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# ATTACHMENTS

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## **Development and Infrastructure Services Committee Meeting**

**5 December 2018**

6.00pm

City of Albany Council Chambers

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# NATURE BASED CAMPING Strategy & Action Plan 2018 – 2022



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# Message From The Mayor



I have lived in Albany most of my life, and along with you, I have visited and camped in many of the Natural Reserves around Albany and enjoyed the opportunity to connect with nature. We live in one of the most biodiverse hotspots in the world, and our City is known to support one of the highest proportions of flora and fauna species in the State. Therefore it is important that the increasing recreational use including camping on our reserves is well planned for and managed to help protect these important environmental values while allowing us to enjoy Albany's unique lifestyle.

Five focus areas for our management of campsites -Sustainable management, Environmental protection, Community safety, Recreation services and facilities, Supporting economic development – bring together priorities supporting the City's Community Strategic Plan objective to be "Clean, Green and Sustainable".

I urge you to support the City's Nature Based Camping Strategy and action plan so the City of Albany is enabled to support the communities desire to be able to connect with nature by experiencing diverse camping experiences that improve accessibility for all community members while protecting our unique and valuable environmental values.

Easy access to quality camping experiences within the areas surrounding Albany will contribute to making our City a unique place to live, work and visit.

Dennis Wellington  
Mayor

# Introduction

The City of Albany's Nature Based Camping Strategy and Action Plan is a five year strategic plan designed to provide a framework for the management of Nature based camping in City managed reserves.

The plan identifies key strategies and actions to continue to provide and further enhance the camping experience available to community members around Albany while also providing improved protection to the areas environmental values with the long term goal to of increasing the number of people able to experience camping in the region while enhancing the overall condition of the environment in surrounding areas.

The Plan is an integral part of the City's Natural Reserves Strategy, City assets management process and is important to informing the Community Strategic Plan, Albany 2021 and a range of other related plans.

# Background

The Amazing South Coast coastline is spectacular and diverse, drawing thousands of people each year who contribute to the area's economy.

Increasing population pressures and changing community expectations regarding use and access to the coast need to be considered and balanced with the need to protect and enhance the environment. The south coastal area is a sensitive environment and forms an important environmental corridor.

Camping is a long term historical use in coast reserves managed by the City of Albany and other land managers.

For the purpose of this Strategy, "nature based camping" includes the use of tents, swags, caravans, camper trailers and motorhomes on sites located in a non-urban area, which has predominantly being formed by nature, and where limited services are provided by the camp operator.

In some areas across the South Coast where camping has not been planned for or well managed it has and is causing significant environmental impacts that need to be addressed to ensure the sustainable enjoyment of the areas and protection of environmental values.



# 5 Key Focus Areas

The strategy covers five key focus area with Objectives and Strategies developed to address each area

1. **Sustainable Management**  
Campsites will be planned and constructed to minimise ongoing management costs and maximise opportunities for revenue collection.
2. **Environmental Protection**  
Campsites will be planned and constructed to ensure the protection of environmental values and minimise the impacts of use on the site and surrounding natural environment.
3. **Community Safety and Access**  
Campsites will be located and constructed in such away to ensure they are as accessible and safe as possible to all community members who wish to engage with nature via a Nature based camping experience.
4. **Recreational Services and facilities**  
Campsites will be designed and constructed to a high standard that meet all legislative requirements and allows for the most flexible use of the sites and facilities for a range of uses.
5. **Economic benefit**  
Campsites will be developed to increase economic benefits to the region buy being of a size and suitable for use by a range of visitors that increases visitation to the region without adversely impacting on other accommodation providers.



## Guiding Principles of Nature Based Campsite Management

These principles are consistent with the City's Natural Reserves Strategy & Action Plan 2017-2021 and other associated State and Federal Government Legislation.

1

### Consistent:

Recognising that a significant body of quality work has been undertaken in managing natural reserves across the City of Albany over the past decade; this Strategy & Action Plan shall seek to build on existing strategies, management plans and policies and/or guidelines

2

### Conserve and Protect:

High biodiversity values of areas surrounding campsites shall be identified and protected using the best available information to enhance ecological function and connectivity.

3

### Cultural and Heritage:

Planning, development and management of campsites shall be sensitive to local cultural and heritage values.

4

### In Partnership:

The City of Albany will work in partnership with other land managers, key agencies and surrounding Local Governments to integrate the planning, development and management of campsites across the region to ensure the best possible outcomes for the community and land managers.

5

### Precautionary principle:

Where there are threats of serious or irreversible damage, lack of scientific certainty should not be used as a reason to postpone measures to prevent environmental degradation. Decisions should be guided by careful evaluation and risk based assessment.

6

### Community Engagement:

The City recognises the importance of local knowledge and community pride in its natural and built assets, and will engage with local communities and user groups in developing plans for the development, modification and management of campsites.

7

### Resilient:

Campsites are public places, available for all to enjoy – plans for and management of campsites shall contribute to the sites capacity to cope with increased use and shall be adaptive to address future trends in recreational use as well as addressing current and future biodiversity threats.

8

### Recreation and Tourism:

Plans and actions shall enhance the capacity of campsites to enable manageable growth to continue in visitation to the South Coast Region and the types of recreational activities undertaken by our community members.

9

### Sustainable:

Planning, development, modification and management of campsites shall be affordable, well planned & carefully managed to ensure long term sustainability including minimising environmental impacts.

10

### Safe and Accessible:

Access to campsites will be managed without discrimination where feasible, considering a range of current and potential users; all campsites will be planned, modified or developed with visitor safety as a priority, acknowledging the wish of community members to have a nature based camping experience.



The City of Albany will adhere to all statutory obligations, international agreements and local strategies and frameworks when guiding the planning development and management of campsites.

**City of Albany  
Community  
Strategic Plan,  
Albany 2023**

**City of Albany's  
2017/18 budget**

**City of Albany  
Strategic Asset  
Management  
Plan 2017**

**Natural  
Reserves  
Strategy &  
Action Plan  
2017-2023**

**Management  
Plans: Specific  
Reserves or  
Issues**

# Challenges and Opportunities

During the development of this plan community members and interest groups were consulted and highlighted a number of key issues of concern regarding the management on Nature Based Camping on the South Coast. These included:

- Maintaining access to nature based camping experiences while controlling environmental impacts and potential conflict between user groups.
- Increasing visitor pressure within campsites and across the wider coastal reserves
- Increased length of stay by some campers restricting access to sites for short term campers
- Challenges associated with resourcing the planning, development and maintenance of campsites appropriate to the level of usage and location.
- Challenges associated with resourcing the regulation of camping across the region
- Impacts nature based camping sites could have on other established accommodation providers.
- The need to develop appropriate management plans for each campsite.

The level of community motivation and willingness to provide assistance with the planning, modification, development and management of campsites is influenced by the value a community places on the site. Some local landowners have also indicated an interest in developing nature based camping facilities on private property sites to assist in reducing pressure on sites within City managed reserves.

The City places a high level of importance on responding positively to the interests and concerns of the community and working with them to achieve best management.

## Environmental Protection

Challenge	Opportunity
Impacts of increased public use of reserves for camping.	Improve environmental protection by establishing and managing appropriate campsites.
Protection of significant environmental values.	Establish campsites away from areas of high conservation values.
Impacts of collection of fuel for campfires.	Establish policies to reduce the number of campsites that allow campfires and a policy under which permits maybe issued for campfires.
	Educate the public on the negative environmental impacts of harvesting of fuel for campfires from area surrounding campsites.
Impacts of clearing native vegetation to expand or establish new campsites.	Modify current campsites to increase capacity without additional clearing.
	Investigate opportunities to support establishment of nature based camping facilities on private property where all legislative requirements can be met and the sites are within close proximity to natural or built attractions.

## Community Safety and Access

Challenge	Opportunity
Fire prevention and management	Establish policies to reduce the number of campsites that allow campfires and a policy under which permits maybe issued for campfires.
	Utilise onsite signage in campsites to educate about fire prevention and environmental impacts of campfires.
	Continue to allow campfires at Cape Riche where there is an onsite management presence.
Evacuation of campsites in emergency situations	Plan for campsite evacuations in management plans for individual campsites.
Providing access to and around campsites for people with mobility challenges	During planning, modification or construction of camping facilities consider the needs of people with mobility issues.

**Recreational Services and Facilities**

**Sustainable Management**

**Economic Benefits**

Challenge	Opportunity
Understanding current and future trends in recreational use of campsites to ensure sites are planned to meet user needs and can be managed sustainably	Engagement with user groups during the planning for the modification of current campsites or establishment of new sites. Work in partnership with other land managers, key agencies and surrounding Local Governments to integrate the planning, development and management of campsites across the region to ensure the best possible outcomes for the community and land managers.
Provide a range and adequate amount of camping experiences while protecting the environment	Plan and develop campsites to match current and future user numbers and needs. Utilise signage and other management practices to educate campers on appropriate behaviour to assist in protecting the environment.
Budget limitations to plan, modify, establish, maintain and manage campsites	Prioritise budget submissions. Actively seek funding opportunities. Plan and construct facilities to minimise ongoing maintenance and management costs.
Understanding recreational users to ensure facilities are managed sustainably	Survey user groups as part of review process.

Challenge	Opportunity
Minimising ongoing environmental impacts while allowing for adequate levels of camping facilities.	Modify current campsites to improve traffic flow and increase capacity without additional clearing. Ensure all new camping facilities are planned and constructed to minimise possible environmental impacts and ongoing maintenance costs.
The cost of ongoing maintenance and management of campsites	Ensure all campsites and facilities are constructed using designs and materials that will minimise the ongoing maintenance costs. Investigate use of volunteer Camp Ground Hosts at appropriate COA campsites. Consider leasing or other appropriate arrangements to allow community groups to take a more active role in management of COA campsites.
Generating ongoing funding to contribute towards ongoing maintenance costs of campsites	Investigate implementation of camping fees at City of Albany campsites in line with sites managed by other land managers in the region.

Challenge	Opportunity
Minimising negative impacts of Nature Based Campsites on other accommodation providers	Ensure nature based campsites are not established within 5km of established caravan parks. Ensure the facilities provided at nature based campsites are not comparable to those provided at established caravan parks etc. (eg no hot water showers, flushing toilets)
Generating revenue from nature based campsites to assist with ongoing maintenance and management costs	Investigate implementation of camping fees at COA campsites in line with similar campsites managed by other land managers across the region.
Increase the number of visitors to the region and the length of their stay.	Increase the capacity of nature based camp sites managed by the COA. Actively promote Albany and the South Coast as a Nature based camping destination.
Measuring the economic benefit of nature based camping to the region	Work with Tourism WA and higher education organisations to regular measure and report on the economic benefits of nature based camping.

# Challenges and Opportunities – Specific sites

Currently there are an estimate of a total of 60-70 bays/campsites available for nature based camping on CoA managed lands spread over 6 existing coastal campsites at Cosy Corner East, Torbay Inlet, East Bay, Bettys Beach, Normans Beach and Cape Riche. This current capacity is far exceeded by demand especially during peak times around Xmas/New Year, Easter and School Holiday periods when most sites are full and the resulting overflow occurs in surrounding areas or other parts of the reserves where camping is often inappropriate and results in a range of environmental and safety issues.

During the development of this plan community members and interest groups were consulted and highlighted a number of issues of concern & opportunities regarding the individual campsites. These included the following:



# Cosy Corner East

Cosy Corner East is an extremely busy site through peak periods (Easter, School Holidays etc.) with visitors to the area enjoying camping, beach activities such as fishing, fossicking, swimming, and snorkelling. The site is popular with caravans as it is an accessible site (2-wheel drive accessible) by most vehicles and there is a chemical dump point near the toilet facility.

This site is under increasing pressure from visitors. This site is noted in many “free camping” brochures and books. In 2014 CoA undertook work to install further

definition of the campsites, traffic /access defined, designated areas for caravans/ tents, new toilet infrastructure, fencing to reduce vegetation destruction and further bins into the area. There are 25 camping bays (caravans and tent sites) defined with a campground host in the site during busy peak periods.

Maintenance and servicing requirements are greatly increased during the December to May period. An increased management presence in the site through campground hosts (introduced 2016/2017) benefit the sites amenity and functionality

Issues	Constraints	Opportunities
Increasing pressure from campers – number of sites not meeting demand in peak periods	Fragile coastal dunes to east and west of current site. Need to clear native vegetation for expansion to north.	Investigate possible expansion to north on relatively flat terrain. Possible installation of small number of “overnight camp only sites” to address overflow in peak periods
Access to toilet facilities from all campsites.	Toilets are currently located at one end of campsite making some campsites a considerable distance from toilet facilities	Consider an additional toilet facility located more centrally in the campsite.
Excessive rubbish at peak periods	Distance from Albany etc. restricts daily rubbish removal	Through education encourage campers to take their rubbish with them. Investigate relocation of bins to a central rubbish collection site next to toilet facilities. Consider installation additional bins or a “skip bin” during peak periods.
Vehicle flow difficult for new visitors to follow in some locations	Lack of signage	Implement improved signage plan to improve vehicle flow throughout site. Investigate improved definition of vehicle access and camping bays in the “tent only area” to improve vehicle flow and reduce congestion.
Safety issue with speed of traffic entering campsite	2 wheel drive gravel road	Installation of additional signage and traffic calming features to reduce speed of vehicles as they approach the campsite.
Cost of day to day management and maintenance of site	Distance from Albany and limited internal COA resources to visit site daily	Possibility to expand volunteer camp ground host program to have hosts on site from December to April and winter school holidays. Clearly define and sign post camp host camping bay. Investigate implementation of camping fees consistent with those at similar campsites managed by other land managers in the region

# Torbay Inlet

Torbay Inlet camping area (also known as Floodgates) is accessed from the western access track off Torbay Inlet Road by 2-wheel drive. Visitors to the area enjoy camping, adjacent beach activities such as fishing, fossicking, swimming, snorkelling and canoeing on the inlet. There are no defined bays for camping.

The site is informal with a toilet and bins provided for day use and camping visitors.

Issues	Constraints	Opportunities
Increasing pressure from campers – number of sites not meeting demand in peak periods	Fragile coastal dunes to south and west, creek to north and inlet to the east of current site. Site has had little formal planning and layout restricts vehicle circulation and definition of appropriate camping bays	Investigate possible redesign of the campsite to improve vehicle flow and define campsites to increase capacity without requiring significant additional clearing. Possible installation of small number of “overnight camp only sites” to address overflow in peak periods
Competition between day users and campers for access to the site.	As above	Define & demarcate day use parking locations during any redesign of the site. Sign post & improve access to the beach via 4wd tracks to south west off campsite off Torbay Inlet Road to reduce “through traffic” in site.
Excessive rubbish at peak periods	Distance from Albany etc. restricts daily rubbish removal	Through education encourage campers to take their rubbish with them. Investigate relocation of bins to a central rubbish collection site next to toilet facilities. Consider installation additional bins or a “skip bin” during peak periods.
Cost of day to day management and maintenance of site	Distance from Albany and limited internal COA resources to visit site daily	Possibility implementation of volunteer camp ground host program to have hosts on site from December to April and winter school holidays. Clearly define and sign post camp host camping bay. Investigate implementation of camping fees consistent with those at similar campsites managed by other land managers in the region
Heritage values (Aboriginal and European) of the site not currently acknowledged significantly	Aboriginal and European heritage values at site need to be protected.	Ensure Aboriginal & European heritage values are considered in all planned modifications to the site. Take the opportunity to acknowledge and interoperate Aboriginal & European Heritage values on signage at the site.

# East Bay

Two People Bay East is a protected bay at the eastern end of Two People Bay. Visitors to the area enjoy camping, beach activities such as fishing, fossicking, swimming and snorkelling in the protected bay area. Toilet facilities are available. The campsite is presently outside of the CoA surveyed reserve and is located within private property. This presents a legislative difficulty with any law enforcement, introduction of camping fees and any legal structures owned by the CoA. It is recommended that prior to any implementation of camping fees this site is to be surveyed and placed into CoA reserved estate.

Camping is prolific in the small area with Easter being a peak busy time. There are no defined camping bays. A new toilet was installed at this site in 2012 and there are bins provided and maintained by the CoA. This site could encroach further into the adjacent vegetation and should be monitored for any fencing requirements into the future. The area is not suitable for caravans due to very small turn around areas, steep access and limited camping spots

Issues	Constraints	Opportunities
Land Tenure causes issues with regulating site	The campsite is presently outside of the CoA surveyed reserve and is located within private property.	Investigate ways of adding the areas surrounding the current site into the CoA adjacent reserve.
Increasing pressure from campers – number of sites not meeting demand in peak periods	Fragile coastal dunes & beach to west, rocky headland to east, with unsuitable (steep) terrain and private property to north of current site. Current encroachment of current sites into native vegetation due to no bays being defined	Define & demarcate day use parking locations during any redesign of the site. Sign post & improve access to the beach via 4wd tracks to south west off campsite off Torbay Inlet Road to reduce “through traffic” in site.
	Plan and implement/define a small number of camping bays that are fenced to reduce encroachment into native vegetation. Possible installation of small number of “overnight camp only sites” to address overflow in peak periods	Through education encourage campers to take their rubbish with them. Investigate relocation of bins to a central rubbish collection site next to toilet facilities. Consider installation additional bins or a “skip bin” during peak periods.
Excessive rubbish at peak periods	Distance from Albany etc. restricts daily rubbish removal	Through education encourage campers to take their rubbish with them. Investigate relocation of bins to a central rubbish collection site next to toilet facilities. Consider installation additional bins or a “skip bin” during peak periods.
Cost of day to day management and maintenance of site	Distance from Albany and limited internal COA resources to visit site daily	Possibility implementation of volunteer camp ground host program to have hosts on site from December to April and winter school holidays. (possibly combined with Bettys beach). Investigate implementation of camping fees consistent with those at similar campsites managed by other land managers in the region.

# Bettys Beach

Betty's Beach is a commercial fishing camp area during February to April every year, operated under a lease agreement. During the commercial fishing period, the site is a day use area only with no camping for the general public due to Occupational Safety and Health requirements surrounding the fishing operations precluding public access at these times.

Visitors to the area enjoy camping, beach activities such as fishing, shore fossicking, swimming and snorkelling. General public have access to a few of the huts outside of the commercial fishing period for camping, the remainder of the site has toilets and no defined camping areas.

The area is not suitable for caravans due to very small turn around areas, steep slopes accessing the site and limited camping spots. Fees are not currently collected at this site.

Issues	Constraints	Opportunities
Increasing pressure from campers – number of sites not meeting demand in peak periods.	Fragile coastal dunes and beach to the north, rocky headlands to the west and east and steep exposed areas to the west.	Investigate possible redesign of the campsite to improve vehicle flow and define campsites to increase capacity without requiring significant additional clearing. Install signage indicating a maximum stay length for all campers. Possible installation of small number of “overnight camp only sites” to address overflow in peak periods.
Competition between day users, salmon fishermen and campers for access to the site.	As above.	Define & demarcate day use parking locations during any redesign of the site. Improve signage to ensure the restriction on camping during Salmon Season is clearly identified.
Excessive rubbish at peak periods.	Distance from Albany etc. restricts daily rubbish removal.	Through education encourage campers to take their rubbish with them. Investigate relocation of bins to a central rubbish collection site. Consider installation additional bins or a “skip bin” during peak periods.
Cost of day to day management and maintenance of site.	Distance from Albany and limited internal COA resources to visit site daily.	Possibility implementation of volunteer camp ground host program to have hosts on site from December to April and winter school holidays. (possibly combined with East Bay). Investigate implementation of camping fees consistent with those at similar campsites managed by other land managers in the region.



# Normans Inlet/Beach

This camping site is located adjacent to private property and the DBCA managed estate. The camping area is defined by bollarding and signage (approx. 8 bays). Visitors to the area enjoy camping, beach activities (fishing, fossicking, swimming, surfing) as well as canoeing on the inlet. The area is not suitable for caravans due to very small turn around areas and limited camping spots.

Issues	Constraints	Opportunities
Increasing pressure from campers – number of sites not meeting demand in peak periods.	Fragile coastal dunes and beach to the south, private property to the west and inlet to the east .- fragile riparian vegetation along inlet foreshore. Need to clear native vegetation for any possible expansion to the north	Investigate possible redesign of the campsite to improve vehicle flow and define campsites to increase capacity without requiring significant additional clearing. Possible installation of small number of “overnight camp only sites” to address overflow in peak periods. Investigate and plan for possible expansion of campsite to north between road and inlet.
Competition between day users, and campers for access to the site.	As above.	Define & demarcate day use parking locations during any redesign of the site.
Excessive rubbish at peak periods.	Distance from Albany etc. restricts daily rubbish removal.	Through education encourage campers to take their rubbish with them. Investigate relocation of bins to a central rubbish collection site. Consider installation additional bins or a “skip bin” during peak periods.
Cost of day to day management and maintenance of site.	Distance from Albany and limited internal COA resources to visit site daily.	Possibility implementation of volunteer camp ground host program to have hosts on site from December to April and winter school holidays. Investigate implementation of camping fees consistent with those at similar campsites managed by other land managers in the region

# Cape Riche

Cape Riche is a managed camp site which has a formal presence all year round with camp ground managers. Fees are collected daily by caretakers.

Visitors to the area enjoy camping, adjacent beach activities such as fishing, fossicking, swimming, snorkelling and bushwalking. With defined sites, visitors are able to undertake nature based camping, boat launching faculties, fish clean down area and the natural amenities.

The grounds has a defined day use area and defined camping sites (approx. 20 sites) with running water, showers, gas barbeques and ablutions ensuring the site is functional and enjoyable by visitors.

Issues	Constraints	Opportunities
Increasing pressure from campers – number of sites not meeting demand in peak periods.	Fragile coastal dunes and beach to the north, private property to the south and east. Need to clear native vegetation for any possible expansion to the north/west in the reserve.	Investigate possible redesign of the campsite to improve vehicle flow and define campsites to increase capacity without requiring significant additional clearing. Possible installation of small number of “overnight camp only sites” to address overflow in peak periods. Investigate and plan for possible expansion of campsite to north/west between access road and beach.
Competition between day users, and campers for access to the site.	As above	Further define & demarcate day use parking locations during any redesign of the site.
Excessive rubbish at peak periods	Distance from Albany etc. restricts daily rubbish removal.	Through education encourage campers to take their rubbish with them. Investigate relocation of bins to a central rubbish collection site. Consider installation additional bins or a “skip bin” during peak periods.
Cost of day to day management and maintenance of site.	Distance from Albany and limited internal COA resources to visit site daily.	Review the role and responsibilities of the campsite manager with view to maximising benefits of this position. Review the current camping fees to ensure they are consistent with those at similar campsites managed by other land managers in the region.

## Boat Harbour (non COA land)

Boat Harbour is a largely unmanaged campsite on unallocated crown land on the boundary between the City of Albany and the Shire of Jerramungup.

Issues	Constraints	Opportunities
Land Tenure.	Campsite on Unallocated Crown Land.	Possible opportunity to work with Shire of Jerramungup to develop management options for the site.
Increasing pressure from campers.	Fragile coastal environment	Further define & demarcate day use parking locations during any redesign of the site.

## Private Property













Currently there is little nature based camping available on private properties in the Albany area.

Issues	Constraints	Opportunities
Lack of camping opportunities.	Legislative requirements associated with establishing nature based camping on private property.	COA to support nature based camping on private property where all legislative requirements can be achieved and the proposed campsite is within close proximity to a natural or built attraction. COA to develop an information package for prospective private property owners who wish to investigate establishing a nature based camping facility on their land including information on the legislative and other requirements of the proposed development.














# Recommendations and Actions

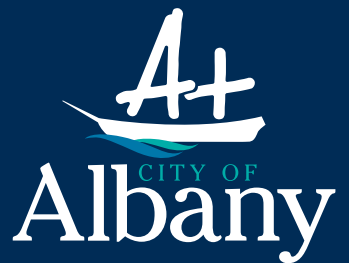
**PRIORITY LEGEND**

 High/Short Term     Medium     Long Term

Number	Recommendation	Responsibility	Time frame
<b>Cosy Corner East</b>			
1	Install a number of "overnight camping only" bays in the Cosy Corner East campsite to address overflow and safety issues during peak periods.	Reserves team	
2	Investigate possible expansion of Cosy Corner East Campsite to the north to increase capacity during peak periods	Reserves team	
3	Investigate relocation of bins at Cosy Corner East to a central location for easy of management and consider utilisation of additional bins during peak periods.	Reserves Team / Waste Management	
4	Improve traffic flow in Cosy Corner east campsite with improved signage.	Reserves team	
5	Address issues of vehicle speed entering Cosy Corner East campsite by installing additional signage and traffic calming features	Reserves Team Engineering team	
6	Clearly define Cosy Corner East Camp Host bay including installation of appropriate signage.	Reserves team	
<b>Torbay Inlet</b>			
7	Investigate possible redesign of the Torbay Inlet Campsite to improve vehicle flow, define campsites, define overnight only bays to increase capacity without requiring significant additional clearing	Reserves team	
8	Sign post and improve access to the beach via 4wd tracks to the southwest of Torbay Inlet campsite of Torbay Bay Inlet Rd to reduce through traffic in the campsite	Reserves team	
9	Include information on Aboriginal and European heritage values in future onsite signage	Reserves team	
<b>East Bay</b>			
10	Investigate appropriate ways of securing management control of lands occupied by and surrounding the current East Bay facilities.	Reserves team	
11	Plan and implement/define a small number of defined camping bays that are fenced to reduce encroachment into native vegetation.	Reserves team	
12	Install a number of "overnight camping only" bays in the East Bay campsite to address overflow and safety issues during peak periods.	Reserves team	
<b>Bettys Beach</b>			
13	Investigate possible redesign of the Bettys Beach Campsite to improve vehicle flow, define campsites, define overnight only bays to increase capacity without requiring significant additional clearing.	Reserves team	

## REPORT ITEM DIS137 REFERS

Number	Recommendation	Responsibility	Time frame
14	Install signage to better ensure campers are aware of restrictions on camping during salmon season before and when they arrive at the site.	Reserves team	
	<b>Nomans Inlet/Beach</b>		
14	Investigate possible redesign of the Normans Inlet/Beach Campsite to improve vehicle flow, define campsites, define overnight only bays to increase capacity without requiring significant additional clearing	Reserves team	
15	Investigate and plan for possible extension of the Normans Inlet/Beach campsite to the north/west between the access road and the inlet.	Reserves team	
	<b>Cape Riche</b>		
16	Investigate possible redesign of the Cape Riche Campsite to improve vehicle flow, define campsites, define overnight only bays to increase capacity without requiring significant additional clearing	Reserves team	
17	Investigate and plan for possible extension of the Cape Riche campsite to the north/west between the access road and the beach	Reserves team	
18	Review the role and responsibilities of the Cape Riche campsite caretaker with a view to maximise the benefits of this position.	Reserves team	
	Boat Harbour (Non CoA Land)		
19	Investigate options for working with the Shire of Jerramungup to development management options for Boat Harbour	Reserves Team / Leasing team	
	Private Property		
20	Support the development of nature based camping on private property where all legislative requirements can be achieved and the proposed campsite is within close proximity to natural or built attractions.	Reserves Team Planning Team Health Team	
21	Develop an information package for prospective private property owners who wish to investigate the establishment of nature based camping facilities on their land including information on legislative and other requirements of the proposed development	Planning Team Health Team	
	General		
22	Expand the camp Ground Host program as resources allow to include hosts at Cosy Corner East; Torbay Inlet; East Bay; Bettys Beach; Normans Inlet/Beach.	Reserves Team	 / 
23	Investigate additional bins or skip bins being installed at campsites during peak periods to address issues with excessive rubbish	Reserves Team Waste Management team	
24	Investigate implementation of camping fees at CoA managed campsites consistent with those at similar campsites managed by other land managers across the region	Reserves Team Finance Team	



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# Draft Nature-based Camping Strategy and Action Plan 2018 - 2022

*Community Engagement Results - October 2018*



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## EXECUTIVE SUMMARY

Formal community consultation regarding the draft City of Albany Nature-Based Camping and Action Plan 2018 - 2022 was carried out from 28 September to 31 October 2018.

During the period, a total of 13 individual submissions were received and one submission was made on behalf of a community group.

The submissions were very diverse in nature with many cases of submission from one individual being directly opposed to the submission from another individual, especially around the issue of campfires where the need to balance environmental protection, fire protection and the social values of campfires were all raised.

Each submission was analyzed to identify key points and suggestions which were grouped and then considered by internal stakeholders. This report summaries the key themes of the submissions, responses from internal staff stakeholders and recommendations on how each theme can be best addressed.

### 1. Project Overview

The City of Albany's Nature Based Camping Strategy and Action Plan is a 5-year strategic plan designed to provide a framework for the management of nature-based camping in City-managed reserves.

The plan identifies key strategies and actions to continue to provide and further enhance the camping experience available to residents and visitors, while also protecting the environmental values of our reserves. The long term goal is to increase the number of people able to experience camping in the region while enhancing the overall condition of the environment in surrounding areas.

The need for the Nature-Based Camping Strategy and Action Plan was identified during consultation for the City's Natural Reserves Strategy and is important to informing the Community Strategic Plan, Albany 2030 and a range of other related plans.

The draft Nature-Based Camping Strategy and Action Plan was advertised for public comment on 2 and 4 October with submissions closing on 31 October. This report summarises the engagement process, responses and recommendations to Council.

#### 1.1 Community Engagement & Participation

The initial draft of the Nature-Based Camping Strategy was developed in 2016-17 with input from a Camping Working Group made up of community representatives, industry representatives, community groups, environmental groups, Councillors and City internal staff.

The final draft of the Strategy was advertising for community comment commenced in the last week of September and finished on 31 October 2018. The City of Albany advertised the public comment period through the following channels:-

- Local papers;
- Several social media Facebook pages managed by the City of Albany;

- City of Albany website;
- Direct emails to known community interest groups
- Distribution of the following posters at strategic locations including at facilities in all the campsites.
- City staff also did several radio interviews relating to the strategy.



PUBLIC COMMENT ON DRAFT STRATEGY

## **NATURE BASED CAMPING STRATEGY & ACTION PLAN**

Council is currently considering the adoption of the Nature Based Camping Strategy & Action Plan 2018-2022, which is a five year strategic plan designed to provide a framework for the management of nature based camping in City managed reserves.

Before finalising this Policy, Council is seeking feedback from the community.

The document can be viewed on the City's website at <http://www.albany.wa.gov.au/council/council/public-notices/> or hard copies are available from the North Road offices.

Please direct feedback to the City's Reserves Officer Carl Beck, via email at [carlb@albany.wa.gov.au](mailto:carlb@albany.wa.gov.au) by Wednesday, October 31 2018.



## **2. Comments Received**

The following is a summary of the comments into themes that were received during the public comment period, with a full copy of the comments included as Appendix 1.

The comments have been considered by a committee of internal City of Albany staff including representatives of the recreation, reserves, parks, health and ranger teams, with their responses and recommendations relating to each summarised comment included.

This section of the report will group comments into broad themes with a recommendation to address each theme.

## 2.1 General Comments

### 2.1.1 Opposition to implementation of Camping Fees

Several of the submissions were opposed to the City of Albany implementing camping fees at camping grounds. The opposition was based on several reasons including:-

- Impact on people who cannot afford to pay camping fees.
- Loss of economic benefit to Albany by campers choosing to holiday at other locations where camping is free.
- Campers choosing to camp in close by unmanaged (unsanctioned) sites and the environmental impacts of this (no toilets, etc).

Alternatively, several submissions were supportive of the implementation of camping fees for reasons including:-

- Generation of income to offset costs to Council and ratepayers for the management of campsites used by visitors (non-ratepayers).
- Providing incentives for campers to use commercial caravan parks.
- Implementation of fees would assist in future implementation of reservation systems and attracting campground hosts.

#### **Recommendation 1:**

Retain recommendation 24 in the Draft Strategy - *Investigate implementation of camping fees at City-managed campsites consistent with those at similar campsites managed by other land managers across the region.*

Staff acknowledge that free camping at City-managed sites currently provides a low cost holiday option for the community (both local and visitors).

The majority of other Local Governments in the South Coast and South West as well as the Department of Biodiversity Conservation and Attractions (DBCA) are currently charging camping fees and reporting continued high use of their sites.

The current recommendation to 'investigate camping fees' will allow Council to consider its position on this issue after further investigation has been undertaken.

### 2.1.2 Campfires

Several submissions were received opposed to the 'proposed ban' on campfires, especially at Cape Riche. This was largely based on the perceived social value of campfires as part of the overall camping experience.

Alternatively, several submissions were supportive of the continued ban on campfires in COA campsites (other than Cape Riche) based on the possible impacts of campfires on environmental values and community safety.

#### **Recommendation 2:**

Modify the Draft Strategy to clearly indicate a recommendation that the current policy of allowing contained campfires at Cape Riche and not allowing campfires at other COA campsites will be retained.

It should be noted that the draft strategy does not specifically recommend the banning of

campfires at Cape Riche but under Challenges and Opportunities (page 8), there is mention of an opportunity to implement policies to either reduce (Environmental Protection) or ban (Community Safety) the use of campfires in COA sites.

Staff acknowledge that for many people a campfire is part of the attraction to and overall experience of nature-based camping, but there is also strong evidence that where campsites are not closely managed (onsite staff), collection of fuel for the fires from surrounding areas can have significant environmental impacts.

Given the City currently has a caretaker at Cape Riche, there have not been significant issues in this area with campfires and local Fire Brigade members are supportive of campfires at this site, it appears practical that campfires could remain as an approved activity at Cape Riche.

### 2.1.3 Camp Hosts

All of the submissions that commented on the expansion of the Camp Host program to all of the COA sites were supportive of this proposal.

**Recommendation 3:** Retain Recommendation 22 of the Strategy to expand the Camp Ground Host Program

Staff acknowledge the valuable contribution Camp Ground Hosts can make to the management of COA camp grounds but note the difficulty that the City is currently having in attracting Camp Hosts. This appears to be related to the fact that there are no benefits for host visitors, as camping is currently free at the sites. Locations where camp fees are charged and Camp Hosts are offered free camping as part of their role appear to have the most success in attracting hosts.

### 2.1.4 Additional Ranger Presence

A number of submissions including several referring to the Cosy Corner Campsite felt that there needed to be a higher level of presence of Rangers visiting the campsites especially during peak periods to help control inappropriate behaviours especially associated with campfires and public safety.

Staff acknowledge that a high level of management presence has a positive impact on managing several issues associated with camping, however the current level of resourcing in the ranger team make it unlikely that significant increases in their presence in campsites can be achieved without additional funding.

## 2.2 Comments on Specific Sites

### 2.2.1 Cape Riche Camp Ground

Cape Riche Campsite generated the highest number of submissions during the community consultation. Comments revolved around the following key issues:-

#### 2.2.1.1. Camping fees

A high level of comment was received expressing dissatisfaction with the new fee structure that was implemented at Cape Riche in 2018.

This new fee structure includes children as young as 7 years being charged the full adult camping fee (\$9/night) at Cape Riche resulting in a family group of 2 adults and 3 children being charged \$45 per night.

This change was implemented due to the large number of school groups which have historically used the site. All of the students were under 16 years, were not paying any fees and therefore were not contributing to the management of the site.

**Recommendation 4:** Review the camping fees at Cape Riche to determine a more appropriate fee structure that ensures all camping groups contribute to the sites management but does not exclude family groups with young children based on cost.

Staff acknowledge that the recently implemented new fee structure, although addressing the previous issues of large groups of children not paying any fees, is adversely impacting on family groups.

A number of alternative options which may be more appropriate include implementing a 'per site fee' or a 'family fee' similar to what is used by other Local Governments or DBCA.

This issue is not specifically associated with the Nature-Based Camping Strategy and will not require the draft document to be modified.

#### 2.2.1.2. Campfires

Although not specifically recommended in the Draft Strategy, a large number of submissions were opposed to a possible ban on campfires at Cape Riche. This was largely based on the perceived social value of campfires as part of the overall camping experience.

**Recommendation 2:**  
Modify the Draft Strategy to clearly indicate a recommendation that the current policy of allowing contained campfires at Cape Riche, and not allowing campfires at other COA campfires, will be retained.

Staff acknowledge that for many people a campfire is part of the attraction to and overall experience of nature-based camping, but also that there is strong evidence that where campsites are not closely managed (onsite staff), collection of fuel for the fires from surrounding areas can have significant environmental impacts.

Given the City currently has a caretaker at Cape Riche, there have not been significant issues in this area with campfires and local Fire Brigade members are supportive of campfires at this site, it appears practical that campfires could remain as an approved activity at Cape Riche.

This would give Cape Riche community members who wish to have a campfire the opportunity to do so, while protecting environmental values by retaining the ban on campfires at all other sites.

#### 2.2.1.3. Expanded capacity

Several submissions we opposed to the recommendation to investigate possible expansion of the Cape Riche Campground to cater for peak periods. The opposition was around the capacity of the site to facilitate expansion without significant environmental impacts, and also the need to retain the site with limited capacity to ensure the current 'isolated' experience.

Several of the submissions also noted current issues with vehicle congestion and the camping bays not working well.

**Recommendation 5:**

Retain recommendation 16 of the Strategy - *Investigate possible redesign of the Cape Riche campsite to improve vehicle flow, define campsites, define overnight only bays to increase capacity without requiring significant additional clearing.*

**Recommendation 6:**

Retain as a long term recommendation 17 of the Strategy - *Investigate and plan for possible extension of the Cape Riche campsite to the north/west between the access road and the beach.*

Staff acknowledge that Cape Riche has a long term history of camping. A considerable number of campers have been using this site for many years and have a significant attachment to it.

As pointed out in several of the submissions, the current design of the site presents some challenges to vehicle movement, etc during peak periods and this is likely to increase as the site continues to grow in popularity. A rise in the number of social media camping apps, etc is already beginning to promote these types of sites to non-traditional users.

As the site has never been professionally designed, it is considered that some of the current issues can be addressed by a redesign (recommendation 16) of the site within the current campsite footprint.

In the long term, as the popularity of the site increases, if user numbers cannot be restricted in an alternative way, establishment of an overflow seasonal area may need to be considered. Retaining this recommendation (#17) in the strategy will allow Council to make a decision on any possible expansion if required in the long term.

### 2.2.2. Cosy Corner East

One submission was received from a stakeholder group which was opposed to any possible expansion of the Cosy Corner campsite, and felt that the development of the Strategy provided an opportunity for the COA to identify a more suitable area or location for a nature-based camp other than Cosy Corner East.

This submission was supportive of the continued ban of campfires at this site but felt that as nearby local residents have access to few COA utilities and services including waste management, the Nature-Based Camping Strategy is superfluous and should not be a priority.

**Recommendation 7:**

Retain recommendations 1-6 of the Strategy relating to the Cosy Corner East campsite but engage closely with all stakeholders including nearby landholders during the planning and implementation of any significant changes to the site

Staff acknowledge that nearby residents have been raising concerns for some time about the Cosy Corner East Campsite and its management.

The site is the City's highest use campsite (excluding Cape Riche) with a survey over Easter 2012 indicating that the site accounted for over half the camper nights of all 5 COA sites at that time. Cosy Corner is now listed on several social media apps promoting nature-based camping, and there is no indication that the steady increase in usage is likely to reduce in the near future. Therefore, the City needs to continue to investigate options for better management of this site.

A strategy used at many other sites across the state with an overflow area that is only open during peak periods is one option that may be considered if the investigations indicate this is possible without significant environmental impacts.

### 3 Overall recommendation to Council

That the Council notes the community comments and the following recommendations when it considers the adoption of the Nature-Based Camping Strategy & Action Plan 2018-2022.

#### **Recommendation 1:**

Retain recommendation 24 in the Draft Strategy - *Investigate implementation of camping fees at City-managed campsites consistent with those at similar campsites managed by other land managers across the region.*

#### **Recommendation 2:**

Modify the Draft Strategy to clearly indicate a recommendation that the current policy of allowing contained campfires at Cape Riche, and not allowing campfires at other CoA campsites, will be retained.

**Recommendation 3:** Retain Recommendation 22 of the Strategy to expand the Camp Ground Host Program.

**Recommendation 4:** Review the camping fees at Cape Riche to determine a more appropriate fee structure that ensures all camping groups contribute to the site's management but does not exclude family groups with young children based on cost.

#### **Recommendation 5:**

Retain recommendation 16 of the Strategy - *Investigate possible redesign of the Cape Riche campsite to improve vehicle flow, define campsites and define overnight only bays to increase capacity without requiring significant additional clearing.*

#### **Recommendation 6:**

Retain as a long term recommendation 17 of the Strategy - *Investigate and plan for possible extension of the Cape Riche campsite to the north/west between the access road and the beach.*

#### **Recommendation 7:**

Retain recommendations 1-6 of the Strategy relating to the Cosy Corner East campsite but engage closely with all stakeholders including nearby landholders during the planning and implementation of any significant changes to the site.

## Appendix 1: Key points from individuals submissions

Camping Strategy Key Points from individual submissions (PR.PLA.4)	
Synergy Ref	Comments
EF18319341	will not support the idea that you can have better serviced campgrounds campgrounds are going to be a ongoing problem for the council Jc the majority of these people who use these grounds are people, don't like spending money, anyway
EF18319353	M Not supportive of stopping campfires at Cape Riche
EF18319360	A Where camp fees are charged make provision for residents from the City of Albany to camp at a cheaper rate Supportive of fees, no fires, day use, camping on PP and camphosts A Not supportive of campgrounds being expanded to increase capacity
EF18319409	B Nothing about protecting community amenity. It's all about the visitors yet the local ratepayers pay for it Need fee structure to be cost neutral need reservation systems S Any expansion of PP camping needs further input from C/Park owners his 2 caravan parks have 43900 individual visitors for a total of 134000 guest nights water rates alone are \$1.44/night/person Verbal Comment Dump pints are an issue
Verbal Comments	Supports campfires being permitted Need BBQ in campsites L Supportive of redesign of Cosy Corner including overnight parking All redesigns need to consider fire & emergency access including firebreaks Need more Ranger presence
EF18319879	D Generally supportive Not supportive of ban on campfires
EF18320707	M Against introduction of camping fees B Not supportive of camping fees - need free camping for homeless people Campsites should be left as is.
EF18320708	B Not supportive of ban on campfires
EF18321038	Ju Not supportive of camping fees especially for children at Camp Riche L Not supportive of ban on campfires at Cape Riche e Not supportive of camp fees especialy for 7yr olds n Not happy with changes made in 2016 D Wants a fish cleaning station at Cape Riche and boat launch/jetty
EF18321113	o Not supportive of any expansion of the Cosy Corner campsite (or even its retension) Not supportive of expansion of cape Riche Campsite
EF18321455	H Not supportive of ban on fires at Cape Riche
EF18321461	Not supportive of ban on campfires at Cape Riche D Not supportive of fees fro children under 16 at cape Riche
EF18321542	Not supportive of ban on campfires at Cape Riche A Not supportive of fees at Cape Riche for children under 16
EF18321562	Not supportive of ban on campfires at Cape Riche Expansion of Cape Riche needs to be carefully planned Lc Need to review Cape Riche fees



## Appendix 2: Individual Submissions Nature-Based Camping Strategy

### EF18319341

I rarely make comment but I feel I must on this subject, as we have been caravanning off an on for many years. We came to Albany and decided we would go to Cosy Corner, for a few days.( only stayed 1) It was overcrowded,( took photos) 99% of the people had their grey water just going onto the ground, attracting flies and the smell, was just awful. Also the talk from the few we met, had mentioned that there was a group of people coming and going, camping in cars, on the ground, that were unsavoury, and the ones we saw, were on drugs. This is something that is becoming very common with Campgrounds around Australia, as more people are becoming homeless, and some who can't get accommodation, and theft is another situation, that occurs, more often, and councils are now rethinking. A lot of us believe, the majority of these people who use these grounds are people, don't like spending money, anyway. We ended up going into Albany and stayed in a Caravan Park, and we cannot praise this park for its amazing clean tidy amenities, we were to stay 2 days, ended up staying a week. Albany is a beautiful place. We will recommend Albany for this reason, on our travels, but we will not support the idea that you can have better serviced campgrounds, like Cosy Corner, etc. The other factor is, when we were at Cosy Corner, it was so overcrowded, and that was not because the caravan parks in Albany were booked out, as we rang 3 to get quotes and all 3 parks had availability. I understand that peak time it could be a different outcome, but that is only a small part of the year, where your campgrounds are going to be a ongoing problem for the council, as we have witnessed for several years. You won't attract more tourists, because of these campgrounds, you will attract a lot more freeloaders. I hope more visitors take time to voice their opinion, because we hear it all the time, and several people, read the article in the local paper, and said the same comments.

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### EF18319353

I am just wondering if the proposal at Cape Riche is to ban camp fires? A newspaper article implies this is the case and I don't agree with it. I don't camp at the Cape but am an adjoining land owner and can see the immense value people gain from a camp fire. It is a very significant part of the camping experience.

I am also the senior fire control officer for the CoA NE sector so have a vital role in fire management. I along with the Wellstead FCO work in with the caretaker at the Cape and have had no issue to date.

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### Verbal – at Stakeholder meeting

Need fee structure to be cost neutral

Need reservation systems

Any expansion of PP camping needs further input from C/Park owners

his 2 caravan parks have 43900 individual visitors for a total of 134000 guest nights

water rates alone are \$1.44/night/person

Dump pints are an issue

---

### Verbal – at Stakeholder meeting

Supports campfires being permitted

Need BBQ in campsites

Supportive of redesign of Cosy Corner including overnight parking

All redesigns need to consider fire & emergency access including firebreaks

Need more Ranger presence

---

**EF18319409**

Nothing about protecting community amenity. It's all about the visitors yet the local ratepayers pay for it.

---

Thanks for sending the strategy through, it is looking really comprehensive. It's great to see a focus on:-

- Fees
- No fires
- Day use
- Access to private land for camping
- Maintained presence of camp hosts

There is some concern around getting the current sites to hold more people and the potential to increase the sites overall size by clearing more. The concerns are around more people on the site reduces its value as nature based camping with implicit understanding of being in a more natural environment with less people. There are plenty of pretty nice caravan parks close to the sea. More people also means more rubbish, more vehicle movements, more use of toilets etc and the subsequent management issues of this. My general understanding from the community near Cosy corner east is opposition to any increase in size of the camp area. I am personally opposed to increasing sites on these sensitive coastal strips and feel the efforts should be made in enabling private landholders to provide this possible increased need, especially in peak times.

My other comment regarding nature based camping is that I feel a range of access is OK. Do we need 2WD motor home access everywhere? Keeping some sites for tents or small camper trailers provides a variety of experiences such as at Shelley Beach.

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**EF18319879**

I have been reviewing the Draft Nature Based Camping Strategy and Action Plan and generally it is very good. However, the decision to ban campfires at all sites is questionable and runs counter to the plan's stated aim to "enhance the camping experience available to community members". Campfires are an integral part of camping in Australia. While I appreciate the damage caused by unfettered harvesting of campfire fuel from the surrounding areas, the City has missed an opportunity here to educate users, and potentially generate an income.

- Campfires could be allowable only if users bring their own fuel.
- Campfire enabled sites [with designated, built fire pits] could attract higher camp fees.
- Rangers collecting camp fees could also be selling firewood bags [at a grossly inflated price!]

There was also no mention if users are able to bring their own wood fired stoves or barbecues. Which are not classified as an open fire, but can still lead to illegal harvesting of fuel wood. If the *harvesting* of fuel wood is banned instead, and decent campfire facilities are introduced, this would lead to positive outcomes for both users and the City.

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**EF18320707**

We are full time travellers and this email is in response to your intention to start charging for camping spots at Cosy Corner, Betty's Beach, Normans Beach & East Bay.

We particularly choose to come and camp in the Albany region because these spots are free. Accordingly we spend money in the town. If we had to pay the exorbitant prices in caravan parks we would not have any money to spend in the local shops. As for paying fees at these remote spots we think it is so far out of the way that we should not have to pay fees. The closest spot is still 30 km from Albany and this is a 60 km return trip. You will lose a lot of travellers by charging fees at these areas. They will spend less time if they have to pay overnight fees. They will just go elsewhere to a free spot and spend the money in the town that does not charge for camping. We have been travelling for 9 years intermittently working as we go. We find that, first in best dressed at campsites is only fair. Also in this regard, there should be at least overnight camping in Albany and around at the small localities for up to 72 hours. This encourages people to stop right in town and spend money as they are there. This also reduces pressure from the beach camp areas. A good example of free camping is a free camping is Borden, close to you. Do not become like Esperance council which travellers avoid, as there is no free camping at all.

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**EF18320708**

I'm having a say about the changes proposed to the current free campsites. I understand some of the changes being proposed sound nice but I'm sorry I feel mostly that it's a money making scheme, ultimately a lot of money will be spent planning the development then making the changes. Yes this means income for companies and people short term but at a high cost. We are losing the freedom we have to go free camping, surely we pay enough in rates etc to continue covering the costs. Also working with homeless people who have a vehicle the Cosy Corner and Torbay Inlet sites give these people somewhere to stay. Introducing fees will limit their ability to stay there and puts them parking in unsafe carparks overnight. For low income families these campsites are great and close by for Albany residents and traveling families to stay at. Giving them an opportunity to get out and about they may not otherwise be able to afford. Having travelled with a family myself I always use to hunt for the free sites. There is no way to low income families can afford caravan park charges and even ranger charges can be too high.

I don't suppose my opinion will make a difference in the end but I'm not the only one who feels this way, it's a shame people are so lethargic in taking action and speaking up.

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**EF18321038**

I'm writing in regard to the proposals for the Cape. I am not sure why we need to ban fires from the camp grounds all year round? Summer time I understand, but why winter? There are very few places left for families to camp and experience the joy of a camp fire and "toasting" marshmallows. I would like to say that I strongly disagree with the cost of the nightly fees. Most families would find it very expensive to stay. Charging for children over 7 the cost of \$9 per night is outrageous. The parents of our area are farm workers with low incomes, taking their family to the Cape for swimming lessons will become out of their reach! Please consider allowing children to camp for free?! We have so very little for the children out here in Wellstead and its surrounding areas please keep this area for our families

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As the most regular Cape Riche camper since early 1999, I make the following submission with regard to the future operation of Cape Riche.

**COOKING/CAMP FIRES.**

Campers are currently permitted small contained, attended fires all year, except for high fire danger occasions. The caretaker is responsible for ensuring fire safety in conjunction with the local fire chief.

Many campers are attracted to Cape Riche because they know they can enjoy the atmosphere and practicality of a controlled cooking/camp fire.

children (and adults) learn to enjoy, use and respect fire in a responsible and safe manner.

Fires are used for heating washing and shower water as well as for cooking and socialising.

Hot showers are not provided at Cape Riche.

Consideration (in consultation with the caretaker and regular campers) should be given to the design and type of fire containers used and where they are situated around the camp ground.

Cooking/ camp fires are an integral feature of nature based camping.

Banning fires will adversely impact on revenue from camp fees.

Banning fires would be a retrograde step regarding the promotion of tourism.

Camp fires have not caused any problems during the past 19 years.

### **CAMPING FEES.**

Camping fees have increased markedly in recent years – from \$5.00 per site to \$9.00 per adult per night currently.

Currently a 7 year old is classified as an adult and charged \$9.00 per night !!

In what other situation is a 7 year old considered an adult !!

Would any family consisting of “mum”, “dad” , and children/adults aged 7, 9, and 11 be happy to pay \$45.00 per night to camp at Cape Riche – with limited facilities

Current fee structure needs urgent revision.

### **CAMP GROUND SITES.**

Cape Riche has 22 designated camp sites.

There is limited scope for increasing the number of sites as the area is fragile and vegetation does not regenerate easily.

Further clearing will create erosion from wind and rain water run-off.

In 2016 camp sites were re-fenced – in numerous cases reducing site sizes and making access more difficult.

No consultation was made with campers prior to or during the re-fencing.

Small adjustments to the positioning of fences would have resulted in easier access and increased accommodation.

### **CARETAKER**

The presence of a full time caretaker has ensured the efficient operation of the camp ground.

Absence of vandalism, camper conflicts and animals (cats and dogs) is a positive feature of Cape Riche.

Cape Riche is a friendly, happy campground that is promoted via social media.

Rubbish removal to Wellstead is done as needed by the caretaker as part of his employment contract.

Rubbish removal by a commercial contractor would be prohibitively expensive and would not be done as needed – particularly at peak times.

A skip bin at peak times would produce an abundance of flies, maggots and stench.

### **FISH CLEANING**

Currently there are no fish cleaning facilities provided.

Approximately 6 years ago a fish offal disposal unit was provided and placed in an unsuitable position.

The above unit was never used.

The unit has been removed.

**BOAT LAUNCHING**

A steep gravel drive provides access to the beach (4WD only)

Boats are launched from the beach.

There is no concrete ramp or jetty.

**POLICY MAKERS**

Have policy makers been campers?

Have policy makers visited Cape Riche and spoken in person to campers?

Are policy makers aware of the history of Cape Riche?

Will policy makers take notice of submissions?

**CONCLUSION**

The positive comments made by visitors from all around Australia and many different countries are testimony to the unique attributes of Cape Riche.

**EF18321113**

The Torbay Hills Residents and Ratepayers Association (THRRA) is writing in response to the recent release of a Nature Based Camping Strategy and Action Plan, particularly the proposal that concerns Cosy Corner East site. The City of Albany's (COA) current proposal continues to challenge the local community therefore we are writing to you to highlight our own challenges and opportunities regarding this strategy planning.

Our records indicate this has been an ongoing issue and one THRRA has approached the City of Albany on numerous accounts in the past decade. As previously addressed the primary challenge for residents on Torbay Hill concerns fire safety and security in the local area. It is well known and documented by the City of Albany and the fire brigade that Torbay Hill is a high-risk area. The impact of increasing the camping facilities at Cosy Corner East we believe does not address this risk nor decrease the risk for residents. THRRA committee's recent discussion in response to your proposal suggests that this proposal highlights an opportunity for the COA to identify a more suitable area or location for a nature-based camp other than Cosy Corner East. THRRA is not opposed to the Cosy Corner East site but certainly concerned that the COA proposal in the long term is

not environmentally sustainable and increases fire risk in the area.

In addition to the fire risks, this strategy poses several other challenges including the management of Cosy Corner East. The firebombing incident at the campsite last summer season certainly emphasises some of the challenges for a camp host in

an isolated location. This incident also brings to light many risks including problems associated with camp hosts, emergency responses, and the potential fire and security risk to residents on the hill.

We agree that the current Cosy Corner East site is not meeting the needs and notable increase in camping tourism in the Great Southern but do not see expanding this site as a solution to the demand. THRRA is not opposed to tourism and propose several alternative strategies to manage this increase without putting the Torbay Hill residents and environment at risk. Private property camping is certainly used in many parts of Australia as a solution to managing peak seasons and providing campers a unique experience on their travels.

There are 114 properties on Torbay Hill with an approximate 200-250 residents on a permanent basis. Ratepayers have access to few utilities and services including waste management by the COA yet your proposal suggests there are resources to improve this camping site which we regard as superfluous and not a priority. The proposal is packaged in glossy brochure which we feel glosses over issues that THRRA perceive to be more important and not necessarily doing the best thing for this community as your motto "everything we do, we do for our community" suggests. Therefore, THRRA would like to propose a meeting with the COA as an opportunity.

**EF18321455**

In response to the nature based camping proposal by council, especially in regard to Cape Riche, I think council need to be very aware that an expansion of camping grounds already available to cater for more campers during peak periods will only be detrimental to the area. Firstly, I grew up in the area until a short time ago, and since have been a regular user of the grounds. By allowing more people to camp at Cape Riche this will only further congest the already small camping ground during peak periods, along with day users, and the only boat ramp for nearly 80km, there is simply not enough room for more people, as the beaches to the west are only accessible by 4WD and same to the east with most beaches to the east inaccessible even by 4WD, the Cape Riche area is simply not big enough to handle high traffic loads along with increased rubbish collection which generally leads to coastal degradation which then results in access closure!! If more and larger facilities are required then plenty of this is already available at Cheynes Beach and Bremer Bay both just a short drive. Please leave this part of WA coast alone. The reason that Cape Riche is so appealing to campers and families is because it can only handle small numbers of people at any one time which gives the great experience enjoyed by so many. The time frame that council talks about peak period only lasts for a couple weeks every year and no matter how many you cater for, it will always fill to capacity during these times.

The decision to ban fires is simply not acceptable to a place like Cape Riche if fire containment is an issue, as long as the fire is contained in a pit or drum, and not during total movement bans, it hasn't been a problem for the last 60 years. If the issue is one of people grabbing bush and trees to burn fires well that's a compliance issue that if caught they will be removed from grounds. A fire at a camping ground such as Cape Riche is a part of the camping experience (Pretty handy on cold summer night with easterly drizzle and cold).

I would strongly suggest that the council reconsider its proposal, especially regarding Cape Riche, and please leave this very special part of our WA coast alone as change is not needed as the current status works very well, we don't have to have facilities to cater for everybody dotted along every part of our coast. Let's leave this unique and stunning part of our WA coast for future generations to enjoy the experience that these types of places offer.

Looking forward to hearing councils revised proposal on this matter

---

**EF18321461**

We are writing this to give our opinion to banning camp fires at Cape Riche. And raising the camping fees.

As we and our families are regular visitors to the camping area , and many friends enjoy camping at the cape whenever possible.

Ourselves and especially our grandchildren enjoy having a camp fire to sit around at night to keep warm and talk about the day's events, it is a great fun for kids to have this for socialising instead of sitting in front of video games etc. If the camp fires are banned it will ruin Cape Riche. So many people have said they will not be going there, they will camp on a beach somewhere.

PLEASE DONT BAN THESE CONTAINED CAMP FIRES. It is the last bit of showing our grandchildren and their friends how much fun it is camping in the bush and sitting around the camp fire talking and laughing and toasting marshmallows and even cooking toast on the fire for brekky.

**CAMPING FEES**

WHY HAVE THE CAMPING FEES GONE UP ?

It is ludicrous that 7 years old and up have to pay adult fees!  
 It always was under 16 years were free!  
 It is a decision that will have an adverse effect on Cape Riche.  
 Not all families can afford to go to caravan parks for a holiday.  
 There were a lot of families that used the Cape camping grounds as a cheap family holiday. But not anymore as the fees are way out of their reach.  
 WHAT DO YOU GET FOR THE PRICE OF CAMPING AT CAPE RICHE?  
 1. A TOILET.  
 2. A COLD SHOWER.  
 Why would people want to pay the hefty price for their children to have a cold shower. This would probably be classed as child abuse.  
 Kids love to have a warm shower after swimming.  
 So come on the CITY OF ALBANY have a heart and let's keep camp fires and the fees for camping as they were. PLEASE

**EF18321542**

I would like to submit my opinion of the before mentioned plan.  
 The increase in fees outlined in the plan, in my opinion would disadvantage many of the members of the public, who have young children.  
 In a lot of cases, they chose this style of getaway as it is affordable, has some basic comforts and allows them the opportunity to sit with their children around a campfire as has been part of our Australian lifestyle since settlement and apart of Aboriginal culture for thousands of years.

Banning the campfires and increasing the fees I believe will result in campers seeking free camping in areas which are not supervised, do not have toilet facilities or enclosed campfires. The result of this will be greater risk to the environment and the potential for bush fires would also be far greater.

To my knowledge, there has not been a risk of fire from a campsite at Cape Riche. With the continued diligence and respect for Fire Hazards, there is no reason to believe this will not continue to be the case.

Thank you for the opportunity to put forward my opinions.

**EF18321562**

I am writing to you today regarding my concerns for the proposals put forward by the City for implementation to select "Free Camping" areas in your localities.  
 I would like to address a number of points that are of concern, more specifically associated with the Cape Riche camping area although I'm sure would be relevant to the remainder in parts. I have been frequenting this location for 30 years, as have my children since they could crawl. We feel we are in a position to offer further insight to this amazing location and feel some suggestions put forward would remove the uniqueness of the location.

**Notification of the removal of camp fires**

"Campfires will not be allowed in COA campsites due to fire danger and environmental impacts. Utilise onsite signage in campsites to educate about fire prevention and environmental impacts of campfires"

Whilst I can appreciate the mindset behind such implementation it would appear this is not in line with Free Campers expectations or actions. This I feel is essentially a "rite of passage" and privilege that should not be revoked. It would be a sad day when you are unable to allow the children to roast a marshmallow or cook jacket potatoes legally or in a controlled environment.

**Fire risk**

To the best of my knowledge there has not been an incident of a camp fire being responsible for a bushfire scenario in this campground. To imply this is a factor is unjust and untrue. People that frequent this area are well aware of fire behaviour and ensure others are made aware if being observed to not be taking due care (myself included, FCO previously with Plantagenet Shire for Rocky Gully) many of whom are involved in local fire brigades. Campers are well advised of expected adverse fire conditions by caretakers, John previously then Mal being re-enforced by locals that are camping.

Needless to say if the proposed ban is enacted it will only exacerbate the issue by removing a controlled environment, patrons and others will then start locating away from the camp ground to enjoy a fire, more than likely with severe ramifications- burns from hot coals buried on the beach, bushfire risk from inappropriate locations of fires outside the shire boundaries to name a few. If the risk can be contained to a suitable area with suitable hardware very little if any collateral damage will occur.

Case in point- Masons Bay near Hopetoun. The amenities are exceptional and I feel of a nature that should be taken into consideration. Fire pits are provided with well-defined signage to advise of their usage, patron expectations and other containment requirements required by State fire regulations.

### **Environmental**

It is common knowledge to bring your own firewood to this location; more often than not those that have utilized the camping area prior will leave their remainder for the use of the next. On more than one occasion we have supplied firewood to visitors that were unaware they could utilize a campfire. It is well known both John and Mal advise those that stay removal of the local fauna is not permitted and this can be seen by the diversity and density of the area. Once again this can be achieved with suitable signage as we have witnessed over the breadth of Australia, along the lines of "Firewood collection is not permitted in this area, source responsibly." If such signage was erected at the entrance and at Wellstead it would provide an opportunity for revenue through the sale of bags of wood- as occurs currently at Parry's Beach- one way to assist with offsetting costs perhaps?

### **Cost of Refuse Removal**

"Excessive rubbish at peak periods"

One possible option to reduce costs and burden involved with removal of rubbish is to put the onus on the camper. This is quite common in other camping areas where you must take your rubbish with you. Simply educating will not achieve the desired outcome, total removal of rubbish facilities should be a consideration. Appreciate this may initially create issues with littering although as witnessed in many other locations throughout Australia this appears not to be a concern. This would assist in negating the need to increase camping fees.

### **Expansion possibilities**

"Increasing pressure from campers – number of sites not meeting demand in peak periods."

"Impacts of clearing native vegetation to expand or establish new campsites"

It would appear the current overflow area is not been taken into consideration for the future requirements of the camping area. Considering this is already well developed and cleared it would seem the idea to clear native pristine vegetation to the north/west is counterproductive. I assume this is not in keeping with current COA Environmental Values whereby an alternative that offers same for same without the impact is accessible. I appreciate this being privately(John Moir) held although I would think a suitable outcome could be achieved if explored appropriately allowing substantial upgrades with minimal environmental impact.

### **Site Management**

"Competition between day users, and campers for access to the site."

"Investigate use of volunteer Camp Ground Hosts at appropriate COA campsites."

It would be a shame to see the removal of communal camping areas if this is something that has been considered to increase overall campsite allocations. With some thought this could be achieved with minimal relocation of existing structure, allowing a portion for overnight stays (rarely witnessed although anticipate a growing demographic) and day trip parking. Communal camping



has been one of the most enjoyable aspects of Cape riche for our family, something we would be upset to see occur.

Possible cap on length of stay may be a consideration, freeing up the more favourable sites that generally are held for excessive periods of time. Perhaps a 7 day window would be a fair outcome. The current resident camp manager arrangement we feel should remain in place, to have volunteers put in the position of authority that at times may be confrontational would be a concern. Having someone that is familiar on a constant basis that has presence and is respected in the campsite can diffuse issues with the assistance of other campers. By no way do I mean this is a frequent occurrence, more so socially considered.

“Investigate implementation of camping fees at COA campsites in line with similar campsites managed by other land managers cross the region.”

Having researched briefly the current fee structure (\$9 pp) is in line/above others of a similar nature. Other sites range from \$10-\$17 per night per vehicle and some charge \$3 per child. Some facilities are better at a cheaper price point. It would appear to keep in line with other locations in the region (and not drive away patrons) the facilities would need to be greatly improved to justify an increase in fees.

### **Accountability**

Have all relevant authorities been approached for input to this proposal?

For example has the city requested recommendations/studies from the relevant agencies that these topics are discussing to ensure all aspects have been brought to light by professionals in their fields? I would anticipate items such as fire restrictions/bans would need considered opinion to ensure the ramifications of such an occurrence have the desired outcome. As mentioned if bans are put in place it may well entice illegal/unsafe behaviour that those aware of such behaviour are familiar with.

Other considerations such as environmental impact studies should also have been submitted prior to drafting to ensure suggested planning options are at all possible or preferable. Are these documents readily available to ensure an unbiased and uncompromised outcome can be achieved?

No doubt the city would ensure transparency, education and accountability is paramount for something that could have significant changes imposed on what most rate payers deem sacred.

Thank you for allowing this submission, if my concerns could be addressed it would be greatly appreciated.

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# Harley Dykstra

PLANNING & SURVEY SOLUTIONS



## Structure Plan Modification RR 34

Lot 9000 Lancaster Road, McKail

Prepared by Harley Dykstra Pty Ltd for J & K Belfield, A & B Lucas and J Lucas

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B	19.10.2016	Final	Client	Revisions following QA
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D				
E				

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## 1 INTRODUCTION

### 1.1 Introduction & Purpose

This report forms part of the proposal to modify the Structure Plan (SP) relating to Lot 9000 Lancaster Road, McKail (the 'subject site').

This report details a total of four (4) modifications to the Structure Plan, which reflect current planning rationale, best planning practice and opportunities and constraints of the subject site.

A background of the subject site and surrounding area is provided, prior to detailed discussion of each modification. Further, the report addresses future servicing, impacts of these changes on the surrounding area and key planning considerations guiding future development of the property.

Approval by the City of Albany and Department of Planning, Lands and Heritage is respectfully requested.

### 1.2 Subject Site Overview

The subject site is currently zoned *Rural Residential* and located within *Rural Residential Area No.34 (RR34)* of the City of Albany Local Planning Scheme No. 1 (LPS1). This area allows for the subdivision of Rural Residential lots down to a minimum size of 1 hectare, based upon land capability, service availability and the approved SP.

### 1.3 Legal Description

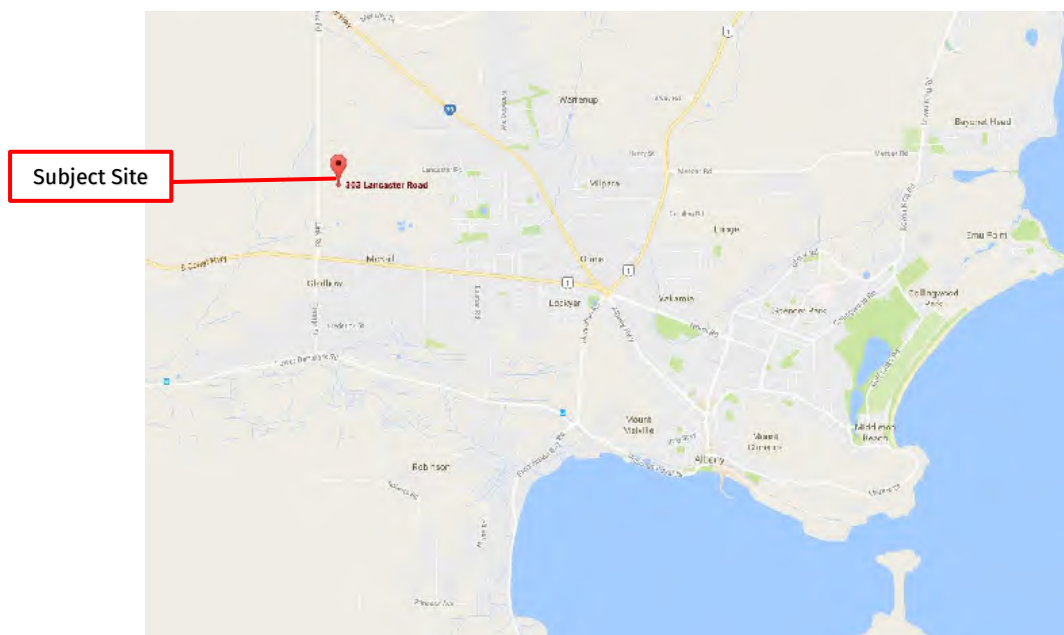
303 Lancaster Road (Lot 9000 on Deposited Plan 70052) is 19.9257ha in area. The property is contained on Certificate of Title Vol. 2814 Fol. 895 and the registered proprietors are:

- Joy Frances Lucas in 1/5 share;
- Jamie Belfield & Kelly Maree Belfield as joint tenants in 2/5 share; and
- Bradley James Lucas and Amy Diane Lucas as tenants in common in 2/5 share

A copy of the Certificate of Title is included in **Appendix A**.

### 1.4 Location

The property is located approximately 7km north-west of the Albany town centre, via Link Road as illustrated in **Figure 1**.



**Figure 1:** Location plan of Lot 9000 Lancaster Road, McKail

### 1.5 Surrounding Land Use

The subject site is zoned Rural Residential, however a mapping error is acknowledged on the City of Albany Scheme Map. Refer to **Figure 2** – land use zoning.

The land immediately surrounding the property is zoned for various purposes including General Agriculture, Rural Residential and Future Urban in the City of Albany Local Planning Scheme No.1 (LPS1).

The landholding to the north of the subject site, on the opposite side of Lancaster Road, is zoned *General Agriculture* and is 64.76 hectares in area. The property adjoining the eastern boundary of the subject site is zoned *Future Urban* with developed lot sizes around 4,000m<sup>2</sup>.

Land adjoining the southern boundary of the subject site is zoned *General Agriculture*, with *Rural Residential Area 40 (RR40)* located approximately 300m south of Lot 9000. Lot sizes in RR40 range from one to five hectares.

To the west of the subject site, on the opposite side of Link Road, land is zoned *Rural Residential* and included within *Rural Residential Area 35 (RR35)*. Developed lot sizes in RR35 range from approximately one to seven hectares.

Land adjoining the eastern boundary of the subject site is zoned *General Agriculture*, with *Rural Residential Area 25 (RR25)* located approximately 500m east along Lancaster Road. Lot sizes in RR25 range from one to five hectares.



**Figure 2:** Land Use Zoning

(Source: DPLH)

## 1.6 Topography

The site is gently sloping from a maximum height of 65m AHD at the north-west corner of the site fronting Lancaster Road, towards the south-eastern corner of the site which is approximately 38m AHD and south western corner which is 43m AHD.

There are no significant topographical features located on the site including watercourses, wetlands, significant vegetation, flood plains or dams.

## 1.7 Transport Noise – Link Road

The subject site is impacted by MRWA noise associated with the future development of Link Road as a heavy vehicle transport route. This is denoted on both the Certificate of Title, Deposited Plan and adopted Structure Plan (2008).

Documentation relating to the MRWA noise affected land notes:

*“The above land described is situated adjacent to the proposed Albany Ring Road and may be affected by transport noise. Further information regarding transport noise, including development restrictions and noise insulation requirements for noise affected property are available from the City of Albany.”*



City of Albany Planning Officers were consulted prior to finalising the amended SP and requested to provide additional information relating to transport noise. Unfortunately additional information was not able to be provided.

### 1.8 Albany Speedway Noise Special Control Area

The northern portion of the site is affected by a special control area associated with the Albany Speedway. Section 6.5 of the City of Albany Local Planning Scheme outlines provisions relating to the Albany Speedway Noise Special Control Area, including the following:

- *The Local Government may grant planning approval and impose conditions on the approval to require the applicant to incorporate design and construction methods/materials to reduce noise impacts to the dwelling; and*
- *The Local Government shall request the Commission impose a condition on the approval for the creation of any new lots created as a result of subdivision within the Albany Speedway Noise Special Control Area be required to have a memorial placed on the Certificate of Title stating that the land may be subject to temporary high noise levels from activities conducted at the Attwell Park Speedway.*

Future dwellings located within the Albany Speedway Noise Special Control Area will be subject to conditions requiring design and construction to address these noise impacts to the satisfaction of the City of Albany.

### 1.9 Vegetation

The property is predominantly cleared of vegetation with a small cluster of trees located midway along the eastern portion of the site. A small patch of remnant vegetation is located in the centre of the site dominated by Sheoak trees with scattered Jarrah trees and a grass understory. Small areas of forest line the northern and southern boundaries of the site comprising of both remnant vegetation and exotic plantings closer to neighbouring dwellings in the south.

The amended SP seeks to retain all existing vegetation where possible. The SP modifications include strategic revegetation areas to improve privacy and amenity, without introducing increased bushfire risk. Details of this are outlined in **section 3.3** of this report.

### 1.10 Existing Buildings & Structures

The subject site accommodates two existing dwellings and associated outbuildings which are located along the northern boundary fronting Lancaster Road. A horse shelter is located approximately 85m from the eastern boundary and 150m from the northern boundary.

Removal of the existing dwellings and outbuildings is not required to implement the Structure Plan modifications.

The amended Structure Plan provides for the eastern dwelling to be setback 13m and the western dwelling 130m from the future road reserve connecting to Lancaster Road.

## 2 PLANNING BACKGROUND

### 2.1 City of Albany Planning Strategy (ALPS)

The key local planning document relating to future planning of the subject site is the Albany Local Planning Strategy (ALPS). This proposal is consistent with the intent of ALPS which was endorsed by the WAPC in 2010.

The subject site and surrounding area is designated as Rural Residential on Map 9B of ALPS, as illustrated in **Figure 3**.



**Figure 3:** ALPS Map 9B extract (Source: CoA ALPS 2010)

Objectives of Rural Residential areas in ALPS include:

- To avoid areas of Rural Living on productive agricultural land, other important natural resource areas and areas of high bushfire risk, flooding and environmental sensitivity;
- Avoid the development of Rural Living areas on future and long term potential urban areas; and
- Minimise the potential for generating land-use conflicts.

The proposed modifications to the Structure Plan support these objectives, as implementation of the amended SP will provide Rural Residential lots within an existing Rural Residential zone and assist to contain encroachment of rural living areas onto agricultural areas and future urban land.

Furthermore, these modifications do not have the potential to generate land use conflicts as the subject lot is already an existing designated Rural Residential area and will be contained within the property boundaries.

## 2.2 City of Albany Local Planning Scheme No.1 (LPS1)

The City of Albany Local Planning Scheme No.1 (LPS1) is a statutory document responsible for implementing the findings of ALPS, and was endorsed by the WAPC in 2014. LPS1 provides provisions for the control, regulation guidance and coordination of public and private development and the use of land within the scheme area.

The subject site is zoned Rural Residential and designated as area 34 (RR34) of LPS1. Schedule 15 of LPS1 outlines special provisions relating to RR34, including:

1. *Subdivision of RR34 shall generally be in accordance with the Subdivision Guide Plan RR34 endorsed by the CEO, with any minor variations approved by the Western Australian Planning Commission.*
2. *The minimum lot size shall be one hectare.*
3. *The following land uses are 'P' permitted uses –*
  - a) *Single House*
4. *The following land uses are 'D' discretionary uses –*
  - a) *Ancillary Accommodation;*
  - b) *Home Business;*
  - c) *Home Occupation;*
  - d) *Industry – cottage;*
  - e) *Public Utility; and*
  - f) *Rural Pursuit (which shall be limited to existing cleared and pastured land only).*
5. *Any dwelling shall be located outside of any development exclusion areas shown on the Subdivision Guide Plan and all buildings shall achieve the following minimum setbacks –*
  - a) *15 metres from the front boundary;*
  - b) *12 metres from a secondary road boundary; and*
  - c) *10 metres from all other lot boundaries.*

All proposed modifications comply with the existing control provisions listed in Schedule 15 of LPS1.

## 2.3 Adopted Structure Plan RR 34 (2008)

Rural Residential 34 was the subject of Amendment No. 243 to the City of Albany Town Planning Scheme No.3. Amendment No. 243 allows for the subdivision of Rural Residential lots down to a size of one hectare. A copy of the adopted SP is included in **Appendix B**.

The adopted SP (2008) provides for the subdivision of eighteen lots ranging in size from 1 hectare to 1.05 hectares. It also incorporates three key planning constraints for the site:

1. Access onto Lancaster Road;
2. Future closure of Patricia Place, and road connectivity through to adjoining landholdings to the south; and
3. Future road connectivity to the landholding to the east (Lot 13)

A total of four modifications to the adopted SP (2008) are proposed. **Section 3** of this report outlines each of the proposed modifications and details the planning rationale underpinning these changes.

### 3 PROPOSED MODIFICATIONS & RATIONALE

Modifications to the adopted SP (2008) are proposed to improve the resultant subdivision within Rural Residential Area No. 34. A total of four (4) modifications are proposed to the adopted Structure Plan. Details of these changes and supporting rationale are described in detail below.

A copy of these modifications are illustrated on the amended SP and included within **Appendix C**.

#### 3.1 Modification 1

##### *Adjusting the lot sizes and layout*

This change is proposed to provide a variety of lot sizes and improved shape to address market feedback and current bushfire practices. These changes also allow for an efficient use of the land, by reducing the total length of roadways required to service the lots by approximately 16 per cent, or 150m.

The amended SP ensures all lots are greater than the one hectare minimum prescribed for RR34, and provides for efficient use of the land and services. Further, modification one supports current planning rationale to limit residential development encroaching into productive agricultural land and will not result in conflicting land uses with surrounding properties.

The amended SP will also not negatively impact on the surrounding amenity, or result in an increase to traffic using Lancaster Road.

#### 3.2 Modification 2

##### *Realigning the future road reserve to provide vehicle access and street frontage to all lots.*

Modification two is proposed in response to modification one outlined above. To enable access and legal road frontage to all lots, the inclusion of an 18m wide road reserve connecting to Lancaster Road is required. The alignment of this future road reserve is simply modified.

The east west road connection located to the south of the subject site not only provides future connectivity to adjoining lots, but also serves as a strategic fire break. This road will be provided with a temporary cul de sac head to allow vehicles to turn around, until adjoining land is developed in the future.

Prior to preparing the amended SP, consultation was undertaken with Main Roads Western Australia (MRWA) to determine; an appropriate location for access onto Lancaster Road, the provision of future access to Lots to the south which will be affected by the potential closure of Patricia Close, as well as ensuring connectivity to the adjoining landholding to the east is provided.

MRWA advised that access onto Lancaster Road should be no closer than 330m from the centre line of Link Road. A copy of MRWA's advice is attached at **Appendix D**. The amended SP provides a

connection point onto Lancaster Road approximately 363m from the centre line of Link Road, which is able to comply with the requirements of MRWA. Further, realignment of the road reserve provides a future connection to Lots to the south (currently accessed via Patricia Close), and east of the subject lot in accordance with the adopted SP (2008). No direct access is proposed from the subject site to Link Road in accordance with the advice from MRWA.

When the subdivision is implemented, the realigned future road reserve will provide a safe single point of access for future residents to access Lancaster Road from the subject site. A secondary Emergency Access Way is able to be provided, as detailed in **section 3.4** of this report.

### 3.3 Modification 3

#### *Adjusting the revegetation areas*

This modification is required to reflect the revised lot layout. The revised revegetation areas noted on the amended SP will provide visual screening and wind breaks. The revegetation will be subject to APZ standards outlined in SPP 3.7 – Planning in Bushfire Prone Areas, to ensure no increase to bushfire risk to future dwellings.

Native tree species will be planted in the revegetated areas which are endemic to the locality. Planting should occur in winter to achieve the highest success rate.

### 3.4 Modification 4

#### *Inclusion of an emergency access way*

This modification is necessary to ensure two points of access and egress in the event of a bushfire, and to comply with the requirements of SPP 3.7 – Planning in Bushfire Prone Areas.

Prior to finalising the Bushfire Management Plan, extensive consultation occurred between the City of Albany, Main Roads WA (MRWA) and DFES regarding the potential closure of Patricia Close and the opportunity for this to be retained as a controlled Emergency Access Way (gated and not locked) for residents in the event of a bushfire. Whilst the City of Albany supports this proposal, and have indicated they would be prepared to manage this EAW to ensure it is not used for other purposes, an agreement has not yet been finalised between MRWA and DFES for this to occur.

Without a secondary point of access and egress, as is the case with the current adopted Structure Plan (2008), the road layout results in effectively a cul de sac, and places unnecessary risk on the lives of residents in the event of a bushfire emergency. To overcome this risk, two options are proposed to ensure the Structure Plan complies with SPP 3.7, and enable MRWA and DFES to identify the most appropriate outcome for a secondary point of emergency access.

**Option One** identifies the retention of Patricia Close as an EAW. In the opinion of the bushfire practitioner, this is the preferred option as Patricia Close is an existing public road and this option would provide access and egress from the subject site onto both Lancaster Road and Link Road. The EAW would be gated, not locked and fitted with appropriate signage identifying it as an EAW. Additional signage could be fitted identifying penalties if it was used other than in the event of an emergency. Responsibility for the management of this would be vested with the City of Albany.

**Option two** provides for an EAW to be located along the eastern boundary of the site and linking onto Lancaster Road, to ensure that residents have two access ways available at all times. This EAW would be ceded as an easement in gross for unobstructed access by residents and fire services in the event of a bushfire emergency. The EAW would also be gated, not locked and fitted with appropriate signage identifying it as an EAW.

Other options for a secondary access were investigated to the east and south, but were deemed not viable. The ability of linking to Timewell Road (1km to the east) is not viable as it crosses a creek and through a Water Corporation Reserve (Wastewater Treatment plant located on Timewell Road). To the south to Beaudon Road there are multiple landowners and again a creek (sensitive land area) to cross which inhibits a potential EAW in that direction. Consultation with adjacent landowners on the matter was pursued, but a resolution was not able to be reached.

The amended Structure Plan illustrates two options available to ensure two points of access are provided, and that it is able to comply with SPP 3.7. Following agreement between MRWA, DFES and the City of Albany, the preferred option can be implemented and the alternative option removed from the adopted amended Structure Plan.

## 4 SERVICING CONTEXT

The existing dwelling on the subject site is serviced by power, reticulated scheme water, onsite effluent disposal and telecommunication infrastructure. These services are proposed to each lot in the amended SP.

Individual services are outlined in more detail below.

### 4.1 Water

A reticulated water main is located within the road reserve of Lancaster Road which services the locality. The existing dwellings are connected to this reticulated scheme water.

Section 5.5.13.2.10 of LPS 1 notes *“where available, a reticulated water supply from a licensed water service provider shall be provided to each lot.”* All proposed lots are able to be serviced with reticulated scheme water extending from the Water Corporation mains located within the Lancaster Road reserve.

### 4.2 Electricity

Both aerial power and underground power are present in the Lancaster Road and Patricia Close road reserves with the existing dwellings being serviced by an overhead electrical supply(s).

All proposed lots will be serviced with an underground electricity supply in accordance with Western Power requirements.

### 4.3 Gas

No reticulated gas is available in the area. Any use of gas will be required to be supplied using bottled gas.

### 4.4 Telecommunications

Telecommunications lines are available in Lancaster Road reserve and the existing houses will maintain their connections to this service. All proposed lots may be serviced with a telecommunication connection.

### 4.5 Access

Access to the amended SP is to occur via a single access road, joining to Lancaster Road, which will connect to an east-west connection at the southern portion of the subject site. Details of this road are discussed in more detail in **section 3.2** of this report.

The amended SP also proposes two 6m wide battleaxe driveways, collocated to provide a 12m wide access and assist with reducing bushfire risks. The battleaxe driveways will provide all weather access and be constructed to a compacted gravel or limestone standard at the time of subdivision.

Further details on emergency access is discussed in **section 3.4** of this report.

### 4.6 Bushfire Management and Emergency Egress

The property is located within a bushfire prone area, as prescribed by the Commissioner of Fire and Emergency Services. State Planning Policy 3.7 - Planning in Bushfire Prone Areas, requires subdivision applications for properties identified within bushfire prone areas to be supported by a Bushfire Management Plan prepared by a certified bushfire planning practitioner.

A Bushfire Management Plan has been prepared by Bio Diverse Solutions outlining various measures that enable the amended Structure Plan to comply with SPP 3.7, including; location, siting and design of development, access and water. A copy of the Bushfire Management Plan is included at **Appendix F**.

The Bushfire Management Plan confirms that the amended Structure Plan is able to comply with the requirements of SPP 3.7. Further details regarding vehicle access can be found in **section 3.4** of this report.

### 4.7 Effluent Disposal

As reticulated sewerage is not available within the locality, the existing dwellings are connected to traditional septic systems with leach drains.

A detailed land capability assessment was previously prepared over the land confirming suitable clearances from the ground surface to late winter ground water levels to accommodate onsite effluent disposal to all lots. This land capability assessment supported the adopted SP (2008) which was adopted by the City of Albany.

A copy of the land capability assessment is included at **Appendix E**, which notes:

*“Even though much of the site is gently sloping, waterlogging is a potential limitation along the southern boundary. It is recommended that dwellings be located on the higher ground on the southern lots.”*

This recommendation has been acknowledged in the SP modifications.

#### 4.8 Drainage

Due to the nature of the property, drainage currently occurs through ground infiltration. All future residential development will require drainage to be contained on-site to the satisfaction of the City of Albany. This is likely to occur through a combination of soak-wells, drainage swales and rainwater tanks.

Surface run off associated with the paved road will be contained within roadside swales which will drain via ground infiltration. This method of drainage has been adopted throughout other Rural Residential estates and has proven to function well.

## 5 CONCLUSION

This report forms part of the proposal to amend the adopted Structure Plan (2008) relating to Rural Residential Area 34 (the ‘*subject site*’), and details four (4) modifications that acknowledge market feedback, current planning rationale, best planning practice and opportunities and constraints of the subject site.

The modifications proposed within the amended SP represent a logical consolidation based upon sound planning rationale, and supports an attractive and efficient manner in which to subdivide the land.

The proposed modifications to the SP are justified on the following grounds:

1. The modifications duly consider and comply with ALPS, LPS 1 and development control provisions relating to Rural Residential Area No.34, including:
  - a. Potential future closure of Patricia Close;
  - b. Providing future connectivity to lots to the south and east;
  - c. Access to Lancaster Road is suitably setback from Link Road;
2. All proposed lots will meet or exceed the minimum lot size of one hectare prescribed for Rural Residential Area No. 34.
3. All lots are able to accommodate dwellings of suitable shape and size outside development exclusion areas.
4. All lots are able to be connected to the Water Corporation’s reticulated water supply, as prescribed in ALPS and LPS1.
5. The proposed modifications will not negatively impact on the surrounding areas or amenity;
6. The proposed modifications will allow the landowners to subdivide the land and ensure future access is provided for lots to the south and east.



7. The amended Structure Plan is able to comply with all relevant local and State policies and provides increased protection to life and assets in accordance with current policy requirements.

Approval of the amended Structure Plan by the City of Albany and Department of Planning, Lands and Heritage is respectfully requested.

---

**APPENDIX A**

---

Certificate of Title

WESTERN



AUSTRALIA

REGISTER NUMBER <b>9000/DP70052</b>	
DUPLICATE EDITION <b>1</b>	DATE DUPLICATE ISSUED <b>24/7/2013</b>

**RECORD OF CERTIFICATE OF TITLE**  
UNDER THE TRANSFER OF LAND ACT 1893

VOLUME  
**2814**

FOLIO  
**895**

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES



**LAND DESCRIPTION:**

LOT 9000 ON DEPOSITED PLAN 70052

**REGISTERED PROPRIETOR:**  
(FIRST SCHEDULE)

JOY FRANCES LUCAS OF 20 PATRICIA CLOSE, MCKAIL  
IN 1/5 SHARE  
JAMIE BELFIELD  
KELLY MAREE BELFIELD  
BOTH OF 21 KENDALL COURT, WARRENUP  
AS JOINT TENANTS IN 2/5 SHARE  
BRADLEY JAMES LUCAS  
AMY DIANE LUCAS  
BOTH OF 37 PEGASUS BOULEVARD, MCKAIL  
AS JOINT TENANTS IN 2/5 SHARE  
AS TENANTS IN COMMON

(T M756022 ) REGISTERED 2 SEPTEMBER 2014

**LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:**  
(SECOND SCHEDULE)

1. \*M348078 NOTIFICATION CONTAINS FACTORS AFFECTING THE WITHIN LAND. AS TO PORTION ONLY SEE SKETCH ON DEPOSITED PLAN 70052 ONLY LODGED 22.7.2013.
2. \*M756023 MORTGAGE TO COMMONWEALTH BANK OF AUSTRALIA REGISTERED 2.9.2014.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.  
\* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.  
Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

**STATEMENTS:**

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP70052.  
PREVIOUS TITLE: 1426-575, 1426-574.  
PROPERTY STREET ADDRESS: 303 LANCASTER RD, MCKAIL.

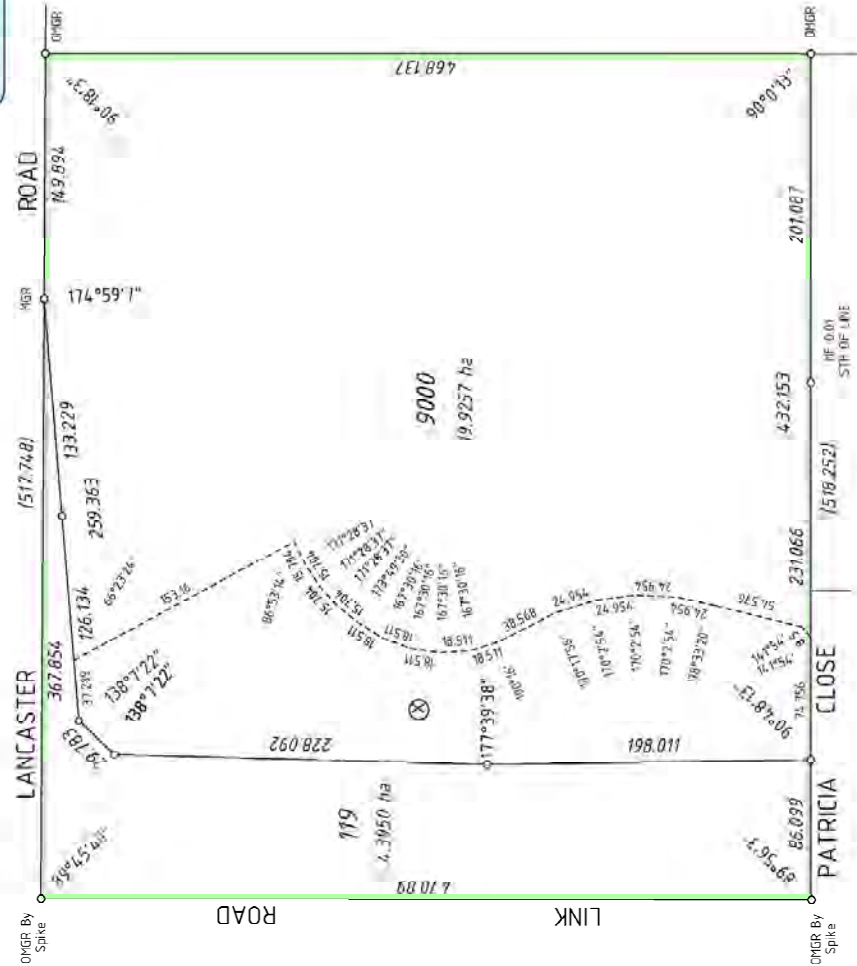
END OF PAGE 1 - CONTINUED OVER

VERSION 2	AMENDMENT SURVEY SHEET ADDED	AUTHORISED BY DATE 20-5-2013	LIMITED IN DEPTH TO 60.96 METRES 35 DEGREES SOUTH LICENSED LAND SURVEYORS 46 Stirling Terrace, Albany WA 6330 Phone: 9842 3766 Fax: 9842 1019	HELD BY LANDGATE IN DIGITAL FORM ONLY.	TYPE FREEHOLD
			PLAN OF  <b>LOTS 119 &amp; 9000</b>	PURPOSE SUBDIVISION SSA - YES	
			DISTRICT PLANTAGENET TOWNSITE FILE	LOCAL AUTHORITY MCKAIL CITY OF ALBANY	
			LOCAL AUTHORITY MCKAIL CITY OF ALBANY	FORMER TENURE ON FIELD BOOK 115932	
			SEE TABLE INDEX BK26 (10) 2.2	SCALE 1 : 3000 @ A3 ALL DISTANCES ARE IN METRES	
SURVEYOR'S CERTIFICATE - Reg 54 I, Mark Anderson hereby certify that this plan is accurate and is a correct representation of the (a) measurements taken in accordance with the Survey Act 1985 (b) calculations from measurements, (c) and that the plan is correct in accordance with the Survey Act 1985. I undertake for the purposes of this plan and that it complies with the relevant written laws in relation to which it is lodged. Mark Anderson LICENSED SURVEYOR DATE 13-May-2013					
LOGGED DATE 18-Apr-13		TYPE OF VALIDATION FULL AUDIT LEGAL COMPONENT B. FRANCIS		APPROVED BY WESTERN AUSTRALIAN PLANNING COMMISSION FILE 128942	
FEE PAID \$374.00		DOCKET PLAN/DIAGRAM TRIM		DATE 13-May-2013	
ASSESS No. 12543276		CERTIFIED CORRECT 19-April-2013		DATE 13-May-2013	
IN ORDER FOR DEALINGS SUBJECT TO Section 70 of The TLA					
APPROVED REG 26A(4) FOR INSPECTOR OF PLANS & SURVEYS/ AUTHORIZED LAND OFFICER DATE 20-May-2013					
SHEET 1 OF 2 VERSION 2					

**SPECIAL SURVEY AREA SUBDIVISION**

LOT	FORMER TENURE	IN PLANTAGENET	Certificate of Title
119	FT LOT 33	D 43284	426/518
9000	LOT 22	D 43284	526/574
	PT LOT 33	D 43284	1424/515

SURVEY CARRIED OUT UNDER REG 26A  
SPECIAL SURVEY AREA GUIDELINES



50 0 SCALE 1 : 3000 @ A3 250  
ALL DISTANCES ARE IN METRES

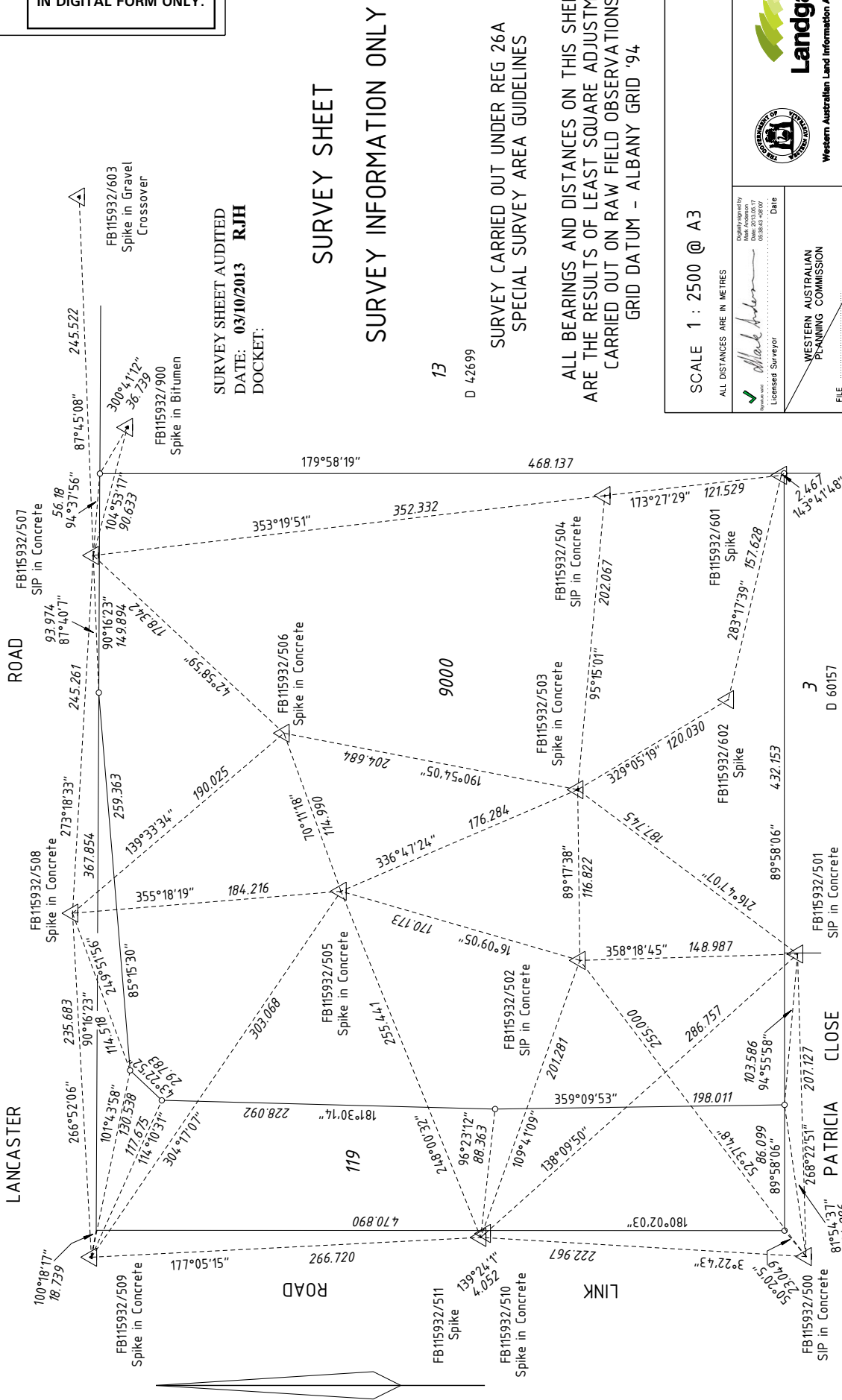
INTERESTS AND NOTIFICATIONS			
SUBJECT	PURPOSE	STATUTORY REFERENCE	ORIGIN
⊗	NOTIFICATION	SEC 70A OF THE TLA	DOC
		LAND BURDENED	COMMENTS
		LOT 9000	PRWA - TRANSPORT ROUSE

REPORT ITEM DIS138 REFERS

REPORT ITEM DIS138 REFERS

HELD BY LANDGATE  
IN DIGITAL FORM ONLY.

FOR HEADING SEE SHEET 1



SURVEY SHEET AUDITED  
DATE: 03/10/2013 **RJH**  
DOCKET:

SURVEY SHEET  
SURVEY INFORMATION ONLY

13

D 42699

SURVEY CARRIED OUT UNDER REG 26A  
SPECIAL SURVEY AREA GUIDELINES

ALL BEARINGS AND DISTANCES ON THIS SHEET  
ARE THE RESULTS OF LEAST SQUARE ADJUSTMENTS  
CARRIED OUT ON RAW FIELD OBSERVATIONS  
GRID DATUM - ALBANY GRID '94

SCALE 1 : 2500 @ A3

ALL DISTANCES ARE IN METRES

Quality approved by  
Mark Anderson  
08 9483 1007  
03/08/13 10:07  
Date  
Mick Johnson  
Licensed Surveyor



DEPOSITED PLAN  
**70052**

WESTERN AUSTRALIAN  
PLANNING COMMISSION

FILE

DATE

DELEGATED UNDER S 8 P 4 D A4 2005

SHEET 2 OF 2 SHEETS  
VERSION 2

FOR INTERESTS AND NOTIFICATIONS SEE SHEET 1

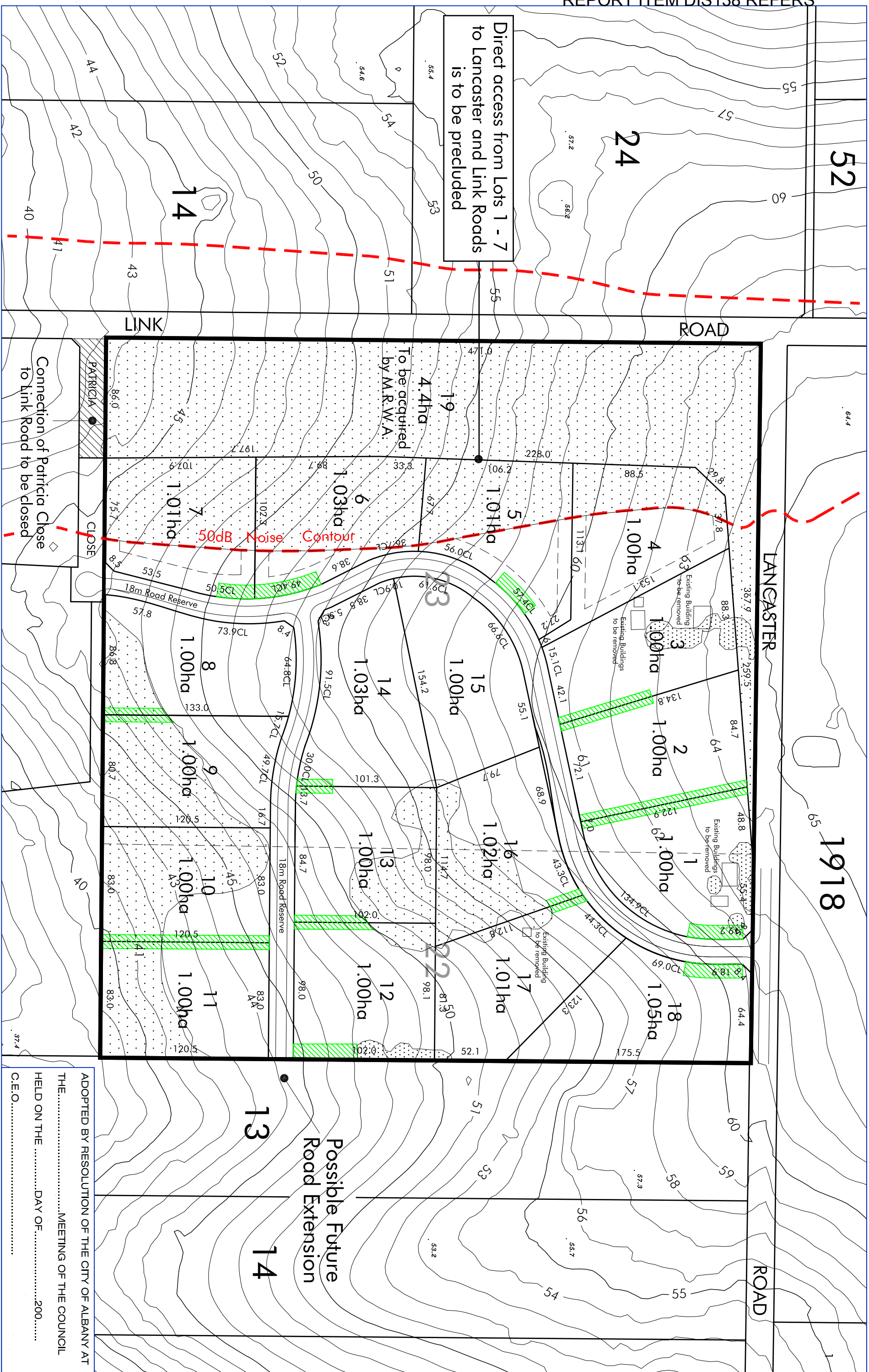
50 0 SCALE 1 : 2500 @ A3 200

ALL DISTANCES ARE IN METRES

## APPENDIX B

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Adopted Structure Plan (2008)



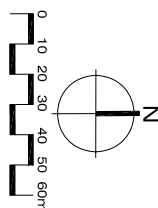
Direct access from Lots 1 - 7 to Lancaster and Link Roads is to be precluded

50dB Noise Contour

Connection of Patricia Close to Link Road to be closed

To be acquired by M.R.W.A.

- Application Area: [Symbol]
- Revegetation Area: [Symbol]
- Building Exclusion Area: [Symbol]
- Areas and dimensions are subject to survey.
- Site Area: 24.3221 ha
- M/R/W/A Road Widening: 4.4 ha
- Internal Roads: 1.75 ha
- Net Area: 18.1609 ha
- Yield 18 Lots @ 1.0 ha



SCALE 1:2500 31 MARCH 2008

ADOPTED BY RESOLUTION OF THE CITY OF ALBANY AT THE ..... MEETING OF THE COUNCIL HELD ON THE ..... DAY OF ..... 2000 C.E.O. ....

Possible Future Road Extension

**GRAY & LEWIS**  
LAND USE PLANNERS

Suite 5, 2 Hardy Street  
South Perth, WA 6151  
T (08) 9474 1722  
F (08) 9474 1172  
perth@graylewis.com.au

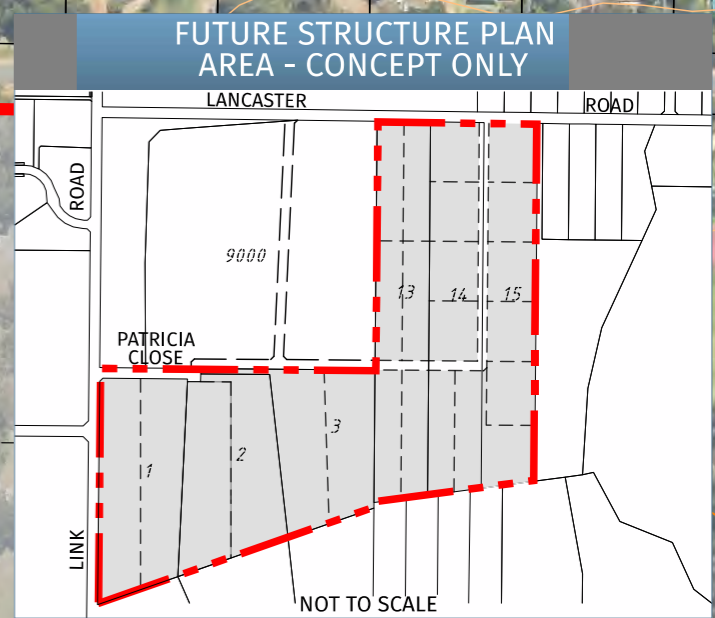
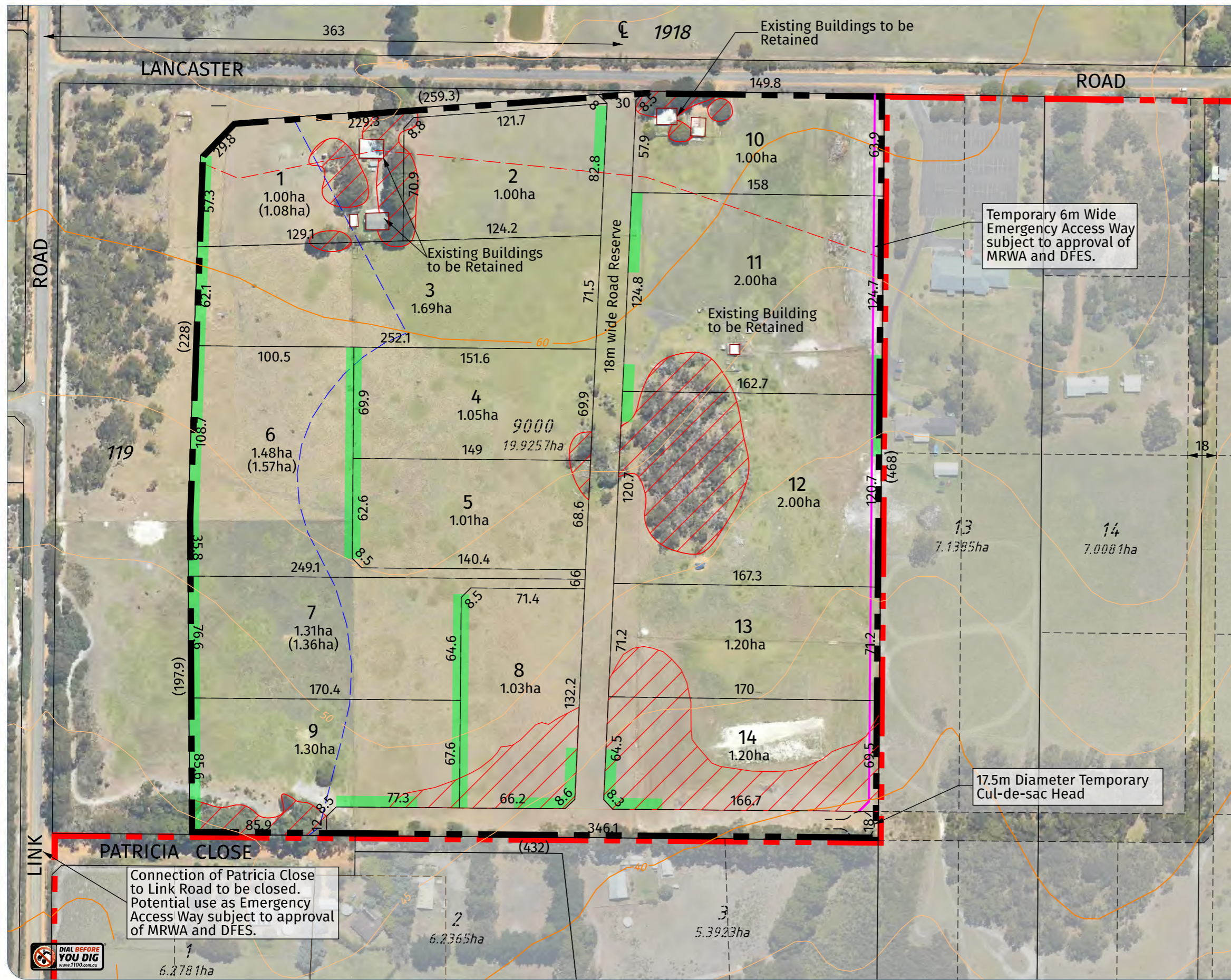
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## APPENDIX C

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Amended Structure Plan





- NOTES**
1. Future Structure Plan Area subject to zoning, detailed assessment and WAPC approval.
  2. Indicative lot layout only within the Future Structure Plan Area. Subject to zoning, detailed assessment and WAPC approval.

**LEGEND**

Subject Land	---
Area of Subject Land	19.9257ha
No of Existing Lots	1
No of Proposed Lots	14
Minimum Lot Size	1.00ha
Average Lot Size	1.32ha
Building Exclusion Zone	
Windbreaks / Screening Subject to WAPC APZ Standards	
Emergency Accessway	
Potential Future Structure Plan Area	
Indicative Future Lot Layout	
<b>LAND DETAILS</b>	
Local Government Area	City of Albany
Zoning	Rural Residential No.34
MRWA Noise Line (50db)	
Albany Speedway Special Control Area	

NOTE: Dwelling construction within MRWA Noise Line may require design and construction methods /materials to reduce noise impacts into the dwelling.

# STRUCTURE PLAN

Rural Residential Area No. 34  
 Lot 9000 Lancaster Road, McKail

Plan No.	20833-04	ALBANY OFFICE:	COPYRIGHT:
Date	30/05/18	116 Serpentine Road, ALBANY WA 6330	This document is and shall remain the property of HARLEY DYKSTRA. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document in any form whatsoever is prohibited.
Drawn	JW	T: 08 9844 5100	
Checked	DC	E: albany@harleydykstra.com.au	
Revision	A	W: www.harleydykstra.com.au	
Scale	1:2500@A3	ALBANY   BUNBURY   BUSSELTON   FORRESTDALE   PERTH	



## APPENDIX D

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MRWA Advice

**David Congdon**

---

**From:** GRANT Chris (AMO/A) <chris.grant@mainroads.wa.gov.au>  
**Sent:** Tuesday, 28 June 2016 2:24 PM  
**To:** David Congdon  
**Subject:** RE: Lot 9000 Lancaster Rd, McKail  
**Attachments:** 20833 Building setback.jpg; 20833 MRWA setback.jpg

Hi David

As the proposed location will not affect the current planned extent of earth works for the Lancaster Rd – Albany Ring Road intersection we have no in principle objection to the access being located as shown in the attached diagrams subject to the following:

- 1) No earthworks associated with the proposed access are to be within 330m of Lancaster Road.
- 2) Patricia Cl must be connected to Lancaster Road by a public and gazetted road reserve.

Regards

**Chris Grant**

Asset Management Officer  
Great Southern Region  
Metropolitan and Southern Regions  
p: 08 9892 0524 | m: 0427 388 047  
w: [www.mainroads.wa.gov.au](http://www.mainroads.wa.gov.au)



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---

**From:** David Congdon [mailto:DavidC@HarleyDykstra.com.au]  
**Sent:** Monday, 27 June 2016 1:00 PM

**To:** GRANT Chris (AMO/A)  
**Subject:** RE: Lot 9000 Lancaster Rd, McKail

Hi Chris,

Thanks for your follow up on this.

Based on these requirements, it appears that the Lancaster Rd connection could be relocated to the west of the existing dwelling. The existing dwelling is located approximately 370 metres from the Lancaster/Link Rd intersection, as illustrated in the attached picture. This would leave a zone of around 30 metres to locate the 18m wide road reserve and achieve a suitable setback to the building..

Would MRWA be supportive of relocating the access within the relocation zone attached? If so, we will progress discussions with the City of Albany.

Appreciate your assistance with this.

Kind Regards,

**David Congdon** B.Com (Property & Finance), Grad Dip (Urban & Regional Planning)  
**Senior Town Planner / Land Development Consultant**

T: 08 9844 5100 | M: 0438 414 408 | F: 08 9841 3643  
Web: [www.harleydykstra.com.au](http://www.harleydykstra.com.au)



**Albany   Bunbury   Busselton   Kelmscott   Perth**

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---

**From:** GRANT Chris (AMO/A) [<mailto:chris.grant@mainroads.wa.gov.au>]  
**Sent:** Friday, 24 June 2016 1:54 PM  
**To:** David Congdon <[DavidC@HarleyDykstra.com.au](mailto:DavidC@HarleyDykstra.com.au)>  
**Subject:** RE: Lot 9000 Lancaster Rd, McKail

Hi David

Main Roads comments on the access from Lancaster Road are as follows.

- 1) Current planned earthworks for the Albany Ring Road / Lancaster Road interface extend approximately 330m metres along Lancaster Rd from the current CL of Link Rd. Therefore any earthworks associated with a proposed access from Lancaster Road must be further east of this point.

## REPORT ITEM DIS138 REFERS

Main Roads requirements in relation to providing connectivity from Patricia Cl to Lancaster Road are as follows:

- 1) Patricia Cl must be connected to Lancaster Road by a public and gazetted road reserve.

All of the above is also subject to clearance by the City of Albany.

Regards

**Chris Grant**

Asset Management Officer  
Great Southern Region  
Metropolitan and Southern Regions  
p: 08 9892 0524 | m: 0427 388 047  
w: [www.mainroads.wa.gov.au](http://www.mainroads.wa.gov.au)



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---

**From:** David Congdon [<mailto:DavidC@HarleyDykstra.com.au>]

**Sent:** Friday, 24 June 2016 10:40 AM

**To:** GRANT Chris (AMO/A)

**Subject:** Lot 9000 Lancaster Rd, McKail

Hi Chris,

Thanks for taking the time to meet yesterday to discuss the proposed access point for the above property onto Lancaster Rd.

Once you've had an opportunity to review MRWA policy, and complete a site inspection, could you please advise MRWA's position on the proposed access point.

Thanks again.

Kind Regards,

**David Congdon** B.Com (Property & Finance), Grad Dip (Urban & Regional Planning)  
**Senior Town Planner / Land Development Consultant**





## APPENDIX E

---

### Land Capability Assessment





## GEOTECHNICAL and LAND CAPABILITY ASSESSMENT LOTS 22 and 23 LANCASTER ROAD, ALBANY

1 April 2005

It is proposed to subdivide Lots 22 and 23, Lancaster Road, Albany into 21 lots of 1 plus hectares.

The site is bounded on the north by Lancaster Road and on the west by Link Road. As there is a possibility that Link Road may be widened at some point in the future the lots along Link Road have been made slightly larger.

Currently Lots 22 and 23 are cleared, apart from two clumps of trees, having been used for sheep grazing in recent times. A church and associated parking area adjoins to the east.

The site was visited on 31 March 2004.

During the inspection a backhoe was used to excavate 11 holes across the site. The holes were inspected by City of Albany Senior Environmental Health Officer, Mr Greg Harwood who inspected most of the test holes as they were sunk.

The site was walked and the vegetation briefly looked at, and the species identified.

### 1.0 EXISTING SITE CONDITIONS

#### 1.1 Vegetation

The only vegetation is two clumps of trees. There are predominantly *Eucalyptus calophylla* in the east with *E. calophylla* and *E. steeri* in the west. The only shrub species recorded were *Kingia australis* and *Allocasuarina fraseriana*. There were no native ground covers or low shrubs noticed.

The understorey is pasture.

#### 1.2 Geology and Soils

The site lies on the south facing crest of a slope, dropping from 65 metre AHD at Lancaster Road down to 38 metres in the south eastern corner and 43 metres in the south west.

A weak drainage line runs to the south western corner and has evidence of surface storm action that has resulted in a small erosion gully to 400 mm deep in the central south west mainly due to a change of slope. This grades out to pasture further south.

The site occupies the edge of the dissected horizontally bedded Tertiary sediments formed from a marine incursion. These tend to be fine sediments, predominantly silts and fine sands with a clay component belonging to the Plantagenet Group, with

dissection in more recent times and subjected to laterisation in the later Tertiary and into the Recent.

The soils tend to have a leached sandy layer that has formed by redistribution of surface sand through either colluvial or aeolian processes. Underlying this are weakly ferricreted or iron indurated layers overlying yellow silty clays, and clay silts. On the southern slopes the ferricrete is more prominent and harder.

Soil descriptions are attached as the backhoe logs.

These soils are well known for the nutrient and water retaining qualities and phosphate adsorption, because of the yellow goethite, iron oxides clay and silt in the subsoils. Leached white surface sand has low phosphorous retention capability.

The phosphorous retention of yellow sands, for example on the Swan Coastal Plain, has been the subject of many studies which all found that yellow sands have good phosphate retention ability. For example, Lantzke N, 1997, *Phosphorous and nitrate loss from horticulture on the Swan Coastal Plain*, Department of Agriculture Miscellaneous Publication 16/97.

### 1.3 Ground Water

The water table is estimated to be 5 - 10 metres, but may be shallower where water is forced towards the surface due to underlying ferricrete in the south east. This can be avoided during location of developments.

## 2.0 GEOTECHNICAL FACTORS

### 2.1 Foundation Stability

Based on the depth of sand the foundation stability of Lots 22 and 23 is rated as AS 2870 Site Class A - S. Individual sites are recommended to be assessed because of lateral and vertical changes in the soil profile and changes in soil moisture across the site.

Site Class P may apply, for example to constructions requiring more than 400 mm natural fill and/or 800 mm sand which will require adequate compaction to prevent differential settling.

GEOTECHNICAL ISSUE	MANAGEMENT
Foundation stability	<ul style="list-style-type: none"> <li>• AS 2870 Site Class A - S. Individual sites are recommended to be assessed because of lateral and vertical changes in the soil profile and changes in soil moisture across the site.</li> </ul>

## 2.2 Drainage and Flood Risk

Even though much of the site is gently sloping, waterlogging is a potential limitation along the southern boundary. It is recommended that dwellings be located on the higher ground on the southern lots. See attached the area marked by the red line in the attached plan.

On geomorphological and field evidence, the only risk areas are storm flows down drainage line in the south west where there is a break of slope.

GEOTECHNICAL ISSUE	MANAGEMENT
Flood risk	<ul style="list-style-type: none"> <li>It is recommended that dwellings be located on the higher ground in the south west. See attached plan.</li> </ul>

## 2.3 Stability of Dams

There is low potential for dams, because the water table is interpreted to be too deep at 5 metres.

GEOTECHNICAL ISSUE	MANAGEMENT
Stability of dams	<ul style="list-style-type: none"> <li>No management issues</li> </ul>

## 2.4 Landslip Risk

The site is underlain by stable silty sands. Slopes are gentle to moderate.

GEOTECHNICAL ISSUE	MANAGEMENT
Landslip Risk	<ul style="list-style-type: none"> <li>Australian Geomechanics Society Guidelines</li> <li>Very low, restricted to minor settlement that will be overcome by good construction techniques.</li> </ul>

## 2.5 Potential for Acid Sulfate Soils

The issue with potential acid sulfate conditions is the exposure of soils or sediments containing iron sulfide to the atmosphere, normally by digging up. The two main types of soil conditions that can lead to the conditions for acid sulfate occurrence are soils associated with saline and estuarine conditions, normally below 5 metres AHD above sea level and peaty swamps where exposure can occur through excessive pumping of surface or superficial water. Gley soils as shown in the Munsell Soil Colour Charts are also worthy of investigation.

None of these conditions were recorded on site and are unlikely based on the geology and geomorphology.

# REPORT ITEM DIS138 REFERS

Land Capability and Environmental Assessment, Proposed Subdivision, Lots 22 and 23, Lancaster Road, Albany

GEOTECHNICAL ISSUE	MANAGEMENT
Acid sulfate conditions	<ul style="list-style-type: none"> <li>• Planning Bulletin 64</li> <li>• EPA Guidelines for the management of Acid Sulfate Soils</li> <li>• No evidence of soils that warranted any investigations for acid sulfate were recorded.</li> </ul>

## 3.0 ENVIRONMENTAL MANAGEMENT

The following items are identified as the most likely to impact on the environment. These items can be managed by the implementation of the management recommendations. Other items are unlikely to impact or the impact is regarded as small.

### 3.1 Landscape Management Vegetation Plan

With subdivision there is an opportunity to plant additional trees and other vegetation. As there is the possibility that Link Road may be widened at some point in the future, this may require the removal of some trees. Tree planting can improve the buffer between the dwellings and the church to the east and well as provide separation buffers. The vegetation can link existing vegetation into corridors.

Views are to the south and therefore it is more desirable to plant trees in clumps and north south lines rather than east west lines. There needs to be a compromise between the maintenance of views, visual separations and aesthetics. Land holders are unlikely to sustain boundary trees that restrict views.

It is suggested that the trees be planted at 3 metre centres. The ground must be correctly prepared by;

- removal of pasture competition by removing topsoil or spraying
- deep ripping the soil and mounding in the south
- planting during winter spring
- protection from stock if stock are kept
- provision of each tube plant with a 10 g fertiliser tree tablet.
- planting a mixture of taller and smaller plants

A total of 1 000 tube plants will be sufficient to cover the areas suggested. These should be planted in winter.

Local species suitable for planting. See the attached plan for the recommended location of the tree planting. Other local species may be substituted as available.

Family	Genus/Species
Casuarinaceae	<i>Allocasuarina fraseriana</i>
Mimosaceae	<i>Acacia myrtifolia</i>
	<i>Acacia pulchella</i>
Myrtaceae	<i>Agonis flexuosa</i>
	<i>Astartea fascicularis</i>
	<i>Callistemon glaucus</i>
	<i>Corymbia calophylla</i>
	<i>Corymbia ficifolia</i>
	<i>Eucalyptus cornuta</i>
	<i>Eucalyptus diversicolor</i>
	<i>Eucalyptus megacarpa</i>

# REPORT ITEM DIS138 REFERS

Land Capability and Environmental Assessment, Proposed Subdivision, Lots 22 and 23, Loncoster Road, Albany

	<i>Eucalyptus marginata</i>
	<i>Eucalyptus patens</i>
	<i>Eucalyptus rudis</i>
	<i>Eucalyptus steerei</i>
	<i>Melaleuca cuticularis</i>
	<i>Taxandria linearifolia</i>
	<i>Taxandria parviceps</i>
	<i>Taxandria marginata</i>
Papilionaceae	<i>Bossiaea aquifolium</i>
	<i>Callistachys lanceolata</i>
Proteaceae	<i>Banksia grandis</i>

ENVIRONMENTAL ISSUE	MANAGEMENT
Remnant vegetation	<ul style="list-style-type: none"> <li>Development should include preservation of existing remnant vegetation.</li> <li>Mature trees should be preserved and protected from grazing pressure.</li> </ul>
Dwellings, fences and other developments are to be aesthetically compatible with the area.	<ul style="list-style-type: none"> <li>Restrictions can be placed on the use of visually non compatible materials.</li> </ul>
Vegetation Planting	<ul style="list-style-type: none"> <li>1000 trees and shrubs of local species planted in areas identified on the attached plan. Planting should be to the guidelines above.</li> <li>Protect the trees by fencing if stock are kept.</li> </ul>

## 3.2 Nutrient Management - Capability for On Site Effluent Disposal

In recent years Lots 22 and 23 have been used for grazing.

With subdivision, it is likely that a significant number of the created one hectare lots will not have stock but some may have stock.

With yellow earthy silts and sand, there is likely to be low risk of phosphorous input to the groundwater system or nearby water bodies to the south provided the waste water from a waste water disposal system is contained or retained within the soil profile.

Phosphorous Retention Index (PRI) tests can frequently be misleading because all materials greater than 2 mm are sieved from the sample prior to testing. This means that a gravelly sand will have the phosphate retaining gravel removed from the sample prior to testing, most likely resulting in a PRI value much lower than the actual situation. On the other hand y clay normally has a high PRI, but the reduced permeability of the clay means that nutrient enriched water may not or only slowly penetrate the clay layer. This results in far lower phosphate retention in the field than indicated by the PRI. In the case of the subject land interpretations of the nutrient management of the soils is considered to be more valid.

The yellow silts and clays, combined with the iron indurated ferricrete have inherently high phosphorous retention capability. The phosphate retention and thus (PRI) of all soils on site are generally high when considering the whole soil profile. The soils were compared to the database of type soils held by Landform Research for PRI and with Chemistry Centre data.

Nitrogen loss through denitrification will follow a similar path. Nitrates are normally taken up by vegetation, denitrified by bacteria under anoxic soil conditions or lost through volatilisation of ammonia. The waste water disposal areas are known to provide for denitrification because they act like sand filters on which there has been research.

# REPORT ITEM DIS138 REFERS

For example the influence of moist soils for denitrification was evident in research by Gerritse et al 1995A, on leach drains servicing septic tanks in the Perth Hills in gravel soils, shows that under wet conditions nitrogen is effectively lost within 10 metres. Many other studies, for example Dawes and Goonetilleke, have found that all nitrogen can be lost within 1 metre in damp soil conditions. Lantzke 1997, also found high levels of denitrification in moist leached sands on the Swan Coastal Plain. These moist soil features would apply on this site.

Gerritse et al, 1995B, found that all phosphate was adsorbed within 2 metres from a 7 year old leach drain in Yarrigal loam soils that have some similarity for phosphate retention as the silty yellow sands. The critical point is retention times within the soils.

Lantzke 1997, showed the breakthrough times were low for phosphate in leached sands on the Swan Coastal Plain, although these were not underlain by subsoils of high phosphate retaining characteristics. He also found that in soils where organo-ferricrete subsoil horizons occurred that phosphate export was significantly reduced and minimised by the high PRI of the organo ferricrete. The water retaining quality of the earthy silts and silty clays provide greater time scales for soil microbial bacteria to denitrify waste water.

Nutrients will be taken up by soil microbial material and it is difficult to quantify its effect. However a horse has a typical loading of 11 kgP/year and 60 kg/N/year. To this needs to be added the influence of pets, gardens and conventional septic systems or alternative waste water systems.

Data is taken from Van Gool D, K Angell and L Stephens, 2000, *Stocking Rate Guidelines for Rural Small Holdings Swan Coastal Plain and Darling Scarp*, Department of Agriculture, Miscellaneous Publication 02/2000, Legislative Assembly, 1994, *Select Committee on Metropolitan Development and Groundwater Supplies, Western Australia*, Dames and Moore, undated, *Draft nitrate management in Jandakot UWPCA*, Water Authority of Western Australia. From the above references a typical lot with a conventional septic system, small garden and lawn, dog and cat plus some chickens has a nutrient loading of 31 kg/N/year and 9.6 kg/P/year.

## Typical nutrient loadings of some land uses

Possible lot size and activity	Nitrogen loading per hectare	Phosphorous loading per hectare	Likely nutrient scenario
Estimated current nutrient loading equivalent to 10 - 12 sheep per hectare and two houses. (averaged for the site)	103.1 - 123.2 kg/N/ha/year	15.5 - 18.4 kg/P/ha/year	Unlikely to be nutrient loss
Likely average nutrient input after subdivision to one hectare lots and an average of one horse per lot and conventional septic systems.	91.0 kg/N/ha/year	20.6 kg/P/ha/year	Similar nutrient loading, slightly increased for phosphorous. Unlikely to be nutrient loss due to high phosphate retention capability of the soils.
Likely average nutrient input after subdivision to one hectare lots and an average of one horse per two lots conventional septic systems.	61.0 kg/N/ha/year	14.1 kg/P/ha/year	Reduced nutrient loading. Unlikely to be nutrient loss plus reduced nutrient loading

# REPORT ITEM DIS138 REFERS

Land Capability and Environmental Assessment, Proposed Subdivision, Lots 22 and 23, Lancaster Road, Albany

Likely average nutrient input after subdivision to one hectare lots and no horses per lot and conventional septic systems.	31.0 kg/N/ha/year	9.6 kg/P/ha/year	Reduced nutrient loading. Unlikely to be nutrient loss plus reduced nutrient loading
Likely average nutrient input after subdivision to one hectares with an average of one horse per two lots and alternative waste water systems.	52.0 kg/N/ha/year	8.6 kg/P/ha/year	Reduced nutrient loading. Unlikely to be nutrient loss plus reduced nutrient loading

The main issues with nutrients are the management of concentrated nutrient inputs, such as mucking out stables and the treatment/disposal of manure. Manure that is widely spread across pasture or gardens or removed off site is preferable to manure being left in one pile.

The soils on this site and the depth to groundwater are well suited to the keeping of horses. The soil profile has good nutrient retaining qualities, it is capable of growing good pasture when irrigated, and there is good quality and quantity of water for the irrigation of pasture.

Best management of manure is outlined in Van Gool D, K Angell and L Stephens, 2000, *Stocking Rate Guidelines for Rural Small Holdings Swan Coastal Plain and Darling Scarp*, Department of Agriculture.

### Off Site Impacts

The potential off site impacts are possibly from dust, fly breeding and nutrient export. Nutrients are discussed above, and considering the soils on site and depth to groundwater, combined with a broad spread of nutrients across the site, there is not expected to be any change to the nutrient regime or risk of export. In fact these soils are good soils for the keeping of horses. The treatment of manure becomes the issue and is no different to the current requirements.

The main risk of a nutrient plume would be the disposal of all horse manure say in the south eastern corner of proposed Lot 10. Most owners are responsible and any issues associated with keeping of horses will be no different to any other property that keeps horses.

Fly breeding also remains a similar issue. Flies can potentially breed in manure.

Suggestions on manure management are contained in Van Gool D, K Angell and L Stephens, 2000.

ENVIRONMENTAL ISSUE	MANAGEMENT
Site Capability for Effluent Disposal	<ul style="list-style-type: none"> <li>• Conventional septic systems are recommended to be inverted or semi inverted, and bunded by natural soils on the down slope side or installed with an impermeable membrane setback from the side of the leach drain on the down slope side to assist in waste water penetrating the natural soils.</li> <li>• Alternative effluent systems are with waste water disposal areas to be sized according to underlying subsoil permeability. 10L/m<sup>2</sup> is regarded as acceptable.</li> <li>• Effluent disposal systems should not be located in potentially wet or potentially waterlogged areas, as shown on the attached plan.</li> </ul>

## 4.0 Conclusions and Recommendations

### Conclusions

1. The soils on this site are well suited to one hectare lots and the keeping of horses, because the soil profile has good nutrient retaining qualities and is capable of growing good pasture
2. The subdivision of Lots 22 and 23 into 21 lots of 1 hectare is unlikely to result in any environmentally significant land use changes or additional nutrient loading.
3. The remnant vegetation can be preserved and enhanced with strategic tree planting.
4. The subdivision of Lots 22 and 23 Lancaster Road, Albany is sustainable, with potentially minimal environmental impact.

### Recommendations

1. Conventional septic systems are acceptable as are alternative waste water systems.
2. Generally locate dwellings and waste water systems out of the recommended exclusion areas, (see attached plan).
3. Plant the vegetation buffers according to the attached plan.

Lindsay Stephens



# REPORT ITEM DIS138 REFERS

Land Capability and Environmental Assessment, Proposed Subdivision, Lots 22 and 23, Lancaster Road, Albany

## SOIL SUMMARY TABLES

Soil Characteristics	Sand over Clay Silts
Location	Southern crest of Plantagenet marine plateau
Origin	Marine silts spongolites and fine sands originally with some feldspathic and clay component, weathered and possibly redistributed on the surface by aeolian action.
Top soil Texture	Grey quartz sand grading to cream or white sand. Generally fine to medium grained
Sub soil Texture	Ferricrete layer at upper surface of underlying yellow silty clays and clay silts. Minor gravel and pisolites are present in the north east.
Rock in profile	Some hardened ferricrete in the south
Bedrock	Very deep, not applicable
Gravel	Gravel occurs in the profile in the north east and east
Hardpan	Ferricrete hardpan is present at depths of 300 plus mm
PH	Neutral to acidic
Salinity	Low
Soil Permeability	High, reducing in silty clay subsoils
Soil Shrinkage	Generally very low to low

Land Qualities	Sand over Clay Silts
Slope	Flat to gently sloping
Slope Stability	High
Wind Erosion Risk	Moderate to high if vegetation removed and plant cover is not maintained.
Water Erosion Risk	Low apart from small break of slope in the central south west
Drainage	Good apart from some minor perching of surface water in the south
Moisture Availability	Low to moderate
Water Logging	Nil apart from some minor perching of surface water in the south
Flood Risk	Nil apart from the weak drainage line in the south west
Surface Water - Availability/Quality	Nil
Ground Water - Availability/Quality	High estimated depth of 3 - 5 metres.
Salinity Risk	Very low
Microbial Purification	High due to the depth and nature of the sand and underlying silty beds. Reduced where the surface sand becomes saturated in winter and waste water does not penetrate but flows from the surface.
Water Pollution Risk	Low in the north to moderate along the southern edge
Phosphate Retention - profile	High due to the depth and nature of the silts, goethite and iron induration. Can be reduced where surface water runs off and detention times are small.
Nitrogen loss - Profile	Moderate to high based on the interpreted degree of anoxic conditions and estimated microbial activity in the soil profile. Can be reduced where surface water runs off and detention times are small.
Existing Degradation	Predominantly cleared

# REPORT ITEM DIS138 REFERS

Land Capability and Environmental Assessment, Proposed Subdivision, Lots 22 and 23, Lancaster Road, Albany

Development Capability	Sand over Clay Silts
Ease of Excavation	High over most of the site, but restricted by ferricrete in the central south east
House and Road Construction	High
Foundation Soundness	High AS 2870 Site Class A - S based on the presence of deep silty sand and Iron indurated subsoils. It is recommended to keep the building envelope on Lot 10 in the north western corner or north, away from the lower ground. See attached plan.
Effluent Disposal	Suitable for conventional inverted to semi-inverted septic systems and alternative systems
Water Supply	Scheme

## REFERENCES and FURTHER READING

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**SUBDIVISION GUIDE PLAN**  
**LOTS 22 & 23 LANCASTER ROAD**  
**ALBANY**

Application Area: .....  
 Revocation Area: .....  
 Building Exclusion Area: .....  
 Site Area: 24.0001 ha  
 NITVA Road Width: 4.4 ha  
 Internal Roads: 1.72 ha  
 19x18 Lot: 0.1 ha

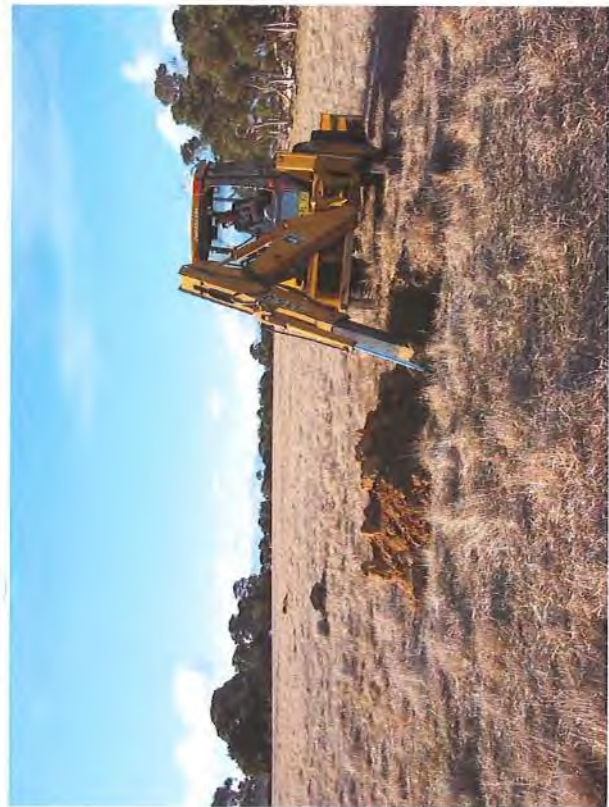
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ADOPTED BY RESOLUTION OF THE CITY OF ALBANY AT  
 THE.....MEETING OF THE COUNCIL  
 HELD ON THE.....DAY OF.....200.....  
 C.E.O.....

**GRAY & LEWIS**  
 LAND USE PLANNERS

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View to the south west past hole 10. Test Hole 10 contains yellow brown gravelly silt.



View towards the west of the site



View south west across the site



View south across Hole 3. Test Hole 3 contains yellow brown sand and silty clay



PROPOSED SUBDIVISION  
LOTS 22 & 23 LANCASTER ROAD  
ALBANY



# REPORT ITEM DIS138 REFERS



## Regolith and Hydrological Logs

Lindsay Stephens BSc (Geology) MSc (Botany)  
25 Heather Road Roleystone 6111  
Phone 9397 5145 Fax 9397 5350

Project	Lancaster	Site Assessed by	L Stephens
Location	Lots 22 and 23 Lancaster Road, Albany	Date of Inspections	31 March 2004

Test Hole Number	1	Natural Surface	
Location	central north east	Base of Hole	
Test Hole Type	backhoe	Depth	
Diameter		Depth of static water level	
Depth	Description	Comments	
0 - 120 mm	grey sand, medium to fine		
120 - 630 mm	brown loamy gravel with weak ferricrete cobbles		
630 - 950 mm	yellow brown clay with minor red brown mottles		
950 - 1250 mm	cream yellow clay with minor red brown pisolite		
Groundwater	Not intersected		
Comment			

Test Hole Number	2	Natural Surface	
Location	central north east	Base of Hole	
Test Hole Type	backhoe	Depth	
Diameter		Depth of static water level	
Depth	Description	Comments	
0 - 90 mm	grey medium grained sand		
90 - 210 mm	light brown sand		
210 - 390 mm	yellow brown gravel		
390 - 500 mm	yellow brown		
500 - 740 mm	coarser yellow brown gravel		
740 - 1320 mm	yellow silty clay		
Groundwater	Not intersected		
Comment			

Test Hole Number	3	Natural Surface	
Location	central west	Base of Hole	
Test Hole Type	backhoe	Depth	
Diameter		Depth of static water level	
Depth	Description	Comments	
0 - 110 mm	grey sand		
110 - 320 mm	light brown to brown sand		
320 - 620 mm	yellow brown laterite caprock		
620 - 740 mm	friable gravelly laterite		
740 - 1350 mm	yellow orange silty clay	ribbon to 25 mm	
Groundwater	not intersected		
Comment			

Test Hole Number	4	Natural Surface	
Location	central south east	Base of Hole	
Test Hole Type	backhoe	Depth	
Diameter		Depth of static water level	
Depth	Description	Comments	
0 - 100 mm	grey medium grained sand		
100 - 450 mm	laterite caprock		
450 - 930 mm	yellow gravelly sit clay		
930 - 1380 mm	light brown clay with red brown mottles		
Groundwater	not intersected		
Comment			

# REPORT ITEM DIS138 REFERS



## Regolith and Hydrological Logs

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Project	Lancaster	Site Assessed by	L Stephens
Location	Lots 22 and 23 Lancaster Road, Albany	Date of Inspections	31 March 2004

Test Hole Number	5	Natural Surface		
Location	south east	Base of Hole		
Test Hole Type	backhoe	Depth		
Diameter		Depth of static water level		
Depth	Description		Comments	
0 - 400 mm	grey to white sand over very hard indurated sandy duricrust		could not penetrate	
Groundwater	not intersected			
Comment				

Test Hole Number	6	Natural Surface		
Location	south east	Base of Hole		
Test Hole Type	backhoe	Depth		
Diameter		Depth of static water level		
Depth	Description		Comments	
0 - 350 mm	grey to white sand over very hard indurated sandy duricrust		could not penetrate	
Groundwater	not intersected			
Comment				

Test Hole Number	7	Natural Surface		
Location	south west	Base of Hole		
Test Hole Type	backhoe	Depth		
Diameter		Depth of static water level		
Depth	Description		Comments	
0 - 60 mm	grey medium grained sand			
60 - 470 mm	sandy yellow to yellow orange ferricrete			
470 - 800 mm	yellow orange clayey silt			
800 - 1050 mm	yellow orange clayey silt with red mottles grading to silty clay			
Groundwater	not intersected			
Comment				

Test Hole Number	8	Natural Surface		
Location	south west corner	Base of Hole		
Test Hole Type	backhoe	Depth		
Diameter		Depth of static water level		
Depth	Description		Comments	
0 - 270 mm	pale grey sand			
270 - 480 mm	hard yellow orange silty ferricrete layer			
480 - 800 mm	yellow orange silty earth with minor gravel			
800 - 1070 mm	yellow orange earthy silt			
Groundwater	not intersected			
Comment				



# REPORT ITEM DIS138 REFERS



## Regolith and Hydrological Logs

Lindsay Stephens BSc (Geology) MSc (Botany)  
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 Phone 9397 5145 Fax 9397 5350

Project	Lancaster	Site Assessed by	L Stephens
Location	Lots 22 and 23 Lancaster Road, Albany	Date of Inspections	31 March 2004

Test Hole Number	9	Natural Surface		
Location	central west	Base of Hole		
Test Hole Type	backhoe	Depth		
Diameter		Depth of static water level		
Depth	Description	Comments		
0 - 100 mm	pale grey sand			
100 - 950 mm	fine to medium white sand			
950 - 980 mm	orange brown ferricrete with organo ferricrete on top due to reduced drainage			
980 - 1300 mm	ferricrete yellow brown silt			
Groundwater	not intersected			
Comment				

Test Hole Number	10	Natural Surface		
Location	central north west	Base of Hole		
Test Hole Type	backhoe	Depth		
Diameter		Depth of static water level		
Depth	Description	Comments		
0 - 70 mm	grey sand			
70 - 280 mm	ferricrete yellow brown silty sand			
280- 700 mm	gravelly yellow brown silt			
700 - 1050 mm	orange clayey to earthy silt with red brown mottles			
Groundwater	not intersected			
Comment				

Test Hole Number	11	Natural Surface		
Location	north west corner	Base of Hole		
Test Hole Type	backhoe	Depth		
Diameter		Depth of static water level		
Depth	Description	Comments		
0 - 60 mm	grey sand			
60 - 180 mm	light brown sand			
180 - 770 mm	gravelly yellow to orange brown silty sand			
770 - 1050 mm	yellow brown to orange brown silty loam clay to clay.			
Groundwater	not intersected			
Comment				

## APPENDIX F

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Bushfire Management Plan (2018)

**Lot 9000 Lancaster  
Road, McKail,  
Albany  
WA 6330**

# Bushfire Management Plan



18/6/2018

Kathryn Kinnear

Bio Diverse Solutions



## DOCUMENT CONTROL

### TITLE

Title: Bushfire Management Plan - Lot 9000 Lancaster Rd, WA 6330.

Author (s): Kathryn Kinnear

Reviewer (s): David Congdon

Job No.: HD046

Client: Kelly Belfield

### REVISION RECORD

Revision	Summary	Revised By	Date
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Draft ID 13/07/2017	Issued to client for review	K.Kinnear	13/7/2017
FINAL ID 18/06/2018	Issued as final following MRWA consultation	K.Kinnear	18/06/2018

*The recommendations and measures contained in this assessment report are based on the requirements of the Australian Standards 3959 – Building in Bushfire Prone Areas, WAPC SPP3.7, Guidelines for Planning in Bushfire Prone Areas (WAPC, 2017) and CSIRO’s research into Bushfire behaviour. These are considered the minimum standards required to balance the protection of the proposed dwelling and occupants with the aesthetic and environmental conditions required by local, state and federal government authorities. They DO NOT guarantee that a building will not be destroyed or damaged by a bushfire. All surveys and forecasts, projections and recommendations made in this assessment report and associated with this proposed dwelling are made in good faith on the basis of the information available to the fire protection consultant at the time of assessment. The achievement of the level of implementation of fire precautions will depend amongst other things on actions of the landowner or occupiers of the land, over which the fire protection consultant has no control. Notwithstanding anything contained within, the fire consultant/s or local government authority will not, except as the law may require, be liable for any loss or other consequences (whether or not due to negligence of the fire consultant/s and the local government authority, their servants or agents) arising out of the services rendered by the fire consultant/s or local government authority.*



Bio Diverse Solutions  
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## Executive Summary

Kelley Belfield through Harley Dykstra commissioned Bio Diverse Solutions (Bushfire Consultants) to prepare a Bushfire Management Plan to guide all future bushfire management for the proposed Structure Plan over (SP) Lot 9000 Lancaster Road, McKail WA.

Such planning takes into consideration standards and requirements specified in various documents such as Australian Standard (AS) 3959-2009, Western Australian Planning Commission (WAPC) Guidelines for Planning in Bushfire Prone Areas (WAPC, 2017) and State Planning Policy 3.7 (WAPC, 2015). These policies, plans and guidelines have developed by WAPC to ensure uniformity to planning in designated “Bushfire Prone Areas” and consideration of the relevant bushfire hazards when identifying or investigating land for future development.

The subject site is located in a bushfire prone area as identified by the state wide publicly released Bushfire Prone Area Mapping (DFES, 2017). The Subject Site currently consists predominantly of Grassland Type G associated with grazing pastures with a small area of Woodland Type B in the centre of the site and areas of Low fuel/Non-vegetation around the two dwellings. External to the site is predominantly Grassland Type G with some areas of Scrub Type D, Shrubland Type C, Woodland Type B, Forest Type A and Low fuel/Non-vegetated scattered around.

Through a method 1 BAL Assessment (demonstrated as a BAL Contour Plan) it has been demonstrated that BAL 29 or less can apply to the lots either in Stage 1 or Stage 2 of development. BAL 19 can apply to the existing dwellings in the northern area of the subject site. BAL and AS3959 is to be implemented by the lot owners at building approval stages, it is not retrospective to the existing dwellings. Detailed BAL can be undertaken by an Accredited level 1 BAL assessor when the final placement of the building is known. The plan of subdivision, Stage 1 and Stage 2 does not require any clearing of vegetation to achieve BAL/AS3959 setbacks, some minor clearing associated with the construction of the new access road will be required to meet public road and intersection standards.

Asset Protection Zones (APZ) associated with BAL 29 or less are recommended to ensure internal lots with grassland areas can achieve a BAL 12.5. Setbacks for APZ areas will be dependent on final placement of dwellings on the lots. Any future plantings as shown in revegetation areas are to be to a APZ standard as outlined in this report. The developer will be responsible for implementing revegetation standards as per APZ standards. New lot owners are to conform to any planting on their lot for revegetation, screening or windbreaks to APZ standards. Development Exclusion (as identified in the plan of subdivision) assumes that although excluding building development/construction, these areas can have vegetation maintained to APZ requirements.

The possibility of Main Roads WA proposal to close Patricia Close onto Link Road will essentially make Patricia Close an extensive cul-de-sac which is to be avoided in bushfire prone areas. An EAW will be constructed along the eastern boundary of the SP to ensure that the residents have two access ways. Two Battle axe lots along the western area of the SP cannot be avoided and to overcome this have been located beside each other to allow for a 12m wide driveway access to the lots. Access standards are to meet the minimum requirements of WAPC guidelines as shown in Table 6. Assessment to the acceptable solutions has deemed the subject site compliant with Element 3 – Vehicular Access.

Reticulated water will be provided to the future residents and is to be installed as per WCWA technical standards and approved by CoA at subdivision clearance stages. The subdivision is fully complaint to this Acceptable Solution.

An assessment to the WAPC Guidelines for Planning in Bushfire Prone Areas (vers 1.3, 2017) Acceptable Solutions of the 4 bushfire protection criteria is summarised over the Page, see Table 1.

**Table 1: Bushfire protection criteria applicable to the site**

Element	Acceptable Solution	Applicable Yes/No	Meets Acceptable Solution
Element 1: Location	A1.1 Development Location	Yes	Compliant BAL 29 or less applied to new lots, existing dwellings are BAL 29.
Element 2: Siting and Design	A2.1 Asset Protection Zone	Yes	Compliant, all new and existing dwellings have APZ in BAL 29 or less. APZ standards as per WAPC (Appendix B) and are located within the lots.
Element 3: Vehicular Access	A3.1 Two Access Routes	Yes	Compliant, EAW to Lancaster Road regardless of outcome of Patricia Close.
	A3.2 Public Road	Yes	Compliant, meets minimum technical standards
	A3.3 Cul-de-sacs	Yes	Compliant, meets minimum standards connected by EAW to Lancaster Road.
	A3.4 Battle axes	Yes	Compliant, located beside each other to provide for wider access and meets minimum standards.
	A3.5 Private driveways	Yes	Compliant, meets minimum technical standards
	A3.6 Emergency Access Ways	Yes	Compliant, meets minimum technical standards
	A3.7 Fire Service Access Ways	No	N/A
	A3.8 Firebreaks	Yes	Compliant, to CoA Fire Management Notice.
Element 4: Water	A4.1 Reticulated areas	Yes	Compliant
	A4.2 Non-reticulated areas	No	N/A
	A4.3 Individual lots in non-reticulated areas	No	N/A

This BMP report provides details of the fire management strategies proposed to be implemented across the site as it is developed to ensure adequate protection of life, property and biodiversity assets. To ensure the mitigation measures are implemented responsibilities are outlined in Section 6 for the new lot owners, the developer and the City of Albany.



## 1. Introduction

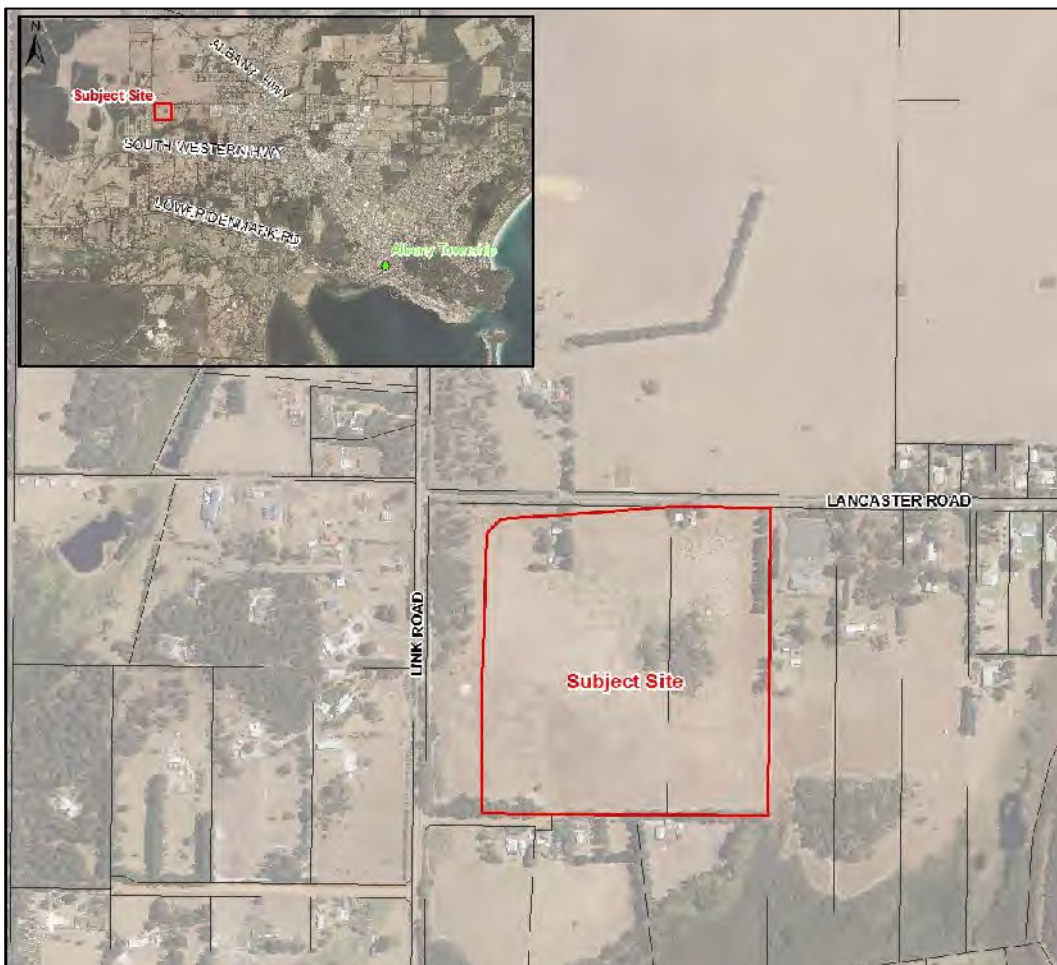
Kelly Belfield, through Harley Dykstra commissioned Bio Diverse Solutions (Bushfire Consultants) on behalf of a client to prepare a Bushfire Management Plan (BMP) to guide all future bushfire management for the proposed subdivision of Lot 9000 Lancaster Road, McKail WA.

This BMP has been prepared to assess the subject site to the current and endorsed Guidelines for Planning in Bushfire Prone Areas Vers 1.3 (WAPC, 2017) and State Planning Policy 3.7 (WAPC, 2015).

Such planning takes into consideration standards and requirements specified in various documents such as Australian Standard (AS) 3959-2009, Western Australian Planning Commission (WAPC) Guidelines for Planning in Bushfire Prone Areas Vers 1.3 (WAPC, 2017) and State Planning Policy 3.7 (WAPC, 2015). These policies, plans and guidelines have been developed by WAPC to ensure uniformity to planning in designated “Bushfire Prone Areas” and consideration of the relevant bushfire hazards when identifying or investigating land for future development.

### 1.1. Location

Lot 9000 Lancaster Road (herein referred to as the Subject Site) is 19.8ha and located approximately 8km northwest of the Albany CBD in the suburb of McKail. The Subject Site is bound by Lancaster Road to the north, Link Road to the west, private rural properties to the south and a church (Free Reformed Church of Albany) to the east. The location of the Subject Site is shown on Figure 1.



**Figure 1: Location Plan**

## 1.2. Development Proposal

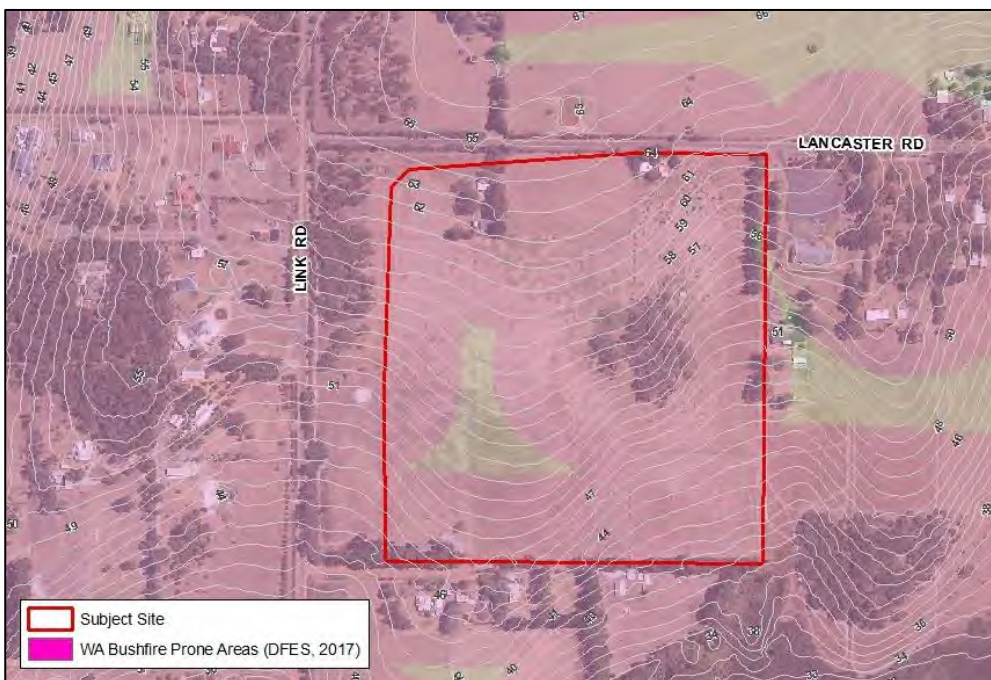
The SP proposes the subdivision into 14 lifestyle size lots ranging in size from 1.0 to 2.0 ha and construction of public roads and an EAW (ceded as an easement in gross). The SP (Harley Dykstra, 2016) showing the proposed subdivision is presented in Appendix A. The subject site is currently zoned Rural Residential and located within Rural Residential Area No.34 (RR34) of the City of Albany Local Planning Scheme No. 1 (LPS1). This area allows for the subdivision of Rural Residential lots to a minimum lot size of 1 hectare, based upon land capability, service availability and other environmental constraints. The land immediately surrounding the property is zoned for various purposes including General Agriculture, Rural Residential and Future Urban in the City of Albany Local Planning Scheme No.1 (LPS1).

## 1.3. Statutory Framework

This document and the recommendations contained within are aligned to the following policy and guidelines:

- *Planning and Development Act 2005;*
- *Planning and Development Regulations 2009;*
- *Planning and Development (Local Planning Scheme) Regulations 2015;*
- State Planning Policy 3.7 Planning in Bushfire Prone Areas;
- Guidelines for Planning in Bushfire Prone Areas;
- *Building Act 2011;*
- *Building Regulations 2012;*
- Building code of Australia (National Construction Code);
- *Fire and Emergency Services Act 1998.*
- AS 3959-2009 “Construction of Buildings in Bushfire Prone Areas” current and endorsed standards;
- *Bushfires Act 1954;* and
- City of Albany Annual Fire Management Notice.

The publicly released Bushfire Prone Area Mapping (SLIP, 2017) shows that the majority of the Subject Site is located within a Bushfire Prone Area (situated within 100m of >1 ha of bushfire prone vegetation). Bushfire Prone Area Mapping is shown on Figure 2.



**Figure 2: Bushfire Prone Area Mapping**

## 1.4. Suitably Qualified Bushfire Consultant

This BMP has been prepared by Kathryn Kinnear (nee White), who has 10 years operational fire experience with the (formerly) DEC (1995-2005) and has the following accreditation in bushfire management:

- Incident Control Systems;
- Operations Officer;
- Prescribed Burning Operations;
- Fire and Incident Operations;
- Wildfire Suppression 1, 2 & 3;
- Structural Modules – Hydrants and hoses, Introduction to Structural Fires, and Fire extinguishers; and
- Ground Controller.

Kathryn Kinnear currently has the following tertiary Qualifications:

- BAS Technology Studies & Environmental Management;
- Diploma Business Studies; and
- Graduate Diploma in Environmental Management.

Kathryn Kinnear is an accredited Level 2 Bushfire Practitioner (Accreditation No: BPAD30794). Bio Diverse Solutions are Silver Corporate Members of the Fire Protection Australia Association. Kathryn is a member of the WA bushfire Working Group and is a suitably qualified Bushfire Practitioner to prepare this Bushfire Management Plan.

## 1.5. Objectives

The subject site is located in a bushfire prone area, SPP3.7 requires any development proposal to be assessed to the Guidelines for Planning in a Bushfire Prone Area (WAPC, 2017). The objectives of this BMP are to assess the bushfire risks associated with the existing site and the proposed subdivision to reduce the occurrence of, and minimise the impact of bushfires, thereby reducing the threat to life, property and the environment. It also aims to guide the SP design by assessing the proposed future subdivision according to the Bushfire Protection Criteria Acceptable Solutions as outlined in the Guidelines for Planning in Bushfire Prone Areas Vers 1.3 (WAPC, 2017).

The BMP aims to:

- Achieve consistency with objectives and policy measures of SPP 3.7 (WAPC, 2015);
- Assess any building requirements to AS3959-2009 (current and endorsed standards) and BAL Construction;
- Assess the subdivision proposal against the Bushfire Protection Criteria Acceptable Solutions as outlined in the Guidelines for Planning in Bushfire Prone Areas (WAPC, 2017);
- Understand and document the extent of the bushfire risk to the Subject Site;
- Prepare bushfire risk management measures for bushfire management of all land within the Subject Site with due regard to people, property, infrastructure and the environment;
- Nominate individuals and organisations responsible for fire management and associated works within the Subject Site; and
- Ensure alignment to the recommended assessment procedure which evaluates the effectiveness and impact of proposed, as well as existing, bushfire risk management measures and strategies.

## **2. Environmental Considerations**

### **2.1. Native Vegetation**

There is no internal site clearing required for this development, the area is previously grazed pasture paddocks. The construction of the new internal road connection will require some minor clearing of vegetation in Lancaster Road reserve (southern verge) for sight lines at the newly created intersection. This area is very degraded from previous verge/road reserve disturbances. A small section of trees are located in the centre of the SP in the future road reserve (north/south orientation) which will require to be removed.

It is not anticipated there will be a trigger of potential environmental impact/referral requirements under State and Federal environmental legislation.

### **2.2. Re-vegetation/Landscape Plans**

There are no landscape plans or revegetation plans associated with this development. Replanting as shown on the SP will be to WAPC APZ standards. Any replanting on the lots will confirm to WAPC APZ standards, see Section 5.1 of this report.

### 3. Bushfire Assessment

#### 3.1. Bushfire Assessment Inputs

A site inspection was conducted on the 23<sup>rd</sup> of May 2017 by Kathryn Kinnear to assess the current land use, topography/slope, vegetation and conditions of the site and its surroundings. Photographs of the Subject Site and surrounding areas were taken and have been presented in this report.

##### 3.1.1. Land use

The site consists predominately of cleared rural land with a small area of remnant vegetation located in the central portion of the site. The Subject Site is used for grazing a variety of cattle, sheep and horses. There are two small homesteads located on the Subject Site adjacent to Lancaster Road. Both homesteads consist of a small house and a medium sized shed with the western most home also having a small shed. There is also one small shed/stable in the central eastern portion of the site. Land use on the Subject Site is shown on Photographs 1 to 4.



**Photograph 1** – View looking into Subject Site from Lancaster Road.



**Photograph 2** – View of eastern most homestead within Subject Site.



**Photograph 3** – View of western most homestead within Subject Site.



**Photograph 4** – View of remnant vegetation located in the central portion of the Subject Site. Unfenced and grazed.

**3.1.2. Surrounding land uses**

The Subject Site is surrounded by rural land to the north and south including three homesteads adjacent to the southern boundary of the site (off Patricia Clsoe), lifestyle lots to the west (west of Link Road) and a church (Free Reformed Church of West Albany) to the east. The surrounding areas are shown on Photographs 5 to 8.



**Photograph 5** – View of rural land to the north of the Subject Site.



**Photograph 6** – View of church to the east of the Subject Site.



**Photograph 7** – View of lifestyle lot to the west of Subject Site.



**Photograph 8** – View of homestead and rural land to the south of Subject Site.

### 3.1.3. Topography

The Subject Site generally slopes gradually from north to south, from a high point of 64m AHD along the northern boundary to 39m AHD in the south-east corner of the site. Topographic contours (1 metre contours) are shown on Figure 2.

The effective slopes (measured as per AS3959-2009) for the Subject Site are generally low ranging from 1.6 to 4.5 degrees. The effective slopes for surrounding areas are also low ranging from 1.4 to 1.8 degrees. The effective slopes for the Subject Site and surrounding areas are shown in Figure 3.

Slope under classifiable vegetation (Effective Slope) was assessed in accordance with Section 2.2.5 of AS3959-2009. Table 2 below summarises the slopes assigned to each plot of classifiable vegetation.

**Table 2: Effective slope allocation to classified vegetation**

Plot Number	Vegetation Classification	Effective Slope
1	Low fuel or non-vegetated areas Exc 2.2.3.2 (f)	N/A
2	Grassland Type G	Upslope
3	Scrub Type D	Upslope
4	Shrubland C	Upslope
5	Woodland Type B	Upslope
6	Woodland Type B	Downslope >0 to 5 degrees
7	Forest Type A	Upslope
8	Forest Type A	Downslope >0 to 5 degrees
9	Scrub Type D	Downslope >0 to 5 degrees
10	Grassland Type G	Downslope >0 to 5 degrees
11	Low fuel or non-vegetated areas Exc 2.2.3.2 (e)	N/A
12	Low fuel or non-vegetated areas Exc 2.2.3.2 (a)	N/A

### 3.1.4. Fire Danger Index

The Western Australian adopted FDI is 80 as outlined in AS3959-2009 and endorsed by Australasian Fire and Emergency Services Authorities Council. The FDI input for this project is also therefore 80.

### 3.1.5. Bushfire fuels – Vegetation

The subject site lies within the Jarrah Forest IBRA bioregion. Hearn et al (2002) describes the bioregion as; *'Duricrusted plateau of Yilgarn Craton characterised by Jarrah-Marri forest on laterite gravels and, in the eastern part, by Wandoo - Marri woodlands on clayey soils. Eluvial and alluvial deposits support Agonis shrublands. In areas of Mesozoic sediments, Jarrah forests occur in a mosaic with a variety of species-rich shrublands.'*

The vegetation has been mapped on a broad scale by J.S. Beard (Shepherd et al 2002) in the 1970's, where a system was devised for state-wide mapping and vegetation classification based on geographic, geological, soil, climate structure, life form and vegetation characteristics (Sandiford and Barrett 2010). A GIS search of J.S. Beards (DEC, 2005) vegetation classification places the Subject Site within two System and Vegetation Association (Source DEC Pre-European Vegetation GIS dataset, 2005):

The northern and central portion of the site is classified as;

**System Association Name:** Albany

**Vegetation Association Number:** 978

**Vegetation Description:** Low forest, jarrah, *Eucalyptus staeri*, *Allocasuarina fraseriana*

The southern portion of the site is classified as:

**System Association Name:** Albany

**Vegetation Association Number:** 51

**Vegetation Description:** Sedgeland, reed swamps, occasionally with heath

There are no Conservation Parks or Class “A” Reserves within the vicinity of the Subject Site.




The vegetation across the Subject Site and surrounding areas is consistent with rural farmland, with the majority of the site and surrounds comprising of heavily grazed pasture dominated by pasture grass species. There is a small patch of remnant vegetation located in the centre of the site dominated by sheoak trees with scattered jarrah trees and a grass/weed understory. There are small areas of forest lining the northern and southern boundaries of the site comprising of both remnant vegetation (eucalypt trees - Jarrah, Marri and Sheoak) and exotic plantings closer to neighbouring dwellings in the south. There is an area of scrub/ thicket consisting of *Agonis* and sedges adjacent to the south-east corner of the site and small patches of woodlands /forest slightly further from the site consisting predominantly of eucalyptus trees.

All vegetation within 150m of the site / proposed development was classified in accordance with Clause 2.3 and Exclusions as per Clause 2.2.3.2 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below. Each plot is representative of the Vegetation Classification to AS3959-2009 Table 2.3 and shown on the Vegetation Classification Mapping Figure 3, page 15.



Plot	1	Classification or Exclusion Clause	Exclusion –Low fuel or non-vegetated 2.2.3.2(e)
			<p><b>Location &amp; Description:</b> Roads, buildings and other hard stand areas surrounding subject area mostly external with the exception of the two existing dwellings adjacent to the northern boundary of the Subject Site.</p> <p><i>Clause (e) – Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.</i></p>
<p><i>Photo Id 1(top): View from Lancaster Road into the Church to the east of Subject Site.</i></p>			
Plot	2	Classification or Exclusion Clause	Grassland Type G
			<p><b>Location:</b> External to the site north of Lancaster Road and to the east of the Subject Site.</p> <p><b>Separation Distance:</b> 20-50m.</p> <p><b>Dominant species &amp; description:</b> Heavily grazed pasture, dominated by pasture grass species.</p> <p><b>Average vegetation height:</b> 50–100mm.</p> <p><b>Surface fuel loading:</b> 4.5 t/ha.</p> <p><b>Effective slope:</b> Upslope.</p>
<p><i>Photo Id 2: North eastern view from Lancaster Road of property to the north.</i></p>			




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Plot	3	Classification or Exclusion Clause	Scrub Type D
			<p><b>Location:</b> External to the Subject Site to the north-east.</p> <p><b>Dominant species &amp; description:</b> Remnant roadside vegetation infested with pasture weeds.</p> <p><b>Separation distance:</b> 16m.</p> <p><b>Average vegetation height:</b> 3-4m (shrubs).</p> <p><b>Vegetation coverage:</b> 10-30%.</p> <p><b>Surface fuel loading:</b> &lt;25 t/ha.</p> <p><b>Effective slope:</b> Upslope.</p>
<p><i>Photo Id 3: View to the west along Lancaster Road adjacent to church driveway.</i></p>			
Plot	4	Classification or Exclusion Clause	Shrubland Type C
			<p><b>Location:</b> External to the Subject Site located along the eastern end of the northern boundary.</p> <p><b>Separation distance:</b> 0m.</p> <p><b>Dominant species &amp; description:</b> Watsonia infestation, interspersed with pasture grasses along the road reserve. Some connectivity to Plot 7.</p> <p><b>Average vegetation height:</b> 0.7-1.5m.</p> <p><b>Surface fuel loading:</b> 8 t/ha.</p> <p><b>Effective slope:</b> Upslope.</p>
<p><i>Photo Id 4: View of Watsonia infestation along southern drain of Lancaster Road.</i></p>			
Plot	5	Classification or Exclusion Clause	Woodland Type B
			<p><b>Location:</b> External to site adjacent to the north-western boundary of site.</p> <p><b>Separation distance:</b> 58m.</p> <p><b>Dominant species &amp; description:</b> Sheoak dominant, not multilayered, grass and weed understory.</p> <p><b>Vegetation height:</b> Tree height to 10m.</p> <p><b>Vegetation coverage:</b> 10-30%.</p> <p><b>Surface fuel loading:</b> 15-25t/ha.</p> <p><b>Effective slope:</b> Upslope.</p>
<p><i>Photo Id 5: View from north western corner of Woodland Type B.</i></p>			



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<b>Plot</b>	<b>6</b>	<b>Classification or Exclusion Clause</b>	<b>Woodland Type B</b>
		<p><b>Location:</b> Internal to the site and external adjacent to the western boundary and along the southern boundary of the site.</p> <p><b>Separation distance:</b> 0m to the south and internal and 15-50m to the west.</p> <p><b>Dominant species &amp; description:</b> Sheoak dominant with scattered Jarrah, not multilayered, grass and weed understory.</p> <p><b>Vegetation height:</b> tree height to 10m.</p> <p><b>Vegetation coverage:</b> 10–30%.</p> <p><b>Surface fuel loading:</b> 15-25t/ha.</p> <p><b>Effective slope:</b> Downslope &gt;0-5 degrees.</p>	
<p><i>Photo Id 6: View to the south-east of Woodland Type B from corner of Link Rd and Lancaster Rd.</i></p>			
<b>Plot</b>	<b>7</b>	<b>Classification or Exclusion Clause</b>	<b>Forest Type A</b>
		<p><b>Location:</b> External to site along the northern and southern side of Lancaster Road and adjacent to the south-east corner of the Subject Site.</p> <p><b>Separation distance:</b> 0-36m.</p> <p><b>Dominant species &amp; description:</b> Dominated by eucalypt trees (Jarrah, Marri and Sheoak), multilayered vegetation structure.</p> <p><b>Average vegetation height:</b> 15m.</p> <p><b>Vegetation coverage:</b> &gt;30–70%.</p> <p><b>Surface fuel loading:</b> 25-35t/ha.</p> <p><b>Effective slope:</b> Upslope.</p>	
<p><i>Photo Id 7: View of southern side of Lancaster Road looking east.</i></p>			

# REPORT ITEM DIS138 REFERS

Plot	8	Classification or Exclusion Clause	Forest Type A
			<p><b>Location:</b> External to the site along the eastern edge of Link Road and adjacent to dwellings to the south of the Subject Site.</p> <p><b>Separation Distance:</b> 0–80m.</p> <p><b>Dominant species &amp; description:</b> Roadside remnant vegetation, multilayered along Link Rd and windbreaks of eucalypt trees and exotic domestic plantings adjacent to dwellings.</p> <p><b>Vegetation height:</b> 10–20m.</p> <p><b>Vegetation coverage:</b> &gt;30–70%.</p> <p><b>Surface fuel loading:</b> 25-35t/ha.</p> <p><b>Effective slope:</b> Downslope &gt;0-5 degrees.</p>
<p><i>Photo Id 8 (top): Looking east onto Patricia Close.</i></p> <p><i>Photo Id 8a: View from southern boundary of Subject Site to the south of exotic planting around residences.</i></p>			
Plot	9	Classification or Exclusion Clause	Scrub Type D
			<p><b>Location:</b> External to site located to the south east of Subject Site.</p> <p><b>Separation Distance:</b> 0-16m.</p> <p><b>Dominant species and description:</b> Scrub/ thicket of <i>Agonis</i> and sedges.</p> <p><b>Average vegetation height:</b> 3–4m.</p> <p><b>Vegetation coverage:</b> &gt;30%.</p> <p><b>Surface fuel loading:</b> 25t/ha.</p> <p><b>Effective slope:</b> Downslope &gt;0-5 degrees.</p>
<p><i>Photo Id 9: Southern view towards Scrub Type D, south east of subject site.</i></p>			

# REPORT ITEM DIS138 REFERS

Plot	10	Classification or Exclusion Clause	Grassland Type G
			<p><b>Location:</b> Internal to site covering most of the Subject Site.</p> <p><b>Separation Distance:</b> 0m.</p> <p><b>Dominant species and description:</b> Heavily grazed pasture dominated by pasture grass species.</p> <p><b>Vegetation coverage:</b> &lt;10% trees.</p> <p><b>Average vegetation height:</b> 50-100mm.</p> <p><b>Surface fuel loading:</b> 4.5 t/ha.</p> <p><b>Effective slopes:</b> Downslope &gt;0-5 degrees.</p>
			<p><i>Photo Id 10: View to the north west from south eastern corner of Subject Site. Note consistent gradient.</i></p>
Plot	11	Classification or Exclusion Clause	Exclusion –Low fuel or non-vegetated 2.2.3.2(f)
			<p><b>Location:</b> Maintained gardens and APZ areas associated with existing residential dwellings</p> <p><i>Clause (f) – Low threat vegetation including managed grassland in minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated ornamental gardens, commercial nurseries, nature strips and wind breaks.</i></p> <p><b>Surface fuel loading:</b> &lt;2 t/ha.</p>
			<p><i>Photo Id 1a: View to the south of the western residence within Subject Site.</i></p>
Plot	12	Classification or Exclusion Clause	Exclusion –Low fuel or non-vegetated 2.2.3.2(a)
<p style="text-align: center;"><i>No photo available</i></p>			<p><b>Location:</b> Located to the east and west of the subject site.</p> <p><b>Description:</b> Vegetation that is &gt;100m from the subject site.</p> <p>As per exclusion clause 2.2.3.2 (a) of AS3959.</p>

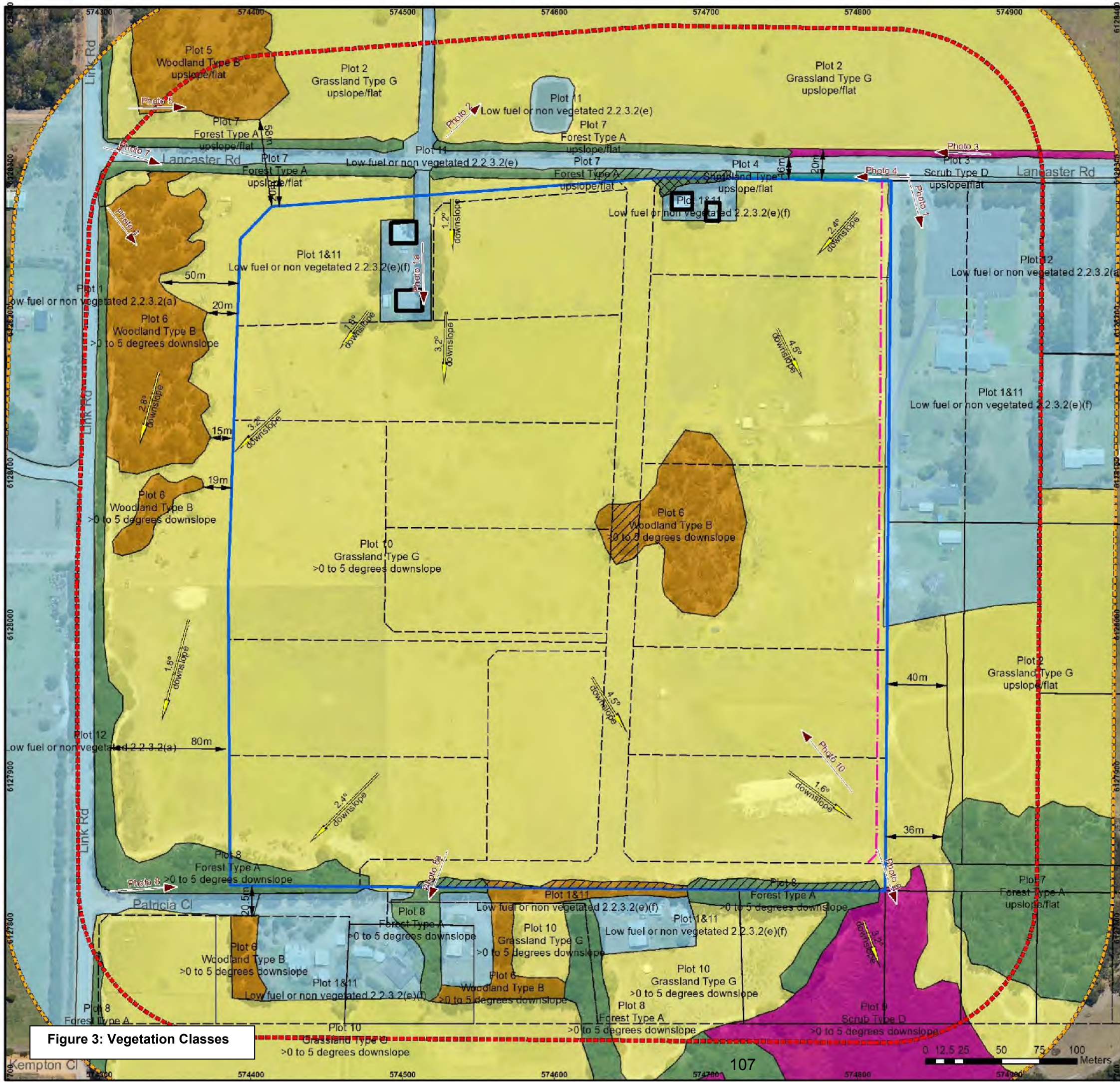


Figure 3: Vegetation Classes

### REPORT ITEM DIS138 REFERS

Kathryn Kinnear, Bio Diverse Solutions  
 Accreditation No: BPAD30794  
 Jurisdiction: Level 2 - WA



29 hercules Crescent  
 Albany, WA 6330  
 Australia  
 Tel: 08 9842 1575  
 Fax: 08 9842 1575



Overview Map Scale 1:100,000

#### Legend

- Subject Site
- 100m Assessment Boundary
- 150m Assessment Boundary
- Existing Building
- Proposed Lots
- Manage to APZ requirements
- Fuel reduced/cleared
- ↘ Slope Degrees
- ↔ Separation Distance
- ▶ Photo ID
- Emergency Access-way (EAW)

#### Vegetation

- Forest Type A
- Woodland Type B
- Shrubland Type C
- Scrub Type D
- Grassland Type G
- Low fuel or non vegetated 2.2.3.2



Scale  
 1:2,500 @ A3  
 GDA MGA 94 Zone 50

#### Data Sources

Aerial Imagery: SLIP Virtual Mosaic WMS Service, Landgate 2017  
 Cadastre, Relief Contours and Roads: Landgate 2017  
 IRIS Road Network: Main Roads Western Australia 2017  
 Overview Map: World Topographic map service, ESRI 2012

#### CLIENT

Kelly Bellfield  
 Lot 9000 Lancaster Rd  
 McKail, WA 6330

#### Vegetation Classes

BAL Assessor	QA Check	Drawn by
SW	BT	SA
STATUS	FILE	DATE
FINAL	HD046	6/06/2018

### 3.2. Bushfire Assessment - Outputs

Bushfire Attack Level (BAL) is the process in AS39598-2009 for measuring the severity of a building’s potential exposure to ember attack, radiant heat and direct flame contact. The threat or risk of bushfire attack is assessed by an accredited BAL Assessor. BAL rating determinations are of 6 levels BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40, BAL FZ. Building is generally not recommended in BAL-40 or BAL-FZ areas. The BAL rating is determined by the distance of the building to vegetation, slope and vegetation type adjacent to the dwelling. Refer to Figure 4.



**Figure 4: Building to BAL**

Bushfire Attack Level (BAL) has been calculated using the Method 1 procedure as outlined in AS3959-2009. This incorporates the following factors:

- WA adopted Fire Danger Index (FDI);
- Vegetation Classes;
- Slope under classified vegetation; and
- Distance between proposed development site and classified vegetation.

The outcomes of the above inputs then allocate a specified BAL construction/setback for proposed buildings.

#### 3.2.1. Method 1 BAL Calculation

A Method 1 BAL calculation (in the form of BAL contours) has been completed for the proposed development in accordance with AS 3959-2009 methodology. The BAL rating gives an indication of the level of bushfire attack (i.e. the radiant heat flux) that may be received by proposed buildings and subsequently informs the standard of building construction required to increase building tolerance to potentially withstand such impacts in line with the assessed BAL. The assessed BAL ratings for the development are depicted as BAL contours, BAL ratings for the Subject Site are presented in Table 3 with BAL Contours for the Subject Site shown on Figure 5.

Internal grassland areas have not been BAL Contoured with Grasslands Type G (Plot 10) still acknowledged by the Bushfire Practitioner as a bushfire risk. Setbacks to BAL and for APZ areas are to apply as depicted on the BAL Contour Plan.

All proposed new buildings can be located in areas subject to a BAL rating of BAL-29 or lower.

**Table 3: BAL Allocation**

Method 1 or 2 BAL Determination					
Lot	Vegetation Type (Table 2.3)	Slope (Table 2.4.3)	Distance to Vegetation (m)	Highest BAL Contour	Modified BAL Contour
1,2	Forest Type A (Plot 7)	Upslope	0-<100m	BAL FZ	BAL 29 on existing house
	Grassland Type G (Plot 10)	Downslope >0 to 5 degrees	9-<14m	BAL FZ	BAL29 can apply
3, 6 & 7 13	Grassland Type G (Plot 10)	Downslope >0 to 5 degrees	0-<100m	BAL FZ	BAL 29 to BAL 12.5 can apply
8, 4, 5, 11-13	Woodland Type B (Plot 6)	Downslope >0 to 5 degrees	13-<100m	BAL FZ	BAL 29 to BAL 12.5 can apply
	Grassland Type G (Plot 10)	Downslope >0 to 5 degrees	0-<50m	BAL FZ	BAL 29 to BAL 12.5 can apply
9 & 14	Forest Type A (Plot 8)	Downslope >0 to 5 degrees	0-<100m	BAL FZ	BAL 29 to BAL 12.5 can apply
	Grassland Type G (Plot 10)	Downslope >0 to 5 degrees	0-<50m	BAL FZ	BAL 29 to BAL 12.5 can apply
10	Shrubland Type C (Plot 4)	Upslope	0-<100m	BAL FZ	BAL 29 to BAL 12.5 can apply

**Assumptions made in BAL Contour Mapping:**

- The Subject Site will be developed according to the Structure Plan (Harley Dykstra, 2016) (Appendix A).
- The construction of the new internal road will require clearing of vegetation in Lancaster Road reserve and clearing on the southern verge for sight lines at the newly created intersection.
- All buildings to have BAL setback area (distance) maintained to APZ standards with the BAL allocation dependant on final placement of dwelling in the lots.
- Where multiple BAL allocations are shown on Table 3, the highest BAL is to apply to the building.
- The owner/developer of the Subject Site will maintain grasslands internal to the site at all times in a low fuel state (i.e. slashed to <100mm) for a minimum distance of 100m from any dwellings or construction areas.
- Internal Grassland areas (Plot 10) are excluded from the BAL Contour assessment and setback distances shown on the BAL Contour map to indicate requirements to achieve BAL-29 or below.

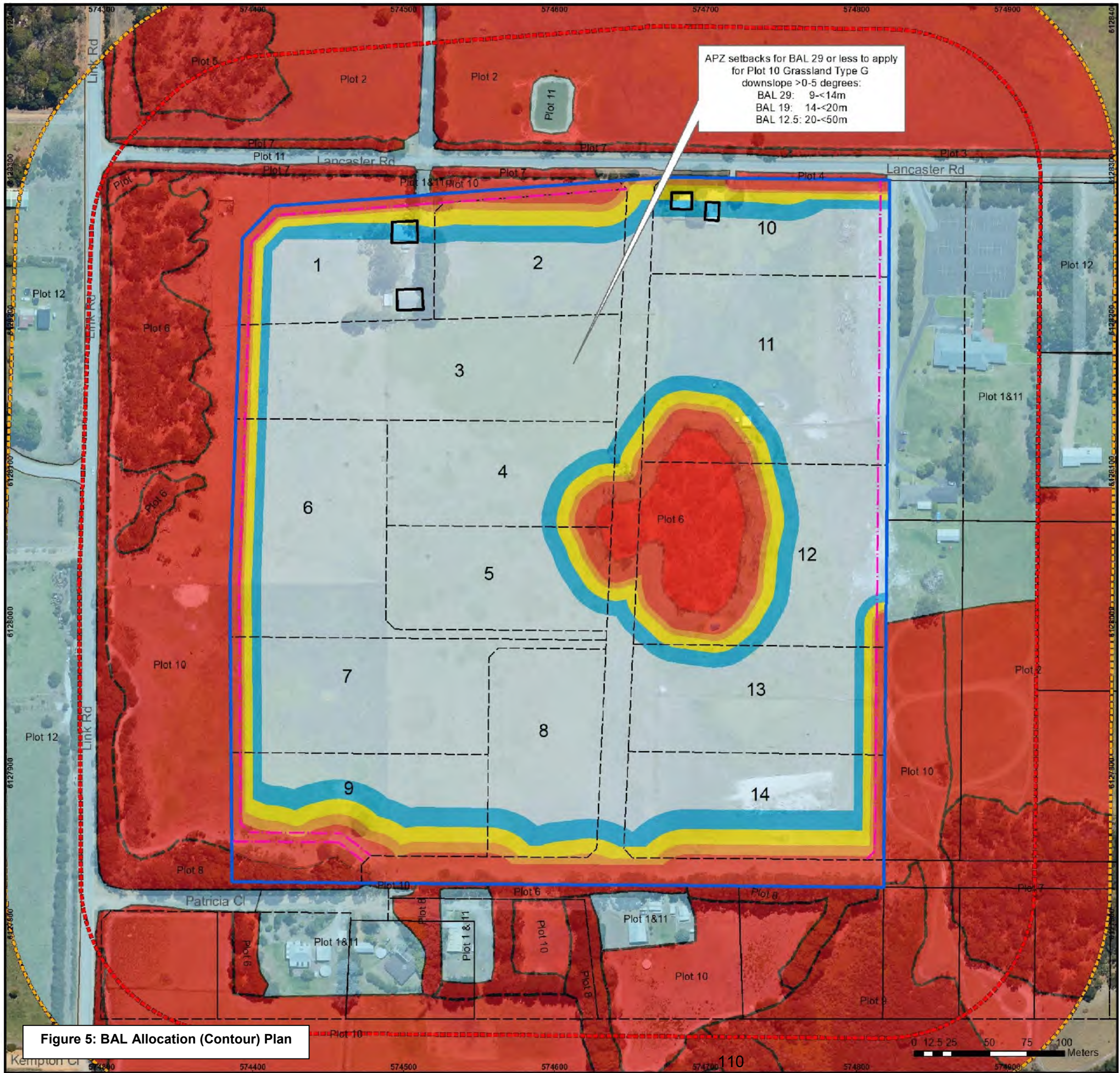
**Note on internal grassland areas:**

The lot contains significant areas of internal grasslands which are mapped as bushfire hazards (refer to Vegetation Classes Map). For practical purposes and to assist in identifying areas of 'least risk', the internal grasslands have been left off the BAL Contour Map (Plot 10). Setback distances to these areas are to be as per AS3959 and the following to apply:

**Plot 10 – Grassland >0-5 degrees**

9-<14m for BAL 29  
14-<20m for BAL 19  
20-<50m for BAL 12.5

When the final placement of the dwelling is known APZ areas are to apply as per the allocated BAL for the dwelling.



### REPORT ITEM DIS138 REFERS

This BAL Plan was prepared by:  
 Kathryn Kinnear, Bio Diverse Solutions  
 Accreditation No: BPAD30794  
 Jurisdiction: Level 2 - WA

**BPAD**  
 Bushfire Planning & Design  
 Accredited Practitioner  
 Level 2

**BIO DIVERSE SOLUTIONS**

29 Hercules Crescent  
 Albany, WA 6330  
 Australia  
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Overview Map Scale 1:100,000

#### Legend

- Subject Site
- 100m Assessment Boundary
- 150m Assessment Boundary
- Proposed Lots
- Emergency Access-way (EAW)
- Existing Building

#### BAL Contours

- BAL-FZ
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5

**Scale**  
 1:2,500 @ A3  
 GDA MGA 94 Zone 50

**Data Sources**  
 Aerial Imagery: SLIP Virtual Mosaic WMS Service, Landgate 2017  
 Cadastre, Relief Contours and Roads: Landgate 2017  
 IRIS Road Network: Main Roads Western Australia 2017  
 Overview Map: World Topographic map service, ESRI 2012

**CLIENT**  
 Kelly Bellfield  
 Lot 9000 Lancaster Rd  
 McKail, WA 6330

### BAL Contour Plan

BAL Assessor <b>SW</b>	QA Check <b>BT</b>	Drawn by <b>SA</b>
STATUS <b>FINAL</b>	FILE <b>HD046</b>	DATE <b>6/06/2018</b>



## 4. Identification of bushfire hazard issues

### 4.1. Bushfire hazards

The subject site is located in a cleared agricultural landscape that has previously been used for grazing and stocking. Internal to the site the bushfire risks are associated with the grasslands and a small remnant patch of grazed Woodlands. These areas can be managed to APZ requirements depending on the final placement of buildings in the large lots.

External to the site the dominant bushfire risks are associated with the remnant Woodland areas to the north west and Forest Type A/Scrub Type B to the south. These areas present an “Extreme” Bushfire Hazards Level (BHL) (WAPC, 2017) and under hot and dry conditions expose the site from bushfire. Small isolated patches of Forest and Woodland occur to the south west and west of the subject site, however are separated by Moderate (grassland) BHL’s and although still deemed a bushfire hazard present lesser risks to the site. The upgrade and extension of Link Road to the west may involve further clearing of the future road reserve from MRWA, however the precautionary principle is used that the vegetation will remain “as is”.

### 4.2. Access Issues

The correspondence to date on access has revolved around Main Roads WA (MRWA) proposal to close Patricia Close onto Link Road, which will essentially make the SP and Patricia Close a long cul-de-sac. Cul-de-sacs are to be avoided in bushfire prone areas (dead end road). It is of the opinion that of the bushfire practitioner that the closure of Patricia Close places all residents in the area at unnecessary risk of bushfire.

Prior to finalisation of this bushfire management plan, extensive consultation occurred between the City of Albany, Main Roads WA (MRWA) and DFES regarding the potential closure of Patricia Close and the opportunity for this to be retained as a controlled Emergency Access Way (EAW) (can be gated and not locked) for residents in the event of a bushfire. Whilst the City of Albany supports this proposal, and have indicated they would be prepared to manage this EAW to ensure it is not used for other purposes, an agreement has not yet been finalised between MRWA and DFES for this to occur. Refer to correspondence Appendix C.

To overcome the access issue and bushfire risks associated with it, two options are proposed to ensure the Structure Plan complies with SPP 3.7, and enable MRWA and DFES to identify the most practical outcome for a secondary point of emergency access.

**Option One** identifies the retention of Patricia Close as an EAW. In the opinion of the bushfire practitioner, this is the preferred option as Patricia Close is an existing public road and this option would provide access and egress from the subject site onto both Lancaster Road and Link Road. The EAW would be gated, not locked and fitted with appropriate signage identifying it as an EAW. Additional signage could be fitted identifying penalties if it was used other than in the event of an emergency. Responsibility for the management of this would be vested with the City of Albany.

**Option two** provides for an EAW to be located along the eastern boundary of the site and linking onto Lancaster Road, to ensure that residents have two access ways available at all times. This EAW would be ceded as an easement in gross for unobstructed access for residents and fire services in the event of a bushfire emergency. The EAW would also be gated, not locked and fitted with appropriate signage identifying it as an EAW. The EAW along the eastern perimeter of the subdivision linking the public road network to Lancaster Road and enable two way linking access from Patricia Close/subdivision residents at all times. It shall be ceded as an easement in gross. The EAW along the eastern boundary fence is conceded not be ideal as the access ways onto Lancaster Road are only 165m apart.

Other options to the east and south to another public roads were investigated by the proponent. The ability of linking to Timewell Road (1km to the east) is not feasible as it crosses a creek and is Water Corporation reserve (for the wastewater treatment plant located on Timewell Road). To the south to Beudon Road there are multiple landowners and again a creek (sensitive land area) to cross which inhibits the EAW in that direction.

## REPORT ITEM DIS138 REFERS

Contact with adjacent land owners on the matter was pursued but not deemed viable from them. Refer to Access Mapping Figure 6 Page 21.

The Structure Plan illustrates two options available for to ensure two points of access are provided, and that it is able to comply with SPP 3.7. Following agreement between MRWA, DFES and the City of Albany, the preferred option can be implemented and the other option no longer required.

Two battle axe lots along the western boundary will be located side by side to enable a larger frontage/access into the lots (lot 6 and 7). All other lots have public road frontage. The driveway battle axes are not to be fenced between the two accesses to provide a 12m wide access route to the dwellings. This will allow for greater sight lines for fire services entering the lots in a bushfire emergency.

The battle axe lots cannot be avoided without making long narrow lots to adjoin the public road reserve which are not practical as the houses would be located close to each other in a predominantly cleared rural landscape. MRWA have indicated that there is limited/restrictive access and driveway cross overs onto the public road of Link Road. To the west Link Road is located (85m) which in the event of bushfire, access along that road can assist with fire services for bushfire mitigation actions to the west of the SP. Refer to the Access Mapping Figure 6, Page 21.



# REPORT ITEM DIS138 REFERS

This SA Plan was prepared by:  
 Kathryn Kinnear, Bio Diverse Solutions  
 Accreditation No: BPAD30794  
 Jurisdiction: Level 2 - WA



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 Australia  
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### Legend

- Subject Site
- Existing Building
- Proposed Lots
- Cadastre
- Emergency Access-way (EAW)



Scale  
 1:6,000 @ A3  
 GDA MGA 94 Zone 50

Data Sources  
 Aerial imagery: SLIP Virtual Mosaic WMS Service, Landgate 2017  
 Cadastre, Relief Contours and Roads, Landgate 2017  
 IRIS Road Network, Main Roads Western Australia 2017  
 Overview Map: World Topographic map service, ESRI 2012

CLIENT  
 Kelly Bellfield  
 Lot 9000 Lancaster Rd  
 McKail, WA 6330

### Access Mapping

IAL Assessor	QA Check	Drawn by
SW	BT	SA
STATUS	FILE	DATE
FINAL	HD046	12/06/2018

## 5. Assessment to the bushfire protection criteria

The Guidelines for Planning in Bushfire Prone Areas (WAPC, 2017) outlines bushfire protection criteria which subdivision and development proposals are assessed for compliance. The bushfire protection criteria (Appendix 4, WAPC, 2017) are a performance based criteria utilised to assess bushfire risk management measures and they outline four elements, being:

- Element 1: Location
- Element 2: Siting and Design of Development;
- Element 3: Vehicle Access; and ‘
- Element 4: Water.

(WAPC, 2017)

The Plan of subdivision(s) is required to meet the “Acceptable Solutions” of each Element of the bushfire mitigation measures (WAPC, 2017). The proposal will be assessed against the bushfire protection criteria Acceptable Solutions for Elements A1, A2, A3 and A4. A summary of the assessment is provided below in Table 4. The following sections of this report outlines how the proposal complies with the bushfire protection criteria Acceptable Solutions as per the Guidelines for Planning in Bushfire Prone Areas (WAPC, 2017).

The Subject Site was assessed against the bushfire protection criteria Acceptable Solutions for Elements A1, A2, A3 and A4. Please refer to Section 5.1.

5.1. Assessment to bushfire protection criteria – 4 elements

Table 5: Bushfire protection criteria applicable to the site

Element	Acceptable Solution	Applicable or not Yes/No	Subdivision meets Acceptable Solution
Element 1 – Location	A1.1 Development Location	Yes	<p>Compliant.</p> <p>The BAL Contour Plan (Figure 5) prepared demonstrates the BAL Contours (method 1 BAL Assessment) upon completed construction of the SP. The BAL Contour Plan demonstrates the future dwellings will be subject to BAL 29, BAL 19 and BAL 12.5 and no higher allocation of these BAL's will apply to the completed subdivision.</p> <p>The existing dwellings in the north of the SP (Lot 1 and Lot 10) can achieve BAL 29. AS3959 and the associated construction standards are to be implemented by the future lot owners at building approval stages, it is not retrospective to the existing dwellings.</p> <p>The plan of subdivision is deemed to be compliant with A1.1.</p>
Element 2 – Siting and Design	A2.1 Asset Protection Zone (APZ)	Yes	<p>Compliant.</p> <p>All future buildings can achieve an APZ area associated with a BAL allocation of BAL 29, BAL 19 or BAL 12.5. A minimum APZ area is recommended for all lots to ensure adequate setbacks to Grassland Type G is maintained (see annotation BAL Contour Plan for Plot 10). APZ setbacks associated with BAL allocation is to apply to individual buildings and is dependent on final placement of the dwelling on the lot. The existing houses (Lot 1 and Lot 10) are to maintain low fuel areas to APZ standards at all times.</p> <p>Staged development of the subject site is to incorporate maintenance of internal grassland areas to APZ requirements to 100m from any from any dwellings or construction areas. The developer will be responsible for maintenance of the site until ownership is relinquished to new lot owners.</p> <p>Any future replanting on lots are to be to WAPC APZ standards as outlined in this report. (See Appendix B). The developer will be responsible for implementing standards as per APZ standards in the balance of land in their ownership. New lot owners are to conform to any planting on their lot for gardens, screening or windbreaks to APZ standards.</p> <p>The plan of subdivision is deemed to be compliant with A2.1.</p>

Table 5 cont.

Element	Acceptable Solution	Applicable or not Yes/No	Subdivision meets Acceptable Solution WAPC 149702 & WAPC 149408
Element 3 – Vehicular Access	A3.1 Two Access Routes	Yes	<p style="text-align: center;">Compliant</p> <p>The Structure Plan illustrates two options available to ensure two access routes are provided. The Alternative access through to Link Road via an EAW on Patricia Close is presently not resolved. Refer to correspondence Appendix C. The closure of this public road will result in the subdivision and the residents along Patricia Close being located on a cul-de-sac which is not recommended in bushfire prone areas. Option one identifies the retention of Patricia Close as an EAW. Option two provides for an EAW to be located along the eastern boundary of the site and linking onto Lancaster Road. The EAW is to be a minimum of 6m wide to enable two way linking access from Patricia Close and the subdivision residents at all times. Refer to further detail in Element A3.6. All connections to the east and south were investigated by the proponent but were inhibitive due to either crossing a creek area (environmental issues) or had unresponsive landowners. Refer to further background information Section 4 of this report. Further consultation between DFES, MRWA and the City of Albany is required to identify the preferred option and removal of the alternative option. The SP is deemed compliant with A3.1</p>
	A3.2 Public Road	Yes	<p style="text-align: center;">Compliant</p> <p>All internal public roads shall be constructed with a minimum of 18m road reserves as depicted on the SP, meeting the minimum construction requirements. The vehicular access standards (Refer to Table 6 – Column 1) and relevant technical information shall be detailed in civil engineering designs at subdivision stage and approved by CoA. The SP is deemed compliant to Acceptable Solution A3.2.</p>
	A3.3 Cul-de-sacs	Yes	<p style="text-align: center;">Compliant</p> <p>Cul-de-sacs are proposed for this development and cannot be avoided due to the future (possible) closure of Patricia Close. The cul-de-sac will exceed the minimum length of 200m as required by WAPC guidelines, see Table 6, column 2. This however is a problem which has not been overcome through extensive consultation with DFES, CoA and MRWA. See Appendix C. A linking EAW will connect Patricia Close and the cul-de-sac in the subdivision along the eastern boundary to assist in achieving secondary/alternative access. Refer to further detail in Element A3.6. The cul-de-sac will require a minimum of 17.5m turnaround bulb as shown on the SP with all vehicular access standards (Refer to Table 6 – Column 1) and relevant technical information to be detailed in civil engineering designs at subdivision stage and approved by CoA. With the inclusion of an EAW along the eastern boundary connecting the cul-de-sac, the SP is deemed compliant to A3.3.</p>

Table 5 cont.

Element	Acceptable Solution	Applicable or not Yes/No	Subdivision meets Acceptable Solution
Element 3 – Vehicular Access cont.	A3.4 Battle axes	Yes	<p style="text-align: center;">Compliant</p> <p>Battle axes are not recommended in Bushfire Prone Areas. Two battle axe lots are required for the SP. This cannot be avoided as long narrow lots would need to be created in a (predominantly) cleared landscape. The widening and development of Link Road to the west has limited access and driveway cross overs in the future onto the public road of Link Road. The Battle Axe's are located beside each other and measure 146m (Lot 8) and 77m (Lot 7) which do not exceed the guidelines maximum of 600m. Battle axes are to be constructed with technical standards of a minimum of 6m wide and as per Table 6, Column 3. Battle Axes must comply with Acceptable Solution 3.4 via:</p> <ul style="list-style-type: none"> <li>• Maximum length 600metres;</li> <li>• Minimum width 6 metres; and</li> <li>• Turn around area for fire appliances (type 3.4) to be made available at house sites (kerb to kerb 17m).</li> </ul> <p>All widths of the battle axes comply to the minimum 6m wide horizontal clearance meeting the minimum requirements of Table 6, column 3. The two driveways are to be unfenced down the centre to allow for a total width of 12m battle axe legs. This will greatly assist with fire services access into the lots. As the driveways exceed 50m from a public road the new lot owners will need to ensure they have adequate turn around areas at the dwelling, refer to Figure 7 indicating compliant turn around areas. The SP deemed compliant to A3.4.</p>
	A3.5 Private driveways	Yes	<p style="text-align: center;">Compliant</p> <p>Private driveways will conform to the minimum technical standards as outlined in Table 6 – Column 3. As the driveways exceed 50m from a public road the new lot owners will need to ensure they have adequate turn around areas at the dwelling to accommodate heavy duty vehicles, refer to Figure 7 indicating compliant turn around areas. The driveways do not exceed 200m, therefore passing bays will not be required. The plan of subdivision is deemed compliant to Acceptable Solution A3.5.</p> <p style="text-align: center;">The plan of subdivision is deemed compliant to A3.5.</p>

Table 5 cont.

Element	Acceptable Solution	Applicable or not Yes/No	Subdivision meets Acceptable Solution
Element 3 – Vehicular Access cont.	A3.6 Emergency Access Ways cont.	Yes	<p>Compliant.</p> <p>A linking EAW along the eastern boundary of the SP will provide emergency access for residents and fire services in a bushfire emergency. It will also allow residents in the event Patricia Close is closed to public access, an alternative access to Lancaster Road. Refer to CoA correspondence confirming the EAW arrangement will meet their approval (Appendix C). The EAW will also link the cul-de-sac as shown on the SP. Although the EAW is along Lancaster Road (165m from the public road entry/egress point) other alternative options were investigated but proved to be unviable.</p> <p>The EAW is to be constructed by the developer at time of subdivision to a minimum of 6m wide horizontal clearance and 6m wide trafficable surface (noting the trafficable width can include a 4m wide paving with one metre wide constructed road shoulders), as per Table 6, column 4. The EAW is to be ceded as an easement in gross so is available for residents and fire services at all times. Signage on the EAW is to be approved by the CoA. Gates are to be a minimum 3.6m to accommodate heavy vehicles and are not to be locked. The minimum technical standards for the EAW are to be constructed in accordance with Table 6 Column 4 and is to be approved by the CoA prior to construction. Ongoing management of the EAW will be the responsibly of CoA. The SP is deemed compliant to this Acceptable Solution A3.6.</p>
	A3.7 Fire Service Access Ways	No	<p>Compliant</p> <p>Fire Service Access (FSA) Routes will not apply at this development. The public roads and EAW shall be used for Fire Services to access lots and alternative access linking back to Lancaster Road. Not assessed to Acceptable Solution A3.7.</p>
	A3.8 Firebreaks	Yes	<p>Compliant</p> <p>Firebreaks are in existence on the Subject Site and maintained regularly by the current owners. These will be maintained as per the CoA Fire Management Notice (updated annually) until developed. Individual future lot owners will be required with 3m perimeter firebreaks as per the CoA Fire Management Notice.</p> <p>The plan of subdivision is deemed compliant to Acceptable Solution A3.8.</p>



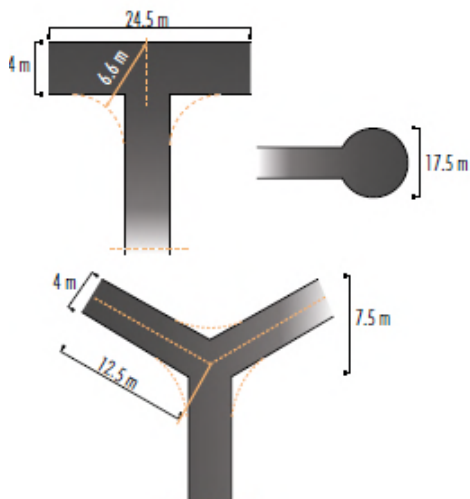
Table 5 cont.

Element	Acceptable Solution	Applicable or not Yes/No	Subdivision meets Acceptable Solution
Element 4 – Water	A4.1 Reticulated areas	Yes	<p>Compliant.</p> <p>The development will be provided with reticulated scheme water in accordance with the specifications of the relevant water supply authority (Water Corporation WA (WCWA)) and WAPC requirements. This will be detailed in the detailed engineering drawings and be subject to approval from WCWA and CoA at subdivision condition stages, meeting the Acceptable Solution. Fire hydrant (street) outlets are required, these must be installed to WCWA standards installed in accordance with the <i>Water Corporation's No 63 Water Reticulation Standard</i> and are to be identified by standard pole and/or road markings and installed by the Developer.</p> <p>Subdivision upon construction is deemed compliant to Acceptable Solution 4.1.</p>
	A4.2 Non-reticulated areas	No	Not assessed to A4.3.
	A4.3 Individual lots in non-reticulated areas	No	Not assessed to A4.3.

Table 6: Vehicular Access Technical Requirements (WAPC, 2017)

Technical requirements	Public Road	Cul-de-sacs	Private Driveways & Battle Axes	Emergency Access Ways (EAW)	Fire Service Access Ways
Minimum trafficable surface (m)	*6	6	4	*6	*6
Horizontal clearance (m)	6	6	6	6	6
Vertical clearance (m)	4.5	4.5	4.5	4.5	4.5
Maximum grades	1 in 10	1 in 10	1 in 10	1 in 10	1 in 10
Minimum weight capacity (t)	15	15	15	15	15
Maximum crossfall	1 in 33	1 in 33	1 in 33	1 in 33	1 in 33
Curves minimum inner radius (m)	8.5	8.5	8.5	8.5	8.5
Maximum Length	N/A	200m	50m	600m	N/A

\*Denotes the width can include a 4m wide paving with one metre wide constructed road shoulders



(WAPC, 2017)

Figure 7 – Design requirements for turnaround areas

## 5.2. Other fire mitigation measures

### 5.3. Evaporative air conditioners

Evaporative air conditioning units can catch fire as a result of embers from bushfires entering the unit. These embers can then spread quickly through the home causing rapid destruction. It can be difficult for fire-fighters to put out a fire in the roof spaces of homes.

It is also recommended that the lot owner (s):

- Ensure that suitable external ember screens are placed on roof top mounted evaporative air conditioners compliant with AS3959-2009 (current and endorsed standards) and that the screens are checked annually; and
- Maintain evaporative air conditioners regularly as per DFES recommendations, refer to the DFES website for further details:  
<http://www.dfes.wa.gov.au/safetyinformation/fire/bushfire/pages/preparebeforetheseason.aspx>

### 5.4. Barrier Fencing

In November 2010 the Australian Bushfire CRC issued a “Fire Note” (Bushfire CRC, 2010) which outlined the potential for residential fencing systems to act as a barrier against radiant heat, burning debris and flame impingement during bushfire. The research aimed to observe, record, measure and compare the performance of commercial fencing of Colourbond steel and timber (treated softwood and hardwood).

The findings of the research found that:

*“.. Colourbond steel fencing panels do not ignite and contribute significant heat release during cone calorimeter exposure”* (exposure to heat)

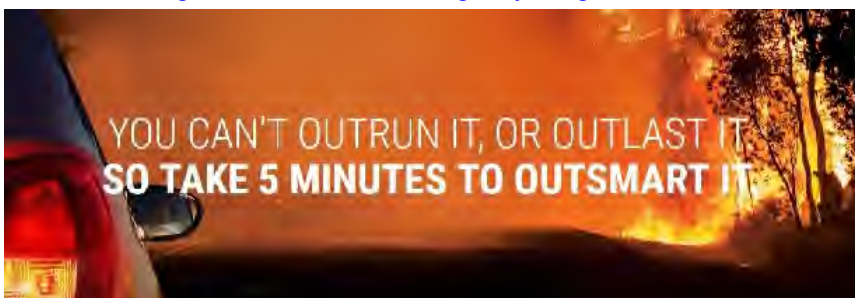
*..”Colourbond steel (fencing) had the best performance as a non-combustible material. It maintained structural integrity as a heat barrier under all experimental exposure conditions, and it did not spread flame laterally and contribute to fire intensity during exposure”*

It is also noted that non-combustible fences are recommended by WAPC (APZ standards: Fences and sheds within the APZ are constructed using non-combustible materials e.g. colourbond iron, brick, limestone, metal post and wire).

#### 5.4.1. Individual Bushfire Plan

Residents should prepare their own individual fire plans, as they need to make a commitment to develop a bushfire survival plan detailing preparations and actions to take if a bushfire threatens. By compiling information as outlined above, the individual lot owner can be prepared for their response in a bushfire emergency. Home owners should not rely on emergency personnel to attend their home and thus it is stressed to prepare an individual bushfire emergency plan regarding their intentions and property. This Bushfire Management Plan is not an individual bushfire emergency plan. More information can be gained from the DFES website (s):

[www.dfes.wa.gov.au](http://www.dfes.wa.gov.au) and [www.emergency.wa.gov.au](http://www.emergency.wa.gov.au)



(DFES, 2018)



## 6. Responsibilities for implementation

### 6.1. Future Lot owner's Responsibility

It is recommended the future property owners shall be responsible for the following:

**Table 7 – Implementation actions future lot owners**

Future Lot owner– Ongoing management				
No	Implementation Action	Initial	Annual	All times
1	Build to AS3959 as it applies to their property	✓		
2	Maintain individual lot fuels and firebreak requirements in accordance with the City of Albany Fire Break Notice and WAPC APZ standards (Appendix B).		✓	
3	Construct driveway standards to Table 6.	✓		
4	Construct turnaround's at dwellings as per WAPC (Figure 7) standards if dwelling is located >50m from a public road.	✓		

Advice only : Residents should prepare their own individual fire plans due to be located in a bushfire prone area.

### 6.2. Developer's responsibility

It is recommended the developer be responsible for the following:

**Table 8 – Implementation actions current land owners/developer**

Developer – Prior to issue of titles		
No	Implementation Action	Subdivision Clearance
1	Ensure prospective buyers are aware of the certified BAL Contour Plan and the applicable BAL to their property through provision of BAL Contour Plan.	✓
2	Maintain balance of land in accordance with the CoA Fire Management Notice and the WAPC APZ standards as stated in the provisions of the BMP.	✓
3	Ensure any replanting on the SP is in accordance with the WAPC APZ standards (Appendix B).	✓
4	Construct all vehicle access in the subdivision to the minimum standards as outlined in Table 6.	✓
5	Construct EAW's during construction periods, ceded as an easement in gross.	✓
5	Install reticulated water to WCWA standards installed in accordance with the <i>Water Corporation's No 63 Water Reticulation Standard</i>	✓

### 6.3. Local Government Responsibility

It is recommended the local government be responsible for the following:

**Table 9 – Implementation actions City of Albany**

LGA– Clearance of conditions		
No	Implementation Action	Subdivision Clearance
1	Request for the update of the BAL contour plan and certification of BAL Contour prior to clearance of titles (post construction).	✓
2	Ensure vehicle access standards are achieved as per Table 6 and demonstrated in the civil engineering drawings.	✓
3	Ensure reticulated water is installed to WCWA standards and installed in accordance with the <i>Water Corporation's No 63 Water Reticulation Standard</i>	✓
4	Developing and maintaining District Fire Fighting Facilities and related infrastructure.	N/A, ongoing
5	Provide advice on standards and methods to achieve community fire protection to owners/occupiers of land through issue and enforcement of the current CoA Fire Management Notice (yearly advice brochure updated annually);	N/A, ongoing

## 7. References

AS 3959-2009 Australian Standard, *Construction of buildings in bushfire-prone areas*, Building Code of Australia, Primary Referenced Standard, Australian Building Codes Board and Standards Australia.

Bushfire CRC (2015) *Managing Forest in South West Western Australia*, Research project undertaken by Dr Lachlan McCaw and Dr Roy Wittkuhn, retrieved from: <http://www.bushfirecrc.com/projects/b11/managing-forest-fires-south-western-australia>

City of Albany Fire Break Order, yearly advise brochure, accessed June 2016 from: <http://www.albany.wa.gov.au>

Department of Fire and Emergency Services Website accessed April 2018: <http://www.dfes.wa.gov.au>

Hearn, R., Williams, K. and Comer, S. (2002) Jarrah Forest (JF2 Southern Jarrah Forest Sub-region), A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002, Department of Conservation and Land Management.

Sandiford, E.M. and Barrett, S. (2010). *Albany Regional Vegetation Survey, Extent Type and Status, A project funded by the Western Australian Planning Commission (EnviroPlanning "Integrating NRM into Land Use Planning" and State NRM Program), South Coast Natural Resource Management Inc. and City of Albany for the Department of Environment and Conservation*. Unpublished report. Department of Environment and Conservation, Western Australia.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2002) *Native Vegetation in Western Australia, extent Type and Status, Technical Report 249*, Department of Agriculture WA.

Western Australian Planning Commission (WAPC) (2017) *Guidelines for Planning in Bushfire Prone Areas Version 3.1*. Western Australian Planning Commission and Department of Planning WA, Government of Western Australia.

Western Australian Planning Commission (WAPC, 2015) *State Planning Policy 3.7 Planning in Bushfire Prone Areas*. Department of Planning WA and Western Australian Planning Commission.

State Land Information Portal (SLIP) (2017) *Map of Bushfire Prone Areas*. Office of Bushfire Risk Management (OBRM) data retrieved from: <https://maps.slip.wa.gov.au/landgate/bushfireprone/>

Western Australian Government Gazette, (2015) Monday 7 December 2015 No 183 Special. State Government of Western Australia

# REPORT ITEM DIS138 REFERS

## Appendices

### Appendix A – Structure Plan

# REPORT ITEM DIS138 REFERS

## Appendix A – Subdivision Guide Plan





# REPORT ITEM DIS138 REFERS

**Appendix B – WAPC APZ standards  
to apply**

**A2.1 Asset Protection Zone (APZ):** every habitable building is surrounded by, and every proposed lot can achieve, an APZ depicted on submitted plans, which meets the following requirements:

- **Width:** Measured from any external wall or supporting post or column of the proposed building, and of sufficient size to ensure the potential radiant heat impact of a bushfire does not exceed 29kW/m<sup>2</sup> (BAL-29) in all circumstances.
- **Location:** the APZ should be contained solely within the boundaries of the lot on which the building is situated, except in instances where the neighbouring lot or lots will be managed in a low-fuel state on an ongoing basis, in perpetuity (see explanatory notes).
- **Management:** the APZ is managed in accordance with the requirements of ‘Standards for Asset Protection Zones’.

(WAPC, 2017)

An Asset Protection Zone (APZ) is an area surrounding a building that is managed to reduce the bushfire hazard to an acceptable level (WAPC, 2017). This is also defined as a “defendable zone”. All buildings in the proposal area will have an APZ utilising Low threat or non-vegetated areas as classified by AS3959-2009 Section 2.2.3.2. Any replanting, revegetation and landscaping across the lots is to be to an APZ standard as per WAPC Guidelines Version (WAPC, 2017) as outlined below.

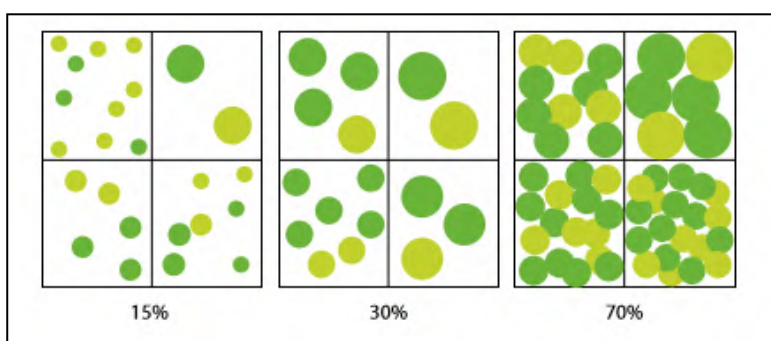
**WAPC Guidelines for an APZ (WAPC, 2017)**

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

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

**Fine Fuel load:** combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.

**Trees (> 5 metres in height):** trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy. See Figure 9 (WAPC Figure 16, Appendix 4) below.



**Figure 9: Tree Canopy Coverage – ranging from 15 to 70% at maturity (WAPC, 2017)**

**Shrubs (0.5 metres to 5 metres in height):** should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m<sup>2</sup> in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.

**Ground covers (<0.5 metres in height):** can be planted under trees but must be properly maintained to remove dead plant material and any parts within 2 metres of a structure, but 3 metres from windows or doors

if greater than 100 millimetres in height. Ground covers greater than 0.5 metres in height are to be treated as shrubs.

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

(WAPC, 2017).

# REPORT ITEM DIS138 REFERS

## Appendix C – DFES and CoA Correspondence

# REPORT ITEM DIS138 REFERS



Fri 20/04/2018 12:15 PM

DFES Advisory Services <[advice@dfes.wa.gov.au](mailto:advice@dfes.wa.gov.au)>

Lot 9000 Lancaster Road Mckail - Local Structure Plan 7 - City seeking further clarification from DFES - DFES Response

To Adrian Nicoll

Cc Lewis, Kelsie; David Congdon; MYNOTT Naomi (SRPO) (Naomi.Mynott@mainroads.wa.gov.au); GRANT Chris (NOM)

Our Ref: D04030

Good afternoon Adrian

I refer to your email dated 28 March 2018 regarding consultation with the Department of Planning, Lands and Heritage (DPLH) in relation to access issues for the above structure plan.

The Department of Fire and Emergency Services (DFES) provide the following comments with regard to *State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP 3.7)* and the *Guidelines for Planning in Bushfire Prone Areas (Guidelines)* to aid in decision-making.

#### Assessment

It is disappointing that strategic planning of adjoining lots cannot be achieved, in seeking a solution for the subject site.

Whilst an emergency access way (EAW) is not a preferred option, DFES is satisfied that the intent of Element 3: Vehicular Access may be demonstrated with the provision of an EAW via Patricia Close to the proposed future Ring Road. Submission of this solution is required to be detailed in a revised BMP to demonstrate compliance. As the implementation of this matter is outside of our discretion, we will leave the decision regarding this solution to MRWA, the City and DPLH.

#### Advice

DFES has reviewed and provided informal advice relating to the above structure plan on 5 occasions (focused primarily on the issue of access). DFES have also liaised with DPLH and MRWA via teleconference to reach a solution.

DFES considers sufficient advice regarding the bushfire risk has been provided to aid the formulation of a structure plan for this site.

If the City and ultimately the Western Australian Planning Commission (WAPC) is of a mind to determine the draft proposals, DFES requests the opportunity to provide a formal response on the final version of the Structure Plan and supporting information.

Should you require clarification of the matters raised, please do not hesitate to contact me on 9482 1761.

Regards

Sandeep Shankar

Land Use Planning Officer | Advisory Services

Rural Fire Division | Department of Fire and Emergency Services

20 Southport Street, West Leederville 6007

E: [advice@dfes.wa.gov.au](mailto:advice@dfes.wa.gov.au) P: 94821761 | W: [www.dfes.wa.gov.au](http://www.dfes.wa.gov.au)



Government of Western Australia  
Department of Fire & Emergency Services





Mon 19/02/2018 11:22 AM

Adrian Nicoll <adriann@albany.wa.gov.au>

RE: Lot 9000 Lancaster Road Mckail - Local Structure Plan 7 - DFES Response

To David Congdon; Simona Damm

Cc GRANT Chris (NOM); MYNOTT Naomi (SRPO) (Naomi.Mynott@mainroads.wa.gov.au); DFES Advisory Services; Lewis, Kelsie

Follow up.

Hi David

Regarding structure planning for Lot 9000 Lancaster Rd.

Having received advise from MRWA and DFES, it's clear that Patricia Close is not available as an access route.

Whilst two access points from the subject lot to Lancaster may not meet the intent of A3.1, DFES is accepting of a secondary access to/from Lancaster Road through an expanded structure plan.

Both main and secondary access design/construction should meet the following:

TECHNICAL REQUIREMENTS	1 Public road
Minimum trafficable surface (m)	6*
Horizontal clearance (m)	6
Vertical clearance (m)	4.5
Maximum grade <50 metres	1 in 10
Minimum weight capacity (t)	15
Maximum crossfall	1 in 33
Curves minimum inner radius (m)	8.5



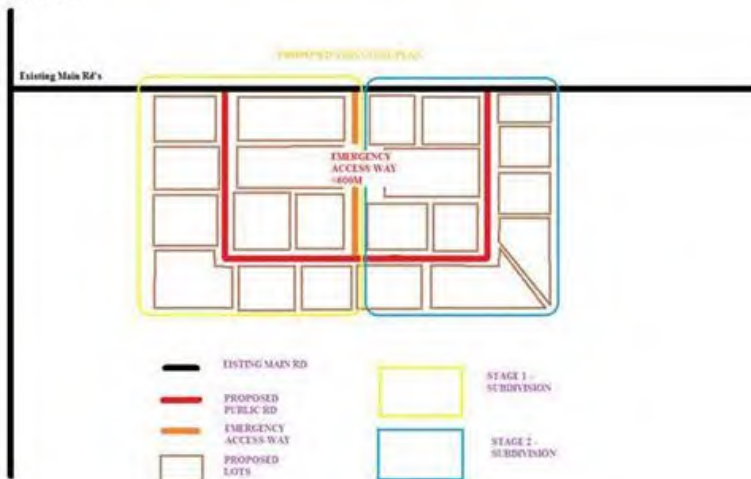
DFES have suggested that alternative access arrangements such as an 'Emergency Access Way' may be acceptable as part of a staged approach to subdivision. Please refer to requirements and indicative plan below:

**A3.6 Emergency access way**

An access way that does not provide through access to a public road is to be avoided in bushfire prone areas. Where no alternative exists (this will need to be demonstrated by the proponent), an emergency access way is to be provided as an alternative link to a public road during emergencies. An emergency access way is to meet all of the following requirements:

- Requirements in Table 4, Column 4;
- No further than 600 metres from a public road;
- Provided as right of way or public access easement in gross to ensure accessibility to the public and fire services during an emergency; and
- Must be signposted.

**Indicative Plan**



In order to resolve issues regarding access, an expansion of the structure plan boundaries is required, to capture lots to the south and east to show the ultimate public road design.

Where possible:

- avoid the creation of battle-axe lots;
- avoid the creation of cul-de-sac;
- avoid the creation of dead ends.

Suggest we meet to discuss...

Kinds Regards

Adrian



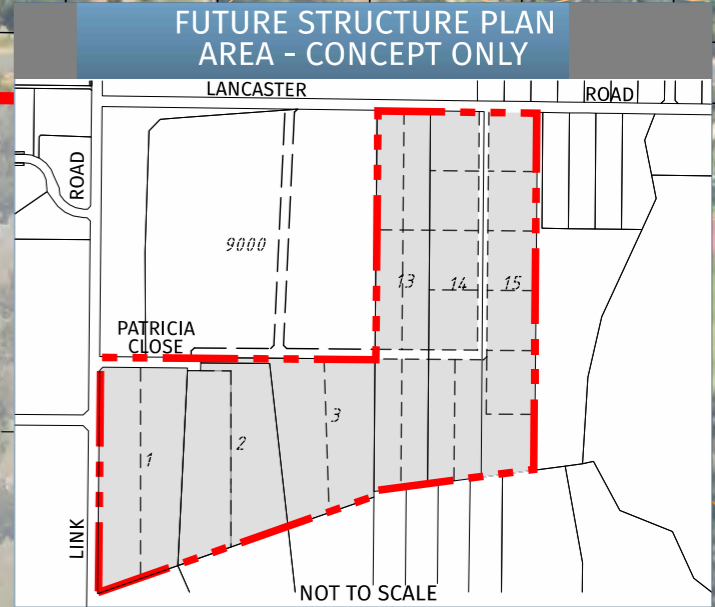
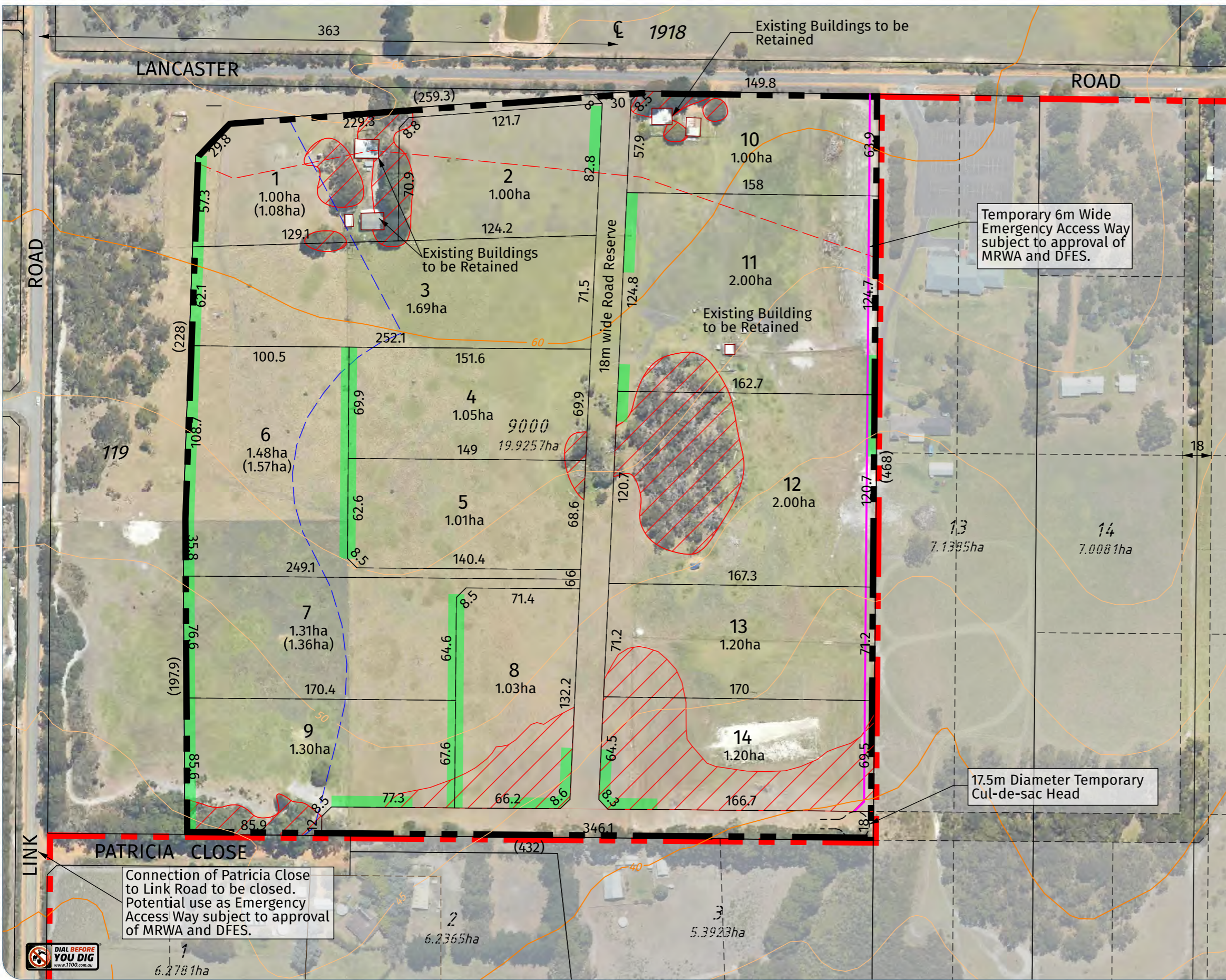
**Adrian Nicoll / Senior Planning Officer - Strategic Planning**

@ adriann@albany.wa.gov.au  
☎ (08) 6820 3050  
☎ (08) 9841 4099

📍 PO BOX 484, Albany, WA, 6331  
📍 102 North Road, Yakamia  
[www.albany.wa.gov.au](http://www.albany.wa.gov.au)







- NOTES**
1. Future Structure Plan Area subject to zoning, detailed assessment and WAPC approval.
  2. Indicative lot layout only within the Future Structure Plan Area. Subject to zoning, detailed assessment and WAPC approval.

**LEGEND**

Subject Land	---
Area of Subject Land	19.9257ha
No of Existing Lots	1
No of Proposed Lots	14
Minimum Lot Size	1.00ha
Average Lot Size	1.32ha
Building Exclusion Zone	
Windbreaks / Screening Subject to WAPC APZ Standards	
Emergency Accessway	
Potential Future Structure Plan Area	
Indicative Future Lot Layout	
<b>LAND DETAILS</b>	
Local Government Area	City of Albany
Zoning	Rural Residential No.34
MRWA Noise Line (50db)	
Albany Speedway Special Control Area	

NOTE: Dwelling construction within MRWA Noise Line may require design and construction methods /materials to reduce noise impacts into the dwelling.

# STRUCTURE PLAN

Rural Residential Area No. 34  
Lot 9000 Lancaster Road, McKail

Plan No. | 20833-04  
Date | 30/05/18  
Drawn | JW  
Checked | DC  
Revision | A

ALBANY OFFICE:  
116 Serpentine Road,  
ALBANY WA 6330  
T: 08 9844 5100  
E: albany@harleydykstra.com.au  
W: www.harleydykstra.com.au

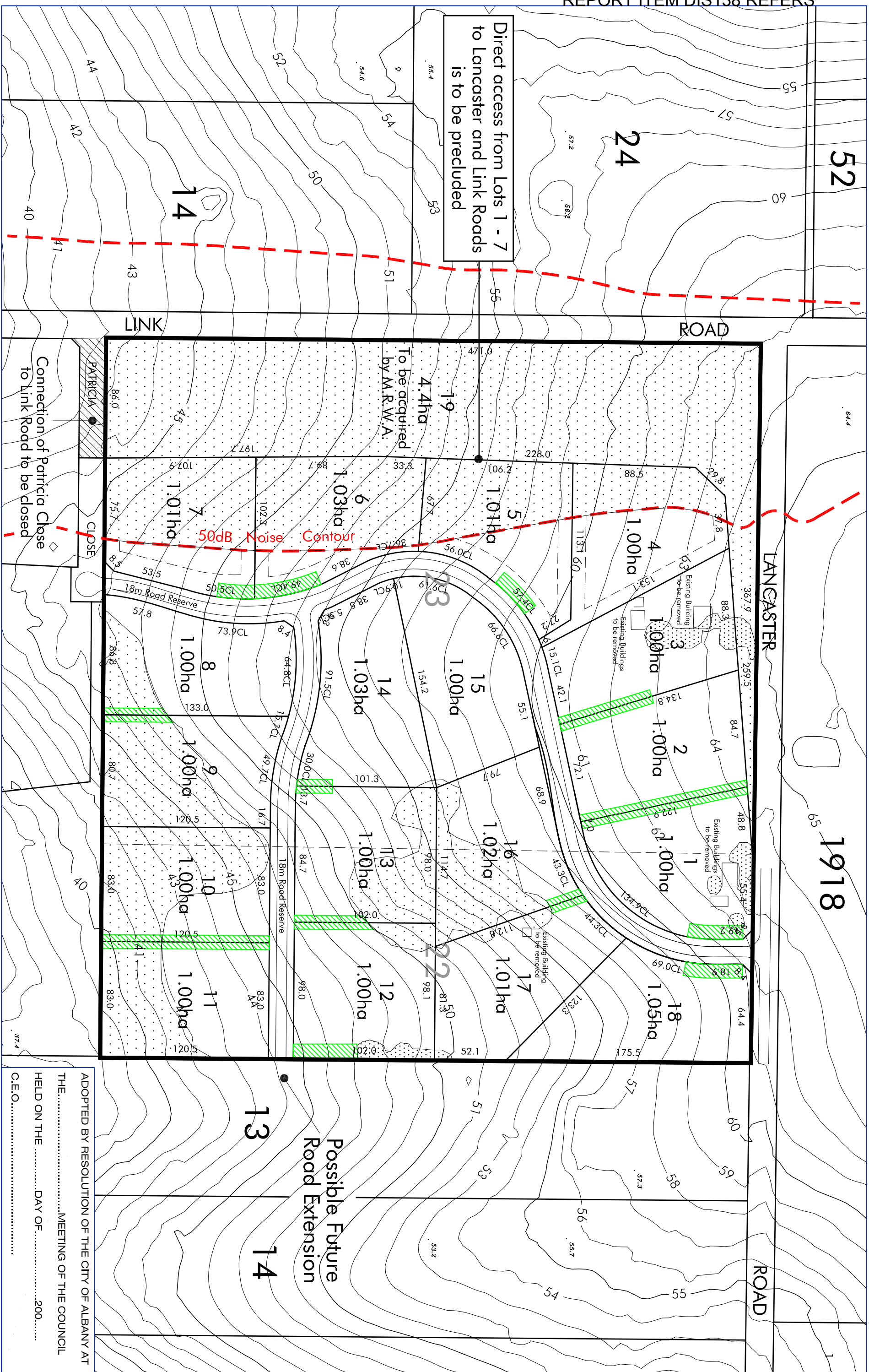
COPYRIGHT:  
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ALBANY | BUNBURY | BUSSELTON | FORRESTDALÉ | PERTH

Scale | 1:2500@A3

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





Direct access from Lots 1 - 7 to Lancaster and Link Roads is to be precluded

50dB Noise Contour

Connection of Patricia Close to Link Road to be closed

To be acquired by M.R.W.A.

Application Area:.....  
 Revegetation Areas:.....  
 Building Exclusion Area:.....  
 Areas and dimensions are subject to survey.

Site Area: 24.3221 ha  
 M/R/W/A Road Widening: 4.4 ha  
 Internal Roads: 1.75 ha  
 Net Area: 18.1609 ha  
 Yield 18 Lots @ 1.0 ha



SCALE 1:2500 31 MARCH 2008


ADOPTED BY RESOLUTION OF THE CITY OF ALBANY AT THE..... MEETING OF THE COUNCIL HELD ON THE ..... DAY OF ..... 2000..... C.E.O.....

Possible Future Road Extension

**GRAY & LEWIS**  
 LAND USE PLANNERS

Suite 5, 2 Hardy Street  
 South Perth, WA 6151  
 T (08) 9474 1722  
 F (08) 9474 1172  
 perth@graylewis.com.au

<b>Schedule of Submissions/Recommendations</b>			
<b>LOCAL STRUCTURE PLAN No.7</b>			
No.	Address	Summary of Submissions	City of Albany – Comment/Recommendations
<p><i>Note: This is a broad summary of the submissions only. A copy of the submissions in full has been provided to the Council as a separate document.</i></p>			
<b>UTILITIES</b>			
1.	ATCO Gas	<p>ATCO does not operate gas mains and infrastructure within this area.</p> <p>ATCO Gas Australia (ATCO) has no objection to the proposed Structure Plan to facilitate the future development of the Lot 9000, based on the information and plan provided.</p>	<p>Note comments from ATCO in relation to gas infrastructure.</p> <p>No modifications recommended for the structure plan in relation to gas.</p>
2.	Water Corporation	<p>Reticulated water is currently available to the subject area by providing a water main extension from the DN100mm Plastic water main in Lancaster Road.</p> <p>A contribution for Water, Sewerage and Drainage headworks may be required. The Water Corporation may also require land being ceded free of cost for works.</p> <p>Reticulated sewerage is remote from this Structure Plan area. Onsite disposal will need to be approved by the Local Authority.</p>	<p>Note comments from the Water Corporation in relation to water and sewer infrastructure.</p> <p>At the development approval stage, on-site septic systems will need to be developed in accordance with the City's Scheme, to manage effluent.</p> <p>At the subdivision approval stage, the Water Corporation will confirm if lots need to be connected to reticulated water infrastructure.</p> <p>No modifications recommended for the structure plan in relation to water and sewerage.</p>
<b>ACCESS</b>			
3.	MRWA	<p>MRWA requested the closure of Patricia Close to Link Road and the connection of Patricia Close to Lancaster Road by a public and gazetted road reserve.</p>	<p>Note comment from MRWA in relation to Patricia Close.</p> <p>The structure plan shows a future public road connecting Patricia Close to Lancaster Road.</p> <p>No modifications recommended.</p>
<b>ENVIRONMENT</b>			
4.	Department of Biodiversity, Conservation and Attractions South Coast Region	<p>It is considered that the proposal and any potential environmental impacts will be appropriately addressed through the existing planning framework.</p>	<p>Note comment from the Department of Biodiversity, Conservation and Attractions in relation to environmental matters.</p> <p>No modifications recommended.</p>

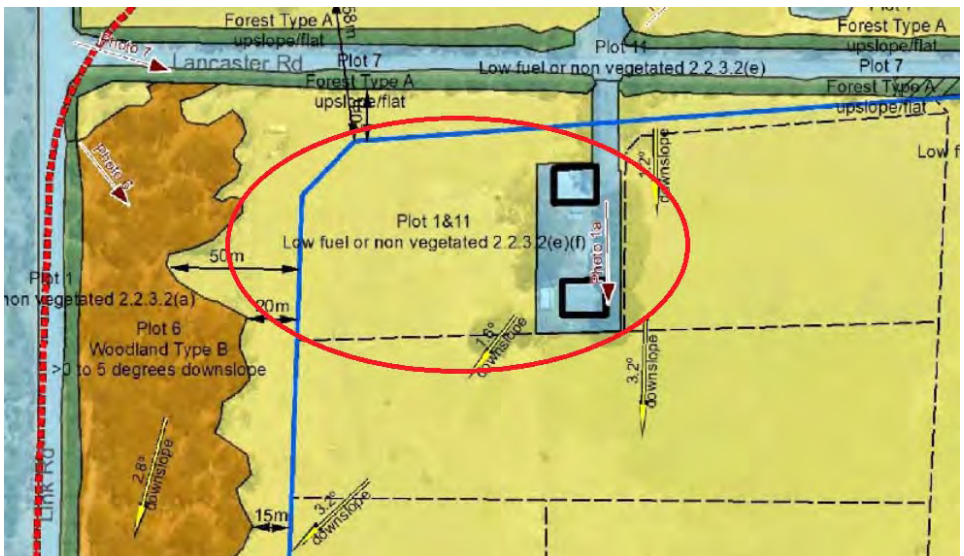



5.	Department of Water and Environmental Regulation.	DWER advises that it has no objection to the proposed modification to the structure plan, as these modifications are not likely to have any impact on local water resources or environmental matters.	Note comment from the Department of Water and Environmental Regulation in relation to environmental matters.  No modifications recommended.
<b>WASTE WATER DISPOSAL</b>			
6.	Department of Health	<p>With regard to the on-site disposal of wastewater, a number of concerns have been identified. While the 2005 Department of Health response considered on-site disposal of wastewater was achievable on the lots proposed under that previous Structure Plan, the new layout raises some issues.</p> <p>A section of site constraints shown over several of the old lots (plan at the end of Appendix E), has not been reflected on the amended Structure Plan (Appendix C).</p>	<p>Uphold comment relating to land capability to manage effluent.</p> <p>DOH correctly note that a building exclusion zone to the western portion of the property was not reflected on the amended Structure Plan, which will exclude development on a small portion of lots 6 &amp; 7.</p> <p><b>In accordance with the land evaluation assessment, it is recommended that the structure plan is amended to illustrate an additional building exclusion area to the western boundary (refer to following plan).</b></p> 
7.	Department of Health	<p>It is also noted the original site investigation was conducted in March, rather than late winter when the full extent of the areas identified by the report as being at risk of water logging could be clarified.</p> <p>A winter Site and Soil Evaluation should be conducted in accordance with <i>Australian Standard 1547:2012 On-site domestic wastewater management</i>. This will help to determine groundwater clearances and compliance with the CSP.</p>	<p>Dismiss comment from the DOH requesting a winter site and soil evaluation.</p> <p>In relation to Department of Health comment, it is recommended that Council agree to advise the Western Australian Planning Commission that in this instance, an additional winter land evaluation assessment is not necessary for the following reasons:</p>




			<p>a. The results from the hydrological logs show that ground water was not intersected in any of the test holes (which went to depths of up to 1380mm deep). This gives the City confidence that the proposed lots will be able to achieve the min 0.5m separation distance to groundwater.</p> <p>b. The decreased lot yield and increased lot size of almost all the proposed lots is a benefit in regards to onsite effluent disposal.</p> <p><b>For assurance, it is recommended that the following condition is included on the structure plan map, applicable to the lower lying lots 6, 7, 8, 9, 13 and 14:</b></p> <p><b><i>At the time of subdivision/development of lots 6, 7, 8, 9, 13 and/or 14, a land capability assessment is to be undertaken to confirm that a min 0.5m separation distance between ground level and ground water can be achieved.</i></b></p>
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**LAND USE CONFLICT**

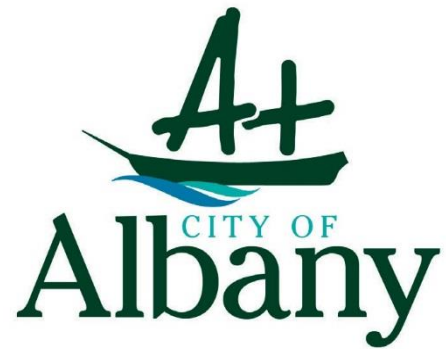
8.	Department of Health	There may be a concern about existing and potential agricultural activities on surrounding land and the possible resultant spray drift from chemical applications.	<p>Uphold comment relating to potential land use conflict.</p> <p><b>It is recommended that the following condition is placed on the structure plan map:</b></p> <p><b><i>A notification, pursuant to Section 165 of the Planning and Development Act 2005 is to be placed on the certificate(s) of title of the proposed lot(s) advising of the existence of a hazard or other factor. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows:</i></b></p> <p><b><i>“This lot is in close proximity to existing agriculture activities and may be adversely affected by virtue of odour, noise, dust and/or light emissions from that land use.”</i></b></p>
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**BUSHFIRE**

9.	Department of Fire and Emergency Services	<p>The exclusions applied to Plot 1 &amp; 11 on the eastern and western periphery are not substantiated.</p> 	<p>Dismiss comment in relation to exclusion areas.</p> <p>The accredited assessor visited the Plots 1 &amp; 11 and verified the areas as being low fuel areas. See below excerpts from the assessor’s bushfire assessment.</p> <table border="1" data-bbox="1409 1239 2448 1669"> <thead> <tr> <th>Plot</th> <th>1</th> <th>Classification or Exclusion Clause</th> <th>Exclusion –Low fuel or non-vegetated 2.2.3.2(e)</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td> <p><b>Location &amp; Description:</b> Roads, buildings and other hard stand areas surrounding subject area mostly external with the exception of the two existing dwellings adjacent to the northern boundary of the Subject Site.</p> <p><i>Clause (e) – Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.</i></p> </td> </tr> </tbody> </table>	Plot	1	Classification or Exclusion Clause	Exclusion –Low fuel or non-vegetated 2.2.3.2(e)				<p><b>Location &amp; Description:</b> Roads, buildings and other hard stand areas surrounding subject area mostly external with the exception of the two existing dwellings adjacent to the northern boundary of the Subject Site.</p> <p><i>Clause (e) – Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.</i></p>
Plot	1	Classification or Exclusion Clause	Exclusion –Low fuel or non-vegetated 2.2.3.2(e)								
			<p><b>Location &amp; Description:</b> Roads, buildings and other hard stand areas surrounding subject area mostly external with the exception of the two existing dwellings adjacent to the northern boundary of the Subject Site.</p> <p><i>Clause (e) – Non-vegetated areas, including waterways, roads, footpaths, buildings and rocky outcrops.</i></p>								

			<table border="1"> <tr> <td>Plot</td> <td>11</td> <td>Classification or Exclusion Clause</td> <td>Exclusion –Low fuel or non-vegetated 2.2.3.2(f)</td> </tr> <tr> <td colspan="2">  </td> <td colspan="2"> <p><b>Location:</b> Maintained gardens and APZ areas associated with existing residential dwellings</p> <p><i>Clause (f) – Low threat vegetation including managed grassland in minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated ornamental gardens, commercial nurseries, nature strips and wind breaks.</i></p> <p><b>Surface fuel loading:</b> &lt;2 t/ha.</p> </td> </tr> </table> <p>No modification required.</p>	Plot	11	Classification or Exclusion Clause	Exclusion –Low fuel or non-vegetated 2.2.3.2(f)			<p><b>Location:</b> Maintained gardens and APZ areas associated with existing residential dwellings</p> <p><i>Clause (f) – Low threat vegetation including managed grassland in minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated ornamental gardens, commercial nurseries, nature strips and wind breaks.</i></p> <p><b>Surface fuel loading:</b> &lt;2 t/ha.</p>	
Plot	11	Classification or Exclusion Clause	Exclusion –Low fuel or non-vegetated 2.2.3.2(f)								
		<p><b>Location:</b> Maintained gardens and APZ areas associated with existing residential dwellings</p> <p><i>Clause (f) – Low threat vegetation including managed grassland in minimal fuel condition, maintained lawns, golf courses, maintained public reserves and parklands, vineyards, orchards, cultivated ornamental gardens, commercial nurseries, nature strips and wind breaks.</i></p> <p><b>Surface fuel loading:</b> &lt;2 t/ha.</p>									
10.	Department of Fire and Emergency Services	It is unclear what enforceable mechanism exists to ensure the remainder of areas that are excluded, will be maintained in a 'low-threat' state as per AS3959, in perpetuity.	<p>Uphold comment, which questions how existing developed areas propose to maintain areas in a 'low-threat'.</p> <p><b>It is recommended that the following condition is included on the structure plan map:</b></p> <p><b><i>Habitable buildings are to be surrounded by an asset protection zone, with a size to ensure the potential radiant heat impact of a bushfire does not exceed 29kW/m<sup>2</sup>. The APZ is to be managed in accordance with the requirements of 'Standards for Asset Protection Zones'.</i></b></p>								
11.	Department of Fire and Emergency Services	<p>The BMP refers to Class G Grassland being excluded from the BAL Contour Map.</p> <p>DFES recommends the wording be revised to avoid any confusion with 'vegetation exclusions' as applied through AS3959. A suggestion, "Class G Grassland has intentionally been omitted from the calculation of the BAL ratings within the BAL Contour Map. To achieve BAL-29 or below..."</p>	<p>Uphold comment in relation to the exclusion of Grassland.</p> <p><b>It is recommended that the wording in the bushfire assessment is revised to avoid any confusion with 'vegetation exclusions', as follows:</b></p> <p><b><i>Class G Grassland has intentionally been omitted from the calculation of the BAL ratings within the BAL Contour Map. To ensure the potential radiant heat impact of a bushfire to a habitable dwelling does not exceed 29kW/m<sup>2</sup>, an asset protection zone around habitable dwellings is to be developed and managed in accordance with the requirements of 'Standards for Asset Protection Zones'.</i></b></p>								
12.	Department of Fire and Emergency Services	<p>In the absence of an endorsed option to secure two access routes to two different destinations, the A3.1 acceptable solution has not been demonstrated. DFES preferences Option 1 over Option 2, as it provides an access route to a different destination.</p> <p>DFES does not support the justification for non-compliance to this acceptable solution. The justification does not substantiate why the cul-de-sac design cannot be avoided by a perimeter road, thereby avoiding need for a dead-end road. Furthermore, it is unclear if the proposed EAW meets the technical requirements of Table 6 of the Guidelines (horizontal clearance). Given the structure plan is being formulated for a greenfield site, it is unclear why the proposed design cannot be avoided.</p>	<p>Dismiss comment on the acceptable solution A3.1.</p> <p>The intent of element 3 (vehicle access) can be achieved by complying with the Performance Principle P3. The structure plan complies with P3 by requiring the development of a 6m wide emergency access way to allow emergency and other vehicles to move through the subject land easily and safely at all times.</p> <p>No modification required.</p>								

13.	Department of Fire and Emergency Services	The creation of a battle-axe lots should be avoided in bushfire prone areas. Furthermore, it has not been demonstrated why the creation of battle-axe lots cannot be avoided as an alternative exists.	<p>Dismiss comment on the acceptable solution A3.4.</p> <p>In accordance with A3.4 Battle-axe, no alternative to battle-axes exist.</p> <p>The structure plan illustrates battle-axes with a width of 6m and a length less than 600m.</p> <p><b>It is recommended that the following requirement is included on the structure plan:</b></p> <p><b><i>The development of Battle-axes is to comply with standards in Table 4, column 3 (vehicle access technical requirements) of the Guidelines for Planning in Bushfire Prone Areas.</i></b></p>
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## Infrastructure and Environment

City of Albany  
Policy

# Upgrades and Maintenance of Watercourses and Drainage Channels



<b>Document Approval</b>			
<b>Document Development Officer:</b>		<b>Document Owner:</b> <i>(Member of EMT)</i>	
Senior Civil Engineering Officer		Executive Director Infrastructure & Environment	
<b>Document Control</b>			
<b>File Number - Document Type:</b>	CM.STD.7 – Policy		
<b>Document Reference Number:</b>	NP1881619		
<b>Status of Document:</b>	<b>Council decision:</b> Public Comment		
<b>Quality Assurance:</b>	Chief Executive Officer, Executive Management Team, Council Committee, and Council.		
<b>Distribution:</b>	Public Document		
<b>Document Revision History</b>			
<b>Version</b>	<b>Author</b>	<b>Version Description</b>	<b>Date Completed</b>
1.0	Senior Civil Engineering Officer	OCM 26/06/2018 Resolution DIS099.	26/06/2018
1.1	Manager City Engineering	Amended post public comment period.	14/11/2018

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**Objective**

To define Council's obligations and policy regarding the maintenance, improvements and rehabilitation of watercourses including Drainage Reserves and Channels.

This policy recognises that watercourses and drainage channels and their associated vegetation should be left in as undisturbed a state as possible, unless extraordinary circumstances apply. Notwithstanding this, Council recognises that there are instances in which the condition of watercourses may deteriorate as a result of erosion and/or sedimentation, overgrowth with weeds or dumping or accumulation of rubbish. In such cases, it is recognised that maintenance and/or rehabilitation of these waterways may be required.

**Policy Statements:****A. Drainage Easements (Benefiting Council):**

**Maintenance** – Council may be responsible for the maintenance of its structures within private property where Council has acquired a drainage easement on such property.

**Improvements** – All requests for improvements in Council drainage easements within private property are to be received and assessed as to whether the work is of net benefit to the community and the environment and prioritised according to budget constraints. If landholder benefits from works, landholder may be required to contribute to costs apportioned to the estimated benefit.

If the work is required to facilitate the development of the land, then the works, if approved, will be at the owner's full cost.

**B. Natural Watercourses:**

- **Maintenance** – Property owners are responsible for maintaining watercourses within private property including watercourses that have been altered from their natural state, through realignment, channel enlargement, filling and the like. However, Council will address significant incidences of bank and bed erosion/scour/siltation, if this damage is a direct result of Council's actions.

Property owners are responsible for maintenance of watercourses within their property. However, such activities should occur with care and consideration of the physical and ecological integrity of the watercourse and in accordance with relevant environmental legislation and guidelines.

In general, only minor maintenance activities are permitted. Activities that include the destruction and removal of native vegetation and the modification of watercourses will require an approval from Council. Other permits may also be required to comply with State Legislation.

Major maintenance work that is excavation, filling, diversion, scour protection, improvements and similar work, will require development consent including the necessary approvals from state government authorities.

- **Improvement and Rehabilitation** – Owners wishing to make improvements or to rehabilitate watercourses in private property are responsible for arranging and carrying out the work at their own cost.

The owner will need to obtain development consent from Council, including the necessary approvals from state government authorities.

Council may determine that an easement in favour of Council should be created over the improved watercourse in order to ensure drainage of a public road, in which case granting of the easement should be at no cost to Council.

**C. Reduction of Owners Contribution:**

Should damage occur to private infrastructure on properties containing natural watercourses and or drainage easements and such damage as determined by the Manager City Engineering is a direct result of Council's actions then the owner's contribution to the proposed work may be reduced.

**D. Watercourses and all drain types (if work approved by Council) within Public Reserves, Drainage Reserves, Public Road Reserves or Council owned land:**

- **Maintenance** – Council is responsible for maintenance of watercourses and drainage channels in council-managed public land. Works will be conducted in accordance with conditions stipulated in any relevant environmental assessment or permit.
- **Improvements and Rehabilitation** – All requests for improvements and rehabilitation will be assessed to determine desirability, prioritised according to budget constraints, potential environmental impacts, cost-benefit analysis and considered for allocations of funds in Council's Works Programs.

**E. Inter-allotment Drainage Easements (Benefiting private property owners)**

- **Maintenance, Improvements and Rehabilitation:** All works to drains in inter-allotment drainage easements within private property are the responsibility of property owners and users of the easement. These drains are 'private' drains and do not belong to Council.

**F. Unapproved Drainage Works on Council Land.**

- Property owners are required to accept natural flows from adjoining properties and control and dispose of flows properly. If unapproved drainage works are carried out on Council land, Council may remove the works and recover costs from the owner that carried out the work.

**G. Unapproved Drainage Works on Private Land.**

- If unapproved drainage is carried out on private land, Council can require the owner to remove the works at the owner's expense (1).
- Maintenance – where existing unapproved drainage infrastructure is located on private owned land, Council will not maintain the infrastructure.

**H. City of Albany right to undertake works**

- Whilst this policy outlines limits of responsibilities in maintaining watercourses and drainage channels in private land, it does not extinguish the right of the City to undertake works in these areas if the City believes there is a defined community good.
- This right is legislated in the Local Government Act 1995, Section 3.27 which confers rights on the City to undertake things on land that is not local government property as prescribed in Schedule 3.2.
- Schedule 3.2 - Particular things local governments can do on land even though it is not local government Section 3.727(1) states the City can:
  - Carry out works for the drainage of land.
  - Do earthworks or other works on land for the prevention or reducing flooding.

**Scope**

This policy applies to all City of Albany ratepayers, land managers, elected members, managers, employees, volunteers, responsible officers, contractors and subcontractors.

**Legislative and Strategic Context**

<p><b>Related Legislation:</b></p>	<p><b>(Legislation Name)</b> Main Roads Act 1993 – Section  Water Management Act 2000  Rights in Water Irrigation Act 1914  Local Government Act 1995 – Schedule 3.2</p>	<p><b>(Relationship/Context)</b> Definition for the roads authority to carry out drainage works  To provide for the sustainable and integrated management of the water sources of the State for the benefit of both present and future generations  Governs the management of water in western Australia and defines a watercourse to mean stream, creek, brook or river through which water flows.  Schedule 3.2 – Particular things local government can do on land even though it is not local government property</p>
<p><b>Related Policies (Council &amp; Internal):</b></p>	<p><b>(Policy Name)</b> Storm water management Strategy</p>	<p><b>(Relationship/Context)</b> Provides the direction to Council with sound objective criteria that sets to guide local Government decision making underpinned by robust analysis to deliver stormwater planning and investment.</p>

**Review Position and Date**

This policy and procedure is to be reviewed by the document owner every three years.

**Associated Documents/Information**

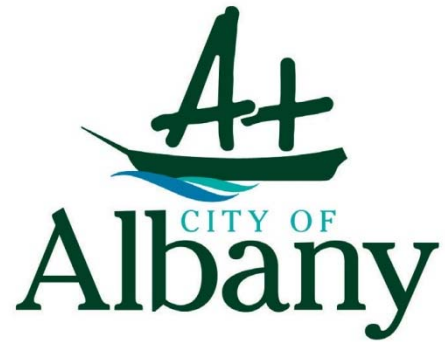
- Stormwater Management Strategy
- Asset Management Plan –Part 3 Stormwater
- *Planning and Development Act 2005*, Sect.214
- Department of Water and Environmental Regulation [www.water.wa.gov.au](http://www.water.wa.gov.au)

**Definitions**

Key terms and acronyms used in the policy, and their definitions:

Term / Abbreviation	Definition
Drainage Easement	A legal restriction on the property title legally allowing drainage through land and defining the properties or parties burdened and benefiting from the drainage easement.
Drainage Reserve	A separate strip of land containing a drain, designated Drainage Reserve and owned by Council.
Watercourse	A stream of water whether perennial or intermittent, flowing in a depression of a natural channel or a natural channel artificially improved or in an artificial channel, which has changed the course of
Floodplain	Floodplains are broad areas of low flat land adjacent to the main floodway (flow path) of a river or creek. These area can become swampy and inundated through seasonal groundwater rise or by rain or storm water inflow.





## Infrastructure & Environment

### Council Policy

# Advertising and Guidance Signage on Public Land & Road Reserves

<b>Document Approval</b>			
<b>Document Development Officer:</b>		<b>Document Owner:</b> <i>(Member of EMT)</i>	
Executive Director Infrastructure & Environment		Executive Director Infrastructure & Environment	
<b>Document Control</b>			
<b>File Number - Document Type:</b>		CM.STD.7 – Policy	
<b>Synergy Reference Number:</b>		NP1765657	
<b>Meta Data: Key Search Terms</b>		Advertising, Signs, Signage, Public Land, Thoroughfare, Road Reserve	
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0.2	Manager Governance & Risk	Draft – v2: Reviewed by Governance & Risk Team	22/05/2017
0.3	MCE	Draft – v3: Minor amendments	12/09/2018



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DRAFT

**OBJECTIVE**

1. The objectives of this policy are to:
  - i. Provide guidance to the public (in particular visiting public) in locating community services and commercial tourism related facilities within the City of Albany through clear and uniform information;
  - ii. Prevent indiscriminate advertising by enabling finite advertising opportunities where they are appropriate to their location and function;
  - iii. Prevent the placement of signs where they could present a hazard to anyone; and
  - iv. Enable authorised persons to undertake compliance and enforcement functions under local laws and legislation in a manner that is consistent with this signage policy.

**SCOPE**

2. Council supports the control and limitation of signage to ensure the placement of signs:
  - i. Do not present a public safety hazard to anyone;
  - ii. Do not detract from the visual amenity of the district;
  - iii. Promote clear and uniform community service and commercial tourism information; and
  - iv. Exploit finite commercial advertising opportunities where appropriate.

**POLICY STATEMENT****3. General provisions:**

3.1. Approval to place a sign covered under this policy within the road reserve or on public land requires a written application advising preferred wording with a supporting street plan identifying signage location(s).

3.2. Signs relating to this policy include:

- Service Signs (Urban and Rural Areas)
- Tourist Signs
- Temporary Signs
- Service Club Signs
- Land Estate Development Signs
- Industrial Estate Signs
- Bus Shelter and Seat Advertising.

3.3. With the exception of Temporary Signs, Bus Shelter and Seat Advertising and unless otherwise approved, all signs are to be supplied and installed by the City of Albany (or its authorised agent) at the expense of the applicant. The City's approval needs to be obtained prior to assessment of supply and installation cost.

3.4. The City accepts no liability for damage arising from vandalism, accident, theft or wear and tear.

3.5. Council reserves the right to remove damaged, poorly maintained or hazardous signs without notice. In this instance, the City will endeavour to contact the original applicant prior to removal.

- 3.6. Where a sign requires replacement, another application will be required along with payment of relevant fees.
- 3.7. Any application for signage to be erected on Main Roads WA controlled roads, are to be referred to Main Roads WA for approval. Main Roads WA managed roads include:
- Albany Highway (from roundabout at Chester Pass/Hanrahan Road to municipal boundary);
  - Chester Pass Road;
  - Princess Royal Drive/Hanrahan Road; and
  - South Coast Highway.

**4. Specific requirements:**

**4.1. Service Signs in Urban Areas (Blue background with White Lettering)**

- 4.1.1. Subject to approval, directional signs in urban areas will be provided in accordance with the criteria set out in this policy.
- 4.1.2. For clarity, guidance to the location of facilities (generally of a non-commercial nature) include:
- Churches and Religious Institutions.
  - Coach Stops.
  - Community and Civic Facilities.
  - Government Facilities such as Police Stations & Hospitals.
  - Post Offices.
  - Public Amenities such as toilets.
  - Rubbish Disposal and Recycling Sites.
  - Sporting, Recreational Grounds and Facilities.
  - Town Halls, Municipal Offices and Depots.
  - Visitor Information Centres.
  - Caravan Parks.
  - Boat Ramps.
- 4.1.3. Signage wording will be generic and under no circumstances contain the name of a business or organisation.
- 4.1.4. Up to two (2) signs may be erected on a single pole identifying a street name. The signs will be manufactured to the standard length so that it is possible to convert from the single pole to a stack sign situation at any time.
- 4.1.5. Up to five (5) signs (not including the street name sign) may be located at any one location by utilising a two pole sign stack. The street name shall be located above the other signs and there shall be a clearance of at least 150mm between the bottom of the street name plate sign and the top of any other sign.
- 4.1.6. Signage is generally permitted in one location only unless there are special circumstances.
- 4.1.7. Signs are to be positioned on the intersection at the entrance to the side road down which the signed premises are located.

**4.2. Service Signs in Rural Areas (Blue background with white lettering)**

- 4.2.1. Subject to approval, Direction Signs in the rural area will be provided in accordance with the requirements outlined for Direction Signs (Urban Areas) above.
- 4.2.2. In addition to the above facilities the following will be permitted in Rural areas only:
  - Roadside Services such as rest stops including those that provide travellers with services such as meals, refreshments and accommodation.
  - Other places of interest deemed to be in the public interest.
- 4.2.3. Up to two (2) signs will be permitted unless there are special circumstances.

**4.3. Tourist Signs (Brown background with white lettering)**

- 4.3.1. Approval to place Tourist signage within the road reserve will be required to comply with Section 2 of the National Tourist Signing Eligibility Guidelines in the first instance to determine whether a sign is appropriate.

These include:

- Natural Features
- Heritage Sites
- Museums
- Wineries/Breweries
- Galleries
- Cottage Industry

- 4.3.2. Up to two (2) signs will be permitted unless there are special circumstances.

**4.4. Temporary Signs**

**4.4.1. Temporary Community Advertising Signs**

Temporary Community advertising signage is allowed at limited designated locations provided for this purpose by the City. Approval to utilise these location will be subject to space being available.

Signs must be neatly set out and be clearly legible and may not have lettering less than 120mm in height.

The City does not allow for non-profit or commercial verge advertising signs. However, temporary advertising for non-profit organisations can be arranged via City of Albany social media steams.

**4.4.2. Service Club Signs**

Subject to approval, Service Club Signs are allowed to be erected in the road reserve adjacent to the facility where the Club meets up to two (2) weeks prior to the event. A plan depicting the size and style of the sign inclusive of foundation details must be provided in support of an application.

4.4.3. Commercial Temporary Signage (eg. Sandwich Board Signs)

The City of Albany allows sandwich board signs up to a size of one (1) square metre, subject to approval under Section 3.4 of the *Activities on Thoroughfares and Public Places and Trading Local Law 2011*.

Businesses within one premises (for example, an arcade) will be permitted one (1) shared sandwich board sign which can display multiple businesses.

4.4.4. Open House (i.e. real estate) and Garage Sale Signs

Two temporary directional signs up to a size of 1200mm x 900mm are allowed for real estate open houses and garage sales for a maximum period of 2 hours, either side of the open house or garage sale times.

4.4.5. The City of Albany does not allow for any other temporary directional signage other than that provided for under provisions 4.4.3 and 4.4.4 above (eg. triangle corflute signs at intersections).

**4.5. Land Estate Development Signs**

4.5.1. Land Developers are entitled to two Land Development Signs per estate indicating the marketed name of the land release.

4.5.2. Sign colours will consist of a blue background with yellow lettering and be placed on poles identifying a street name or stacks as outlined for Direction Signs (Urban Areas) above.

4.5.3. The signs will be removed by the City on receipt of advice from the applicant that land sales have been completed or after two years following initial installation, whichever occurs first.

**4.6. Commercial and Industrial Estate Signs**

4.6.1. Areas zoned as Commercial and Industrial estates (eg. Pendeen Industrial Estate) are permitted to have an Estate Sign or Entry Statement displaying the names of various businesses within the estate. These signs are expected to enhance the visual amenity of the entrance to the estate whilst providing an opportunity for directional signage. These signs are controlled through the Development Approval process.

**4.7. Bus Shelter Advertising & Roadside Seat Advertising**

4.7.1. Commercial advertising on bus stop shelters and bench seats may be permissible under certain circumstances in accordance with the signs local law and this policy.

4.7.2. The advertising must meet all planning requirements in respect to size amenity and appropriateness.

4.7.3. Any proponent who wishes to utilise the space for advertising must enter into formal contract agreement with the City of Albany. This contract will require Council's endorsement.

4.7.4. Advertising is limited to existing seat and shelters on Distributor function roads in accordance with the City of Albany Road Hierarchy

4.7.5. Advertising is not permitted in the localities of Albany (CBD), Middleton Beach and Emu Point.

4.7.6. Advertising is not permitted on rural bus stops and shall not occur on local access streets.

**REVIEW POSITION AND DATE**

5. Executive Director Infrastructure & Environment to review every two years.

**ASSOCIATED DOCUMENTS**

6. The City will provide guidance upon application. In general the information contained in the following documents is to be complied with.

**6.1. City of Albany Policies and/or Guidelines or Local Laws:**

- City of Albany Signs Local Planning Policy
- City of Albany Signs Local Law 2006 (As amended)
- City of Albany's Activities in Thoroughfares and Public Places and Trading Local Law 2011
- City of Albany Art in the Domain Policy

**6.2. Standards & Codes:**

- AS 1742.2 Manual of Uniform Traffic Control Devices. Traffic Control Devices for General Use
- AS1742.5 Manual of Uniform Traffic Control Devices. Street Names and Community Facility Signs
- AS1742.6 Manual of Uniform Traffic Control Devices. Service and Tourist Signs for Motorists
- AS1744 Forms of Letters and Numerals for Road Signs

**6.3. Other Publications:**

- MRWA Guidelines for Service and Tourist Signs
- Tourism WA Tourist Signage Guidelines

## Services Information & Tourist Signs Policy

### Objective

The City of Albany's Service and Tourist Signage Policy within road and other reserves under Council control is to provide the travelling public with clear and uniform roadside information, while minimising the number of signs and avoiding direct advertising.

### Policy Statement

The purpose of the policy is to detail the principles and conditions governing the approval of requests for signage.

This policy applies to all service and tourist signage on roads and other reserves that are under the care, control and management of the City of Albany, including streets, squares and parks.

The CEO has delegated authority to approve signs within Council's reserves provided that conditions as per the guidelines/procedures are complied with.

All signs must comply with Australian Standards AS1742 Parts 5 & 6, AS 1744 and Main Roads W.A. guidelines with regards to size, colouring, lettering, symbols, fixing and installation.

Unless otherwise directed, all signs are to be erected and maintained by Council at the expense of the applicant. Council will undertake minor maintenance for all signs where possible but will not replace stolen, badly damaged or end of life signs. Where a sign requires to be replaced, a formal application is required and the relevant fees paid.

The City of Albany retains control of all signs it installs on Local Government Roads. As such, the City of Albany reserves the right to remove, modify or relocate unapproved, damaged, badly maintained or dangerous signs without notice.

The written agreement of Main Roads Western Australia is to be obtained for all signage proposed for roads under their control.

Written agreement from the Western Australian Tourism Commission is required for all Tourist signs, and Service signs relating to accommodation.

Existing signs that do not conform to this Policy shall remain in place until such time as they require replacement or are specifically reviewed by Council.

Council will remove unapproved signs on the road reserve without notice and recover costs.

### Delegated Authority

The CEO is delegated the authority to approve signs within Council's reserves.

Condition: Amount must be allocated in Council's annual budget.

### Scope

This policy applies to all service and tourist signage on roads and other reserves that are under the care, control and management of the City of Albany, including streets, squares and parks.

### Definitions

- **AS** Australian Standards
- **CEO** Chief Executive Officer

### Legislative and Strategic Context

All signs must comply with Australian Standards AS1742 Parts 5 & 6, AS1744 and Main Roads W.A. guidelines.

**Review Position and Date**

Document Owner to review every two years.

**Associated Documents**

- Australian Standards AS1742 Parts 5 & 6
- Australian Standards AS1744
- Main Roads W.A. guidelines
- City of Albany Service and Tourist Signs Guidelines
- City of Albany Service and Tourist Signs Application form
- Tourism Signs – W.A. Tourism Commission
- Council Policy: Planning: Signs
- City of Albany Local Laws:
  - Local Government Property Local Law
  - Activities on Thoroughfares and Public Places and Trading Local Law

<b>Document Approval</b>			
<b>Document Development Officer:</b>		<b>Document Owner:</b>	
Manager City Engineering		Executive Director Works & Services (EDWS)	
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<b>File Number - Document Type:</b>	CM.STD.7 – Council Policy		
<b>Document Reference Number:</b>	NP1767057		
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1.0	EDWS	Adoption Ref: OCM 19/04/2005 Item 13.3.4	19/04/2005
2.0	EDWS	Revised: Delegation and formatting. Re-adopted. Adoption Ref: OCM 14/12/2010 Item 4.3.29	14/12/2010
2.1	EDWS	Reviewed and minor amended under delegation. NP073247_3	8/05/2014
3.0	MGR	Review Ref: OCM 23/05/2017 Resolution CCCS028. Amended to include reference to the City's Local Laws and changed title to: Services Information & Tourist	20/06/2017



## City of Albany Information Sheet

### Signs on Public Land

#### Objective

This information sheet applies to road and other reserves under Council control which is to provide the travelling public with clear and uniform information, while minimising the number of signs and avoiding indiscriminate advertising.

Road reserve is Council owned land which includes:

- land that can be turned into a road
- land used for footpaths and/or cycle ways and/or dual use paths.

The underlying philosophy of this information sheet is to guide the travelling public to their chosen destination. It details the principles and conditions governing the approval of any signage requests.

#### Scope

This information sheet applies to all service and tourist signage on roads and other reserves (not leased land) that are under the care, control and management of the City of Albany, including streets and parks.

#### LOCATION AND NUMBER OF SIGNS

The availability of space for signage is determined by the total number of signs at the intersection.

Only street name signs are supported in the Central Business District and adjacent verges. A maximum number of five signs (sign stack) under the street name sign shall be permitted in any one location.

In the event that a “sign stack” is full and a new request for signage for a similar service is presented, the City may reconfigure the stack by removing the existing signs and erecting a generic symbolic sign.

Service and Tourist signs are to be provided only where the road user is required to turn into a new road to continue following the route (no signs are to be provided where the signposted route continues along the same road through intersections).

Signage is generally permitted at two locations in rural areas and one location in urban areas, with only one being at an intersection on a major road and the other(s) on the intersection of the road on which the facility is located. Major roads are:

- City of Albany managed roads:
  - Lower King Rd
  - Nanarup Rd
  - Lower Denmark Rd
  - Frenchman Bay Rd; and
  - Albany Hwy (from York Street to roundabout at Chester Pass/Hanrahan Road).

Any application for signage to be erected on Main Roads WA controlled roads, are to be referred to Main Roads WA for approval.

- Main Roads WA managed roads:
  - Albany Hwy (from roundabout at Chester Pass/Hanrahan Road to municipal boundary)
  - Chester Pass Rd
  - South Coast (Hassell) Hwy; and
  - Princess Royal Drive/Hanrahan Road.

## **TYPES OF SIGNS**

**Tourist Signs** – (brown background with white lettering)

Guide travellers to recognised tourist attractions and approved tourist establishments.

These include natural features and heritage sites of interest to tourists and approved tourist establishments such as:

- Museums
- Wineries/Breweries
- Galleries/Craft centres/Potteries.

An approved tourist establishment is defined as, a commercial or non-commercial tourist establishment, that has been approved by Main Roads WA. Written approval from Main Roads WA is required for these signs, prior to lodging an application with the City.

**Service Signs** – (blue background with white lettering)

Inform travellers of the location of roadside services and facilities.

Types of service signs that may be approved include, but are not limited to:

- a. government facilities eg: post offices, police offices, public health - hospitals;
- b. public toilets;
- c. community centres;
- d. significant public educational facilities, eg: libraries;
- e. significant public cultural facilities, eg: galleries, museums;
- f. significant heritage facilities;
- g. significant places of public worship;
- h. locations of regional significance, eg: parks;
- i. significant public transport facilities;
- j. roadside services such as rest stops that provide travellers with services such as meals, refreshments and accommodation;
- k. significant tourist destinations;
- l. information centres and tourist bureaux;
- m. boat ramps;
- n. cottage industries ie. non-commercial and commercial establishments that enhance the unique Albany experience for visitors to the district but are usually not opened for at least 3 months of any year;
- o. other sites that are considered to be in the public's interest.

**MAINTENANCE**

Unless otherwise directed, all signs are to be erected and maintained by Council at the expense of the applicant. Council will re-affix signs where possible but will not replace stolen or badly damaged signs. Where a sign requires replacement, another application is required and the relevant fees paid.

Council reserves the right to remove damaged, badly maintained or dangerous signs without notice. In this instance, the City will endeavour to contact the original applicant to advise that the sign has been removed and the replacement process.

**RESERVES**

For signage relating to Council managed reserves, any requests are to be referred to the Reserves Manager, using the City of Albany Signs Application form. These requests include:

- regulatory (ie. no camping)
- interpretive (ie. aboriginal heritage)
- information (ie. beach access)
- visitor safety (ie. slippery rocks).

Where a community group has requested signage, approval will be conditional upon the production, installation and maintenance costs being borne by the applicant.

**Legislative and Strategic Context**

In order to meet legislative requirements and to ensure consistency in size, colouring, lettering, symbols, fixing and installation all signs must comply with:

- AS 1742.2 Manual of Uniform Traffic Control Devices. Traffic Control Devices for General Use
- AS1742.5 Manual of Uniform Traffic Control Devices. Street Names and Community Facility Signs
- AS1742.6 Manual of Uniform Traffic Control Devices. Service and Tourist Signs for Motorists
- AS1744 Forms of Letters and Numerals for Road Signs

Other Publications:

- MRWA Guidelines for Service and Tourist Signs
- City of Albany Signs (Amendments) Local Law

**Review Position and Date**

Executive Director Works & Services to review on or before 30/6/2014

**Delegated Authority**

The CEO is delegated the authority to approve signs within Council's reserves.  
Condition: Amount must be allocated in Council's annual budget.

Consideration may be given for additional non-commercial signage at the discretion of the Executive Director of Works & Services.

**Associated Documents**

- Tourism Western Australia  
[http://www.tourism.wa.gov.au/Growing\\_Your\\_Business/Pages/Tourist\\_Signage.aspx](http://www.tourism.wa.gov.au/Growing_Your_Business/Pages/Tourist_Signage.aspx)  
<http://www.mainroads.wa.gov.au/OtherRoads/Pages/mrwaSearchResults.aspx?k=signs>
- City of Albany Environmental Code of Conduct
- City of Albany Signs Application form.

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**\*\* DISCLAIMER \*\***

*This information contained in this document is a guide only. Verification with original Local Laws, Acts, Planning Schemes, and other relevant documents is recommended for detailed references. The City of Albany accepts no responsibility for errors or omissions.*

# **CITY OF ALBANY**

## **LOCAL PLANNING SCHEME NO. 1**

### **AMENDMENT No 33**

MINISTER FOR PLANNING

PROPOSAL TO AMEND A LOCAL PLANNING SCHEME

LOCAL AUTHORITY: **CITY OF ALBANY**

DESCRIPTION OF LOCAL PLANNING SCHEME: **LOCAL PLANNING SCHEME No. 1**

TYPE OF SCHEME: **DISTRICT SCHEME**

SERIAL No. OF AMENDMENT: **AMENDMENT No. 33**

PROPOSAL:

- i. Incorporating portion of Lot 1, Frenchman Bay Road within 'Additional Uses' site no. 33;*
- ii. Amending Schedule 2 – Additional Uses (CL 4.5) by including Lot 1 within the second column under 'Description of Land';*
- iii. Amending Condition II within the fourth column by replacing the R 30 code with the R 40 code; and*
- iv. amending the Scheme Maps accordingly.*

**LOCAL PLANNING SCHEME No. 1**

**AMENDMENT No. 33**

**CONTENTS**

1. RESOLUTION
2. REPORT
3. EXECUTION

# REPORT ITEM DIS141 REFERS

PLANNING AND DEVELOPMENT ACT 2005

## RESOLUTION TO PREPARE AMENDMENT TO LOCAL PLANNING SCHEME

CITY OF ALBANY  
LOCAL PLANNING SCHEME No. 1

DISTRICT SCHEME  
AMENDMENT No. 33

RESOLVED that the local government pursuant to Section 72 of the *Planning and Development Act 2005*, amend the above Local Planning Scheme by:

- i. Incorporating portion of Lot 1, Frenchman Bay Road within 'Additional Uses' site no. 33;*
- ii. Amending 'Schedule 2 – Additional Uses (CL 4.5) No. AU33' by including Lot 1 within the second column under 'Description of Land';*
- iii. Amending 'Schedule 2 - Additional Uses (CL 4.5) No. AU 33' Condition II within the fourth column under 'Conditions' by replacing the R 30 code with the R 40 code; and*
- iv. Amending the Scheme Maps accordingly.*

The amendment is standard under the provisions of the *Planning and Development (Local Planning Schemes) Regulations 2015* for the following reason.

- The amendment is consistent with the Albany Local Planning Strategy, which sets a strategic objective to support urban infill development based on compatibility of land uses and infrastructure capacity;
- The amendment would have minimal impact on land in the scheme area that is not the subject of the amendment; and
- The amendment does not result in any significant environmental, social, economic or governance impacts on land in the scheme area.

Dated this \_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
CHIEF EXECUTIVE OFFICER



**CITY OF ALBANY**

**LOCAL PLANNING SCHEME NO. 1**

**AMENDMENT NO. 33**

**PLANNING REPORT**

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**APPENDIX A: BAL CONTOUR PLAN AND BUSHFIRE MANAGEMENT - PLAN BIO DIVERSE SOLUTIONS - JUNE 2018**

## 1. INTRODUCTION

The Little Grove 'Local Centre' is located on Lots 1 and 312 on the corner of Frenchman Bay Road and Bay View Drive. As the centre is only located on a portion of Lot 1 and has limited further potential for additional retail floor space, a scheme amendment has recently been initiated to designate Lot 312 for 'Additional Uses' in order to allow for the option of developing residential and mixed use development.

The owner of Lot 1 now wishes to extend the 'Additional Uses' designation over the vacant portion of the property in order to also allow for the option of residential/mixed use development.

As the amendment relating to Lot 312 has been advertised and is awaiting final approval, a separate scheme amendment is required to extend the 'Additional Uses' designation.

The following report provides background information and justification for the proposed scheme amendment.

## 2. BACKGROUND

Lot 1 Frenchman Bay Road contains the Little Grove Local Centre on the corner of Frenchman Bay Road and Bay View Drive, which is located approximately 9km from the Albany Town Centre, Refer to Location Plan below.



LOCATION PLAN

Lot 1 is 3,197m<sup>2</sup> in area and approximately 2065m<sup>2</sup> or 65% of the site has been developed with a service station, convenience and liquor store, associated office space, storage, car parking and loading/service area. The balance of the site is 1132m<sup>2</sup> and is currently vacant and the owner of the property requests the flexibility to develop residential units and/or mixed uses on the site. Refer Site Plan.

It is proposed that this 'Additional Use' designation also be extended to Lot 1 so that the vacant portion of the site can be developed for the same purposes.



### 3. PLANNING CONTEXT

The key planning document relating to the distribution and development of retail centres in Albany is the City of Albany's 'Activities Centre Planning Strategy' (ACPS) which was endorsed by the Council in June 2010.

The Strategy notes that Local Centres play an important role in Albany, providing a local convenience service. However, as the higher order services provided by the larger neighbourhood centres also provide a local convenience function, the need for future purely-local centres is considered limited.

Local Centres are allowed to develop Shop/Retail floorspace up to 600<sup>2</sup>m, although the ACPS notes that most will probably remain smaller than this.

The Strategy recommends that Local Centres:

- Encourage and facilitate the development of other local-serving uses at an appropriate scale within local activity centres. Such uses could include some local offices and residential development.
- Where practicable, within a 100 metre radius of local centres, facilitate increased residential density of at least R30, preferably R40. This will enhance the commercial potential of these centres.
- Allow additional, appropriately sited, local activity centres to be planned in new urban areas as part of the structure planning process, to serve as (amongst other things) focal points for increased residential densities.

The first dot point is relevant to this amendment proposal as it encourages the development of residential development as well as other local servicing uses such as some local offices. While offices are a discretionary use within the 'Local Centre' zone, a single house, grouped dwelling and multiple dwelling are not permitted.

Other uses which may be considered within the 'Local Centre' zone include:

Amusement Parlour	Industry - service
Caretaker's Dwelling	Market
Child Care Premises	Medical Centre
Civic Use	Office
Club Premises	Restaurant
Community Purposes	Service Lunch Bar
Consulting Rooms	Service Station
Convenience Store	Shop
Dry Cleaning Premises	Small Bar
Exhibition Centre	Storage
Fast Food Outlet	Tavern
Industry – Cottage	Veterinary Service

While some of the above uses may not be suitable for particular locations, their retention will allow for their consideration in an appropriate situation without having to go through the process of a Scheme amendment.

Current practice generally excludes the development of a 'Single House' and most Schemes in WA encourage 'Grouped Housing' and 'Multiple Housing' within a 'Local Centre'.

With regard to proposed retail development in the locality, the only proposal is a 'Village Centre' associated with the Big Grove Outline Development Plan. The Village Centre is nominated for convenience shopping and commercial uses along with complimentary residential uses.

The size of the centre was not determined as it was considered outside the study time frame. However, it was noted that surrounding development potential could support a small to medium sized Neighbourhood Centre.

Within this context, the Little Grove Local Centre is likely to remain a local centre and will have the capacity to extend from 400m<sup>2</sup> Shop Retail to 600m<sup>2</sup> should demand increase pending the development of the Big Grove Centre.

This additional floor space can be accommodated by making more efficient use of the existing site or by extending into the vacant land remaining within Lot 1.

#### **4. BUSH FIRE PLANNING**

As the property is located within a bushfire prone area, a BAL Contour Plan and Bushfire Management Plan has been prepared and is attached in Appendix 'A'.

BAL 12.5 will apply to any future development of the vacant land and BAL 29 will apply to the existing building.

#### **5. PROPOSED SCHEME AMENDMENT**

In order to provide for the flexibility to develop residential and mixed use development on the vacant portion of Lot 1, it is proposed to incorporate the lot within the 'Additional Uses' site which is currently the subject of a Scheme Amendment relating to Lot 312 to the north.

The 'Additional Uses' will allow 'Grouped Housing', 'Multiple Housing' and 'Mixed Use' to become discretionary ('A') uses.

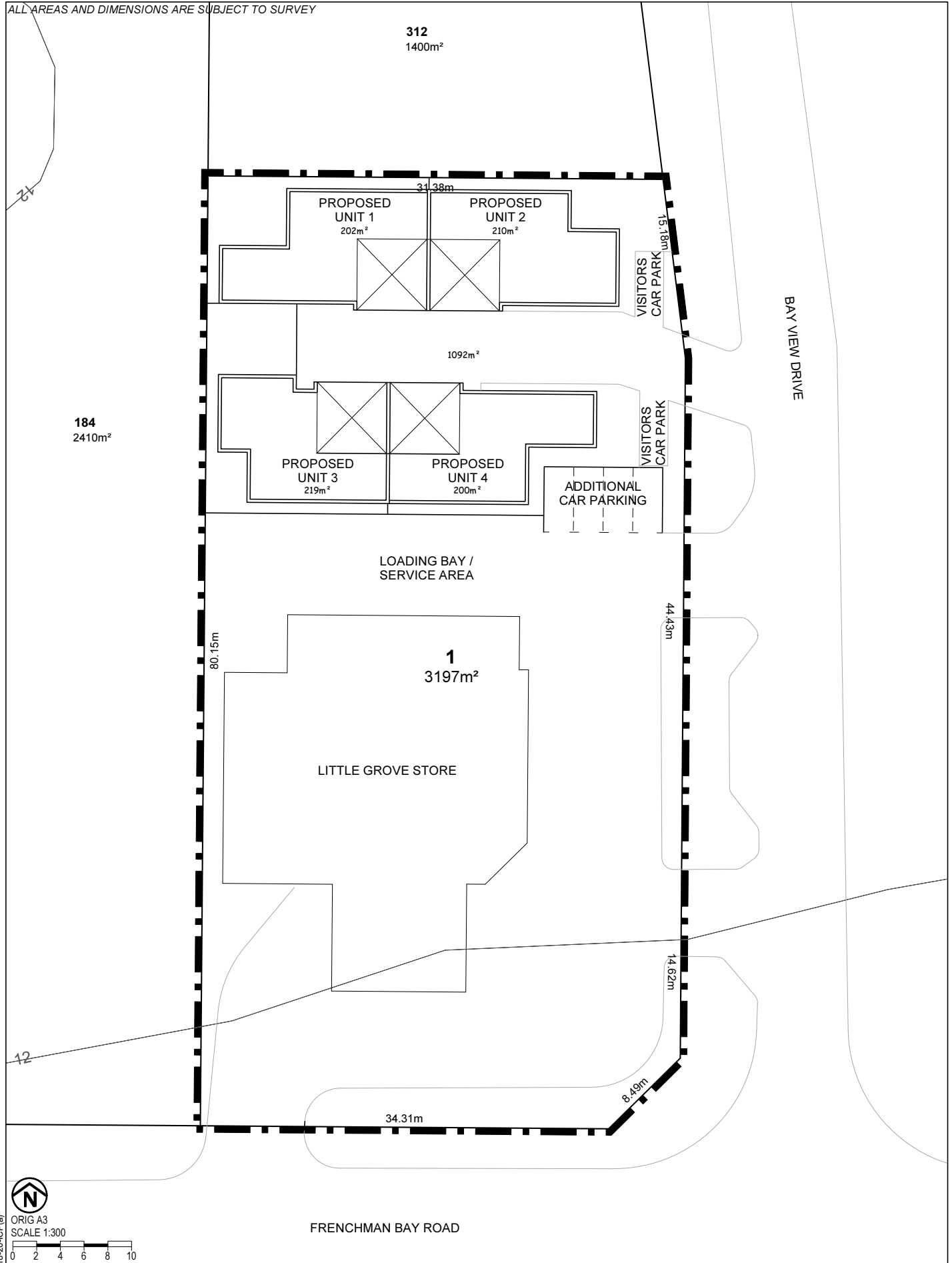
This will allow for the flexibility for a number of development options ranging from commercial, residential or mixed use within the vacant land. The proponent's preference at this stage is to develop up to four residential units on the site which would also have potential to incorporate suitable commercial use such as a small scale office.

An Indicative Concept Plan has been prepared (refer over leaf) which illustrates how four units can be developed on the site with two visitor parking bays and an additional four car parking bays which are integrated with the local centre site. These bays could be used both for the local centre and possible commercial use(s) associated with the residential units.

While the 'Additional Uses' conditions associated with Lot 312 immediately to the north, designate an R30 density code, it is recommended that an R40 density code apply to both sites in order to allow greater scope for the possibility of mixed use development.

The Indicative Concept Plan demonstrates that the vacant portion of Lot 1 and Lot 312 can be developed independently. Lot 312 is larger in area and with two road frontages can be developed in a number of ways depending on the proposed use or mix of uses.





## 6. CONCLUSION

This scheme amendment proposes to extend the 'Additional Uses' designation applying to Lot 312, within the Little Grove Local Centre zone, to the vacant portion of Lot 1, which is also zoned 'Local Centre'.

The proposal provides an opportunity to develop medium density housing in close proximity to the Local centre and meets Council's objective to encourage provision of a greater range of housing in an area which is still predominantly large lot single residential.

An R40 density code is recommended which will also provide greater scope for mixed use development.

PLANNING AND DEVELOPMENT ACT 2005

CITY OF ALBANY

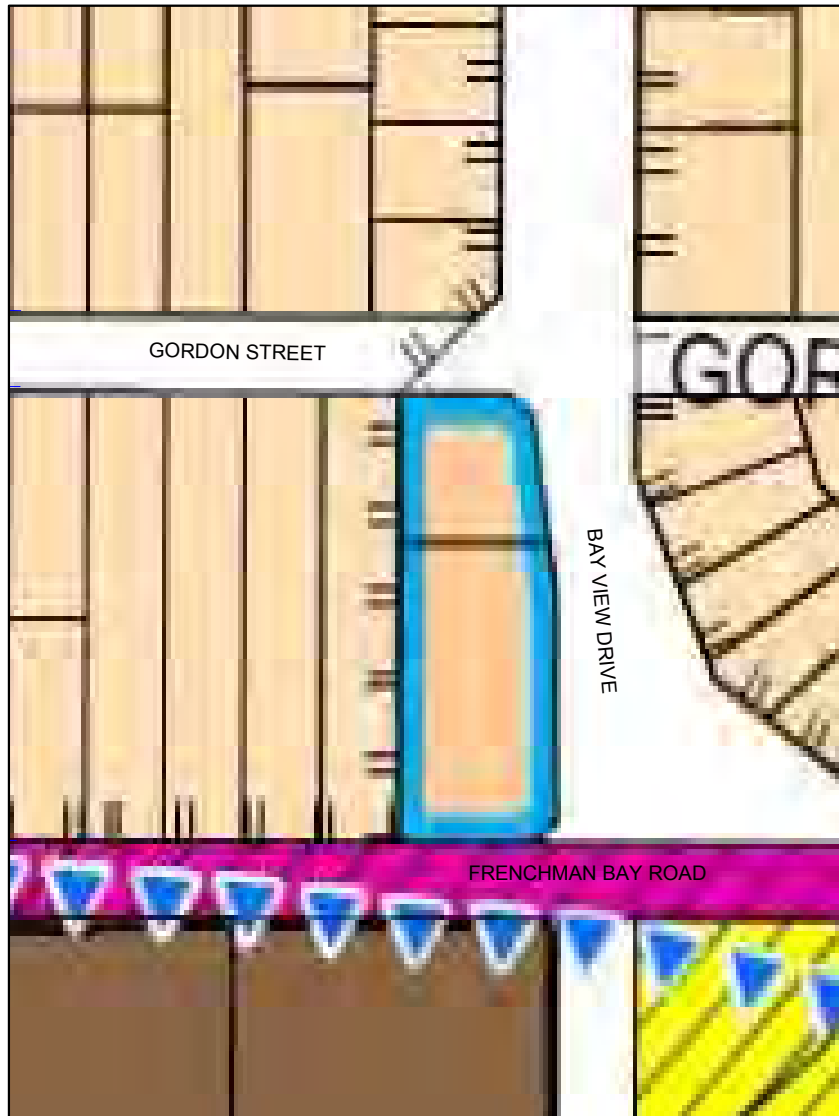
LOCAL PLANNING SCHEME No. 1

AMENDMENT No. 33

The City of Albany under and by virtue of the powers conferred upon it in that behalf by the Planning and Development Act 2005 hereby amends the above local planning scheme by:

- i. Incorporating portion of Lot 1, Frenchman Bay Road within 'Additional Uses' site no. 33;*
- ii. Amending 'Schedule 2 – Additional Uses (CL 4.5) No. AU 33' by including Lot 1 within the second column under 'Description of Land';*
- iii. Amending 'Schedule 2 – Additional Uses (CL 4.5) No. AU 33' Condition II within the fourth column under 'Conditions' by replacing the R 30 code with the R 40 code; and*
- iv. amending the Scheme Maps accordingly.*

**Existing Zoning**



**LEGEND**

**LOCAL SCHEME RESERVES**

(see scheme text for additional information)

- Local road
- Priority road
- Public use

**LOCAL SCHEME ZONES**

(see scheme text for additional information)

- Local centre
- Residential
- Rural residential

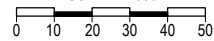
**OTHER CATEGORIES**

(see scheme text for additional information)

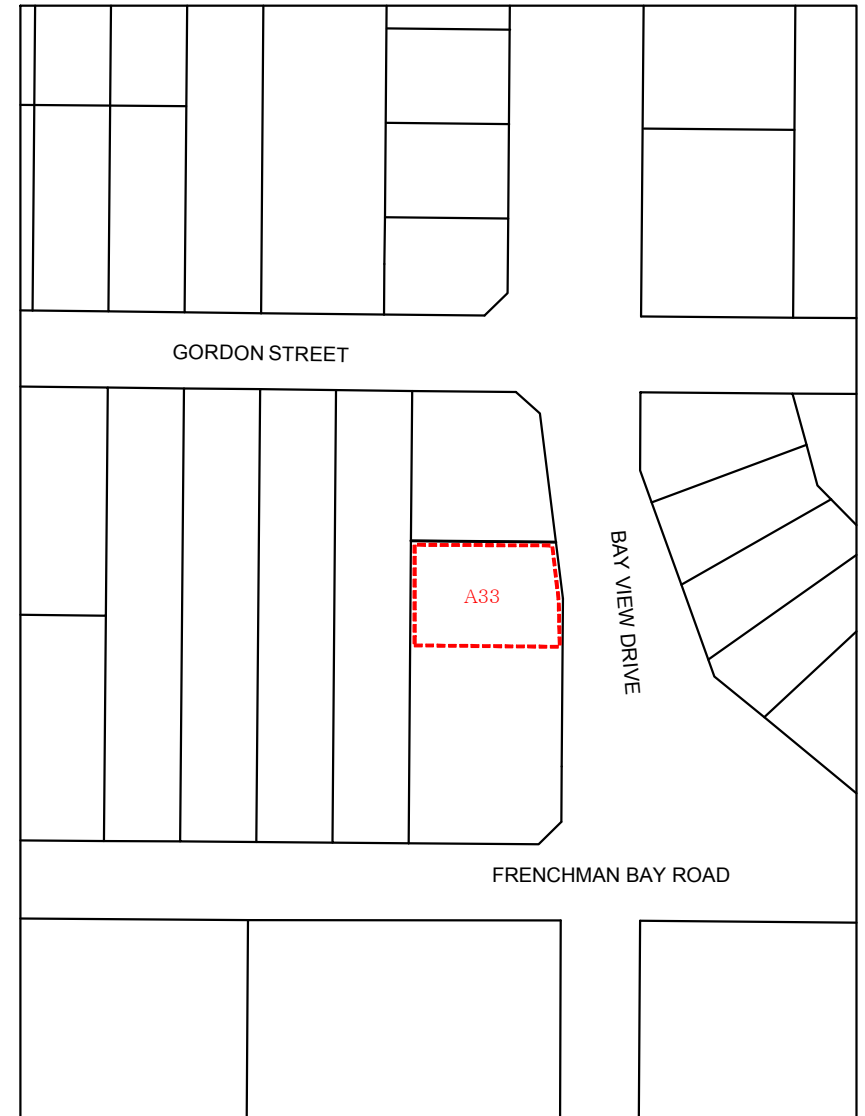
- R20 R Codes
- A1 Additional uses
- Public drinking water sources special control areas (see c.6.3)



ORIG A4  
SCALE 1:2000



**Proposed Zoning**



# REPORT ITEM DIS141 REFERS

## ADOPTION

Adopted by resolution of the Council of the City of Albany at the Meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_.

\_\_\_\_\_  
**Mayor**

\_\_\_\_\_  
**Chief Executive Officer**

## FINAL APPROVAL

Adopted for final approval by resolution of the City of Albany at the Meeting of the Council held on the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_\_ and the Common Seal of the City of Albany was hereunto affixed by the authority of a resolution of the Council in the presence of:

\_\_\_\_\_  
**Mayor**

\_\_\_\_\_  
**Chief Executive Officer**

Recommended/Submitted for Final Approval

\_\_\_\_\_  
**Delegated Under S.16  
of the PD Act 2005**

\_\_\_\_\_  
**Date**

Final Approval Granted

\_\_\_\_\_  
**Minister for Planning**

\_\_\_\_\_  
**Date**

**APPENDIX A**

**BAL CONTOUR PLAN AND  
BUSHFIRE MANAGEMENT PLAN**

BIO DIVERSE SOLUTIONS

JUNE 2018

# BAL Contour Plan and Bushfire Management Plan (BMP)

Site Details			
<b>Address:</b>	Lot 1 Frenchman Bay Road		
<b>Suburb:</b>	Little Grove	<b>State:</b>	W.A.
<b>Local Government Area:</b>	City of Albany		
<b>Description of Building Works:</b>	N/A		
<b>Stage of WAPC Planning</b>	Rezoning		

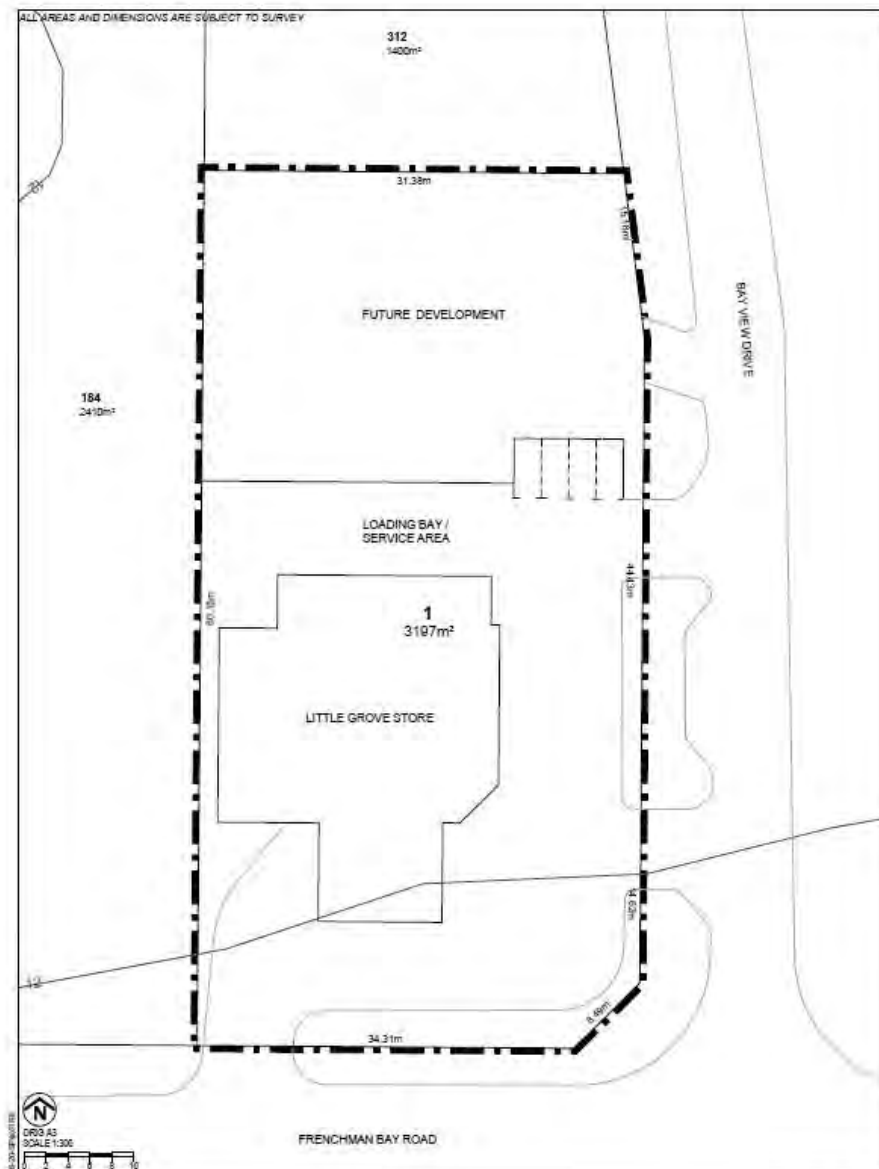
BAL Contour Plan Details			
<b>Report / Job Number:</b>	AB0030	<b>Report Version:</b>	FINAL version 1
<b>Assessment Date:</b>	12/03/2018	<b>Report Date:</b>	20/06/2018
<b>BPAD Practitioner</b>	Kathryn Kinnear	<b>Accreditation No.</b>	BPAD30794



**SECTION 1: Proposal details**

Lot 1 Frenchman Bay Road is zoned 'Local Centre' and the purpose of the Scheme Amendment is to allow residential and mixed-use development by designating 'Grouped Housing and 'Multiple Housing' as discretionary uses within the zone. An R30 Density Code is proposed. These uses are currently not permitted in the zone. The City of Albany's 'Activities Centre Planning Strategy' (2010) recommends that Local Centres should be encouraged to include residential uses.

The subject site is located in the municipality of the City of Albany (CoA) in the locality of Little Grove. The northern portion of the site is undeveloped land/vacant land. The southern portion of the site has an existing shop/fuel station. Refer to the Site Plan Figure 1 and Locality Plan Figure 2. The subject site is located in the WA bushfire prone area mapping (SLIP, 2018), refer to Figure 3.



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**SITE PLAN**  
 Lot 1 Frenchman Bay Road  
 & Bay View Drive  
 Little Grove, City of Albany

**Figure 1: Site plan**





Figure 2: Location Plan



Figure 3: State Bushfire Prone Area Mapping (SLIP 2018)

## **SECTION 2: Environmental Considerations**

**Vegetation modification proposed:** Vegetation clearing of the northern portion of the site is proposed to enable future site development/construction. The southern portion is cleared for buildings and parking.

**Re-vegetation/landscape plans:** No revegetation or landscaping plans are proposed for the proposal.

## **SECTION 3: Assessment Results**

### **SECTION 3.1 – Assessment Inputs**

Bushfire Assessment inputs for the site has been calculated using the Method 1 procedure as outlined in AS3959-2009. This incorporates the following factors:

- WA adopted Fire Danger Index (FDI), being FDI 80;
- Vegetation Classes;
- Slope under classified vegetation; and
- Distance between proposed development site and classified vegetation.

### **Vegetation Classification (Bushfire Fuels)**

All vegetation within 150m of the site / proposed development was classified in accordance with Table 2.3 and Exclusion clauses 2.2.3.2 of AS 3959-2009. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified in the following pages and shown on the Vegetation Classes Map (Figure 4) page 5.

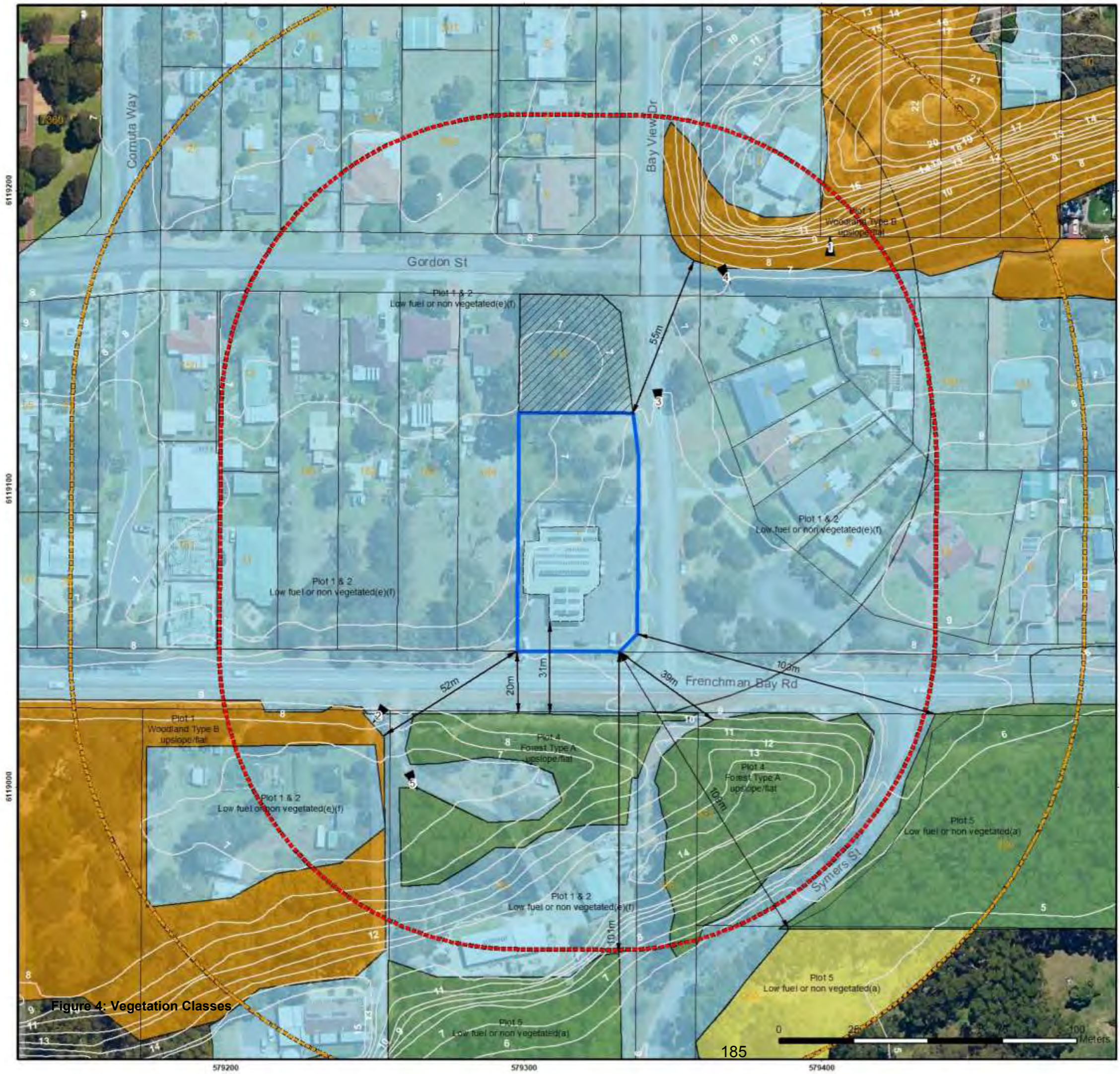


Figure 4: Vegetation Classes

**REPORT ITEM DIS141 REFERS**

This BAL Plan was prepared by  
 Kathryn Kiensar, Bio Diverse Solutions  
 Accreditation No. BPA030794  
 Jurisdiction: Level 2 - WA



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 Albany, WA 6330  
 Australia  
 Tel: 08 9842 1575  
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Overview Map Scale 1:100,000

**Legend**

- Subject Site
- Existing Building
- 100m Assessment Boundary
- 150m Assessment Boundary
- Cadastre
- Photo Point
- 1m Contours
- Separation Distance
- Future Low Fuel
- Vegetation**
- Forest Type A
- Woodland Type B
- Grassland Type G
- Low fuel or non vegetated 2.2.3.2



Scale  
 1:1,250 @ A3  
 GDA MGA 94 Zone 50

**Data Sources**  
 Aerial Imagery: WA Now, Landgate Subscription Imagery  
 Cadastre, Relief Contours and Roads: Landgate 2017  
 IRIS Road Network: Main Roads Western Australia 2017  
 Overview Map: World Topographic map service, ESRI 2012

**CLIENT**  
 Nick Ayton  
 Ayton Baesjou Planning  
 Lot 1 Frenchman Bay Road  
 Little Grove, WA 6330

**Vegetation Classes**

BAL Assessor	QA Check	Drawn By
KK	KK	BT
STATUS	FILE	DATE
FINAL	AB0030	18/06/2018

# REPORT ITEM DIS141 REFERS


Plot	1	Classification or Exclusion Clause	Woodland Type B
		<p><b>Location:</b> North east of the subject site near the Gordon Street and Bay View Drive intersection.</p> <p><b>Separation distance:</b> 55m to the north east and 52m to the south west.</p> <p><b>Dominant species &amp; description:</b> Peppermint trees, with a small amount of coastal vegetation as understorey.</p> <p><b>Average vegetation height:</b> 8m.</p> <p><b>Vegetation Coverage:</b> 10-30%.</p> <p><b>Available fuel loading:</b> 15-25t/ha.</p> <p><b>Effective slope:</b> Upslope.</p>	

Photo Id 1: View looking north through Plot 1 to the north east of the subject site.




Plot	1	Classification or Exclusion Clause	Woodland Type B
		<p><b>Location:</b> South west along Frenchman Bay Road.</p> <p><b>Separation distance:</b> 55m to the north east and 52m to the south west.</p> <p><b>Dominant species &amp; description:</b> Peppermint trees, with a small amount of coastal vegetation as understorey.</p> <p><b>Average vegetation height:</b> 8m.</p> <p><b>Vegetation Coverage:</b> 10-30%.</p> <p><b>Available fuel loading:</b> 15-25t/ha.</p> <p><b>Effective slope:</b> Upslope.</p>	

Photo Id 2: View looking into Woodland Type B situated to the south west (south of Frenchman Bay Road).


# REPORT ITEM DIS141 REFERS

Plot	2	Classification or Exclusion Clause	Low fuel or non-vegetated areas exclusion 2.2.3.2 (e)
			<p><b>Location:</b> Located to the east, north, west and south of the subject site in existing urban area.</p> <p><b>Description:</b> All roads, driveways, buildings and other non-vegetated areas. As per AS3959-2009 exclusion clause 2.2.3.2 (e).</p>

*Photo Id 3: View looking south along Bay View Drive.*

Plot	3	Classification or Exclusion Clause	Low fuel or non-vegetated areas exclusion 2.2.3.2 (f)
			<p><b>Location:</b> Located to the east, north, west and south of the subject site in existing urban area.</p> <p><b>Description:</b> Managed gardens, lawns and other low-threat fuel areas. As per AS3959-2009 exclusion clause 2.2.3.2 (f).</p> <p><b>Available fuel loading:</b> &lt;2t/ha.</p>

*Photo Id 4: View of maintained garden to the north east of the subject site.*

Plot	4	Classification or Exclusion Clause	Forest Type A
			<p><b>Location:</b> South of Frenchman Bay Road in private property.</p> <p><b>Separation distance:</b> 20-39m.</p> <p><b>Dominant species &amp; description:</b> Peppermint trees and occasional Karri trees, Closed low forest. Mid and understorey of sedges, juvenile trees, herbs and grasses.</p> <p><b>Average vegetation height:</b> 8-10m, occasional 15-20m (Karri).</p> <p><b>Vegetation Coverage:</b> &gt;30-70% foliage cover.</p> <p><b>Available fuel loading:</b> 25-35t/ha.</p> <p><b>Effective slope:</b> Upslope.</p>
<p><i>Photo Id 6: View of Forest Type A taken within private property to the south.</i></p>			
Plot	5	Classification or Exclusion Clause	Low fuel or non-vegetated areas exclusion 2.2.3.2 (a)
<p><i>No photo available</i></p>			<p><b>Location:</b> Vegetation located south and south east of the subject site to the south of Frenchman Bay Road.</p> <p><b>Separation distance:</b> 101-103m.</p> <p><b>Description:</b> Areas of vegetation excluded as located &gt;100m from subject site boundary as per exclusion clause 2.2.3.2 (a) of AS3959-2009.</p>

**COMMENTS ON VEGETATION CLASSIFICATIONS**

- Distances from vegetation were made based on surface fuels to edge of lot (subject site) boundary;
- Effective slopes were measured in the field using a Nikon Forestry Pro and represented on the respective plots;
- Method 1 (AS3959-2009) Simplified procedure was used for vegetation classification process;
- All vegetation was classified within the subject site and within 150m of the lot boundaries to Table 2.3 and Exclusions 2.2.3.2 (a-f) of AS3959; and
- The perimeter of the vegetation was measured using field GPS and notations on field GIS maps.

## SECTION 3.2 Bushfire Assessment Outputs

The potential bushfire impact to the site / proposed development from each of the identified vegetation plots are identified below (Table 1) and shown on the BAL Contour Plan Page 10.

**Table 1 - Potential Bushfire impacts to AS3959**

Lot number	Vegetation Type (Table 2.3)	Slope (Table 2.4.3)	Separation distance to vegetation (m)	Highest BAL Contour	Modified BAL Contour
1	Woodland Type B (Plot 1)	Upslope	52m	BAL 12.5	BAL 12.5 can apply
	Forest Type A (Plot 4)	Upslope	20m	BAL 29	BAL 12.5 can apply
Existing Building	Forest Type A (Plot 4)	Upslope	31m	BAL 19	BAL 19 can apply

It is noted in Table 1 that where multiple BAL ratings apply - the highest BAL is always to apply. The final BAL allocation is dependent on final placement of the dwelling on the lot. BAL assessments may be considered on the lot by the new owners when dwelling design/ placement is known and can be undertaken at building approval stages with the engagement of an Accredited Level 1 BAL Assessor.

### NOTES ON BAL ASSESSMENT

- The BAL Contour Plan was prepared by an Accredited Level 2 Bushfire Planning Practitioner (BPAD30794); and
- The BAL Contour Map has been prepared in accordance with Department of Planning (WAPC) Guidelines for Planning in Bushfire Prone Areas Version 1.3 (WAPC, 2017);
- Subdivision based on plan of subdivision as supplied by Ayton Baesjou Planning, (Figure 1)
- Subject site is located in a Bushfire Prone Area; see Figure 3 (SLIP, 2017).
- APZ areas will be maintained in a Low Fuel state as per APZ standards in the Guidelines for Planning in Bushfire Prone Areas Version 1.3(WAPC, 2017) and CoA Fire Management Notice. Refer to Appendix A.
- All new buildings are to be placed in BAL 12.5 zones.



Figure 5: BAL Contour Plan

**REPORT ITEM DIS141 REFERS**

This BAL Plan was prepared by  
 Kathryn Kinnear, Bio Diverse Solutions  
 Accreditation No. BPAD30794  
 Jurisdiction: Level 2 - WA



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 Australia  
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 Fax: 08 9842 1575



Overview Map Scale 1:100,000

**Legend**

- Subject Site
- Existing Building
- 100m Assessment Boundary
- 150m Assessment Boundary
- Cadastre
- BAL Contours**
- BAL-FZ
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5
- BAL-LOW



Scale  
 1:1,250 @ A3  
 GDA MGA 94 Zone 50

**Data Sources**  
 Aerial Imagery: WA Now, Landgate Subscription Imagery  
 Cadastre, Relief Contours and Roads: Landgate 2017  
 IRIS Road Network: Main Roads Western Australia 2017  
 Overview Map: World Topographic map service, ESRI 2012

**CLIENT**  
 Nick Ayton  
 Ayton Baesjou Planning  
 Lot 1 Frenchman Bay Road  
 Little Grove, WA 6330

**BAL Contour Plan**

BAL Assessor <b>KK</b>	QA Check <b>KK</b>	Drawn by <b>BT</b>
STATUS <b>FINAL</b>	FILE <b>AB0030</b>	DATE <b>18/06/2018</b>



## **SECTION 4: Identification of Bushfire Impacts**

The bushfire threats associated with the subject site are the continuous remnant Woodland vegetation located to the north east in Gordon Street Road Reserve and to the south west in private property located along Frenchman Bay Road. Continuous Woodland Type B vegetation occurs in this area which has been modified in the urban landscape, however is not managed. There is also continuous Forest Type A vegetation located to the south of the subject site situated to the south of Frenchman Bay Road.

To the north, south and west all properties have applied the CoA Fire Management Notice and fuel reduced their property. Continuous vegetation occurs linking along to Gordon Street to the east which can act as a “wick” into the Little Grove urban area. It is recommended for the safety of residents in the area, the CoA Fire Management Notice is applied in residential lots and fuel reduction occurs.

Surrounding the subject site to the north, south, east and west is existing residential area which is classified low fuel or non-vegetated areas as per exclusion clauses 2.2.3.2 of AS3959.

## **SECTION 5: ASSESSMENT TO GUIDELINES FOR PLANNING IN BUSHFIRE PRONE AREAS**

The Bushfire Protection Criteria have been provided by WAPC in the “Guidelines for Planning in Bushfire Prone Areas” (WAPC, 2017) to assist the assessment of the proposal in bushfire prone areas. The BMP report assesses the proposal to the “Acceptable Solutions” of the four elements a summary of this assessment is outlined over the page (Table 2).

**Table 2: Bushfire protection criteria applicable to the site**

Element	Acceptable Solution	Applicable or not Yes/No	Meets Acceptable Solution
Element 1 – Location	A1.1 Development Location	Yes	Compliant. BAL 12.5 will apply to any future buildings on site, BAL 29 applies to the existing building, meeting acceptable solution A1.1
Element 2 – Siting and Design	A2.1 Asset Protection Zone	Yes	Compliant. An APZ area will apply to the whole of the lot and will also utilise the surrounding existing low fuel areas of Bayview Drive and Gordon Street. APZ standards to be as per WAPC requirements, refer to Appendix A. An APZ area consistent with 12.5 will apply which is compliant to the WAPC guidelines.
Element 3 – Vehicular Access	A3.1 Two Access Routes	Yes	Compliant. Access is via future driveways onto Bay View Drive (north/south) where people can reach two separate destinations to the west and east and/or north and south depending on the bushfire attack direction. Access to the existing Little Grove Store is onto Bay View Drive (north/south) and Frenchman Bay Road (east/west). Although Frenchman Bay Road to the south is ultimately a dead-end road, this is deemed a legacy issue to the Little Grove suburb.
	A3.2 Public Road	No	No public roads are proposed. Not assessed to A3.2.
	A3.3 Cul-de-sacs	No	No cul-de-sacs are proposed. Not assessed to A3.3.
	A3.4 Battle axes	No	No battle axes are proposed. Not assessed to A3.4.

Table 2 cont.

Element	Acceptable Solution	Applicable or not Yes/No	Meets Acceptable Solution
Element 3 – Vehicular Access	A3.5 Private driveways	Yes	Compliant. A driveway is to be installed to 4m trafficable surface and 6m horizontal clearance. To be conditioned through the DA approvals process.
	A3.6 Emergency Access Ways	No	No EAWs proposed as the public road network will be utilised. Not assessed to A3.6.
	A3.7 Fire Service Access Ways	No	No FSA's proposed as the public road network will be utilised. Not assessed to A3.7.
	A3.8 Firebreaks	Yes	Firebreaks and fuel loads are to be compliant to CoA Fire Break Notice.
Element 4 – Water	A4.1 Reticulated areas	Yes	Not assessed to A4.1.
	A4.2 Non-reticulated areas	No	Not assessed to A4.2.
	A4.3 Individual lots in non-reticulated areas	No	Compliant. Water supply will be through the extension of the existing reticulated scheme water into the area. Connections are known to be available. Standards are to be as per WCWA and approval by the CoA.

**SECTION 6: IMPLEMENTATION ACTIONS**

The responsibilities of the developer(s), Landowners and local government are shown in Table 3.

**Table 3 – Implementation Actions**

<b>Developer – Prior to issue of titles</b>		
<b>No</b>	<b>Implementation Action</b>	
1	APZ areas to apply to the whole of the lot and to be maintained as per WAPC (Appendix A) and CoA requirements by the Developer until lots are relinquished to new owners.	<input type="checkbox"/>
3	A driveway cross over to be designated/ installed off for access into subject site (min of 4m wide stabilised and 6m wide clearance).	<input type="checkbox"/>
4	Reticulated water supplied to the site to WCWA requirements and to CoA approval.	<input type="checkbox"/>

**SECTION 7: DISCLAIMER**

*The recommendations and measures contained in this assessment report are based on the requirements of the Australian Standards 3959-2009 – Building in Bushfire Prone Areas, WAPC State Planning Policy 3.7 (WAPC, 2015), WAPC Guidelines for Planning in Bushfire Prone Areas (WAPC, 2015), and CSIRO’s research into Bushfire behaviour. These are considered the minimum standards required to balance the protection of the proposed dwelling and occupants with the aesthetic and environmental conditions required by local, state and federal government authorities. They DO NOT guarantee that a building will not be destroyed or damaged by a bushfire. All surveys and forecasts, projections and recommendations made in this assessment report and associated with this proposed dwelling are made in good faith on the basis of the information available to the fire protection consultant at the time of assessment. The achievement of the level of implementation of fire precautions will depend amongst other things on actions of the landowner or occupiers of the land, over which the fire protection consultant has no control. Notwithstanding anything contained within, the fire consultant/s or local government authority will not, except as the law may require, be liable for any loss or other consequences (whether or not due to negligence of the fire consultant/s and the local government authority, their servants or agents) arising out of the services rendered by the fire consultant/s or local government authority.*

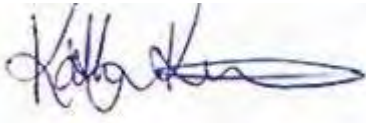
**AS3959-2009 disclaimer:** It should be borne in mind that the measures contained within this Standard (AS3959-2009) cannot guarantee that a building will survive a bushfire event on every occasion. This is substantially due to the unpredictable nature and behaviour of fire and extreme weather condition.

Building to AS3959-2009 is a standard primarily concerned with improving the ability of buildings in designated bushfire prone areas to better withstand attack from bushfire thus giving a measure of protection to the building occupants (until the fire front passes) as well as to the building itself.

(AS3959, 2009)

**SECTION 8: Certification**

I hereby certify that I have undertaken the assessment of the above site and determined the Bushfire Attack Level stated above in accordance with the requirements of AS 3959-2009 (Incorporating Amendment Nos 1, 2 and 3) and the Guidelines for Planning in Bushfire Prone Areas Ver. 1.3 (WAPC, 2017).

SIGNED, ASSESSOR: ..  ..... DATE:

Kathryn Kinnear, Bio Diverse Solutions  
Accredited Level 2 Bushfire Practitioner (Accreditation No: BPAD30794)



**References**

Western Australian Planning Commission (WAPC) (2017) Guidelines for Planning in Bushfire Prone Areas Version 1.3. Western Australian Planning Commission and Department of Planning WA, Government of Western Australia.

Western Australian Planning Commission (WAPC) (2015) State Planning Policy 3.2 Planning in Bushfire Prone Areas. Department of Planning WA and Western Australian Planning Commission.

State Land Information Portal (SLIP) (2018) Map of Bushfire Prone Areas. Office of Bushfire Risk Management (OBRM) data retrieved from:

<https://maps.slip.wa.gov.au/landgate/bushfireprone/>

**REVISION RECORD**

Revision	Summary	Revised By	Date
DRAFT ID 18/6/2018	Internal QA review	Bianca Theyer	18/6/2018
Issued to client as final		Bianca Theyer	20/6/2018

**Appendix A**

**Standards for an Asset Protection Zone (APZ) (WAPC, 2017)**

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

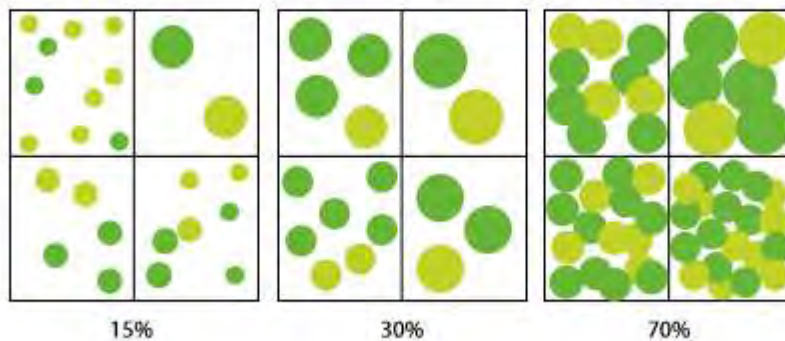
**Objects:** Within 10 metres of a building, combustible objects must not be located close to the vulnerable parts of the building i.e. windows and doors.

**Fine Fuel load:** Combustible dead vegetation matter less than 6 millimetres in thickness reduced to and maintained at an average of two tonnes per hectare.

**Trees (> 5 metres in height):** Trunks at maturity should be a minimum distance of 6 metres from all elevations of the building, branches at maturity should not touch or overhang the building, lower branches should be removed to a height of 2 metres above the ground and or surface vegetation, canopy cover should be less than 15% with tree canopies at maturity well spread to at least 5 metres apart as to not form a continuous canopy. See Figure 2 (WAPC Figure 16, Appendix 4) below.

**Figure 2 – Tree Canopy Cover**

**Figure 16:** Tree canopy cover – ranging from 15 to 70 per cent at maturity



(WAPC, 2017)

**Shrubs (0.5 metres to 5 metres in height):** Should not be located under trees or within 3 metres of buildings, should not be planted in clumps greater than 5m<sup>2</sup> in area, clumps of shrubs should be separated from each other and any exposed window or door by at least 10 metres. Shrubs greater than 5 metres in height are to be treated as trees.

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

**Grass:** Should be managed to maintain a height of 100 millimetres or less.

<b>Schedule of Submissions</b>			
<b>LOCAL PLANNING SCHEME AMENDMENT No.33 – LOT 1 Bay View Drive, Little Grove.</b>			
No.	Address	Summary of Submissions	City Comment/Recommendation
		<i>Note: This is a broad summary of the submissions only. A copy of the submissions in full has been provided to the Council as a separate document.</i>	
<b>Utilities</b>			
1.	ATCO Gas Australia	ATCO Gas Australia Pty Ltd (ATCO) has no objection to the proposed Amendment to include "Additional Uses" over the vacant portion of Lot 1 to facilitate the future development of the Lot, based on the information and plan provided.  ATCO does not operate gas mains and infrastructure within this area.	Note comment from ATCO Gas.  No modifications recommended.
2.	Water Corporation	The site is currently serviced with water and sewerage by connection to the local networks in the area. Any additional water or sewerage connections, or upgrades required to service future additional development on the site will need to be determined by the proponent's consulting engineers in consultation with the Water Corporation at the subdivision and development stages.  There is a 300mm diameter Water Corporation bore transfer main and a 150mm diameter water reticulation main that run along the road reserve close to the eastern boundary of the subject land. The proponent should be advised to take due care in undertaking any works on the site and to make application to the Water Corporation for any works that have the potential to impact on these mains.	Note comment from the Water Corporation in relation to servicing upgrades.  No modifications recommended.
<b>Environment</b>			
3.	Department of Biodiversity, Conservation and Attractions	It is considered that the proposal and any potential environmental impacts will be appropriately addressed through the existing planning framework.	Note comment from the Department of Biodiversity, Conservation and Attractions.  No modifications recommended.
4.	Department of Water and Environmental Regulation.	It is noted that no landscape plan and or revegetation is proposed as part of the amended land use within the Scheme Amendment. Given that significant remnant vegetation currently exists on Lot 1 and Lot 312 and that the social impacts of removal of this vegetation will likely be significant, it is recommended that provisions are made for this within the Scheme Amendment. For this reason, development should take into consideration retention of some of the more significant trees where possible through planning design, to improve the social, ecological and environmental amenity of the proposal. This is considered important given that the proposed change in land use is from a community local centre with public benefit to private development with no public benefit.	Dismiss comment from the Department of Water and Environmental Regulation, which recommends that provisions are made within the Scheme Amendment for the retention of significant trees.  It is proposed that the subject site falls within the Schemes Additional Use zone No.33. In accordance with the Additional Use site 33 provision No.1, at the time of subdivision and/or development, the local government may request the provision of a Local Area Plan to guide development, which may include the need for landscaping (tree planting) adjacent to the streetscape, access areas and private open space areas.  No modifications recommended.