaken;
- Authorisations to be obtained; and
- Post burn appraisals to be conducted.

3. Have prescribed burning plans and the associated operational plans referenced in the BMP been prepared?

Bushfire Prone Planning Response: No. The Bushfire Management Plan prepared for this development application is intended for the planning approvals process to address the development in line with the Guidelines for Plantation Fire Protection. Elements of the DPLH Guidelines for Planning in Bushfire Prone Areas are not specifically relevant where the development proposal is for plantation purposes only and no built infrastructure or subdivision land use proposed.

The BMP however considers both the Guidelines for Plantation Fire Protection and the Elements of the Guidelines for Planning in Bushfire Prone Areas. Refer Section 2 of the Bushfire Management Plan.

Operational and site management plans can subsequently be prepared as part of the development conditions and future plantation programmed works. This is to ensure that operational and site management plans are able to be updated as required to capture current practices that will be implemented for the plantation site in consultation with the relevant agencies and in accordance with legislation at that time.

4. Has a rehabilitation plan been prepared for post controlled/uncontrolled burns?

Bushfire Prone Planning Response: As above. The BMP identifies in Section '1.8.9 Rehabilitation' that there is a requirement to undertake rehabilitation of disturbance resulting from firefighting operations as soon as practical after the bushfire is contained. Where substantial rehabilitation works are or will be required, and it is considered relevant at that time, a rehabilitation plan can be prepared and implemented.

5. What material will the vehicle access routes be constructed from?

Bushfire Prone Planning Response: Firebreaks are to be install/constructed in accordance with the Shire of Gingin Firebreak Order and Bushfire Information.

The main access routes are to be capable of a minimum load limit of 15 tonnes and meet the vehicle access technical requirements as detailed within the Guidelines for Planning in Bushfire Prone Areas.

The Guidelines do not specify surface construction material for driveways or access routes. The main access routes to infrastructure within the Plantation site (e.g. water tanks) should be constructed of an all-weather compacted material trafficable surface suitable for 2WD vehicles, or as specified by the Shire of Gingin.

6. How will the water tanks be replenished?

Bushfire Prone Planning Response: Bores located within the site will enable the static water tanks to be replenished. Location of bores/tanks to be indicated on the site plans.

Woodside to provide bore locations and flow rates.

7. The BMP requires the development to have access to, own or contract light and heavy machinery such as front-end loaders to be used in firefighting efforts. Can you confirm the landowner has access to such equipment?

Bushfire Prone Planning Response: Pre-incident readiness for the bushfire season, will consider resources and procedures for daily activities and requirements for fire preparedness and response. Existing machinery suitable for on-site works can be included in pre-incident machinery list and seasonal contractor machinery arrangements can be identified within these plans and the contractor contact details updated annually or as required.

8. Please provide a response to submissions received on the application, with particular regard to the comments received from DFES.

Bushfire Prone Planning Response: As below.

DFES COMMS REQUIRING RESPONSE

1. Where there are habitable buildings, DFES also undertakes an assessment against SPP 3.7 & Guidelines (including the use of APZs, water supply and vehicle access), which will be assessed using content in the BMP.

Bushfire Prone Planning Response: The BMP considers both the Guidelines for Plantation Fire Protection and the Elements of the Guidelines for Planning in Bushfire Prone Areas. Refer Section 2 of the Bushfire Management Plan.

2. The BMP does not appear to provide a full site post-development vegetation assessment, or resultant BAL outputs (tables are provided as an attachment to the document however no BAL contour map or BAL outputs are provided for each building),

Bushfire Prone Planning Response: The majority of the post development on-site vegetation will be the plantation vegetation, Figure 2.0 in the Bushfire Management Plan. An additional plan can be provided more accurately indicating the Plantation vegetation detail. The current planting detail to be updated based on plantings which are 300-400 stems per hectare mixed species Marri's, Coastal Blackbutt and Banksia's similar to a mallee planting, but including low density tree species. The final vegetation type is likely more alike low woodland in terms of pure vegetation classification, rather than scrub. Mapping in the BMP can be updated to reflect the vegetation mix.

Figures 3.2.1, 3.2.2, 3.2.3 and 3.2.4 indicate the plantation vegetation impact on existing habitable and non-habitable buildings. The requirement for these buildings within the subject lot/s is to meet the requirements of the Shire of Gingin Firebreak Order and Bush Fire Information brochure (Notice). The existing buildings are not required to be retrospectively upgraded to a determined BAL rating.

The Guidelines for Plantation Fire Protection require that existing or approved habitable buildings must be a minimum of 100m from the plantation unless the building has been constructed to an appropriate higher standard. Between non-habitable existing or approved buildings (i.e. sheds and enclosed storage areas, a minimum 50 metre separation is required. This hazard separation zone requirement is greater than that required by the Shire of Gingin Firebreak Order and Bush Fire Information brochure (Notice).

These separation zones comprise an asset protection zone and hazard separation zone, which is detailed within the bushfire management plan. The asset protection zones indicated in the BMP for the habitable buildings are equivalent to a BAL-29 radiant heat impact. Refer Figure 3.2.3.

Non-habitable Sheds/enclosed structures are surrounded by a 20 metre asset protection zone in accordance with the Shire of Gingin Firebreak Order and Bush Fire Information brochure (Notice).

3. The scale of several figures is not sufficient to detail the location/number of tanks, dwellings, shed etc. accurately. Specifically, DFES notes that figures 1.0, 1.2, 2.0 and 3.1 should be updated to ensure that either less information is provided, or a smaller scale is used to clearly show the information being presented. It does not appear that a full site plan is appropriate to accurately detail the location/access to of tanks/dwellings/sheds/gates etc.

Bushfire Prone Planning Response: The purpose of the bushfire management plan is for development application planning information. The bushfire management plan is not intended as the on-site 'daily' operation document in its entirety.

Additional mapping/figures can be prepared as part of development approval conditions for the on-going site operation management plans to ensure information remains current and relevant at that time.

If required:

i. BMP Figure 1.0 provides and overview of the entire development site. Two additional figures/ can be prepared, if required, as a west and east plan of the plantation site at a scale that provides additional clarity of the site details.
ii. BMP Figure 1.2 indicates the bushfire prone area mapping. This *Map of Bush Fire Prone Areas* acts as a trigger to determine whether bushfire protection planning and building requirements apply. There is little value in providing a greater scale map for the bushfire management plan.
iii. BMP Figure 2.0 provides and overview of the Plantation site. Two additional figures/ can be prepared, if required, as a west and east plan of the plantation site at a scale that provides additional clarity of the site details.
iv. BMP Figure 3.1 provides and overview of the classified vegetation and topography. Two additional figures/ can be prepared, if required, as a west and east plan of the plantation site at a scale that provides additional clarity of the site details.

4. It is suggested that photos should be provided to validate any 'building specific' vegetation assessments, as well as the overall vegetation assessment. It is unclear if the photos submitted are representative for the overall site for each vegetation type.

Bushfire Prone Planning Response: Photograph points are indicated on Figure 3.1.

Figures 3.2.1, 3.2.2, 3.2.3 and 3.2.4 can be updated with relevant photograph points in necessary or additional photographs provided, subject to consultation with the landowner.

The requirement for these buildings within the subject lot is to meet the requirements of the Shire of Gingin Firebreak Order and Bush Fire Information brochure (Notice). There is little value in additional detail as bushfire attack level requirements are not applicable to these existing buildings.

The minimum requirement for asset protection zones can be met and indicated in Figures 3.2.1, 3.2.2, 3.2.3 and 3.2.4.

5. The BMP does not include detail of slope for the subject site, or a full site post development vegetation assessment. DFES notes that page 58 of the BMP details two slopes for each plot. Plots should be separated to detail the vegetation type and slope of each individual area.

Bushfire Prone Planning Response: Slope is indicated in Figures 3.1, 3.2.1, 3.2.2, 3.2.3 and 3.2.4.

Vegetation 'Plots' or 'Areas' of the same classification of vegetation across the broader landscape are only relevant to a fixed point i.e. relevant to the location of a building. There is no requirement for a bushfire attack level contour map as asset protection zones in this instance are directly related to the requirements of the Shire of Gingin Firebreak Order and Bush Fire Information brochure (Notice).

Therefore large scale mapping of multiple vegetation areas that aren't site specific from a distance of 150 metres to a fixed point (existing or proposed building) are of little value in the planning process.

Due to the large landscape scale of the development proposal, an Elevation Map and Terrain Slope Map can be provided as additional information to assist with fire behaviour modelling if require by the Shire of Gingin.

The post development vegetation map will be the Plantation area, classified as low woodland and residual vegetation. BMP Figure 2.0 provides and overview of the Plantation site. Two additional figures/ can be prepared, if required, as a west and east plan of the plantation site at a scale that provides additional clarity of the vegetation details, if required by the Shire of Gingin.

6. DFES notes that the Low Fuel Zone areas (8ta/ha) should not be excluded, as an APZ should have no more than 2ta/ha and comply with the APZ standards provided in the Guidelines.

Bushfire Prone Planning Response: The less than 8 t/ha hazard separation zone/low fuel zone on the bushfire management plan Figures 3.2.1, 3.2.2, 3.2.3 and 3.2.4 will be updated so as not to appear as excluded vegetation.

Attachment Three

Completed Schedule of Submissions

Please direct all responses/queries to:
Gareth Parry
T: +61 423771520
E: Gareth.Parry@woodside.com

Our reference: 1401758941

Woodside Energy Carbon (Services) Pty Ltd
ACN 652 509 450
Mia Yellagonga
11 Mount Street
Perth WA 6000
Australia
T: +61 8 9348 4000
www.woodside.com

20/02/2024

Attn: James Bayliss, Manager Planning and Building
Shire of Gingin
7 Brockman Street,
Gingin WA 6503

Dear James,

DEVELOPMENT APPLICATION: (BLD/7661-P2610) PROPOSED PLANTATION (CARBON FARM)
ADDRESS: KARAKIN LAKES ROAD & BARAMBA RD, KARAKIN

Woodside Energy Carbon (Services) (WEC(S)) has reviewed the Shire of Gingin's request for information and provides a response to both the requests identified in the letter and the schedule of submissions. To best answer the request, we have engaged with Bushfire Prone Planning who prepared our Bushfire Management Plan. Their response has been attached. In response to reviewing Shire's RFI we're in the process of updating our Bushfire Management Plan and Plantation Management Plan, this will be delivered to the Shire upon completion.

WEC(S) outlines that the response provided by Bushfire Prone Planning aligns with its views. We believe the only additional commentary necessary relates to the 2nd and 6th request:

The proposal (pg 5.) outlines that 'permanent monitoring stations' are proposed to be established. Can you please advise what the proposed monitoring stations comprise of?

These permanent monitoring stations relate to requirements from the Clean Energy Regulator for determining stem density and canopy cover. They will compose of a quadrant style monitoring plot marked by steel posts.

Are the Carbon Credit Units generated by the development affected by plantation damage from bushfire?

Yes, as WEC(S) is registering this project under the Emission Reduction Fund, any loss of carbon during a fire event within the crediting period will need to be modelled. WEC(S) is also obligated under the emission reduction fund to maintain carbon stored for a 100-year period.
Please find our response to the schedule of submissions below.

Kind regards,

Steven Purse
Acting Vice President of Carbon Solutions

SCHEDULE OF SUBMISSIONS

DEVELOPMENT APPLICATION: PROPOSED PLANTATION – CARBON FARM ON LOTS 1, 2, 3, & D26681 – (459) KARAKIN LAKES ROAD, KARAKIN

No.	Submitter	Submission details	Applicants' response
1.	DPLH	The submitter provides the following general comment: *The Department has no specific comments on the application.* *Since liaising with you last, the WAPC Tree farm – Fact sheet has since been released - Planning fact sheet – Tree Farms (www.wa.gov.au)* *This sets out the DPLH and WAPC position on assessment of tree farm applications which reflects the measures outlined in SPP2.5 – Rural Planning.*	Woodside Energy Carbon Services (WEC(S)) notes the Gingin local planning scheme has not yet been amended to include the 'Tree Farm' land use, which has resulted our application seeking approval for the 'Plantation' land use. WEC(S)Notwithstanding, the proposal aligns with WAPC Fact Sheet on Tree Farms and with SPP 2.5 – Rural Planning. With regard to the land use planning considerations for tree farms set out in the Fact Sheet, the application and supporting documentation address the matters of bushfire risk, environmental and economic issues, water availability and transport. The Shire of Gingin has not identified any prominent rural landscapes in proximity to the subject site. Lastly, the subject site is not in proximity to any sensitive land uses. The subject site is not priority agricultural land given its sandy, alkaline soils and the exclusion of large-scale irrigation under its water licence.
2.	DPLH – Aboriginal Heritage Conservation	The submitter provides the following general comment: *A review of the Register of Places and Objects as well as the Department of Planning, Lands and Heritage (DPLH) Aboriginal Heritage Database concludes that the subject area intersects with Aboriginal Lodged Place ID 3483 (Karakin Lakes 3). The subject area is also within the public boundary of Aboriginal Registered Site ID 20008 (Gingin Brook Waggyl). However, the proposed works are not within the actual boundary as administered by DPLH. For reported Aboriginal heritage Sites where there is restricted information, the actual location of the place is not publicly available. A*	Woodside will ensure the proposal complies with the Aboriginal Heritage Act 1972 (AHA) (and any amendments). Woodside is engaging with the Yued Aboriginal Corporation as the development is within the Yued Indigenous Land Use Agreement (ILUA). WEC(S) regularly checks the Aboriginal Cultural Heritage Inquiry System (ACHIS) should new Aboriginal Cultural Heritage be reported within our subject area.

		dithered boundary is represented on the publicly accessible Aboriginal Cultural Heritage Inquiry System (ACHIS) to protect its actual location. Based on the current information held by DPLH, approvals under the Aboriginal Heritage Act 1972 (AHA) will be required for the proposed development where it intersects with ID 3483 (Karakin Lakes 3). Please refer the proponents to the DPLH website at Aboriginal Heritage Approvals (www.wa.gov.au) for information on 'Land use under the Aboriginal Heritage Act 1972' for the types of approvals available under the AHA and how to apply.	
3.	Ratepayer	The submitter **supports** the application and provides the following general comment: *I have no complaints.*	WEC(S) thanks the submitter for taking the time to review the development application.
4.	Ratepayer	The submitter **supports** the application and provides the following general comment: *As owners of Lot 2719, Lot 1626 and Lot 8 (see Karakin Development Application Appendix A) with a mutual boundary with the proponent of approximately seven (7) kilometres, we thank you for the opportunity to make a submission on the above Development Application made by Woodside Energy Carbon (Services) Pty Ltd regarding a proposed plantation/carbon farm at neighbouring Karakin Farm.* *We have read and considered the Karakin Development Application, Woodside Native Reforestation Project, by the applicant and comment as follows.* *Section 1 : Existing Land Use* *We note that the water licence for this property has been moved to the Lancelin Golf Club land titles (presumably for future residential use as this location is intended to be redeveloped for housing) thus preventing continuance of the centre-pivot irrigation system for large scale irrigation on Karakin Farm. This course of action is commendable from a water conservation point of view as, with average winter rainfall decreasing significantly and water extraction by broadacre horticulture in the vicinity increasing, evidence from local stockwater bores indicates that local groundwater supply is not being replenished at a rate that is sustainable. There is also evidence of increasing local salinity. We take this opportunity to strongly recommend that the water licence remains at the Lancelin Golf Club location and is never reinstated at Karakin Farm.*	WEC(S) thanks the submitter for taking the time to review the development application and the provided commentary on recommendations of plantation management. With reference to the general comment, WEC(S) understands that the water license (GWL110514(11)) on Lot 5694 was removed in April 2023 with the conditions regarding the Lancelin Golf Club placed on the water license in May 2022. WEC(S) currently has no plans to acquire a new license and outlines that all water licenses in the area are fully allocated WEC(S). WEC(S) will plant in no larger than 100 ha cells and monitor for the identified wingless grasshoppers as part of our pest management. WEC(S) proposes, measures outlined in the development application to be taken to ensure no net harm on surrounding areas including existing vegetation the Karakin lakes wetlands.

		Section 2 : Proposed Land Use *In our opinion, the repurposing of Karakin Farm as a carbon farming system with remnant vegetation links is a suitable land use for the property for the purpose of generating Australian Carbon Credit Units. It is noted that the intention is to plant local species, such as eucalypts, banksias and shrubs exhibited in the existing remnant vegetation. This is a sensible approach as these are the species that are endemic and thrive in this locality. Biodiversity will increase as the bushland is re-established, returning the property as much as possible to its natural, pre-cleared state.* *Section 3 : Land Use Compatibility* *It is noted that some grazing and honey production may also be considered as the bushland is re-established. Both of these land uses are consistent with many properties within the Shire of Gingin, and are proven to be sustainable in the long term. The carbon farming proposal, although not a traditional farming practice, should be encouraged by the Shire of Gingin as a 'modern' farming practice, as it is intended over time to sequester carbon, thus assisting to reduce the increasing level of carbon dioxide in the atmosphere.* *Section 4 : Development Activities* *The five development activities, including the building rationalisation, appear to be consistent with successful management and operating of the property. However, we would strongly recommend the post-planting pest control strategy includes monitoring and spraying for wingless grasshopper incursions in the early summer to prevent decimation of the new seedlings, which will be costly for Woodside Energy to establish and lack of control may jeopardise the success of their plantation project. There is no specific mention of wingless grasshoppers in Section 4, so the proponent may not be aware of them and the damage they can inflict on vulnerable young plants in this locality in the summer.* *Section 5 : Ongoing Activities* *These seem consistent with operation of a successful carbon farming enterprise.* *Section 6 : Products and Services* *These seem consistent with operation of a successful carbon farming enterprise.* *Section 7 : Employment and Local Content* *Employing local contractors and indigenous*	

		participation is commendable and should be encouraged by the Shire of Gingin. *Section 8 : Waste Management* *The waste management proposal appears to be adequate.* *Section 9 : Fire Management* *It is encouraging that the proponent has submitted a Bushfire Management Plan to the Shire of Gingin as part of the Development Application and that it appears a review and update will be conducted annually prior to the bushfire season. It would be our expectation that the Shire of Gingin's Chief Fire Control Officer ensures this takes place each year without fail, as the loss of young trees by fire, and subsequent wind erosion, would be catastrophic to the carbon farming enterprise. The lack of livestock grazing as the bushland is being re-established will cause extra fuel load and result in an extreme fire hazard so a spraying or cultivation programme to control this within the plantation will be essential.* *For effective on-ground fire-fighting purposes, we would recommend that the 'block planting' method mentioned in Section 2, Proposed Land Use, is set out in blocks of no larger than 100 hectares, with 100 metre firebreaks between each block so easy access and movement is provided for firefighting machinery in the event of a bushfire within the plantation.* *Representatives of Woodside Energy were invited to, and attended, the 2023/24 Annual General Meeting of the Nilgen (now renamed Cowalla) Volunteer Bushfire Brigade in November and addressed the meeting on their proposed carbon farming enterprise and bushfire management strategies, including the provision of firefighting units and training for their permanent employees. It is good to see the company is taking an interest in supporting the community they will become a part of and it is hoped this will continue.* *Section 10 : Environmental Considerations* *As there are several wetlands on the property, including Doopiter Swamp and Biddingarra Swamp further to the north west, we request the Shire of Gingin considers asking the proponent to provide a Wetland Management Plan to guide the proponent and their employees, so these areas are identified and protected from harmful activities.* *Section 11 : Heritage Considerations*	

		It is noted that Woodside will consider excluding the Karakin Lakes Reserve Loc 8304 from planting, as per Appendix A, Proposed Preliminary Reforestation Plan. We would strongly recommend that this Reserve, which is subject to seasonal inundation in wetter seasons, be left in its natural state, in order to avoid any interference with the place and its environment. *Section 12 : Traffic Management* *This seems to be consistent with the management of the enterprise, and should not interfere with the management or amenity of our adjoining traditional farming property.*	
5.	Ratepayer	The submitter **does not support** the application and provides the following general comment: *We do not support and request on more information regarding propose land use in section 2 were it states seasonal grazing **in addition to honey and wax production*** *Adjoining properties are developed as Agriculture (intensive) which would raise concern to operations without a considerable buffer zone.*	WEC(S) thanks the submitter for taking the time to review the development application. Keeping of bees for honey and wax production is consistent with the 'Rural Pursuit' land use, defined under Local Planning Scheme No. 9 ('LPS 9') as: *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* *the sale of produce grown solely on the lot, but does not include agriculture — extensive or agriculture — intensive;* Under Schedule A clause 61(2)(h) of LPS 9, a rural pursuit in the General Rural zone is exempt from the requirement for development approval. Therefore, as the subject site is zoned General Rural, the keeping of bees for honey and wax production does not require development approval.
6.	DWER	The submitter provides the following general comment: *The Department of Water and Environmental Regulation has assessed the below planning application and has no objections.*	WEC(S) thanks the submitter for taking the time to review the development application.
7.	DEMIRS	The submitter provides the following general	WEC(S) thanks the submitter for

		comment: *The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) has assessed this proposal with respect to mineral and petroleum resources, geothermal energy, and basic raw materials and makes the following comments.* • *Most the area is underlain by a regional BRM – sand. This resource is mapped as being widespread throughout the region and is not protected or considered significant in this area.* • *Over the eastern third of the area there is a 18.13% encroachment on granted E 70/5576 and over the eastern most portion of the area this is a 0.37% encroachment on granted E70/2844 both held by Image Resources NL.* • *Over the central area there is a 6.61% encroachment on pending E 70/6284 held by Iluka Midwest Limitted.* • *The tenement holders were not contacted as the encroachment is relatively minor and the change to the land use although more restrictive than the current rural land use, should not stop exploration occurring in this area.* *DMIRS lodges no objections to the above development application.*	taking the time to review the development application.
8.	DFES	The submitter provides the following general comment: *DFES notes that a Bushfire Management Plan (BMP) has been submitted, however no Plantation Management Plan (PMP) has been included in the application. DFES notes that plantations will typically not achieve compliance with requirements of State Planning Policy 3.7 (SPP 3.7). In order to ensure adequate assessment of impacts is undertaken, DFES recommends that the decision maker requests that a PMP is also submitted addressing the requirements of the Guidelines for Plantation Fire Protection (FESA 2011) (PFP).* *DFES acknowledge that due to the introduction of risk (through increased vegetation), it is unlikely that a plantation is capable of compliance with SPP 3.7 and the associated Guidelines for Planning in Bushfire Prone Areas (the Guidelines). The submission of a PMP allows for clear assessment of the plantation layout, risk mitigation/management measures and a single clear reference for contact details/plans moving*	WEC(S) thanks the submitter for taking the time to review the development application. We've engaged with our bushfire management practitioner to best answer the below comments these are attached in appendix A. In-conjunction with the attached WEC(S) would like to clarify that the site will be unmanned, with the firefighting equipment being scaled to the number of people present, the activities being performed and the Australian Fire Danger Rating of the day.

		forward with the project. Where there are habitable buildings, DFES also undertakes an assessment against SPP 3.7 & Guidelines (including the use of APZs, water supply and vehicle access), which will be assessed using content in the BMP. *The submitted BMP provides a vegetation assessment and some high-level information addressing some requirements of the PFP Guidelines, however further information is required.* *Updated information in the form of a PMP is requested to confirm how each section of the PFP Guidelines has been addressed. Information missing from the proposal includes (but is not limited to)* • *Specific plantation manager details (including 24-hour contacts, how fires will be identified etc.),* • *Clear assessment of <u>all</u> habitable and non-habitable buildings on site and any surrounding local developments within the relevant boundaries of the plantation (additional comments related to this are provided below) as well as additional uses within 1km of the sites (it is unclear if this has taken place),* • *A proposed species list and final layout map (including compartment size). It is noted that any compartment size over 30ha requires the support of the LG, however the proposal details compartment sizes up to 119.6ha without comments regarding LG support.* • *Several requirements of sections 1-7 of the PFP Guidelines are not addressed, including (but not limited to); harvesting plans, natural features/site features that may impact response, ongoing fuel management etc.* *DFES notes that while the submitted BMP addresses some requirements of the PFP Guidelines, most elements require further information, and some conflicting information is present (e.g., Figure 2.0 is titled 'Indicative Planting Cells Limited to Areas Under 100ha' however the figure details two cells greater than 100ha). Further, development plans (and figures in the reports) should be at their final stage, not 'indicative' as submitted.* *DFES notes that there are inconsistencies between the BMP and the Woodside cover letter regarding*	

		the number and location of existing dwellings/buildings on/surrounding the site, and the specific provision/availability of firefighting equipment. Additional issues with the BMP following a brief review are provided below. Please note that a formal review of the BMP has not taken place due to these issues. • *The BMP does not appear to provide a full site post-development vegetation assessment, or resultant BAL outputs (tables are provided as an attachment to the document however no BAL contour map or BAL outputs are provided for each building),* • *The scale of several figures is not sufficient to detail the location/number of tanks, dwellings, shed etc. accurately. Specifically, DFES notes that figures 1.0, 1.2, 2.0 and 3.1 should be updated to ensure that either less information is provided, or a smaller scale is used to clearly show the information being presented. It does not appear that a full site plan is appropriate to accurately detail the location/access to of tanks/dwellings/sheds/gates etc.* • *It is suggested that photos should be provided to validate any 'building specific' vegetation assessments, as well as the overall vegetation assessment. It is unclear if the photos submitted are representative for the overall site for each vegetation type.* • *The BMP does not include detail of slope for the subject site, or a full site post development vegetation assessment. DFES notes that page 58 of the BMP details two slopes for each plot. Plots should be separated to detail the vegetation type and slope of each individual area.* • *DFES notes that the Low Fuel Zone areas (8ta/ha) should not be excluded, as an APZ should have no more than 2ta/ha and comply with the APZ standards provided in the Guidelines.* • *Due to the above issues, BMP outputs cannot be validated in their current form.* *DFES notes that as no PMP has been submitted, and the application has not addressed several requirements of the Guidelines for Plantation Fire Protection (FESA 2011), DFES is unable to provide further information at this time.*	

9.	Ratepayer	The submitter **supports** the application.	WEC(S) thanks the submitter for taking the time to review the development application.
10.	Stakeholder	The submitter provides the following general comment: *DPIRD does not object to the proposal and offers the following comments:* *<u>Soil-landscape</u>* *This property is located on the intersection of eleven soil-landscape units, consisting of the Bassendean, Moore River and Spearwood subsystems. Some of the soils that comprise these subsystems will provide challenges to the establishment of a plantation in this landscape.* *The table of the soil-landscape units for the property (Attachment 2) lists some of the risks associated with the subsystems present across these lots. The Spearwood, phase 2+3 subsystem dominates the plantation area. The soils of this subsystem carry a high to very high risk of wind erosion (95%). The proposal to completely scalp and rip the sandy soil which will expose large areas for wind. DPIRD requests that the proponent considers and plan to minimise the wind erosion risk when preparing the ground for plantings to prevent seedlings being exposed to sand blasting in their first few years.* *The range of landscape and soil types on this property will permit the proponent to establish a large number of unique terrestrial plant communities.* *<u>Water Licence</u>* *As the conditions associated with water licence exclude its use for large-scale irrigation; this will limit agricultural use to dryland cropping and grazing. The development application suggests that:* *The sandy soils covering much of the property are generally highly alkaline and are not conducive to high productivity cereal cropping.* *DPIRD would need access to soil tests to confirm this assessment that the soils pose a limitation to grain production.* *On another matter, depending on the licence conditions access to water through the first summer, may be useful as a contingency to ensure*	WEC(S) thanks the submitter for taking the time to review the development application. WEC(S) confirms the actions recommended by DPIRD align with the activities described in the development application.

		the seedlings are established in the first 12 months. *<u>Fire management and erosion control</u>* *Firebreaks are anticipated in the plantation areas to assist with property access and fire control. Formed tracks without measures to control surface water flow can increase the risk of mild to severe water erosion. The proponent has obligations under the Soil and Land Conservation Act 1945 to mitigate and prevent land degradation (soil erosion from water and wind). DPIRD requests that fire breaks and tracks include appropriate surface water engineering structures to control/capture surface water to minimise the risk of soil erosion. Farm Note 524, Minimising farm track and firebreak erosion is attached (Attachment 1).* *<u>Biosecurity</u>* *DPIRD recommends that the proponent monitors and, when required, implement controls for weeds and pests for the entire duration of the project. This is an important commitment to meet their obligations under the Biosecurity and Agriculture Management Act 2007.*	

For Gingin shire (public submissions)

Final Audit Report 2024-02-20

Created:	2024-02-20
By:	OLLIE VIANT (ollie.viant@woodside.com)
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14 REPORTS - OPERATIONS AND ASSETS

Nil

15 MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

16 COUNCILLORS' OFFICIAL REPORTS

16.1 LANCELIN PRIMARY SCHOOL MONSTER FETE

File:	GOV/21
Councillor:	J Weeks
Report Date:	5 March 2024

I attended the Lancelin Primary School Monster Fete on Sunday 3 March 2024 which was a fantastic success.

Congratulations to the P&C, volunteer organisers, and of course the local businesses who sponsored this year's Fete.

17 NEW BUSINESS OF AN URGENT NATURE

Nil

The Coordinator Governance left the meeting at 4.27 pm.

18 MATTERS FOR WHICH MEETING IS TO BE CLOSED TO THE PUBLIC

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Balcombe SECONDED: Councillor Sorensen

That Council move into a Confidential Session to discuss Item 18.1

CARRIED UNANIMOUSLY
9 / 0

FOR: *Councillor Balcombe, Councillor Fewster, Councillor Kestel, Councillor Sorensen, Councillor Stewart, Councillor Weeks, Councillor Woods, Councillor Johnson and Councillor Peczka*

AGAINST: *Nil*

18.1 PROVISION OF CLEANING AND SANITARY SERVICES – RFT 01/2024

File	COR/40-012024
Author	Danica Todd – Coordinator Operations & Assets Administration
Reporting Officer	Vanessa Crispe - Executive Manager Operations and Assets
Refer	Nil
Appendices	Nil

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:

c. a contract entered into, or which may be entered into, by the local government and which relates to a matter to be discussed at the meeting;

The Coordinator Governance returned to the meeting at 4.31 pm.

PROCEDURAL MOTION

MOVED: Councillor Kestel SECONDED: Councillor Peczka

That Council defer the matter for consideration at the Ordinary Council meeting to be held on 19 March 2024.

CARRIED
8 / 1

FOR: *Councillor Balcombe, Councillor Fewster, Councillor Johnson, Councillor Kestel, Councillor Peczka, Councillor Stewart, Councillor Weeks and Councillor Woods*
AGAINST: *Councillor Sorensen*

COUNCIL RESOLUTION/OFFICER RECOMMENDATION

MOVED: Councillor Johnson SECONDED: Councillor Weeks

That the meeting be re-opened to the public.

CARRIED UNANIMOUSLY
9 / 0

FOR: *Councillor Balcombe, Councillor Fewster, Councillor Kestel, Councillor Sorensen, Councillor Stewart, Councillor Weeks, Councillor Woods, Councillor Johnson and Councillor Peczka*
AGAINST: *Nil*

The meeting re-opened to the public at 4.32 pm . No members of the public returned to the Gallery.

19 CLOSURE

There being no further business, the President declared the meeting closed at 4.33 pm.

The next Ordinary Council Meeting will be held in Council Chambers at the Shire of Gingin Administration Centre, 7 Brockman Street, Gingin on 19 March 2024, commencing at 3.00 pm.