

# BUSHFIRE EMERGENCY MANAGEMENT AND EVACUATION PLAN

Phase 2 & 3 Lindfield Learning Village 100 Eton Road, Lindfield

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for all emergencies

Prepared for

**NSW Department of Education** 



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# **Contents**

1.	Plan Authorisation & Review	5
2.	School Details	6
3.	Overview	8
4.	Introduction	9
<b>5</b> .	Bushfire Risk	10
6.	Schools as Vulnerable Uses	11
6.1.	The need for early action	11
6.2.	Off-site evacuation	11
6.3.	Emergency Management System	12
6.4.	Redundancy	12
6.5.	Traffic Issues	13
7.	Basis of the Evacuation Plan	14
8.	Types of Evacuation	14
9.	Additional Uses	15
10.	Authority to Evacuate	16
11.	Emergency Roles & Responsibilities	18
12.	Emergency Contacts	19
13.	Preparation for bushfires	20
13.1	. Before the commencement of the Bush Fire Danger Period	20
13.2	During the bushfire danger period	21
13.3	Be aware of hazard reduction burning	21
14.	Fire Danger Ratings	23
15.	Total Fire Ban and Extreme Fire Weather	24
16.	Catastrophic Fire Danger Rating	25
17.	Temporarily Cease Operations	26
18.	Shelter in Place Options - Refuge	27
18.1	. Time to Evacuate	29
18.2	. Refuge Occupancy	29
18.3	. Gymnasium	30
18.4	. Refuge Considerations	31
19.	Evacuation Process	32
20.	Evacuation Procedures	33



20.1.	Evacuation Preparedness	33
20.2.	Procedures for Evacuations	33
21.	Triggers for Evacuation	35
22.	Emergency Alerts	36
23.	Bushfire Alert Levels	36
24.	Actions During Dangerous Fire Danger Weather	37
<b>25</b> .	Actions & General Principles for Evacuation	38
26.	Sheltering Procedures	45
<b>27</b> .	Horizontal Evacuation	46
28.	Off Site Evacuation - Walking	50
29.	Off Site Evacuation – transport by bus	52
30.	Post-bushfire Event Actions	54
30.1.	Debriefing	54
Appe	ndix 1 - Areas of Potential Spot Fires	56
Appe	ndix 2 - Roles and Responsibilities	57
Appe	ndix 3 - Glossary	59
Appe	ndix 4 Charles Bean Oval (Synthetic Turf)	61
Appe	ndix 5 Summary Bushfire Evacuation Plan	63





# 1. Plan Authorisation & Review

This document has been reviewed by the Department of Education and complies with the Departments requirements for bushfire evacuation.

Responsibility for enacting, testing and implementing the document rests with the Department of Education. This document does not include evacuation arrangements for specific hazards (e.g. floods, storm, active shooter, internal structure fire etc) which are contained within individual plans and Department of Education specific policies.

This document is to be reviewed through consultation with stakeholders affected by this document:

- no less than every three years;
- following an emergency resulting in significant evacuations

The Principal is responsible for authorisation of the plan and review as per Table 1. The Plan is to be reviewed and signed by 1 August in each year, prior to the start of the Bushfire Danger Period on 1 October.

Table 1 Plan authorisation and review

	Name	Signature	Date
2019 Authorised by	Ms Stephanie McConnell Principal Lindfield Learning Village		
2020 Authorised by			
2021 Authorised by			

The Principal is responsible for distributing a current 'Evacuation Plan' in August each year to the Local Emergency Management Committee (**LEMC** through Council), the Local Emergency Management Officer (**LEMO** through Council) and other appropriate authorities. (e.g. NSW Rural Fire Services, NSW Police, Fire and Rescue NSW).



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# 2. School Details

This plan is for Lindfield Learning Village located at 100 Eton Road, Lindfield and legally known as Lot 2 DP1151638.

Lindfield Learning Village includes learning spaces, offices, open space, gymnasium, auditorium & two lecture theatres and associated facilities.

The Bushfire Emergency Management and Evacuation Plan has been designed to assist school and Department of Education management to protect life in the event of a bushfire.

This Plan outlines procedures for both sheltering (remaining on-site) and evacuation to enhance the protection of occupants from the threat of a bushfire attack.

Contact Person	Stephanie McConnell Mobile: 0414712089		
Confact Person	Principal	Stephanie.mcconnell@nsw.edu.au	
Primary Place of Assembly	Inside entry to main building – outside the Auditorium		
Assembly point for off-site	Inside entry to main building – outside the Auditorium,		
evacuation	known as Level 5		
On site Refuge	See section 18		
Off-site evacuation to	Lindfield Public School		
Oil-sile evacuation to	218 Pacific Hwy, Lindfield NSW 2070		

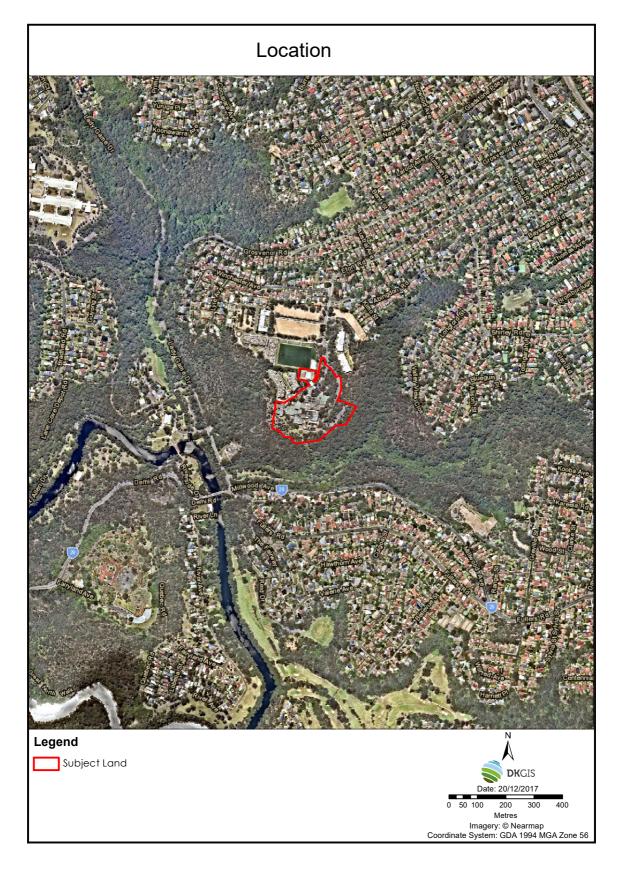
# People on site

Stage	Students	Staff			
		School Staff	OOSH Staff	Aurora Staff	Total
Stage 1	350	45	3	0	48
Stage 2	1,050	135	8	21	164
Stage 3	2,000	275	16	21	312





Figure 1 Lindfield Learning Village Location







# 3. Overview

This Emergency Management and Bushfire Evacuation Plan (Evacuation Plan) has been prepared by Blackash Bushfire Consulting on behalf of the NSW Department of Education and School Infrastructure NSW (the Applicant). It accompanies a Response to Submissions Report in support of State Significant Development Application (SSD 16\_8114) for Lindfield Learning Village (the site).

On 24 October 2018 the Minister for Planning granted partial development consent to SSD 8114 for Phase 1 construction and operation of a new school for 350 students. The remainder of SSD 8114 (as originally proposed) has not yet been granted consent and has been subject to further approvals, assessment and engagement with the relevant agencies (DPE, RFS, OEH, RMS, TfNSW) and Council. The Response to Submissions and supporting documents seek approval for the remainder of SSD 8114, being:

#### Phase 2(a) of construction:

- Minor internal works within the approved Phase 1 area to accommodate an additional 35 students.
- The additional 35 students (a total of 385 enrolled students) is needed for Day 1 Term 1 2020, prior to Phase 2(b) being completed.
- Phase 2(a) will occur immediately on approval to allow the additional students for Day 1 Term
   1 2020.

# Phase 2(b) of construction:

- Works to accommodate 1,050 students (including the approved 350).
- Repurposing of the Phase 1 area to staff and administration uses.
- A loop road around the southern portion of the site for emergency vehicles, buses and drop off and pick up vehicles.

# Phase 3 of construction:

Works to accommodate an additional 950 students in the western wing of the building.

Vegetation management will be required to achieve the necessary APZ. The SSD does not seek approval for vegetation management outside the site boundary.





# 4. Introduction

The Lindfield Learning Village (the School) incorporates Lot 2 and 4 in DP 1151638 known as 100 Eton Road Lindfield (the site). 'Lindfield Learning Village' is proposed to eventually accommodate approximately 2,000 students from kindergarten to Year 12 and approximately 350 staff.

The aim of this document is to inform and enhance emergency management arrangements during forecast bad fire weather and provide for evacuations during actual and or forecast bushfires.

This Bushfire Management and Emergency Evacuation Plan extends to the proposed Phase 2 and 3 parts of the school and provides for updated procedures relating to the OSHC and Auditorium and Gymnasium for internal and external operations. Upon completion of the loop road around the facilities, the Evacuation Plan will be updated to reflect arrangements for busses collecting staff and students from the site.

The bushfire evacuation procedures have been completed in accordance with NSW Rural Fire Service Guide to Developing A Bushfire Emergency Management Plan and with consideration of Australian Standard AS 3745-2010 – Planning for Emergencies in facilities and NSW Government Evacuation Management Guidelines (March 2014).

Specific building evacuations for internal structure fires are not within the scope of this Plan. A separate Fire Engineering Report sets out the evacuation procedure from an internal fire which complies with the NCC & BCA requirements.

Building evacuation routes or maps have been developed and provide an accurate layout of the building and multiple exit routes from any location in the event of a structure fire within any of the school buildings. These maps will be located in prominent positions to be agreed with DesignInc and the signage consultant in well-travelled areas (e.g. hallways, stairwells and entries).

A detailed Fire Engineering report (separate document) has been completed by Stephen Grubits Fire Safety Engineers that has documented the internal evacuation assessment of the buildings and has informed the evacuation strategies contained within this Bushfire Emergency Management and Evacuation Plan. During a bushfire, the internal evacuation and movement is expected to occur within the buildings to the refuge area and if safe out of the school buildings and school site.

Occupants are not expected to egress externally toward any bushfire hazard areas and external egress is focussed at the main entrance to the school to limit radiant heat exposure.

Based on recommendations from NSW Rural Fire Service, the plan addresses provisions relating to single access into the site, that firefighting assistance may be limited in the event of a bushfire, and that evacuation may not be possible as escape routes may be blocked.





#### 5. Bushfire Risk

Bushfire is a normal part of Australia's natural environment, particularly in eucalypt forests. However, the frequency and intensity of bushfires varies throughout the landscape and seasons. Bushfires are a common occurrence during drier parts of the year.

Climate change is expected to bring longer bushfire seasons to parts of Australia, an increasing number of extreme fire weather days, and increasing fire intensity.

Bushfires of low or moderate intensity often pose little threat to life, property and community assets, but the potential for changes in wind direction can be a significant hazard. However, bushfires that burn in heavy fuels, steep terrain or on hot, dry and windy days often spread rapidly, crown in forests, produce powerful convection columns and create extensive spot fires ahead of the fire front, often making their control impossible until weather conditions moderate.

As the fire danger reaches "extreme", bushfires are often described as firestorms and become impossible to control. When the fire danger reaches 'Catastrophic", the risk of serious injury or death to people in the path of a bushfire increases significantly, and many properties and other community infrastructure can become difficult or impossible to defend.

The intensity of a bushfire, which determines to a large extent how much damage it will do, is a product of the fuels burning (quantity, arrangement, size, moisture content), the weather at the time (temperature, wind speed and direction, relative humidity, atmospheric stability) and the topography of the land where the fire is burning (slope and aspect).

Vulnerability to bushfire risk is a combination of the physical location of the persons under threat and the understanding and ability that person has that enables them to deal with the risk.

It is the position of Australian fire agencies that the safest action to protect life is for people to be away from the bushfire or threat of bushfire as early as possible.





# 6. Schools as Vulnerable Uses

In NSW, schools are identified as Special Fire Protection Purpose (SFPP) development under section 100B of the *Rural Fires Act*, 1997. Occupants of SFPP developments require special care and are considered vulnerable uses.

The nature of SFPPs means that occupants may be more vulnerable to bushfire attack for one or more of the following reasons (Planning for Bushfire Protection 2006 p. 28):

- They may be less educated in relation to bush fire impacts;
- They may have reduced capacity to evaluate risk and to respond adequately to the bushfire threat;
- They may present organisational difficulties for evacuation and or management;
- They may be more vulnerable through stress and anxiety arising from bush fire threat and smoke;
- There may be significant communication barriers;
- Supervision during a bush fire may be difficult; and
- Logistical arrangements for the numbers of residents may be complicated in terms of alternate accommodation, transport, healthcare and food supplies.

Students within school facilities and those who care for them, are likely to need more time, resources, support and assistance to take the appropriate actions and or to evacuate safely.

School children are particularly vulnerable to the effects of bushfire and are more likely to be adversely affected by smoke or heat and health related issues (such as stress, respiratory issues etc) while being evacuated.

# 6.1. The need for early action

The Evacuation Plan has been completed such that it does not rely on the immediate availability of emergency service personnel to undertake the evacuation. As such, the decision to evacuate must be undertaken confidently and without hesitation by the Principal or Department of Education person with delegated authority.

The school will require early advice and decisions to evacuate or close the school.

# 6.2. Off-site evacuation

The off-site evacuation point has been determined as Lindfield Public School. Arrangements have been put in place by the Department of Education to provide for LLV at Lindfield Public if required.





# 6.3. Emergency Management System

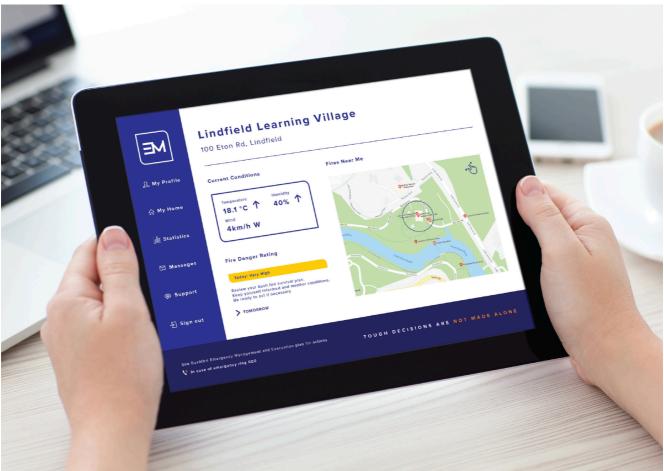
A Bushfire Emergency Management System (Figure 2) has been developed to be utilised by the school to provide a single point of information to inform decision making.

The Evacuation Plan has been digitised that draws on the strategies from the Evacuation Plan in a simple user interface. The Emergency Management System (EM System) provides a framework for the Principal to view risks and to inform decision making actions.

The EM System (stage 1) will be deployed prior to the commencement of 1 October 2019.



Figure 2 Emergency Management System



# 6.4. Redundancy

A redundancy option has been included should early evacuation be impeded by bushfire, embers or smoke impacting the school that makes evacuation unsafe. The refuge has been carefully chosen and provides temporary safe areas within the school building.



Avoiding risk (i.e. closing the school) should always be the first option. Once occupied, in the event of an emergency, off site evacuation should be the first option. The short-term use of the refuge should only be considered if it is unsafe to evacuate the building.

The fundamental priority of people within the school site must be to leave the area to the primary evacuation point (Lindfield Public School) well before there is a risk of bushfire, either in the area, or along a route to an area not prone to bushfire attack.

#### 6.5. Traffic Issues

Schools are particularly prone to traffic-generated congestion on roads at start and finish times. This is heightened when parents believe that their children are likely to be exposed to bushfire and in seeking to reach the school, cause road congestion and hamper the firefighting effort (PBP 2006 p. 29) and this plan has been developed to reduce risk to as low as reasonably practical.

The Evacuation Plan does not rely on vehicular evacuation from the site.





# 7. Basis of the Evacuation Plan

The plan is based on the premise that:

- 1. On Total Fire Ban days and above, the Principal will determine the operation of the school in line with local decision-making provisions;
- 2. On days of Total Fire Ban the NSW RFS will liaise with the School Principal should the need arise to evacuate or limit occupation.
- 3. Leaving a high-risk bushfire location is the safest action and evacuating before a bushfire threatens is always safer than remaining until a bushfire starts. Leaving early becomes increasingly appropriate with higher Fire Danger Ratings.
- 4. DoE policy require schools on the Bush Fire Register to temporarily cease operations on days when a Catastrophic Fire Danger Rating (FDR) is issued in their NSW Fire Area.

# 8. Types of Evacuation

Evacuation is a risk management strategy that may be used to mitigate the effects of an emergency on a community. It involves the movement of people to a safer location and their return. The types of evacuation and alternatives to evacuation include:

**Immediate Evacuation** This results from a hazard impact that forces immediate action, thereby allowing little or no warning and limited preparation time.

**Pre-Warned/Managed Evacuation** This follows the receipt of sufficient and reliable information which prompts a decision to evacuate ahead of a potential hazard impact.

**Self-Managed Evacuation/Relocation** This is a spontaneous type of evacuation involving the self-initiated movement of people as individuals, families or community groups. This may include circumstances where residents are advised to leave early ahead of dangerous conditions

**Shelter in Place** Shelter in place should be considered as an alternative when the risk associated with evacuation is seen as being greater than that of sheltering in place or as an outcome of an immediate threat to individuals where evacuation cannot be initiated in a safe manner.



<sup>&</sup>lt;sup>1</sup> NSW Evacuation Management Guidelines (March 2014)



# 9. Additional Uses

# Out of School Hours Care (OSHC), Vacation Care and Auditorium and Gymnasium for internal and external operators

This Bushfire Management and Emergency Evacuation Plan extends to the proposed Phase 2 and 3 school and provides for additional associated uses including OSHC, Vacation Care and Auditorium and Gymnasium for internal and external operators.

The person with authority relating to the additional uses within the school is ultimately responsible for enacting the Evacuation Plan.

The person with authority will perform the role as designated throughout this document as the "Principle" or "fire warden." The "school" definition includes all associated uses including OOSH, Vacation Care and Auditorium and Gymnasium for internal and external users.

Where the Principal has made a decision to enact aspects of the Evacuation Plan, it shall apply to all uses, both internal and external for the day that the action is implemented. If the school is temporarily closed due to bushfire considerations, all ancillary operations will be cancelled.

If the school is temporarily closed and evacuated to Lindfield Public School, the OSHC function will operate out of Lindfield Public School.

If the gymnasium is booked for external use out of hours, the Principal will make the event organiser aware of the Evacuation Plan.

After hours use of the gymnasium will not have access to the main body of the school, including the refuge. A separate Evacuation Plan will be provided for after-hours use of the gymnasium.





# 10. Authority to Evacuate

NSW Department of Education can initiate closure and or an evacuation of the school or associated use.

When the Principal or Director, Educational Leadership have been advised or are aware of an emerging bushfire emergency situation and determine that it is in the best interests of the safety of staff and students (or other users) to temporarily cease operations at the school. In some cases, this will relate to the operation of the school for the following day.

Authority to evacuate can be directed by:

- Instructions from the NSW Police or Fire Authority (NSW Rural Fire Service or Fire and Rescue NSW)
- Instruction from NSW Department of Education authorised officer;
- Instruction from Director, Educational Leadership
- Local decision by the Principal

NSW Agencies with legislated authority to order an evacuation are:

- a) Combat Agencies with appropriate legislation; and
- b) the NSW Police Force.

A Combat Agency generally issues an order to evacuate; consideration should be given to how affected people may respond to such an order. Police Officers generally enforce such orders.

**NSW Police** Force may issue an evacuation order under Section 60L State Emergency & Rescue Management Act 1989. A senior police officer may, if satisfied that there are reasonable grounds for doing so for the purpose of protecting persons from injury or death threatened by an actual or imminent emergency, direct, or authorise another police officer to direct, a person to do any or all of the following once a danger areas is declared:

- (a) to leave any particular premises and to move outside the danger area,
- (b) to take any children or adults present in any particular premises who are in the person's care and to move them outside the danger area,
- (c) not to enter the danger area. A 'danger area' means the areas specified by a senior police officer as the area affected by an emergency.

**Fire & Rescue NSW** under Section 19 Fire Brigades Act 1989 through the officer in charge at a fire or hazardous material incident may cause to be removed any person, vehicle, vessel or thing the





presence of whom or which at or near a fire or hazardous material incident might, in the officer's opinion, interfere with the work of any fire brigade or the exercise of any of the officer's functions.

**NSW Rural Fire Service** Section 22A of the Rural Fires Act 1997 provides that an officer of a rural fire brigade or group of rural fire brigades may cause to be removed any person, vehicle, vessel or thing the presence of whom or which at or near a fire, incident or other emergency might, in the officer's opinion, interfere with the work of any rural fire brigade or the exercise of any of the officer's function





# 11. Emergency Roles & Responsibilities

The NSW Police, in consultation with the Emergency Control Organisation and other emergency control agencies, has overall responsibility for evacuations within the school grounds and can initiate an evacuation.

When so directed, the Principal is to act under the authority of NSW Police.

Where emergency services are not present and direction has not been provided, the Principal should initiate evacuation procedures. Emergency roles and responsibilities are identified in Table 2.

Table 2 Emergency Roles & Responsibilities

Position	Name of Person	Responsibility	Mobile Phone Number
Principal	Ms Stephanie McConnell	Site Controller responsible for co-ordination of response procedures and chief communicator with Emergency Services and DOE. See Appendix 2	
Principal/ Chief Fire Warden	Ms Stephanie McConnell	See Appendix 2	
Deputy Chief Fire Warden	Mr Mark Burgess	See Appendix 2	
First Aid Officer	As identified by NSW Education		
Communication Officer	As identified by NSW Education		



# 12. Emergency Contacts

Organisation	Office	Phone Number
Emergency	General emergency number	000
	Fire/ Police/ Ambulance	000
NSW Police	0.5   1   0   1   1/0// 0070	(02) 9418 5399
	2 Park Ave, Gordon NSW 2072	000
NSW Rural Fire Service	1049 Pacific Hwy, Cowan NSW 2081	(02) 9883 2000
Hornsby Fire Control Centre	1047 I delile Hwy, Cowall NSW 2001	000
NSW Rural Fire Service	Bushfire Information Line	1800 679 737
Fire and Rescue NSW	Pacific Hwy, Gordon NSW 2072	(02) 9449 9834
Gordon Station	r delite rivry, cordorrivovi 2072	000
Ku-ring-gai Council	Local Emergency Management	
	Officer ( <b>LEMO</b> )	02 9424 0000
	818 Pacific Highway, Gordon NSW	
Health and Safety Directorate	Incident Report and Support Hotline	1800 811 523 (Select Option 1)
Director, Educational Leadership	Sue Lowe	
Lindfield Public School (off site evacuation)	218 Pacific Hwy, Lindfield NSW	(02) 9416 1903



# 13. Preparation for bushfires

The official Bushfire Danger Period generally starts on 1 October and extends through to the following April. However, the fires season has been starting earlier and finishing latter. During this period, bushfires can occur at any time.

# 13.1. Before the commencement of the Bush Fire Danger Period

Before the commencement of the Bush Fire Danger Period, the Principal will:

- Review and update the school's Bushfire Emergency Management Plan and Evacuation Plan.
- Liaise with emergency service agencies about emergency procedures
- Ensure Landscape Management Program and Vegetation Management Plan have been completed prior to 1 October each year.
- Certification should be received prior to October that the work has been completed in accordance with RFS Standards for Asset Protection Zones to Inner Protection Zone standard.
- If Asset Protection Zones have not been maintained by October each year, liaise with School Infrastructure NSW regarding Asset Protection Zones maintenance
- Communicate the school's bushfire preparedness arrangements with school staff including their responsibilities at a staff meeting in September each year.
- Communicate the school's bushfire preparedness arrangements with the school and student community e.g. school newsletter or intranet.
- Review school's set-up for local notification system i.e. SMS messaging process and/or school website updates to communicate during emergency situations to parents (includes communication regarding short-term immediate ceasing operations or ceasing operations next day).
- Review staff completion of the e-safety Bush Fire module by October of each year.
- Test and verify fire protection systems (fire hydrants, evacuation alarms, fire extinguishers)
- Check emergency equipment and first aid resources are available and operational (battery radio, mobile telephone)
- Check operation of the bushfire shutters
- Consult with the NSW RFS regarding bushfire arrangements evacuation and a shelter in place options
- Provide updated contact details including a mobile number for emergency contact after school hours to local Emergency Services and Police.





- Conduct practice fire evacuation drills
- Contact off-site assembly area (where applicable) i.e. school, community facilities for notification of potential use during a bushfire emergency
- Contact transport suppliers to confirm potential use during a bushfire emergency
- Make the Evacuation Plan available to all associated uses within the school.

# 13.2. During the bushfire danger period

During the bushfire danger period including during periods of increased fire danger, the Principal will monitor information sources for bushfire conditions by:

- Display the Emergency Management System information in prominent places throughout the school
- Listening to the local radio station, TV and/or monitoring the NSW Rural Fire Service website at www.rfs.nsw.gov.au for information on bushfire activity or fire danger ratings.
- Knowing the Fire Danger Ratings for the area
- Staying alert for warnings such as Bush Fire Alert Levels issued by the RFS
- Watching for signs of fire, especially smoke or the smell of smoke
- Calling the RFS Bush fire Information Line on 1800 NSW RFS (1800 679 737)
- Contacting the Health and Safety Directorate's Incident Report and Support Hotline on 1800 811523 (Option 1) for information and support
- Downloading the free iPhone application from NSW Rural Fire Service Fires Near Me
   NSW and keeping aware of fire in the vicinity of the school.

#### **Review Bushfire Dashboard**

Review the Emergency Management Systems Bushfire Dashboard (Dashboard) for predicted fire weather at https://em-systems.firebaseapp.com/dashboard and take appropriate steps in the Evacuation Plan.

The Dashboard displays information collated from a number of official sources including NSW Rural Fire Service and the Bureau of Metrology. Training will be provided to DoE staff in how to use the Dashboard.

# 13.3. Be aware of hazard reduction burning

Land managers will often undertake hazard reduction burns in the cooler months of the year. Hazard reduction burns are planned fires in specific areas.

Agencies undertaking planned hazard reduction burns near the school will notify the school. However, some hazard reduction burns will be undertaken further that may cause smoke drift





onto the school. Until it is confirmed that a hazard reduction burn is being undertaken, all fires should be considered as uncontrolled.





# 14. Fire Danger Ratings

The Bushfire Danger Ratings give an indication of the possible consequences of a fire, if one was to start.

Bushfire Danger Ratings are based on predicted weather conditions such as temperature, humidity, wind and the dryness of the landscape. Bushfires are more likely to spread and cause damage on days when the weather is very hot, dry and windy. The higher the fire danger rating, the more dangerous the conditions. Figure 3 describes each of the Fire Danger Ratings.

Figure 3 Fire Danger Ratings and what they mean (Source AFAC www.fireandbiodiversity.org.au/ literature.../AFAC Fire Danger Ratings explained)

Fire Danger	Description
Rating	
CATASTROPHIC FDI 100+ (Code Red)	Fires will be uncontrollable, unpredictable and fast moving – flames will be higher than roof tops. People will die and be injured. Thousands of homes and businesses will be destroyed.  Well prepared, well constructed and defended homes may not be safe during the fire. Construction standards do not go beyond a Fire Danger Index of 100.  Thousands of embers will be blown around. Spot fires will move quickly and come from many directions, up to 20 km ahead of the fire.  Leaving is the best option.
EXTREME FDI 75-99	<ul> <li>Fires will be uncontrollable, unpredictable and fast moving – flames will be higher than roof tops.</li> <li>People will die and be injured. Hundreds of homes and businesses will be destroyed.</li> <li>Only well prepared, well constructed and actively defended houses are likely to offer safety during a fire.</li> <li>Thousands of embers will be blown around.</li> <li>Spot fires will move quickly and come from many directions, up to 6 km ahead of the fire.</li> </ul> Leaving is the safest option for your survival.
SEVERE FDI 50-74	Fires will be uncontrollable and move quickly– flames may be higher than roof tops. There is a chance people may die and be injured. Some homes and businesses will be destroyed. Well prepared and actively defended houses can offer safety during a fire. Expect embers to be blown around. Spot fires may occur up to 4 km ahead of the fire  Leaving is the safest option for your survival. Your home will only offer safety if it and you are well prepared and you can actively defend it during a fire.
VERY HIGH FDI 25-49	Fires can be difficult to control – flames may burn into the tree tops. There is a low chance people may die or be injured. Some homes and businesses may be damaged or destroyed. Well prepared and actively defended houses can offer safety during a fire. Embers may be blown ahead of the fire. Spot fires may occur up to 2 km ahead of the fire.  Leaving is the safest option for your survival. Your home will only offer safety it is and you are well prepared and you can actively defend it during a fire.
HIGH FDI 12-24	Fires can be controlled Loss of life is highly unlikely and damage to property will be limited Well prepared and actively defended houses can offer safety during a fire. Embers may be blown ahead of the fire. Spot fires can occur close to the main fire.  Know where to get more information and monitor the situation for any changes
LOW-MODERATE FDI 0-11	Fires can be easily controlled Little to no risk to life and property  Know where to get more information and monitor the situation for any changes





The Rural Fire Service provides a map of the Fire Danger Ratings at: <a href="https://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans">https://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans</a>. The school is within the Greater Sydney Region.

Fire Danger Ratings give an indication of the consequences of a fire, if one was to start. The higher the fire danger, the more dangerous the conditions. The Fire Danger Ratings should act as a trigger to take action as per Section 25.

# 15. Total Fire Ban and Extreme Fire Weather

The NSW RFS has reviewed the *Bushfire Emergency Management and Evacuation Plan* (Version 1.1, dated 11 December 2018, and is comfortable with the school operating on days of Total Fire Ban (TOBAN).

- A TOBAN is a day of elevated bushfire danger potential.
- A TOBAN is declared by the RFS on days when fires are likely to spread rapidly and will be difficult to control.
- Fire Danger Ratings are updated twice daily by the RFS at 6.00am and 4pm.

Total Fire Bans are normally declared by 5pm on the day before a ban but can be declared or revoked at any time. Always check the RFS web page for latest information at:

http://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans

Given the location of the school and the single accessway into and out of the school, the school may consider closing when a Total Fire Ban has been declared by the Commissioner of the NSW Rural Fire Service.

The Principal may choose to temporarily cease operations (see section 17) due to an emergency or potential emergency situation or based on advice issued by the Health and Safety Directorate.





# 16. Catastrophic Fire Danger Rating

The school is on the Department's Bushfire Register and is required to close on days when a **Catastrophic** Fire Danger Rating is issued in this NSW Fire Area. Schools on the Bushfire Register will be alerted by the Health and Safety Directorate to preliminary weather forecasts where a Catastrophic Fire Danger Rating is predicted (but not confirmed) up to four days before the event. Preliminary weather forecasts will provide the school with the opportunity to undertake initial preparation should a Catastrophic Fire Danger Rating be issued, requiring them to temporarily cease operations on relevant days.

The State Emergency Operations Centre (SEOC) will notify the department at approximately 4.30pm each day when there are Catastrophic Fire Danger Ratings predicted for the following day.

The Health and Safety Directorate will issue a notification to the Principal via email and telephone advising them that they must relocate or temporarily cease operations for the day the Catastrophic Fire Danger Rating has been declared. Upon this advice the Principal will implement an emergency response as per Section 20 of this plan.





# 17. Temporarily Cease Operations

Where a school determines that a decision to temporarily cease operations is appropriate for an emergency situation, including natural disasters such as bushfire or flood, it must make contact with the Health and Safety Directorate to provide details. This will allow the Department to fulfil its obligations for advising the State Emergency Operations Centre (SEOC) of any temporary closures during an emergency event.

The NSW Department of Education *Procedures to temporarily cease operations due to an emergency* or potential emergency situation requires among other matters that:

In the event of an emergency, schools should enact their Emergency Management Plan, which is inclusive of an evacuation plan, and contact emergency services immediately. In most cases, schools will be advised by emergency services of the appropriate action to take.

However, there may be occasions when the Principal or Director, Educational Leadership has been advised of an emerging situation and determine that it is in the best interests of the safety of staff and students to temporarily cease operations at the school. In some cases, this will relate to the operation of the school for the following day.

These major disruptions to the school will mean that the Principal, as the leader and manager of the school site, or Director, Educational Leadership will make the decision that the school is either:

- Operational (this means that there are staff and students on site, albeit likely to be minimal); or
- Non-operational (this means that there are no staff or students on site).





# 18. Shelter in Place Options - Refuge

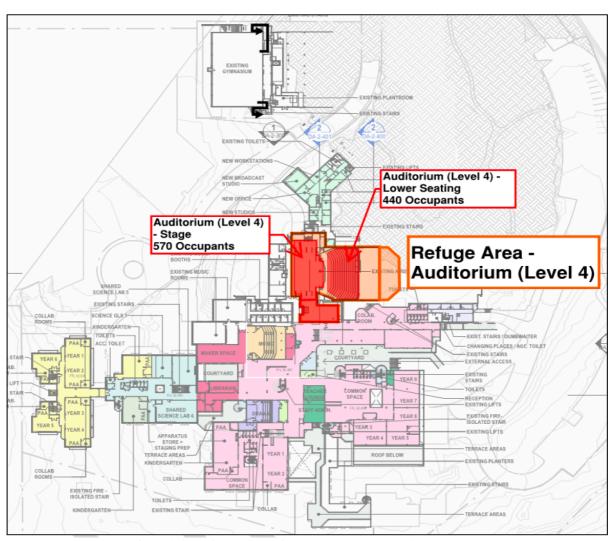
The Department of Education have provided short term options within the school that can be used as a last resort shelter in place option, known as a bushfire refuge.

In the event of a bushfire emergency, where external evacuation to a safe place outside the school is not possible, all occupants within the buildings are expected to evacuate to the designated refuge areas, which is the:

- The BAL FZ Auditorium (that interconnects from level 4 to 6) and
- level 5 BAL FZ areas(cafeteria and office area).
- Occupants of the BAL FZ gym is expected to evacuate into the main building via the external bridge when necessary.

The refuge areas and occupancy numbers are shown in Figures 4, 5 and 6.

Figure 4 Refuge Area on Level 4 – Auditorium (source Grubits)





Refuge Area BAL-FZ (Office Area)
280 Occupants

Refuge Area Auditorium (Level 5)

Au

Figure 5 Refuge Area on Level 5 - Auditorium Area & BAL FZ Refuge Area (source Grubits),





EXISTING TOILE NEW STAFF STUDY EXISTING STAIRS Refuge Area -Auditorium (Level 6) EXISTING TORIET 200 Occupants EXIST. ROOF EXIST, ROOF EXSTING FIRE ISOLATED STAIRS

Figure 6 Refuge Area on Level 6 - Auditorium (source Grubits)

#### 18.1. Time to Evacuate

The fire engineering simulation demonstrated that an internal evacuation would take approximately 650 seconds (approximately 11 minutes) to evacuation 2520 occupants throughout the 7 storeys building to the refuge areas (Grubits and Associates Bushfire Evacuation Analysis Report).

# 18.2. Refuge Occupancy

An outcome of the fire engineering assessment demonstrated that 2520 occupants are expected to move into the BAL FZ refuge area within the auditorium and surrounding compartment.





The maximum permissible number of occupants in a refuge area has been estimated by Grubits and Associates and is shown in Table 3.

Table 3 Maximum permissible capacity of occupants

			Maximum
	Location	Available space	permissible in the
			model
	Level 4	Total floor area	
	BAL FZ Auditorium Stage	350m2	570
	Level 4	As per number of	
	BAL FZ Auditorium Lower	seats	440
	Seating		
Maximum	Level 5	As per number of	
permissible capacity	BAL FZ Auditorium Upper	seats	230
of occupants	seating		
	Level 6	As per number of	
	BAL FZ Auditorium	seats	200
	Level 5	Total floor area	
	BAL FZ Office Area	450m2	280
	Level 5	Total floor area	
	BAL FZ Cafeteria Area	1100m2	800
		TOTAL	2,520

# 18.3. Gymnasium

Occupants in the gymnasium require confirmation from a fire warden that it is safe to cross the external bridge when fire in the vicinity to the gymnasium may endanger occupants that are required to evacuate externally via the external bridge. If not safe, it is considered safer to remain in the BAL-FZ certified Gymnasium until further notice.





# 18.4. Refuge Considerations

In developing the Evacuation Plan, Blackash acknowledges that the BAL FZ **assembly area is not a stand-alone solution to mitigating bushfire risk to life safety**. Rather, it should be considered to be a life safety measure that is a <u>last resort</u> which may provide temporary shelter from the immediate effects of a bushfire.

The assembly area is only one consideration in developing a comprehensive set of measures to counteract the effects of a bushfire event that include effective land-use planning, fuel management, community strategic bushfire planning and emergency services strategies.

The objective of the refuge area is to provide temporary shelter to members of the school community who have not been able to evacuate the school/ local area prior to the impact or passage of a bushfire and consequently find themselves not able to safely evacuate due to bushfire attack.

The fundamental priority of people within the school site must be to leave the area well before there is a risk of bushfire, either in the area, or along a route to an area not prone to bushfire attack.

The refuge is within a fire isolated compartment<sup>2</sup> with a Fire Resistance Level (RFL) of 120/120.



<sup>&</sup>lt;sup>2</sup> as per the Fire Engineering Report by Grubits & Assoc



# 19. Evacuation Process

The evacuation process has been adopted from NSW Evacuation Management Guidelines (March 2014).

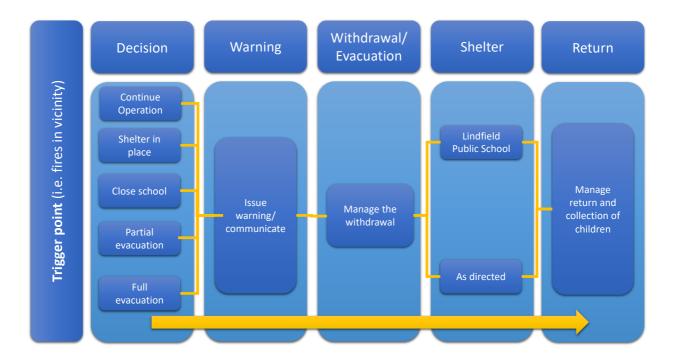
The decision to advise or direct evacuation should be considered whenever there is a potential need to move people to a safer place. This process should be constantly reviewed in changing circumstances.

The decision to evacuate people who are at immediate risk during an emergency is not always straightforward, as it is often based on incomplete or unverified information in a rapidly developing and dynamic situation. Timing of the decision is a significant factor.

The Principal must consider whether the lead warning times they have available to them permit a safe evacuation of a location threatened by bushfire. If sufficient time is available, then properly planned and executed evacuation is the most effective strategy.

Figure 8 shows the evacuation process.

**Figure 7 Evacuation Process** 





# 20. Evacuation Procedures

# 20.1. Evacuation Preparedness

The Principal is responsible for implementing the following procedures to facilitate the objectives of this Plan:

- Ensure all staff and visitors to the school are alerted of the Fire Danger Rating during the bushfire danger period;
- Ensure staff are trained and familiar with the Evacuation Plan necessary for their efficient and effective operation in an emergency;
- Ensure staff and visitors are provided/shown the location of the written evacuation procedures:
- Ensure evacuation procedures are displayed in strategic locations

#### 20.2. Procedures for Evacuations

Evacuation involves relocating people to where they are safer and by a route that is relatively safe.

The action taken is largely determined by the nature of the fire threat, the people involved and their location. Welfare of evacuees following evacuation is also an important consideration. Such procedures require careful and timely consideration of all factors.

Every bushfire attack scenario will be different. The response to each must therefore be specific and include consideration of the following:

- Location of fire;
- Fire behaviour including;
- Rate and direction of spread;
- Ember affecting the area;
- Smoke affecting the area;
- Numbers of potential evacuees;
- Availability of access;
- Transport





The Principal/ chief warden (or delegate), on becoming aware of a bushfire emergency, will take the following steps:

- 1. Ascertain the nature of the emergency or potential emergency situation and determine appropriate response using the Bushfire Emergency Management and Evacuation Plan;
- 2. Contact Emergency Services for advice and support;
- 3. Inform the Health and Safety Directorate's Incident Report and Support Hotline 1800 811 523 (Select Option 1);
- 4. Ensure each class is checked and confirm all children and staff are accounted for;
- 5. Utilise PA systems or the emergency system to alert all children, staff and visitors that a bushfire emergency has been declared;
- 6. Activate the bushfire shutters;
- 7. Brief and co-operate with the Emergency Services personnel if/as required;
- 8. Check triggers for evacuation off site (Section 21);
- 9. If safe, evacuate off site to Lindfield Public School;
- 10. If unsafe to evacuate off site, seek temporary refuge.

Triggers for evacuation are at section 21.





# **Triggers for Evacuation**

The following is provided as a guide for evacuation. Evacuate only if safe to do so. The Emergency Assembly Area provides shelter in place options. If fires are within the region, monitor resources for situational awareness as per section 10.

Observation/	Bushfire Danger Rating						
situation	Low/ Moderate	High	Very High		Severe	Extreme	Catastrophic
Out of control fire north of Lane Cove Road of school	- Evacuation triggered if safe to do so.  Or  - Move to assembly areas	- Move to Emergency Assembly Area - Evacuate if safe to do so - Seek instruction from emergency services	Move to Emergency     Assembly Area     Evacuate if safe to     do so     Seek instruction     from emergency     services	red	- Close school - Move to Emergency Assembly Area - Seek instruction from emergency services	- Close school - Move to assembly Area - Seek instruction from emergency services - To be escorted from site by emergency services	<ul> <li>Close school<sup>3</sup></li> <li>Move to assembly areas<sup>4</sup></li> <li>Seek instruction from emergency services</li> <li>To be escorted from site by emergency services</li> </ul>
Out of control fire south of Lane Cove Road from school	- Normal operation - Seek guidance from emergency services	- Move to Emergency Assembly Area - Initiate evacuation of the site	Move to Emergency     Assembly Area     Trigger evacuation     Seek instruction     from emergency     services	TOTAL Fire Ban Declared	<ul> <li>Close school</li> <li>Move to assembly areas</li> <li>Seek instruction from emergency services</li> </ul>	- Close school - Move to assembly areas - Seek instruction from emergency services	<ul> <li>Close school</li> <li>Move to assembly areas<sup>3</sup></li> <li>Seek instruction from emergency services</li> <li>To be escorted from site by emergency services</li> </ul>
Bushfires within region but not within Area of Concern	- Normal operation	- Situational awareness	- Situational awareness	T	<ul> <li>Principal to consider precautionary closure of school</li> <li>Situational awareness</li> </ul>	- Principal to consider precautionary closure of school - Situational awareness	- Close school - Move to assembly areas <sup>3</sup> - Seek instruction from emergency services
No Fires	- Normal operation	- Situational awareness	- Situational awareness		<ul> <li>Principal to consider precautionary closure of school</li> <li>Situational awareness</li> </ul>	<ul> <li>Principal to consider precautionary closure of school</li> <li>Situational awareness</li> </ul>	- Close school

<sup>&</sup>lt;sup>3</sup> School is closed, no students in attendance

<sup>&</sup>lt;sup>4</sup> If students are at school



# 22. Emergency Alerts

Emergency Alert is a national telephone warning system that aims to save lives by letting people know about threats such as bushfire as early as possible. When danger is imminent, authorised groups such as NSW Rural Fire Service, NSW Police or the NSW SES can send a warning message to residents in high risk areas.

Emergency Alerts are sent in the form of:

- recorded voice messages to landline numbers based on handset location
- text messages to mobile phones based on billing address

If the school receive an Emergency Alert, follow the instructions in the message.

# 23. Bushfire Alert Levels

During a bush fire, Alert Levels are used to give an indication of the level of threat from a fire.

Don't wait for a warning. Some fires start and spread so quickly there may not be any time for a warning. If you get a Bush Fire Alert, you must take it seriously. Failure to take action can result in death or injury. There are three levels of Bush Fire Alerts:

#### **Table 4 Bushfire Alert Levels**



#### Advice

A fire has started. There is no immediate danger. Stay up to date in case the situation changes.



#### Watch and Act

There is a heightened level of threat. Conditions are changing and you need to start taking action now to protect students, staff and visitors.



#### **Emergency Warning**

An Emergency Warning is the highest level of Bush Fire Alert. The school may be in danger and need to take action immediately. Any delay now puts the lives of students, staff and visitors at risk.





# 24. Actions During Dangerous Fire Danger Weather

Table 5 provides the triggers and actions required depending on a range of different scenarios.

### **Table 5 Extreme Weather & Catastrophic Fire Rating**

Triggers	Actions	Responsible for Implementation
Total Fire Ban is Declared	When a Total Fire Ban is declared by the Commissioner of the NSW Rural Fire Service for the Sydney Basin weather district, the school may be closed on the designated day of Total Fire Ban.	Principal
Catastrophic Fire Danger Rating	This school is on the Department's Bushfire Register and is required to close on days when Catastrophic FDR is issued in this NSW Fire Area.	
	Upon receipt of Health and Safety Directorate email or telephone call advising of CFDR, school activates action plan to close the school for the day the Catastrophic Fire Danger Rating is to be implemented	Principal
If Catastrophic, Extreme or Severe,	Initiate preparation i.e. determines availability of temporary relocation or alternative place of work and prepare notification to school community.	
Fire Danger Rating (above Fire		
Danger Index of 50)	Activate local notification requirements to school community (school website and local School ENews, SMS, APP, Facebook) regarding temporary arrangements for school temporarily ceasing operations for the start of the next school day.	Principal
	Confirm details of school's relocation or closure by contacting the Health and Safety Directorate's Incident Report and Support Hotline on 1800 811 523 (Option 1).	Principal



Notify Director, Educational Leadership of school's actions	Principal
Monitor local weather conditions for further advice. Health and Safety Directorate provides daily updates after	Principal
4.30pm the following day if the school needs to temporarily cease operations due to CDFR being issued.	

# 25. Actions & General Principles for Evacuation

Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
		After consultation with Emergency Services, and notification to Health and Safety Directorate, school determines with Director Educational Leadership to temporarily cease operations for the day and/or the next day.	Principal
Emerging Bushfire Risk / Catastrophic Fire Danger Rating	Watch & Act Controlled Closure of School	Activate (close) bushfire shutters  Updates school website or School ENews/SMS/APP/Facebook with advice to parents to collect students as soon as possible. Notification to Health and Safety Directorate Incident Report and Support Hotline on 1800 811 523 (Option 1).	Principal Principal
		Student release to parents to be recorded	Principal
		Provides updates to Director, Educational Leadership and Health and Safety Directorate on status of personnel on site.	Principal



Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
Bushfire in the surrounding area  Fire WILL NOT arrive in next 2 hours	Watch & Act Off-site Evacuation Controlled Closure of School	Bushfires within the surrounding area will trigger evacuation of the school. The surrounding area includes any lands within the Lane Cover River Catchment SAFETY NOTE: Evacuation must be COMPLETED well in advance of the fire arrival to ensure people are not caught in the open or on access roads between Dunstan Grove or bushland adjacent to Charles Bean Oval and Eton Road (see Appendix 4).  If this cannot be achieved, then on-site shelter in place should be sought. A refuge point has been provided within the school.  Off-site evacuation should always be the first option.  Activate (close) bushfire shutters  Consult through NSW RFS Website www.rfs.nsw.gov.au , contact 1800 NSW RFS, check smart phone Fires Near Me application	Principal  Principal  Principal
		Inform staff of fire situation	Principal
		Fire wardens or authorised persons to coordinate evacuation Evacuate to Lindfield Public School.	Principal



Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
		Alert staff to potential activation of procedures for safe movement of students with disabilities and/or health conditions.	Principal
		Consult with local Emergency Services, Director, Educational Leadership and Health and Safety Directorate to determine action to be taken e.g. temporarily relocate or cease operations. Implement local decision to evacuate	Principal
		Check www.livetraffic.com.au for potential road closures or traffic restrictions (consider road blocks for parent pick up from school site or off site location)	Principal
		Prepare notifications (School ENews/SMS/APP/Facebook) to parents/carers pending potential collecting of students by parents or evacuation activity	Principal
		Continue to monitor situation and stay contactable with mobile phone at all times	Principal
		Contact transport providers to alert of potential requirement	Principal
		Arrange initial collection of Emergency Kit contents: including:- First Aid Kit, Health Care Plans and prescribed medication, student class roll, visitors book, mobile phones, emergency contact list (students and staff), Bushfire Emergency Plan, pens, whistle or bell, workplace keys,	Principal, SAM



Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
		Careful assessment of fire potential required by experts, evacuation only to proceed if it can be completed at least 1 hour before potential arrival of fire.	Principal
Imminent bushfire	After consultation with Emergency Services, school determines with Director Educational Leadership to temporarily cease operations and evacuate.  Notification to Health and Safety Directorate Incident Report and Support Hotline on 1800 811 523 (Option 1)	Principal	
threat to the school (less than 2 hrs to	Emergency Warning Off-site Evacuation (if	Activate (close) bushfire shutters	Principal
impact)	time permits)  Controlled Closure of	Updates School ENews/SMS/APP/Facebook to parents/cares/next of kin to advise of action for off-site evacuation	Principal
	School	Implement transport arrangements (where applicable) – call bus company to evacuate	Principal
		Sound continuous siren (evacuation bell).	Office staff
		Collect Emergency Kit items (see above)	Office Staff
		Students, staff, visitors and contractors move to site assembly area	Teachers



Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
		Conduct roll call of students, staff, visitors and contractors at school site assembly area	Teachers
		Report missing persons to Chief Warden (Principal)	Teachers
		Floor Wardens check that all classrooms and toilets are clear and close doors	
		Evacuation commences	
		Upon arrival at off site evacuation assembly area conduct roll call again.	
		Student release with parents to be recorded.	Class teacher
		Continue to monitor situation and stay contactable with mobile phone at all times	
		Provides regular updates to Health and Safety Directorate's Incident Report and Support Hotline 1800 811 523 (Option 1) and Director Educational Leadership on status.	
Imminent bush fire threat to the school	Emergency Warning	Not possible to complete off-site evacuation before fire (potentially) arrives or cuts access is a potentially life-threatening situation.	Principal



Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
(less than 2 hrs to impact - insufficient time to enact off-site evacuation procedures)  Also applicable for Any situation which emergency services or staff believe warrants shelter in place	On-site evacuation (shelter in place)  Controlled Closure of School	Staff should be aware of the fire location and predicted fire weather conditions to determine appropriate response/action.  Seek temporary shelter in Assembly Area 1. The primary objective of the Assembly Area 1 is to provide temporary shelter to members of the school community who have not been able to evacuate the local area prior to the impact or passage of a bushfire and consequently find themselves not able to safely evacuate due to bushfire attack.  The fundamental priority of people within the school site must be to leave an area well before there is a risk of bushfire, either in the area, or along a route to an area not prone to bushfire attack.	
Not possible to complete off-site evacuation before fire (potentially) arrives or cuts access		Activate (close) bushfire shutters	Principal
General	Advice	Contact 000 and advise fire services that fire is imminently about to impact the school and advise of the staff and student location.  Advise 000:  Location: school Auditorium, in the main building	Principal



Trigger/ Scenario	Primary Responses	Actions	Responsible for Implementation
		<ul> <li>Number of students, staff and visitors</li> <li>Request immediate assistance from emergency services</li> </ul>	



# 26. Sheltering Procedures

The School provides a temporary shelter in place point within the school known as the Emergency Refuge.

The fundamental priority of the Department of Education and the Principal must be to leave an area well before there is a risk of bushfire, either in the area, or along a route to an area not prone to bushfire attack.

Sheltering in place must be accepted as being a last resort option when it is no longer safe to move to an area not prone (Lindfield Public School) to bushfire risk, but sufficiently safe to reach the assembly area. The bushfire shutters should be activated.

The temporary shelter option has been provided and accepted by the RFS as a viable redundancy option and an appropriate means of mitigating the risk to life safety during a bushfire event impacting the school.

Note: Timing for the decision to assemble prior to shelter in place or evacuate, will depend largely on size of fire and how quickly it is spreading.

The school has been designed, built and maintained to meet Building Code of Australia fire service requirements. The school has been isolated from non-habitable parts of the buildings by two-hour fire rated walls and or fire isolated compartments.

- A firewall or fire isolated compartment is a fire-resistant barrier used to prevent the spread of fire for a prescribed period (2 hours).
- Firewalls and fire compartments have been used throughout the buildings to subdivide buildings into separate fire areas (compartments) and are constructed in accordance with Building Code of Australia.
- Firewalls are a portion of a building's protection systems.
- The fire compartmentation has been designed to provide a layered approach to protect the Emergency Assembly Area.

The fire compartments comprise a series of separations (compartments) within the buildings to prevent or slow the spread of fire through the building. The compartments are separated from one another by fire rated walls, roof and flooring that hinders the spread of fire. The compartments provide for horizontal movement through the building to the Emergency Assembly Area for safe evacuation from the building.

Generally, a bushfire will move through an area relatively quickly. It is crucial that the external and internal fire situation is monitored continuously by the Principal or Chief Warden to





determine when it is safe to evacuate. Specialist training will be provided to staff to be aware of what to look for and what action to take.

- Primary Assembly location: Inside the main entry point to the school and School Auditorium
- Secondary Assembly location: Charles Bean Oval (short-term only

   associated with off-site evacuation / bus collection only) Do not
   use the oval if there are spot fires or embers dropping in the
   vicinity.
- Off-site evacuation: Lindfield Primary School.

Table 4 provides the shelter in place procedures.

If shelter in place is enacted, it is critical that 000 is called and emergency services are notified that the school is not able to be evacuated safely. **Request immediate assistance** from emergency services to the Emergency Assembly Area.

### 27. Horizontal Evacuation

Horizontal evacuation means moving away from the area of danger to safer place on the same floor at the time of the alarm or emergency.

This type of evacuation may be required in situations where the fire is due to impact the site and it is unsafe to evacuate. The Emergency Assembly Area is only able to accommodate 1,500 people. When the school is in full operation, the Emergency Assembly Area will not be able to accommodate all people on the site.

If the site is unable to be evacuated in sufficient time and the Emergency Assembly Area is at capacity, a fire compartment directly adjacent to the main evacuation area should be used as a temporary place of shelter. In this case, people should move away from the area of imminent danger (the part of the building closets to the bushfire hazard) and wait until it is safe to horizontally move into another fire compartment.





### **Table 6 Procedures for Shelter in Place**

Triggers	Actions	Responsible for Implementation
Imminent bush fire threat to the school –	Contact 000 and advise fire services that fire is imminently about to impact the school and the location of all staff and students.  Advise 000:  Location;  Number of students, staff and visitors;  Request immediate assistance from emergency services	Principal
primary action to "shelter in place" (or no time to enact evacuation procedures if evacuation is the primary action)	After consultation with Emergency Services, school determines with Director Educational Leadership to temporarily cease operations and "Shelter in Place". Notification to Health and Safety Directorate Incident Report and Support Hotline on 1800 811 523 (Option 1).	Principal
	Updates School ENews/SMS/APP/Facebook to parents/carers/next of kin to advise of school "shelter in place".	Principal
	Sound short bursts of the hooter (lock down bell).	Office Staff
	Collect Emergency Kit items (see Evacuation Procedures).  Emergency Kit inside shelter (bottled water, cups, buckets, toilet paper, first aid kit, torches, sign out sheets, rags for base of doors, towels). Students bring bags if possible.	Office Staff



Floor Wardens check that all classrooms and toilets are clear and close doors	Fire Wardens
Students, staff, visitors and contractors move to "shelter in place" location.	
Conduct roll call of students, staff and visitors	Teachers
Report missing persons to Chief Warden (Principal)	Techers
Turn off air conditioning	Principal
Close doors	Principal
Keep students, staff and visitors hydrated	Principal and teachers
Continue to monitor bushfire situation and stay contactable with mobile phone at all times.	
Provide updates to, Health and Safety Directorate's Incident Report and Support Hotline (Option 1), Director, Educational Leadership. and parents on status *advise parents not to come to the school to collect students. Communications will be kept open at all times	
When the fire has passed and the threat from radiant heat has abated, all persons may move to the Secondary Assembly Point on Charles Bean Oval	
Conduct roll call of all persons	



	Provide updates to Health and Safety Directorate via Incident Report and Support Hotline (Option 1) and to Director, Educational Leadership on status	
	Updates School ENEWS/SMS/APP/Facebook with advice to parents to collect students	
	Once evacuation is complete to Lindfield Public School, student release with parents to be recorded.	
Transport and pick up arrangements	Depending on the situation arrangements will be made with police for off-site evacuation, transport by bus or pick up by parents.	Principal



# 28. Off Site Evacuation - Walking

The decision to evacuate is a difficult one. However, once direction has been received from police or emergency services, Department of Education or at the discretion of the Principal, the Principal and staff should act on this advice.

 If the Principal is not comfortable with the direction from police or emergency services, they should advise emergency services and seek comfort that student, staff and visitor safety can be provided.

The evacuation is predicated on a safe layered approach to providing life safety. Several redundancies have been built into the evacuation plan to provide flexibility and to take account of potential fire scenarios.

If off-site evacuation is required, it must avoid areas as identified in Appendix 1 that have potential for spot fires. The starting point for off-site evacuation is the Assembly Area within the main entrance (Level 5). Charles Bean Oval could be utilised as a short-term collection point due to the potential hazards associated with the oval itself.

Figure 9 provide the routes to be taken to Lindfield Public School. Walking evacuation is preferred via Grosvenor Road as the evacuees can use upgraded footpaths adjacent to the road.

The approximate egress times for bushfire evacuation are calculated as 16 minutes to the corner of Eton Road, and 33.5 minutes to Lindfield Public School. This includes time for roll call and road crossing (3 mins and 1.5 mins, respectively), and generally assumes the students are walking two-abreast.<sup>5</sup>

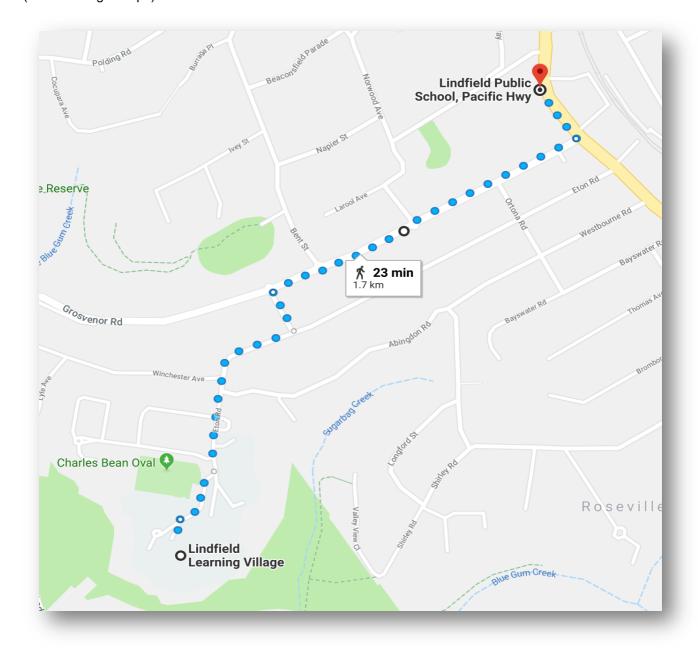






Figure 8 Off-site evacuation: walking to Lindfield Public School via Grosvenor Road

(source Google Maps)





# 29. Off Site Evacuation – transport by bus

The Plan does not rely on transport by busses. However, Stage 2 and 3 of the school will provide a loop road (see Figure 10) that is accessible for buses and fire fighting vehicles.

The loop road may be used by busses to increase the lift of students being evacuated from the site.

The loop road is between the school buildings and the bushfire prone land. Loading of students or staff is not permitted on or within the area known as the loop road as this will be subject to high degrees of radiant during bushfire impact.

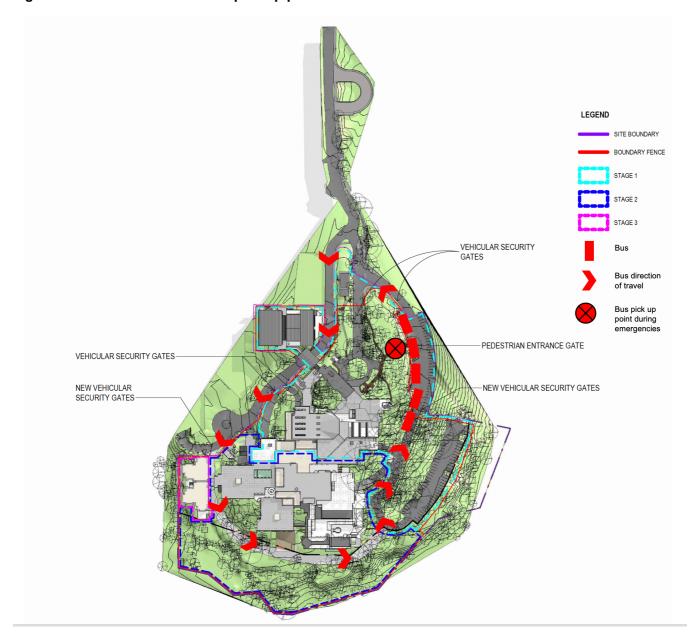
The bus pick-up point during evacuation is the school drop off area adjacent to the main school entry (see Figure 10). Buses are to enter the loop road on a anti clockwise approach starting at Dunstan Grove.

Number of vehicles required	Capacity for 8 buses to wait although 5 are required based on numbers
Name of organisation providing transportation	Transdev
Transport provider contact phone number	131 500
Time required to have transportation available	To be determined
Bus pick up point	Shout Ridge Road as shown in Figure 6





Figure 9 Off-site evacuation: Bus pick up point





### 30. Post-bushfire Event Actions

The Principal decides when to re-open the school, in consultation with local emergency services, Director, Educational Leadership, Health and Safety Directorate based on review and confirmation of the safety of the school including:

- Confirm with NSW Fire and Rescue that utilities (water, electricity and gas) are safe to use;
- The air quality is safe and does not rigger health issues in students or staff;
- A qualified arborist should check impacted (burnt) trees within the school to certify structural integrity and that they will not fail as a result of being impacted by fire. In some instances, areas can be marked as unsafe until specialist felling trees have made the area safe;
- All burnt areas and structures (including play equipment) should be avoided until they have been checked for safety issues by a qualified person.

### General housekeeping should include:

- Review buildings/structure integrity including inspection of all BAL-FZ specifications, bushfire shutters, intumescent grills & fire dampers;
- Review tree integrity;
- Telecommunications/IT/equipment checks;
- Advise the school community of plans to recommence operations including community users (school website, email or School ENews);
- Implement procedures to resume workplace activities including providing counselling and support to those affected by the incident;
- Review Emergency Management and replenish First Aid stocks.

# 30.1. Debriefing

Debriefing after the event is critical to identify lessons learnt and to tighten procedures that will facilitate a better activation in future.

The aim of debriefing is to ensure that lessons learnt (both positive and negative) are applied for future bushfire events, not to lay blame on people for mistakes.

Debriefing should be conducted by an independent third party and should include key stakeholders activated during the event.

- The debrief should consider (at minimum)
- Fire behaviour and impact on the school and evacuation pathways;
- Activation procedures and trigger points
- Communications
- Implementation of the Evacuation Plan;





- Logistics
- Performance of fire systems
- Identification of training needs
- Information that can enhance the lessons learnt

Debriefings should include a discussion of:

- 1. What you set out to do
- 2. What actually happened
- 3. Why things happened the why they did
- 4. What could be done better next time
- 5. What lessons can be applied across schools as a vulnerable community.

If the fire involved a critical incident, arrange for critical incident counselling through the Department of Education.

Ensure injuries are recorded and reported.





# **Appendix 1 - Areas of Potential Spot Fires**

The approaches to and from the school are not in the care, control or management of the Department of Education. Various land management arrangements are in place with Ku-ring-gai Council and Defense Housing Australia that prevent areas being managed to meet Asset Protection Zone Standards. In the absence of a maintenance regimen, it is possible that spot fires can start and develop in the areas identified on Figure 11. As such, evacuation to the off-site location is not to occur if embers are dropping out in the surrounds of the school. Guidance from emergency services should be sought and escort provided through these areas if required.

Figure 10 Areas of Potential Spot Fires





# **Appendix 2 - Roles and Responsibilities**

In accordance with Australian Standard AS 3745-2010, an Emergency Control Organisation (ECO) is to be established for the planning, preparation and implementation of the on-site evacuation and emergency procedures and is to consist of Department of Education staff and or specialist providers with the following skills:

- Physical capability to perform the duties required
- Strong leadership qualities
- Maturity of judgement, good decision-making skills and capability to remain calm under pressure
- Sound knowledge of the local area
- Ability to be on site during the fire danger period; and
- Ability to complete the required training

The ECO does not have a 'statutory standing'. It is to follow any instructions or advice from authorised Emergency Service personnel related to evacuation.

Each person in the ECO shall have clearly defined duties and responsibilities.

Implementation of the Evacuation Plan is the responsibility of the Principal and ECO with assistance and support from staff, the Health and Safety Directorate, NSW RFS and Emergency Services when required. The Principal will ensure that:

- The evacuation plan is updated annually
- All staff are made aware of the existence of the Evacuation Plan and the
  Evacuation procedures to be adopted in the event of an emergency.
  Yearly training is to be provided for all staff in the implementation of the
  Evacuation Plan.
- The 'Evacuation Procedure' and map are displayed in strategic locations throughout school
- Evacuation procedures are tested regularly. Evacuation Drills conducted twice a year (1 each semester) and recorded in the Department's in Case of Emergency (ICE) system.
- Deficiencies in the Evacuation Plan/evacuation management systems are reviewed, and changes implemented to address these deficiencies
- Sirens (alarm system) on Fire units are tested and maintained on a regular basis
- A copy of the current plan is distributed to the local emergency management committee and emergency services.





### The Chief Warden (Principal) is responsible for the following:

- Implementation of evacuation preparedness procedures
- Management and overseeing of any evacuation; until relieved of this responsibility by the attending commanding officer of Emergency Services, or the Police
- Notification to the Health and Safety Directorate's Incident Report and Support Hotline (Option 1) when decisions are made to temporarily cease operations, evacuate or shelter in place.
- Supervision of the ECO
- Ensuring the ECO achieves its responsibilities
- Liaising with Emergency Services and maintaining the Emergency Service contact lists
- Maintaining and displaying a current list of contact telephone numbers
- Distributing a current 'Evacuation Plan' in August each year to the Local Emergency Management Committee (LEMC), the Local Emergency Management Officer (LEMO) and other appropriate authorities. (e.g. NSW Rural Fire Services, NSW Fire Brigade)
- Maintaining Chief Warden and Deputy Chief Wardens rosters

### **Deputy Chief Warden**

The appointment of the Deputy (usually the Deputy Principal) is to ensure continuity of the Chief Warden's functions during absences. The selection of the Deputy should be consistent with the selection criteria for the Chief Warden. The deputy should be fully trained and prepared to take over the primary role of the Deputy Chief Warden.

The Deputy Chief Warden is responsible for the following:

- Assisting with the notification and implementation of the evacuation
- Assisting the Emergency Service personnel on their arrival, unless otherwise directed
- The Deputy Chief Warden will also be responsible for onsite evacuation and assembly areas, including setting up evacuee's registration system to check people into and out from Evacuation Areas.





# **Appendix 3 - Glossary**

assembly point	An area or building/structure that is used to assemble people for evacuation or that have evacuated from a site in an emergency situation.			
Bushfire Attack	Attack by burning embers, radiant heat or flame generated by a bush fire.			
District Emergency Management Officer (DEMO)	For emergency management purposes, NSW is divided into emergency management districts. Each Emergency Management District has a District Emergency Management Committee. The Committee is chaired by the District Emergency Operations Controller (DEOCON), supported by the District Emergency Management Officer (DEMO). The DEMO is also responsible for assisting local committees and communities within the relevant District on emergency management matters.			
emergency	An event that arises internally, or from external sources, which may adversely affect the occupants or visitors in a facility, and which requires an immediate response.			
Emergency Planning Committee (EPC)	Persons responsible for the documentation and maintenance of an emergency plan.			
Emergency warning and intercommunication system (EWI	A combined emergency warning and intercommunication system that facilitates both way communications and control during an emergency.			
evacuation	The orderly movement of people from a place of danger.			
Fire Danger Index (FDI)	The chance of a fire starting, its rate of spread, its intensity and the difficulty of its suppression, according to various combinations of air temperature, relative humidity, wind speed and both the long- and short-term drought effects.			
Local Emergency  Management Officer  (LEMO)	The State is divided into Local Government areas with a Local Emergency Management Committee for each area. This Committee is chaired by a senior representative of the council and is supported by a Council appointed Local Emergency Management Officer ( <b>LEMO</b> ).			
occupant	A person attending a facility on a permanent or temporary basis, such as an employee, contractor, student or resident, but not a visitor			





on-site refuge	A building within the premises that is able to accommodate the people that will shelter. The place is not under threat from a bushfire. The school provides a temporary refuge point within the school.  Off-site evacuation should always be the first option.			
off-site evacuation point	A venue at another location some distance away that is able to accommodate all the people being evacuated. The place is not under threat from a bushfire.			
relocation	Movement of persons and/or organisations to an alternate area			
State Environmental Planning Policy (SEPP)	State Environmental Planning Policy (SEPP) is a legislated policy that deals with issues significant to the state and people of New South Wales.			
sheltering	Procedures for a relevant situation where the safest course of action is to remain in a building or location.			
support needs	People with physical, intellectual, visual, or auditory disabilities or impairments, either temporary or permanent who require support. It also includes aged persons and juveniles who are dependent on others for their care and wellbeing.			





# Appendix 4 Charles Bean Oval (Synthetic Turf)

The areas immediately to the north of the proposed school buildings, are large public open playing fields, known as Charles Bean Oval. It is not to be used as an assembly / refuge area for students and staff due to the synthetic, and potentially hazardous, nature of material used in oval.

Generally, large open space areas that are well separated / shielded from adjoining hazards, present good opportunities for evacuation assembly, and even safe refuge, when the potential bushfire impacts are minimal. Charles Bean Oval is well separated from the significant hazard areas contained within Lane Cove National Park; however, remnant hazards are present adjacent to the north eastern corner and southern boundary of the oval, in the form of retained conservation and landscaped areas, respectively. Therefore, some residual risks are in place for the oval based on its location / context within Crimson Hill.

Blackash has undertaken consultation with the manufacturer of the synthetic oval materials and investigated research / testing materials provided, in order to determine the suitability and level of risk involved in utilising the oval for evacuation / assembly purposes.

In summary, the following overview of the synthetic oval product is provided:

- The synthetic turf material utilised is a plastic and, therefore, is 'petroleum-based'.
- Key area of concern is not the turf itself, but the black rubber that is used as both an underlay
  and to lay across the top of the turf. The rubber is recycled car tyres.
- The manufacturer has had significant testing of the synthetic product, but the focus of testing
  has been for response of material during internal / structural fires rather than external bushfire
  impacts. These bushfire responses are still unknown; however, some assumptions can be
  extrapolated from existing information.
- The key threshold for the plastic turf and recycled rubber is <u>120 degrees Celsius</u> this is the melting point. Potentially toxic / harmful fumes will likely be emitted even before melting point is reached.
- The oval also has the potential to be impacted by 'spot fires' possibly for several hours before and after the main fire front has passed. The impact of these spot fires is to likely cause the emission of toxic smoke throughout the vicinity of the oval.

Therefore, based on the above key points, and supporting testing / research materials, it is recommended that Charles Bean Oval only be utilised as part of the evacuation/emergency planning for Lindfield Learning Village as short-term assembly / evacuation as part of the bus collection procedures when fire is not within 1 hour of the site and or embers are not observed dropping in the vicinity.





If fire is within 1 hour of the site or embers are observed, Charles Bean Oval is not to be used in any capacity.

Due to the toxic nature of the smoke and the potential for the substrate to burn, the oval should not be used if spot fires or ember attack is occurring. The preference is to evacuate students and staff off site early (where possible) and to also shelter in place within the refuge area if time permits.





Appendix 5 Summary Bushfire Evacuation Plan

# BUSHFIRE EVACUATION PLAN SUMMARY

Lindfield Learning Village 100 Eton Road, Lindfield









### **EMERGENCY CONTACT INFORMATION**

FIRE, POLICE, AMBULANCE	CALL 000
PRINCIPAL	Stephanie McConnell   0417 712 089
DEPUTY PRINCIPAL	Mark Burgess   0422 268 172
HEALTH & SAFETY DIRECTORATE	Sus Lowe   1800 811 523 (Select Option 1)





### **AWARENESS OF SITUATION**

RFS BUSH FIRE INFORMATION LINE | 1800 679 737

RFS WEBSITE | www.rfs.nsw.gov.au

FIRES NEAR ME APPLICATION





### LOCATION INFORMATION

ADDRESS	Lindfield Learning Village 100 Eton Road, Lindfield
NUMBER OF STUDENTS	350
NUMBER OF STAFF	30 - 50
TOTAL STAFF / STUDENTS	380 - 400
OFF SITE EVACUATION	Lindfield Public School,218 Pacific Hwy, Lindfield I 9416 1903



### **ACTIONS**

- 1. See Triggers for Evacuation (page 3)
- 2. Raise alarm & Call 000
- 3. Call Health & Safety Directorate & advise of bushfire emergency
- 4. All classes to report to Assembly Point
- 5. Complete rollcall
- 6. Activate shutters from main control panel

- 7. Determine bushfire threat
  - Activate communication protocols for parent notification
  - If unsafe, seek temporary refuge in Evacuation Assembly Point
- 8. Activate communication protocols for parent notification
- 9. Principal of Lindfield Public notified

2 BUSHFIRE EVACUATION PLAN SUMMARY







### **EVACUATION**



### THE SAFEST OPTION IS TO LEAVE EARLY

### Authority to evacuate can be directed by:

- Instructions from the NSW Police or Fire Authority (NSW Rural Fire Service or Fire and Rescue NSW)
- Instruction from NSW Department of Education authorised officer;
- · Instruction from Director, Educational Leadership
- · Instruction from Director, Educational Leadership

### Evacuate if directed & it is safe to do so.



### **WALKING EVACUATION**

- Evacuate if it is safe to do so.
- Walking evacuation is to Lindfield Public School at 218 Pacific Hwy, Lindfield
- Use route as indicated below
- Teachers to walk with class
- Seek guidance from emergency services
- Escort provided by emergency services if required



### **EVACUATION ROUTE**



### Charles Bean Oval

End of, Eton Rd, Lindfield NSW 2070

- Walk east on Shout Ridge towards Eton Rd
- Turn left onto Eton Rd
- Turn left onto Austral Ave
- At the roundabout, take the 1st exit onto Grosvenor Rd
  Go through 2 roundabouts
  Destination will be on the left
- Lindfield Public School

3 BUSHFIRE EVACUATION PLAN SUMMARY







## **EVACUATION CONTINUED**



### **DO NOT EVACUATE IF:**

- Spot fires are observed
- · Embers are observed
- It is unsafe
- · Directed by emergency services to remain in place
- Shelter in Place should be considered as an alternative when the risk associated with evacuation is greater than
  that of sheltering in place, or evacuation cannot be initiated and completed in a safe manner.
- Contact 000 and request immediate assistance

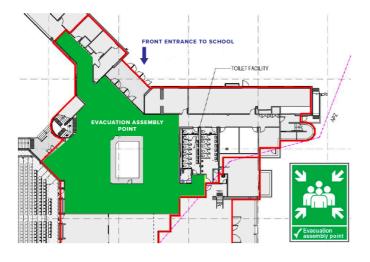


### **ASSEMBLY POINT / SHELTER LOCATION**

- Evacuation Assembly Point is inside entry to main building outside the Auditorium. This area has been separated from the rest of the school by 2 hour fire walls
- Assembly Point may provide temporary shelter from the immediate effects of a bushfire



# ACTIONS



- Close all fire & smoke doors
- Close bushfire shutters
- Assemble first aid kits including Ventolin
- Keep watch for spot fires in and around the building
- When safe, evacuate or as instructed by emergency services

**M** | SYSTEMS







# TRIGGERS FOR EVACUATION

The following is provided as a guide for evacuation. Evacuate only if safe to do so. The Emergency Assembly Area provides shelter in place options.

Observation /			Bushfire	Dange	r Rating		
Situation	Low/ Moderate	High	Very High		Severe	Extreme	Catastrophic
Out of control fire north of Lane Cove Road of school	Evacuation triggered if safe to do so.     Or     Move to assembly areas	Move to Emergency     Assembly Area     Evacuate if safe to     do so     Seek instruction from     emergency services	Move to Emergency     Assembly Area     Evacuate if safe to     do so     Seek instruction from     emergency services		Close school     Move to Emergency     Assembly Area     Seek instruction from     emergency services	Close school Move to assembly Area Seek instruction from emergency services To be escorted from site by emergency services	Close school Move to assembly areas Seek instruction fremergency service To be escorted frosite by emergency services
Out of control fire south of Lane Cove Road from school	Normal operation     Seek guidance from emergency services	Move to Emergency     Assembly Area     Initiate evacuation of     the site	Move to Emergency     Assembly Area     Trigger evacuation     Seek instruction from emergency services	TOTAL Fire Ban Declared	Close school     Move to assembly areas     Seek instruction from emergency services	Close school     Move to assembly areas     Seek instruction from emergency services	Close school Move to assembly areas Seek instruction fremergency service To be escorted frosite by emergency services
Bushfires within region but not within Area of Concern	Normal operation	• Situational awareness	Situational awareness	-	Normal operation	Situational awareness	Situational awarer
No Fires	Normal operation	Situational awareness	Situational awareness		Principal to consider precautionary closure of school Situational awareness	Principal to consider precautionary closure of school Situational awareness	Close school
		Decreasing Risk				Increasing Risk	

