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Bushfire Safety and Evacuation Plan

**Premier Mushrooms (stage 1 additions)
Lot 1 –Lot 2 DP 603811
182 Boundary Road
Glossodia, NSW, 2756**



B2015-013 September 2015

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1.0 INTRODUCTION : General scope of project

- 12 new growing rooms (stage 1 1-4 growing rooms)
- 14,400m³ dams.
- Boundary adjustment.

The site faces Boundary Road to the west and is surrounded by rural residential development and commercial rural business.

The site is classified as bushfire prone according to Hawkesbury City Council records and bushfire prone lands map. Therefore the application of a Bush Fire Safety and Evacuation plan under Section 100B of the Environmental Planning and Assessment Act and Guide lines of NSW Rural Fire Service must apply in this instance.

2.0 PURPOSE OF REPORT

This bushfire safety and evacuation plan is to provide the owner, Premier Mushrooms, the Rural Fire Service and Hawkesbury City Council with an independent bushfire hazard determination together with appropriate recommendations for both bushfire safety and evacuation plan in accordance with Planning for Bushfire Protection – 2006 and NSW Rural Fire Service Guidelines.

The recommendations contained within this report may assist in forming the basis of any specific bush fire safety and evacuation plan or bushfire mitigation measures that council and / or the rural Fire Service may elect to place within any Council consent conditions issued for the subject Development Application.

3.0 REFERENCED DOCUMENTS AND PERSONS

Comments provided are based on the calculated Bushfire Attack Level (BAL), the Rural Fire Service (RFS) document known as "Planning for Bushfire Protection – 2006" for the purposes of bushfire hazard determination and NSW Rural Fire Service Guidelines.

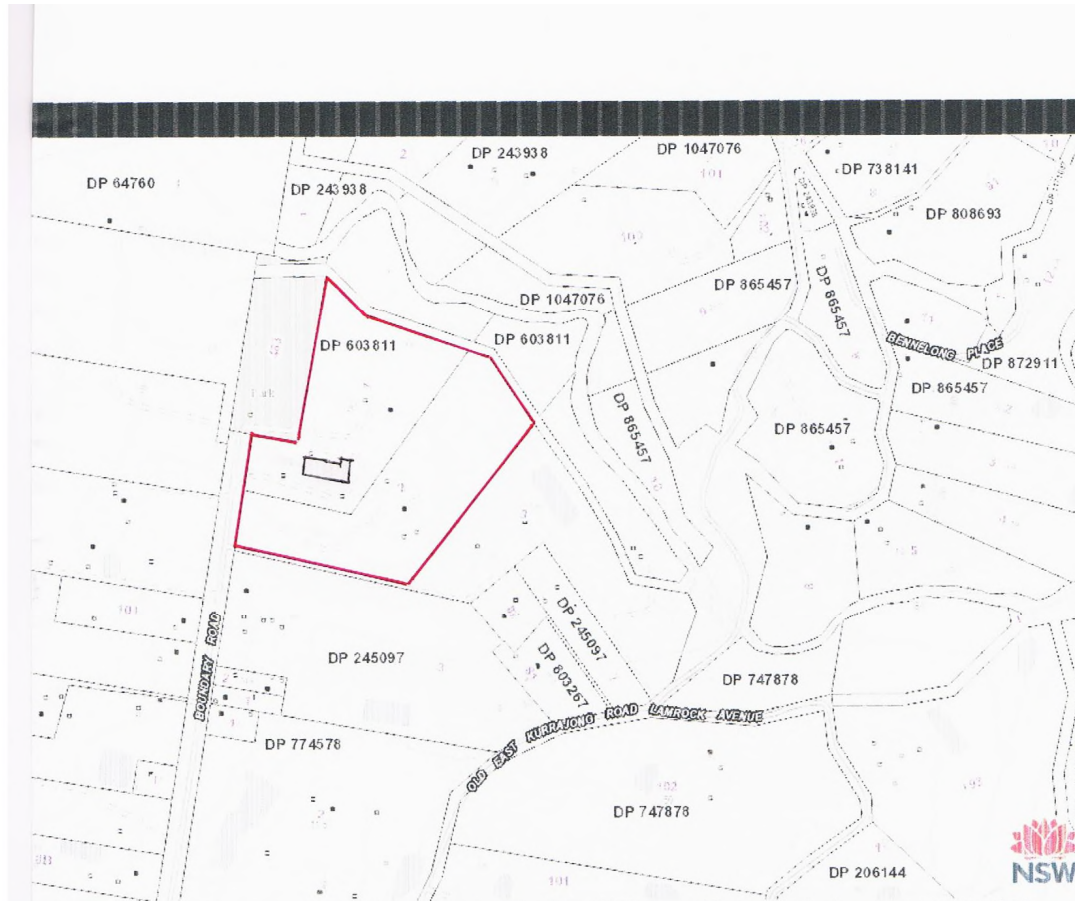
The author has visited the subject property.

4.0 BUSHFIRE HAZARD ASSESSMENT

5.01 Location

The subject property is known as Lot 1 & 2 DP 603811, 182 Boundary Road, Glossodia, NSW, 2756.

Access to the proposed development is via Boundary Road..



5.02 COMPLIANCE TABLE

The following table sets out the projects compliance with Planning for Bushfire Protection – 2006

	North	East	South	West
VEGETATION TYPE	N/A Developed and managed property.	N/A Developed and managed property – adjoining property.	Remnant woodland corridor	N/A Managed property – Boundary Road
DISTANCE TO VEGETATION			30m	
SLOPE			2 deg. downslope	
REQUIRED ASSET PROTECTION ZONE			Min 30m	
PROPOSED ASSET PROTECTION ZONE	Maintain cleared and landscaped area.	Maintain cleared and Landscaped area to boundary	Vegetation to be cleared for new works	Maintain cleared and landscaped area to boundary
PROTECTED SPECIES OR HABITAT	nil	nil	nil	nil

CATEGORY OF BUSHFIRE ATTACK			LOW	
REQUIRED CONSTRUCTION LEVEL			BAL 12.5	
PROPOSED CONSTRUCTION LEVEL	BAL 12.5 (AS3959)	BAL 29 (AS3959)	BAL 12.5 (AS3959) 10Kw/m2	BAL 12.5 (AS3959)

Asset Protection Zone Compliance – Can be achieved by maintaining landscaping/cleared areas as indicated above.
Also refer to “ On Going Maintenance (Addendum 1).

5.03 Bush fire water supply

Plenty of water available for bushfire fighting services connection via existing dam, water storage tanks and bore providing 5 litres/second.

5.03 Fire Fighting Vehicle access

Ample room for fire fighting vehicle access around existing facility from main entrance plus upgrade of secondary access road east of proposed new growing rooms to Boundary Road.

6.0 EVACUATION PLAN.

7.0 DETAIL OF PREMISES

Number of employees: 99 at full production.

- Number of buildings:
 - Existing growing and packing sheds.
 - Administration block.
 - New growing rooms.
 - Out buildings.

8.0 ROLES AND RESPONSIBILITIES

Owner manager: Location – private residence

Contact phone no. 02 45796224.

Manager to provide a copy of evacuation procedures in plain view at administration block.

9.0 EVACUATION TRIGGER

In the event of a bushfire risk of impacting on the facility endangering life and property.

As directed by emergency services.

So much smoke that it is causing medical problems for employees and staff.

10.0 DESIGNATED ASSEMBLY POINT

Adjacent to the existing water tanks located along side main parking areas.



11.0 TRANSPORT DETAILS

- Private vehicle for employees and staff.
- Private vehicle for owner manager.
- Or as directed by manager.
- Helicopter landing area available for evacuation persons with medical problems, incapacitated or as directed by emergency services.

12.0 EVACUATION LOCATION

Venue 1:-

Boundary Road outside entry to facility.

Venue 2:-

Junction of Boundary Road and Spinks Road or as directed by Emergency Services.

13.0 CONTACT DETAILS

Manager to contact Rural Fire Service on 000 to report smoke sightings and await advice.

Manager to monitor RFS warnings and radio warnings during the bushfire season.

14.0 SECURITY

Manager/owner is responsible for security of the property during the evacuation period.

15.0 EVACUATION PROCEDURES

In the event of a bushfire in the surrounding area, employees and staff shall follow the procedures outlined below:-

- Close all windows and doors.
- Proceed to assembly point as directed by manager.
- Await directions for evacuation if required.
- Manager to account for all visitors/employees/staff by name and number.
- Details of family names and contacts taken by manager in case of evacuation.
- Numbers and details of evacuees to be given to emergency services in charge.

Prepared by:-
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Note:
The Planning for Bushfire Protection 2006 has an appropriate disclaimer attached to it and similarly, my interpretations and opinions are also given in the same good faith.

16.0 ANNEXURE

List of Referenced Documents

- NSW Rural Fire Service guidelines for bushfire evacuation.
- Documents and details supplied by Urban City Consulting.
- Writers visit to the site.

ADDENDUM 1

ON GOING PROPERTY MAINTENANCE

It is recommended that the following items be implemented in advance of the bush fire season, where applicable.

- Removal of litter from roof and gutters.
- Ensure painted surfaces are in good condition (no exposed decaying timber)
- Water supply is in good working order.
- Driveways and access roads are in good condition with no overhanging trees or other obstacles.
- Screens to windows and doors are fitted neatly and in good order.
- Doors are fitted with draught seals which are in good order.
- Fire fighting water supply and associated equipment to be maintained in a ready working condition.
- Prepare and maintain a bushfire survival and evacuation plan.
- Monitor bushfire warning advice during the bushfire season.

PHOTOS



View looking south showing area for proposed new growing rooms and remnant vegetation beyond.



View looking south on Lot 2 showing area beyond proposed growing rooms and road to the south of facility to be used as secondary access.



View looking east showing secondary road access and adjoining property to the south.



View looking south along Boundary Road.

CALCULATION



Bushfire Attack Assessment Report

AS3959 (2009) Version 1.4.2

Print Date: 22/04/2015

Assessment Date: 22/04/2015

Site Street Address: 182 Boundary Road, Glossodia
 Assessor: Allan Bates; Dialla Design and Drafting Services
 Fire Danger Index: 100 (Fire Weather Area: Greater Sydney Region)
 Local Government Area: Hawkesbury Alpine Area: No

Equations Used

Transmissivity: Fuss and Hammins, 2002
 Flame Length: RFS PBP, 2001
 Rate of Fire Spread: Noble et al., 1980
 Radiant Heat: Drysdale, 1985; Sullivan et al., 2003; Tan et al., 2005
 Peak Elevation of Receiver: Tan et al., 2005
 Peak Flame Angle: Tan et al., 2005

Run Description: south aspect

Vegetation Information

Vegetation Type:	Remnant Vegetation	Vegetation Group:	Remnant Vegetation
Vegetation Slope:	2 Degrees	Vegetation Slope Type:	Downslope
Surface Fuel Load(t/ha):	10	Overall Fuel Load(t/ha):	12

Site Information

Site Slope	0 Degrees	Site Slope Type:	Level
Elevation of Receiver(m)	Default	APZ/Separation(m):	30

Fire Inputs

Veg./Flame Width(m):	100	Flame Temp(K)	1090
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Calculation Parameters

Flame Emissivity:	95	Relative Humidity(%):	25
Heat of Combustion(kJ/kg)	18600	Ambient Temp(K):	308
Moisture Factor:	5		

Program Outputs

Category of Attack:	LOW	Peak Elevation of Receiver(m):	5.1
Level of Construction:	BAL 12.5	Fire Intensity(kW/m):	8541
Radiant Heat(kW/m2):	10	Flame Angle (degrees):	79
Flame Length(m):	10.39	Maximum View Factor:	0.163
Rate Of Spread (km/h):	1.38	Inner Protection Area(m):	30
Transmissivity:	0.807	Outer Protection Area(m):	0