

Bushfire Hazards and Risk Assessment Report

New primary school at Wilton Junction

NSW Department of Education

24 February 2025

→ The Power of Commitment

School Name: New primary school at Wilton Junction		Company Name:	GHD Pty Ltd
School ID:	ТВС	Report Status:	Final
School Address:	200 Fairway Drive, Wilton, 2571, NSW	Report Date:	24 February 2025
School Region:	Wollondilly	Contract Number:	DDWO05868/23

Commercial in confidence

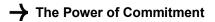
Project na	ame	Wilton Junction (New Primary School) - Bushfire					
Documen	t title	Bushfire Hazards and Risk Assessment Report New primary school at Wilton Junction					
Project n	umber	12633168					
File name			12633168 - Final V2 Bushfire Risk REP - REF Submission - Wilton Junction (new primary school) - SCHOOL ID - GHD.docx				mary
Status	Revision	Author	Reviewer		Approved for issue		
Code			Name	Signature	Name	Signature	Date
S3	V0	R. Bowyer, P Fernandes	M. George	On file	M. George	On file	20/01/25
S4	V1	R. Bowyer, P Fernandes	M. George	On file	M. George	On file	14/01/25
S4	V2	R. Bowyer, P. Fernandes	M. George	On file	M. George	On file	24/02/25

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Executive Summary

The area subject to this assessment, the new primary school at Wilton Junction, is located at 200 Fairway Drive, Wilton, 2571, NSW. The site forms part of the northern portion of Lot 1063 in Deposited Plan 1289197, on the western side of the Hume Motorway within the Wollondilly Shire Council local government area (LGA) (Figure 1).

This assessment assumes that all land within the site can be managed as an Asset Protection Zone (APZ) - Inner Protection Area.

The subject site is depicted on Wollondilly Shire Council's Bushfire Prone Land (BFPL) Map as BFPL, with the site classified as bushfire prone land due to the presence across the entire site of mapped bushfire prone Vegetation Category 3 (see Figure 3). The application of Planning for Bush Fire Protection (PBP) 2019 and Australian Standard 3959-2018 '*Construction of buildings in bushfire-prone areas*' (AS3959-2018) is therefore triggered for a Review of Environmental Factors (REF). However, it is noted that the proposed school falls within the future town centre and significant changes to the landscape will result from proposed activity. This will result in the removal of bushfire prone vegetation on and adjoining the site.

Figure 4 indicates that existing bushfire hazard occurs within the boundary of the subject site, with Plant Community Type 3320 - Cumberland Shale Plane Woodlands (Grassy Woodlands under PBP 2019) located within and surrounding the site and constituting a significant part of the internal and surrounding vegetation. The Plant Community Type 3616 - Sydney Hinterland Grey Gum Transition Forest (Dry Sclerophyll Forests (Shrubby subformation) under PBP 2019) lies approximately 50 m north of the site at its closest point. It is present largely to the north and east of the site and absent to the south and west of the site.

The proposed site is a greenfield site adjoined by earthworks/infrastructure for a residential development. GHD conducted this bushfire hazards and risk assessment based on the assumption that the proposed activity occurs in advance of surrounding development.

To achieve deemed-to-satisfy acceptable solutions for APZ's and building construction, the proposed activity will require a temporary APZ of 50 m to the south between the grassland vegetation and the proposed school, and a temporary APZ of 100m to the north, east and west between the grassy woodland vegetation and the proposed school (Figure 5). The temporary APZ would remain in place until such time as adjoining development removed the hazard permanently. Landcom, as the owner and developer of the land 50 m to 100 m around the school is proposing to establish and maintain such an APZ on the land owned by Landcom – and excluding the land to be transferred to SINSW for the Primary School – to enable the Wilton Junction primary school planning, construction and asset protection. Landcom has provided in writing arrangements for the management of the APZ (Appendix A).

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Abbreviations

Abbreviation	Definition
APZ	Asset Protection Zone
AS 3959	Australian Standard AS 3959:2018 <i>Construction of buildings in bush fire-prone areas</i>
BAL	Bushfire Attack Level
BFPL	Bushfire Prone Land
BFSA	Bush Fire Safety Authority
ВРМ	Bushfire Protection Measure
DA	Development Application
EP&A Act	Environmental Planning and Assessment Act 1979
FDI	Fire Danger Index
LGA	Local Government Area
NCC	National Construction Code
РВР	Planning for Bush Fire Protection
РСТ	Plant Community Type
REF	Review of Environmental Factors
RFS	Rural Fire Service
SFPP	Special Fire Protection Purpose

1. Introduction

This Bushfire Hazards and Risk Assessment Report has been prepared to support a Review of Environmental Factors (REF) for the NSW Department of Education (DoE) for the construction and operation of the new primary school at Wilton Junction (the activity).

The purpose of the REF is to assess the potential environmental impacts of the activity prescribed by *State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP) as "development permitted without consent" on land carried out by or on behalf of a public authority under Part 5 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The activity is to be undertaken pursuant to Chapter 3, Part 3.4, Section 3.37A of the T&I SEPP.

This document has been prepared in accordance with the *Guidelines for Division 5.1 assessments* (the Guidelines) by the Department of Planning, Housing and Infrastructure (DPHI) as well as the *Addendum Division 5.1 guidelines for schools*. The purpose of this report is to identify any likely required bushfire mitigation measures that would be applicable for the design and construction of a new school development as part of 200 Fairway Drive, Wilton, 2571, NSW. This report presents a Bushfire Hazards and Risk Assessment of a proposal to develop the subject land for a Special Fire Protection Purpose (SFPP) development.

Further assessment may be required if there are significant changes to Bushfire Prone Land (BFPL) mapping, surrounding land management/vegetation cover, to the development concept, proposed uses and/or in response to NSW Rural Fire Service (RFS) policy or feedback.

This Bushfire Hazards and Risk Assessment is valid as of the date of issue and is suitable for the purpose for which it was commissioned.

1.1 Site Description

The current street address is 200 Fairway Drive, Wilton, 2571, NSW. The site forms part of the northern portion of Lot 1063 in Deposited Plan 1289197 that was previously subdivided by Landcom. The site is approximately 3.4ha hectares in size and is located within Wilton Junction which is part of the North Wilton Precinct.

As a result of precinct wide rezonings, the surrounding locality is transitioning from a semi-rural residential area to a highly urbanised area with new low to medium density residential development with supporting services. North Wilton Precinct is approximately 85km south-west of the Sydney CBD, 30km north-west of Wollongong and 30km southwest of Campbelltown-Macarthur Strategic Centre. The precinct is located on the interchange with the Hume Highway, which connects the Southern Highlands with the Sydney metropolitan region to the northeast and Canberra to the south-west.

The proposed school site does not currently have road access, however Landcom is expected to deliver the road network and surrounding public domain network in accordance with DA/2022/1279/1. Proposed Road 14 located on the eastern boundary of the site will ultimately provide future access to the site. The site contains several patches of remnant native vegetation particularly within the northern portion of the site. The central part of the site has been predominantly cleared and consists of grassland. An aerial photograph of the site is provided at Figure 1.

Street address or property name:		Wilton Junction Primary School		
Suburb, town or locality:	Wilton	Postcode:	2571	
Lot/DP no:		Lot 1063 DP 1289197		
Local Government Area:		Wollondilly Shire Council		
Fire Danger Index (FDI):		Illawarra/Shoalhaven Region: 100		

Table 1 Subject site and proposed activity summary

Current land use zoning:	UD Urban Development	
Type of development proposed:	Special Fire Protection Purpose	

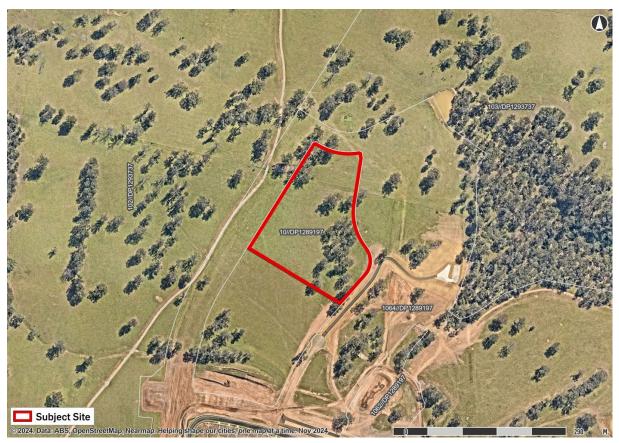


Figure 1 Aerial Photograph of the Site. Source Urbis, 2024

1.2 Proposed Activity Description

The proposed activity is for the construction and operation of a new primary school at Wilton Junction which will accommodate up to 522 students and 35 staff. Additionally, the proposal includes an integrated pre-school which will capacity for up to 60 students and 7 staff. In total, the new school will support up to 612 students and 42 staff.

The new school includes general and support learning spaces, a library, administrative areas and a staff hub. Core facilities include a standalone school hall and canteen, two carparks and a sports court.

Specifically, this proposal includes the following:

- Construction of a 3-storey learning hub which includes:
 - 24x General Learning Spaces
 - 3 x Support Learning Spaces
 - Staff hub including administrative areas and library
 - Integrated public pre-school
- Standalone hall and COLA with outside of school hours care (OSHC).
- Associated landscaping including sports court and separate outdoor play space for the preschool.
- Associated site utilities and services including installation of new 1500 kVA padmount substation and a new main switchboard.
- Main car park to the south of the site with 33 car spaces (including one accessible space).

- Separate car park for pre-school located to the north of the school with 18 spaces (including one accessible space).
- Main school pedestrian entrance proposed off Road 14.
- Earthworks

Figure 2 provides an extract of the proposed site plan.

1.3 Scope and limitations

This report has been prepared by GHD for NSW Department of Education and may only be used and relied on by NSW Department of Education for the purpose agreed between GHD and NSW Department of Education as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than NSW Department of Education arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer section 1.3 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

Investigations undertaken in respect of this report are constrained by the particular site conditions, such as the location of buildings, services and vegetation. As a result, not all relevant site features and conditions may have been identified in this report.

Site conditions and offsite conditions influencing bushfire hazard may change after the date of this Report. GHD does not accept responsibility arising from, or in connection with, any change to the site conditions. GHD is also not responsible for updating this report if the site conditions change.

1.4 Assumptions

BFPL has been assessed using the NSW RFS BFPL mapping tool (<u>Check if you're in bush fire prone land -</u> <u>NSW Rural Fire Service</u>) and the NSW ePlanner Spatial viewer (<u>ePlanning Spatial Viewer (nsw.gov.au</u>)) and has not been independently verified by GHD.



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Figure 2 Proposed Site Plan. Source: PTW, 2025

2. Background

2.1 Planning and legal framework

2.1.1 PBP requirements

Schools are classified as SFPP and assessed against the Bushfire Protection Measure (BPM) specifications in Chapter 6 of Planning for Bush Fire Protection (PBP). An addendum to PBP (RFS 2022) has recently been released which aligns with the new bushfire protection specifications for specific Class 9 buildings (which includes schools) under the National Construction Code (NCC) 2022.

Bushfire requirements can be found in:

- Chapter 6 (Tables 6.8a to Table 6.8d) of PBP (<u>https://www.rfs.nsw.gov.au/___data/assets/pdf_file/0005/130667/Planning-for-Bush-Fire-Protection-2019.pdf</u>); and
- Table 2 and Table 4 of PBP Addendum 2022: (<u>https://www.rfs.nsw.gov.au/___data/assets/pdf_file/0006/241584/Planning-For-Bush-Fire-Protection.pdf</u>); and

2.1.2 NCC 2022

NCC 2022 was released on 1 October 2022 (enacted 1 May 2023) and prescribes additional bushfire protection provisions for certain Class 9 buildings which includes schools. The transition period for this change was October 2022 to May 2023, with no grace period after this date.

Bushfire specifications for SFPP Class 9 buildings (including NSW variations) can be found in Section G, Part G5 of NCC 2022 (https://ncc.abcb.gov.au/editions/ncc-2022/preview/volume-one/g-ancillary-provisions/part-g5-construction-bushfire-prone-areas) and Specification 43 (<u>https://ncc.abcb.gov.au/editions/ncc-2022/preview/volume-one/g-ancillary-provisions/43-bushfire-protection-certain-class-9-buildings#_805751e5-3585-4bde-a894-f4d52916cffd</u>).

Clause G5D4 of NCC 2022 is a deemed-to-satisfy (DTS) provision applicable to scenarios where the bush fire attack level (BAL) does not exceed BAL 12.5. It provides that in a designated bush fire prone area, a Class 9 building that is a SFPP, or a Class 10a building or deck immediately adjacent or connected to such a building or part, must comply with:

- a. for a Class 9 building that is special fire protection purpose, Specification 43 except as amended by Planning for Bush Fire Protection;
- b. for a Class 10a building or deck immediately adjacent or connected to a Class 9 building that is a SFPP:
 - i. AS 3959 except as amended by Planning for Bush Fire Protection; and
 - ii. S43C13; or
- c. the requirements of (a) or (b) above as modified by the development consent with a BFSA issued under section 100B of the RF Act for the purposes of integrated development.

The following Specification 43 measures are not addressed by PBP:

- S43C3 Separation between buildings
- S43C4 Separation from allotment boundaries and car parking areas
- S43C5 Separation from hazards (such as liquefied petroleum gas bottles, fuel storage, storage of combustible materials, waste bins, vehicles, machinery, and the like)
- S43C6 Non-combustible path around building

- S43C7 Access pathways
- S43C8 Exposed external areas
- S43C9 Internal tenability
- S43C12 Emergency power supply
- S43C13 Signage

PBP Addendum 2025 alters the requirement of compliance with S43C9 - Internal tenability and S43C14 – Vehicular access for SFPP developments which are primary and/or secondary schools. The amendments are as follows:

S43C9 - Internal tenability does not apply unless:

- (a) any part of the building is on land, or is within 100 metres of land, that is categorised as Vegetation Category 1 on a bush fire prone land map certified by the Commissioner of the NSW RFS under section 10.3 of the EP&A Act; and
- (b) the area of land categorised as Vegetation Category 1:
- i. is greater than 5 hectares in size but is not a corridor with a width of 120 metres or less at its widest point (where 'width' refers to the narrowest dimension of the corridor); or
- ii. is within 100 metres in any direction of another area of land categorised as Vegetation Category 1

S43C14 – Vehicular access does not apply if the building is a building that is, or forms part of, a primary and/or secondary school, provided that the performance criteria or acceptable solutions in Table 6.8b of PBP 2019 are complied with.

Clause S43C9 does not apply for this proposed development as no proposed new buildings is on land, or is within 100 metres of land, categorised as Vegetation Category 1.

Due to planning time frames, it is likely that this addendum will be in effect before construction of the school begins.

2.2 Bushfire Prone Land (BFPL) Status

The subject site is depicted on Wollondilly Shire Council's Bushfire Prone Land (BFPL) Map as BFPL, with the site classified as bushfire prone land due to the presence across the entire site of mapped bushfire prone Vegetation Category 3 (see Figure 3). The application of Planning for Bush Fire Protection (PBP) 2019 and Australian Standard 3959-2018 '*Construction of buildings in bushfire-prone areas*' (AS3959-2018) is therefore triggered for a REF. However, it is noted that the proposed school falls within the future town centre and significant changes to the landscape will result from proposed development. This will result in the removal of bushfire prone vegetation on and adjoining the site.

BFPL has been assessed using the NSW RFS BFPL mapping tool (<u>Check if you're in bush fire prone land -</u> <u>NSW Rural Fire Service</u>) and the NSW ePlanner Spatial viewer (<u>ePlanning Spatial Viewer (nsw.gov.au</u>)) and has not been independently verified by GHD. BFPL mapping for the site is shown in Figure 3.

2.3 Assessment Process

The proposed activity in bushfire prone areas (as determined and mapped by the NSW RFS in consultation with Local Government) must comply with PBP 2019. Accordingly, a REF must demonstrate how the proposed activity complies with the PBP 2019. A bush fire safety authority (BFSA) is required from the NSW RFS for SFPP developments on BFPL. An application for a BFS must address the extent to which the activity complies with PBP.

The proposed site is a greenfield site adjoined by earthworks/infrastructure for a residential development. GHD conducted this bushfire Risk and Hazards Assessment based on the assumption that the proposed activity occurs in advance of surrounding development. Under this assumption, the assessment determines that the proposed activity can be managed with a temporary Asset Protection Zone (APZ) in place (based on advice issued by NSW RFS dated 15/07/2024 via email). Specifically, a temporary APZ of 50 m to the south between the grassland vegetation and the proposed school, and a temporary APZ of 100 m to the north, east and west between the grassy woodland vegetation and the proposed activity. The temporary APZ would remain in place until such time as adjoining development removed the hazard permanently. Landcom, as the owner and developer of the land 50

m to 100 m around the school is proposing to establish and maintain such an APZ on the land owned by Landcom – and excluding the land to be transferred to DoE for the Primary School – to enable the Wilton Junction primary school planning, construction and asset protection. Landcom has provided in writing arrangements for the management of the APZ. The letter of support from Landcom is provided in Appendix A. This will form part of the GTA's from NSW RFS.

This assessment is based on the following information sources:

- Information contained within the site plan (PTW 2025)
- Geographic information system (GIS) analysis including online spatial resources
- Site inspection 4 April 2024

Table 2 identifies the bushfire protection measures assessed and whether an acceptable or performance solution is being proposed.

Table 2	Summary of Bush Fire Protection Measures assessed

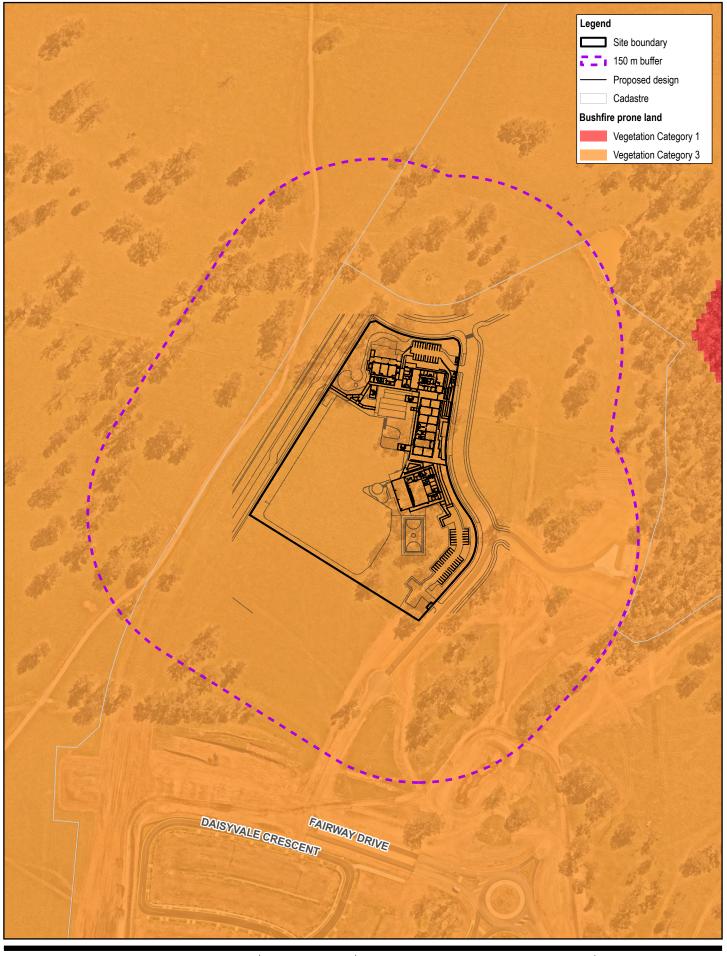
Bushfire Protection Measures	Acceptable Solution	Performance Solution	Report Section
Asset Protection Zone			4.1
Construction			4.2
Landscaping			4.3
Access			4.4
Water Supply			4.5
Electricity Services			4.6
Gas Services			4.7
Emergency Management			4.8

2.4 Significant Environmental Features

This report identifies the impact footprint of the bushfire protection measures, including the APZ. However, this report has not undertaken an assessment of significant environmental features, threatened species, populations or ecological communities under the Biodiversity Conservation Act that may be potentially affected by the proposed bushfire protection measures as it is addressed by other components of the planning approval process. DoE is the proponent and determining authority and will assess any potential environmental issues.

2.5 Aboriginal Cultural Heritage

This report identifies the impact footprint of the bushfire protection measures, including the APZ. However, this report has not undertaken an assessment of any Aboriginal cultural heritage objects under the National Parks and Wildlife Act 1974 that may be potentially affected by the proposed bushfire protection measures as it is addressed by other components of the planning approval process. DoE is the proponent and determining authority and will assess any potential issues.



Paper Size ISO A4 100 50 ſ Metres Map Projection: Transverse Mercator Horizontal Datum: GDA2020 Grid: GDA2020 MGA Zone 56



NSW Department of Education New Primary School at Wilton Junction Bushfire Hazards and Risk Assessment

Project No. 12633168 Revision No. 0 Date 13/02/2025

FIGURE 3

Bushfire prone land

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3. Bushfire Hazard Assessment

3.1 Process

The site assessment methodology from Appendix 1 of PBP has been used in this assessment to determine the required APZ and construction requirements. Figure 4 and Table 3 show the effective slope and predominant vegetation representing the highest bushfire threat potentially posed to the development from various directions.

The site is in the Wollondilly Shire Council Local Government Area (LGA) which has Fire Danger Index (FDI) of 100.

Where a 50 m APZ for grassland and 100m APZ for other vegetation types can be provided there is no further requirements however, a full assessment of the proposal against PBP (Chapter 6 and Appendix B of the Addendum) has been undertaken in response to agency advice detailed below and detailed in section 4.

Consultation occurred with the NSW RFS, with a representative from NSW RFS noting via email (dated 15/07/2024) that "The RFS will accept temporary APZs outside the school site providing (in accordance with 3.2.5 of PBP 19) where the land owner is agreeable to a restriction on title or registered plan of management until such time the hazard is removed permanently" (refer Appendix B).

3.2 Fire weather

The site falls within the Wollondilly Shire Council Local Government Area (LGA) within the Illawarra/Shoalhaven region for which Fire Danger Index (FDI) of 100 is applicable for bushfire assessment (NSW RFS, 2019).

3.3 Vegetation

The nearest mapped vegetation is classified as Plant Community Type (PCT) 3320 – Cumberland Shale Plane Woodlands (Grassy Woodlands under PBP 2019), and PCT 3616 – Sydney Hinterland Grey Gum Transition Forest (Dry Sclerophyll Forests (Shrubby sub-formation) under PBP 2019). The Cumberland Shale Plane Woodlands surrounds the site. The Sydney Hinterland Grey Gum Transition Forest lies approximately 50 m north of the site at its closest (refer Figure 4).

The proposed site is a greenfield site adjoined by earthworks/infrastructure for a residential development. It is assumed that proposed activity occurs in advance of surrounding development. The new primary school at Wilton Junction development will retain vegetation along the creek line to the east and may retain isolated remnant trees in other locations throughout the site (Plate 1) depending on proposed activity designs for the school, but these are not expected to constitute a bushfire hazard.

3.4 Effective slope

In accordance with PBP, the slope that would most significantly influence fire behaviour is determined over a distance of 100 m from the boundary of the proposed activity under the classified vegetation.

Effective slope was assessed using contour mapping from Nearmap. {Note this is describing the slope underneath the vegetation, not between the building and the vegetation}. The northern, eastern, and western portion can be characterised as having a downslope ranging between 0-5 degrees. The southern portion can be characterised as flat/upslope. Further information on slope in surrounding area is provided in Table 3.



Plate 1: Proposed public school site showing patch of mature trees towards the centre of the site. Photo from site visit on 4 April 2024, looking south-west.

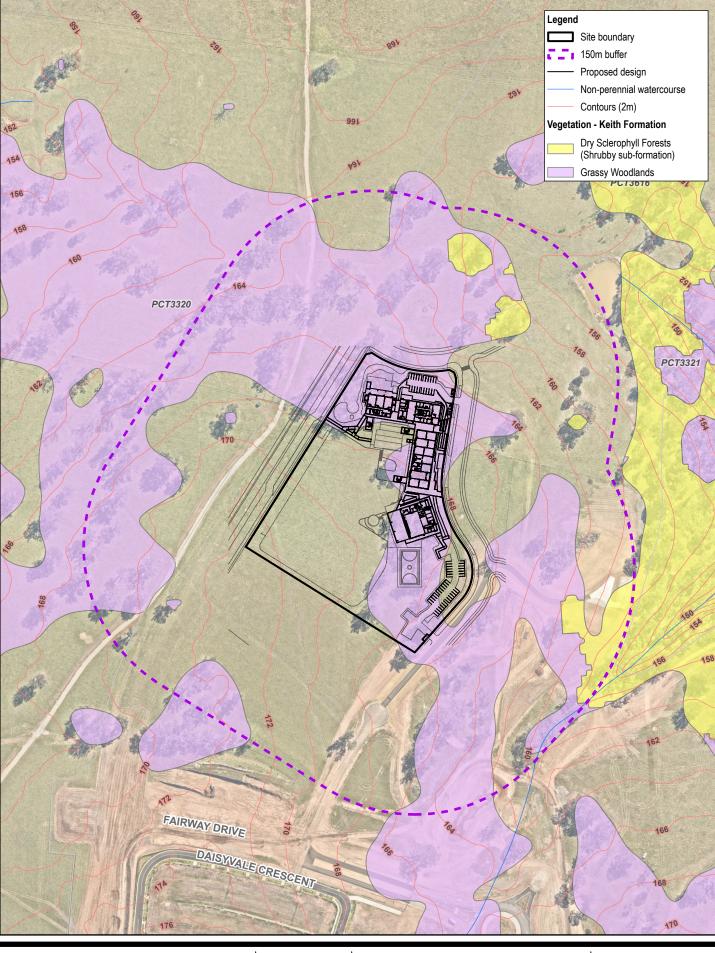
3.5 Summary of Assessment

The bushfire hazard assessment is summarised in Table 3 and shown in Figure 4.

 Table 3
 Bushfire hazard assessment and APZ requirements

Direction	Nearest BF prone vegetation (existing)	Effective slope class	SFPP required APZ (m)	Proposed APZ (m)	Comments
North	Grassy Woodland	0-5 degrees downslope	50m	100m	Temporary APZ can include road and earthworks providing separation from any hazard vegetation until such time as all adjoining development complete.
East	Grassy Woodland	0-5 degrees downslope	50m	100m	Temporary APZ can include road and earthworks providing separation from any hazard vegetation until such time as all adjoining

Direction	Nearest BF prone vegetation (existing)	Effective slope class	SFPP required APZ (m)	Proposed APZ (m)	Comments
					development complete.
South	Grassland	Flat/ Upslope	36m	50m	Temporary APZ can include road and earthworks providing separation from any hazard vegetation until such time as all adjoining development complete.
West	Grassy Woodland	0-5 degrees downslope	50m	100m	Temporary APZ can include road and earthworks providing separation from any hazard vegetation until such time as all adjoining development complete.



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NSW Department of Education New Primary School at Wilton Junction Bushfire Hazards and Risk Assessment

Project No. 12633168 Revision No. 0 Date 13/02/2025

FIGURE 4

Bushfire hazards

NghdhetlghdAUSydney/Projects/2112633168/GISMaps/Deliverables/12633168_BHRA.aprx Print date:: 13 Pb 2025 - 17.10 DISCLAMRE? White very care has been taken to generate this figure. GHD makes no representations or warranties about its accuracy, reliability, completeness or suitability for any particular purpose and carmot accept liability and responsibility of any kind (whether in contract, tort or dherwise) for any expenses, losses, damages and/or costs indirect or consequential damage) which are or may be incurred by any particular sea a result of this flague bein placeurals, incomplete or unsubletion any may and for any response.

ted: 13/02/2025; General topography - NSWSS; SVTM - DPIE, 2023; Bush Data so prone land - DPIE, 2024. Created by: pfernandes

4. Bushfire Protection Measures

In undertaking this assessment, it should be noted the site is considered low risk based on the following mitigating factors:

- Updated BFPL (being undertaken under a separate application, refer Section 5) will remove the BFPL mapping from the entire site;
- There will be no grassland hazard within 50 m of the site;
- There will be no wooded bushfire hazard within 100 m of the site;
- A1.3 of PBP stipulates the assessment process for grassland vegetation formation and clearly identifies that where a 50 m APZ is provided, there are no further requirements. This is not the Grassland Deeming Provisions located in 7.9 of PBP.

Based on the above, BPM are not applicable as the site will not be bushfire prone land and the APZ to be implemented far exceeds those required for SFPP in grassland and woodland vegetation however, APZ and landscaping measures have been considered.

The following section demonstrates how the proposal conforms or deviates from the specifications set out in Chapter 6 of PBP and Addendum to PBP in accordance with the Agency Advice issued by RFS (Appendix C).

4.1 Asset Protection Zones

Table 3 shows the minimum required APZ to achieve SFPP development standards (reproduced from Table 6.8 of PBP 2019), with a temporary APZ until surrounding development is in place. The footprint of the APZ is shown in Figure 5.

As discussed in Section 2.3, the proposed site is a greenfield site adjoined by earthworks/infrastructure for a residential development. It is assumed that the proposed activity will occur in advance of surrounding development, meaning that the site can be managed with a temporary APZ in place (in line with advice issued by NSW RFS dated 15/07/2024 via email). Specifically, a temporary APZ of 50 m to the south, and a temporary APZ of 100 m to the north, east and west (as described in Table 4). The temporary APZ would remain in place until such time as adjoining development removed the hazard permanently. Landcom, as the owner and developer of the land 50 m to 100 m around the school is proposing to establish and maintain such an APZ on the land owned by Landcom – and excluding the land to be transferred to SINSW for the Primary School – to enable the Wilton Junction primary school planning, construction and asset protection.

Landcom has provided in writing arrangements for the managements of the APZ. The letter of support from Landcom is provided as Appendix A. A school building cannot be located within the APZ, however, carparking, roads and non-habitable structures (Class 10) can be accommodated within these areas.

 Table 4
 Proposed temporary vegetation management arrangements

ID No.	Sector	Address	Required APZ (m)	Hazard assessment/mitigation
1	North	200 Fairway Drive, Wilton, 2571, NSW	100m	Land to be managed as a temporary APZ 100 m from building boundary. Temporary APZ to be managed by Landcom. APZ can include road and earthworks providing separation from any hazard vegetation until such time as all adjoining development complete.
2	East	200 Fairway Drive, Wilton, 2571, NSW	100 m	Land to be managed as a temporary APZ 100 m from building boundary. Temporary APZ to be managed by Landcom. APZ can include road and earthworks providing separation from any hazard vegetation until such time as all adjoining development complete.
3	South	200 Fairway Drive, Wilton, 2571, NSW	50m	Land to be managed as a temporary APZ 50 m from building boundary. Temporary APZ to be managed by Landcom. APZ can include road and earthworks providing separation from any hazard vegetation until such time as all adjoining development complete.
4	West	200 Fairway Drive, Wilton, 2571, NSW	100m	Land to be managed as a temporary APZ 100 m from building boundary. Temporary APZ to be managed by Landcom. APZ can include road and earthworks providing separation from any hazard vegetation until such time as all adjoining development complete.

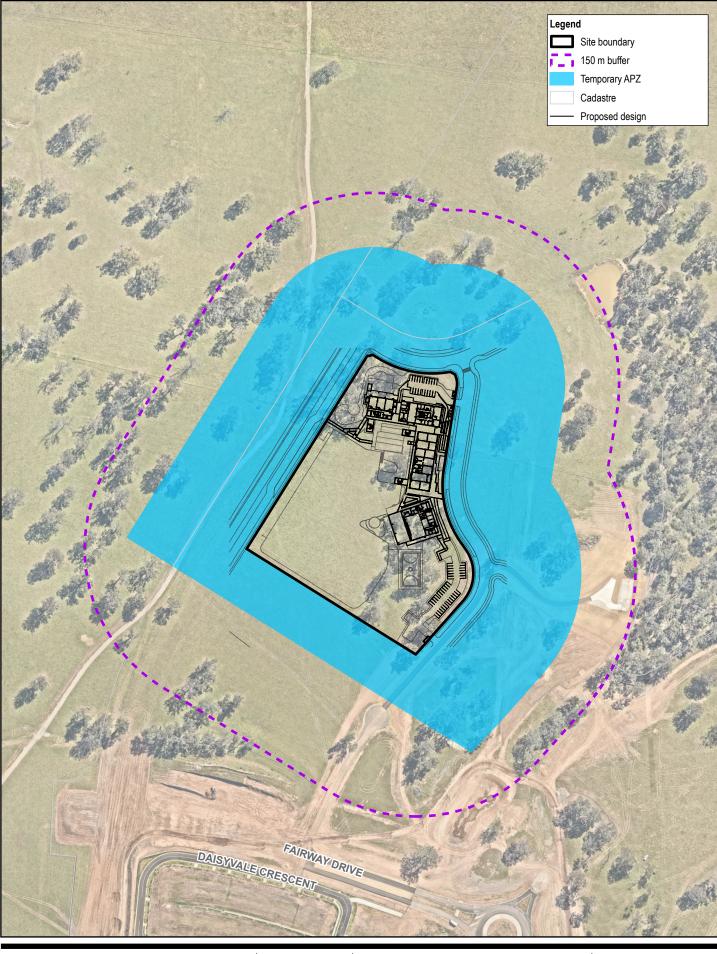
Land will be managed to Inner Protection Area (IPA) specifications in accordance with Appendix 4 of PBP in perpetuity or until such time as adjoining development removed the hazard permanently.

Table 5 documents the compliance of the proposed APZ with Section 6.8 of PBP.

Table 5

APZs and construction for SFPP development (adapted from Table 6.8a of PBP)

radiant heat	levels of greater	the building is provided with an APZ	Can Comply
than 10kW/m 1200K) will n	n ² (calculated at	in accordance with table A1.12.1 in Appendix 1.	APZ provided in accordance with Table A1.12.1 as shown Table 4.
APZ mainter	ance is practical,	the APZ is located on lands with a	Complies
soil stability i compromised	s not	slope less than 18 degrees.	APZs are not located on slop greater than 18°.
APZs are ma		the APZ is managed in accordance	Complies
maintained to spread of fire	o prevent the to the building.	with the requirements of Appendix 4 of this document and is wholly within the boundaries of the development	APZ to be managed in accordance with PBP.
the APZ is pr perpetuity.	rovided in	site. APZ are wholly within the boundaries of the development site; and Other structures located within the APZ need to be located further than 6m from the refuge building.	Can Comply Assuming construction of sch commences prior to other development, Landcom, as th owner and developer of the la 50 m to 100 m around the school, is proposing to estab and maintain such APZ on th land owned by Landcom – ar excluding the land to be transferred to SINSW for the Primary School. Landcom ha provided in writing arrangement for the managements of the A



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NSW Department of Education New Primary School at Wilton Junction Bushfire Hazards and Risk Assessment

Project No. 12633168 Revision No. 0 Date 13/02/2025

FIGURE 5

Asset Protection Zone

 Wightenel@hidAUJSydnet/Projects/2112633168/GISIMaps/Deliverables/12633168_BHRA.aprx
 Data source: Imagery - Nearmap:

 Print data: 13 Feb 2025 - 17:11
 World Topographic Map: Esri, HERE, Gamin, USGS extracted: 13/02/2025; General topography - NSWSS; SVTM - DPIE, 2023; Bushfire prone land - DPIE, 2024;

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 any particular purpose and compt liability and representations or warranties about its accuracy, reliability on contract, tort or otherwise) for any expenses, losses, damages and/or costs (including
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 indirect or consequential damage) which are or may be incurred by any party as a result of this figure being inaccurate, incomplete or unsuitable in any way and for any reason.
 nany reason.

4.2 Construction requirements

Table 6 shows the compliance of construction with Table 2 of Appendix B of Addendum to PBP. The site is not constrained by Bushfire Attack Level (BAL) exposure. The site can achieve BAL LOW through the provision of temporary APZ in all directions until adjoining development occurs.

Table O	Or a function of a second complete second contract of from Table Or 6 Address to BDD)
Table 6	Construction requirements and compliance (adopted from Table 2 of Addendum to PBP)

Performance Criteria Acceptable Solutions Compliance notes				
The intent may be achieved where:				
NOTOTINGS	a construction level of BAL-19 under AS 3959 and section 7.5 is applied.	 Not applicable BAL determined using Table A1.12.5 of PBP. BAL is determined as Low through the provision of temporary APZ in all directions until adjoining development occurs, and based on the following mitigating factors: Updated BFPL (being undertaken under a separate application, refer Section 5) will remove the BFPL mapping from the entire site There will be no grassland hazard within 50 m of the site There will be no wooded bushfire hazard within 100 m of the site A1.3 of PBP stipulates the assessment process for grassland vegetation formation and clearly identifies that where a 50 m APZ is provided, there are no further requirements. This is not the Grassland Deeming Provisions located in 7.9 of PBP. 		

4.2.1 Fences and Gates

All fencing and gates are to be constructed of hardwood or non-combustible material to comply with Section 7.6 of PBP. Where fencing is within 6 m of a building, they should be made of non-combustible material only.

It is recommended all fencing within 6 m of buildings is made of non-combustible material.

4.3 Landscaping

Table 7 shows the compliance of landscaping with Table 2 of Appendix B of Addendum to PBP.

 Table 7
 Performance criteria and acceptable solutions for landscaping for SFPP development (adapted from Table 6.8 of PBP)

Perf	ormance Criteria	Acceptable Solutions	Compliance notes
The	intent may be achieved where:	1	
LANDSCAPING	landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions	landscaping is in accordance with Appendix4; and fencing is constructed in accordance with section 7.6.	Can Comply To be managed in accordance with PBP.

4.3.1 PBP requirements

Until such time as the surrounding hazard is permanently removed by adjoining development and the temporary APZ is no longer required, vegetation management, including landscaping, within the activity site and the temporary APZ (refer Figure 5) is to achieve the specifications of an Inner Protection Area (IPA), as described by PBP and outlined below:

Trees

- Canopy cover should be less than 15% (at maturity);
- Trees (at maturity) should not touch or overhang the building;
- Lower limbs should be removed up to a height of 2 m above ground;
- Canopies should be separated by 2 to 5 m; and
- Preference should be given to smooth barked and evergreen trees.

Shrubs

- Create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings;
- Shrubs should not be located under trees;
- Shrubs should not form more than 10% ground cover; and
- Clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.

Grass

- Should be kept mown (as a guide grass should be kept to no more than 100 mm in height); and
- Leaves and vegetation debris should be removed.

4.4 Access

Table 8 shows the compliance of access with Table 2 of Appendix B of Addendum to PBP.

Table 8

Performance criteria and acceptable solutions for access for SFPP development (adapted from Table 6.8b if PBP)

Performa	ance Criteria	Acceptable Solutions	Compliance notes
The inter	nt may be achieved wh	nere:	
FIREFIGHTING VEHICLES	firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation	Vehicular access must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the entire building; and Must have a minimum unobstructed width of 6m with no part of its furthest boundary more than 18m from the building and in no part of the 6m width be built upon or used for any purpose other than vehicular or pedestrian movement; and Must provide reasonable pedestrian access from the vehicular access to the building; and Must have a load bearing capacity and unobstructed height to permit the operation and passage of fire fighting vehicles; and	Can Comply The site does not currently have road access, however Landcom is expected to deliver the road network and surrounding public domain network in accordance with DA/2022/1279/1. Proposed Road 14 located on the eastern boundary of the site will ultimately provide future access to the site, with the main school entrance off Road 14.
		Must be wholly within the allotment except that a public road complying with above may serve as the vehicular access or part thereof.	
ACCESS ROAD CAPACITY	the capacity of access roads is adequate for firefighting vehicles	the capacity of road surfaces and any bridges/ causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes); bridges and causeways are to clearly indicate load rating	Can comply Access will be via the bridge of the Hume Highway which does comply with design requirements and supports access for adequate firefighting vehicles.
ACCESS TO WATER	there is appropriate access to water supply	 Reticulated water is to be provided to the development, where available; and Water for firefighting purposes must be made available and consist of – A fire hydrant system installed in accordance with AS2419.1; or Where no reticulated water is available, a static water supply consisting of tanks, swimming pools, dams or the like, or a combination of these, together with suitable pumps, hoses and fittings, determined in consultation with NSW RFS that – is capable of providing the required flow rate for a period of not less than 4 hours or has a volume of 10,000 litres for each occupied building. 	Can comply Hydrant points located outside internal road reserve and parking areas.

Non-perimeter access roads are designed to allow safe access and egress for firefighting vehicles while occupants are evacuating	 minimum 5.5m width kerb to kerb. parking is provided outside of the carriageway width. hydrants are located clear of parking areas. there are through roads, and these are linked to the internal road system at an interval of no greater than 500m. curves of roads have a minimum inner radius of 6m. the maximum grade road is 15° and average grade of not more than 10°. the road crossfall does not exceed 3°. a minimum vertical clearance of 4m to any overhanging obstructions, including tree branches, is provided. 	Can Comply The site does not currently have road access, however Landcom is expected to deliver the road network and surrounding public domain network in accordance with DA/2022/1279/1. Proposed Road 14 located on the eastern boundary of the site will ultimately provide future access to the site, with the main school entrance off Road 14.
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4.5 Utilities – Water supplies

Table 9 shows how the proposed water supply complies with Table 4 of Appendix B of Addendum to PBP.

Table 9

Performance criteria and acceptable solutions for water services for SFPP development (Adapted from Table 6.8c of PBP)

Perfo	ormance Criteria	Acceptable Solutions	Compliance notes	
The i	intent may be achieved v	vhere:		
	An adequate water supply for firefighting purposes is installed and maintained.	reticulated water is to be provided to the development, where available, or a 10,000 litres minimum static water supply dedicated for firefighting purposes is provided for each occupied building where no reticulated water is available.	Can Comply It is assumed the site will be serviced by a reticulated water supply.	
WATER SUPPLY	water supplies are located at regular intervals the water supply is accessible and reliable for firefighting operations	fire hydrant spacing, design and sizing comply with the relevant clauses of Australian Standard AS2419.1:2021. hydrants are not located within any road carriageway; and reticulated water supply to SFPPs uses a ring main system for areas with perimeter roads; and	Can comply The advice of a relevant authority of suitably qualified professional should be sought, for certification of design and installation in accordance with relevant legislation Australian Standards, and table 6.8 and table 6.8c of PBP.	
>	flows and pressure are appropriate	fire hydrant flows and pressures comply with the relevant clauses AS2419:2021,		
	the integrity of the water supply is maintained	all above-ground water service pipes external to the building are metal, including and up to any taps;		
	water supplies are adequate in areas where reticulated water is not available	a connection for firefighting purposes is located within the IPA or non-hazard side and away from the structure; a 65mm Storz outlet with a ball valve is fitted to the outlet.	Can Comply It is assumed the site will be serviced by a reticulated water supply.	

ball valve and pipes are adequate for water flow and are metal. supply pipes from tank to ball valve have the same bore size to ensure flow volume; and underground tanks have an access hole of 200mm to allow tankers to refill direct from the tank; and a hardened ground surface for truck access is supplied within 4m of the access hole; and above-ground tanks are manufactured from concrete or metal. raised tanks have their stands constructed from non-combustible materials on bush fires-resisting timber (see Appendix F AS 3959). unobstructed access is provided at all times unobstructed access is provided at all times tanks on the hazard side of a building are provided with adequate shielding for the protection of firefighters and; underground tanks are clearly marked all exposed water pipes external to the building are metal, including any fittings; and where pumps are provided, they are a minimum 5hp or 3kW petrol or dieselpowered pump, and are shielded against bush fire attack; any hose and reel for firefighting connected to the pump shall be 19mm internal diameter; and fire hose reels are constructed in accordance with AS/NZS 1221:1997 Fire hose reels and installed in accordance with the relevant clauses of AS 2441:2021 Installation of fire hose reels.

4.6 Utilities – Electrical services

Table 10 shows how the proposed supply of electricity services complies with Section 6.8.3 of PBP.

 Table 10
 Performance criteria and acceptable solutions for electricity services for SFPP development (Adapted from Table 6.8c of PBP)

Perf	ormance Criteria	Acceptable Solutions	Compliance notes
The	intent may be achieve	ed where:	
	location of	where practicable, electrical	Can Comply
RICITY SERVICES	electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings	transmission lines are underground, and where overhead, electrical transmission lines are proposed as follows: lines are installed with short pole spacing (30m), unless crossing gullies, gorges, or riparian areas; and	Associated site utilities and services will include installation of new 1500 kVA pad mount substation and a new main switchboard.
ELECTRICITY		no part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 <i>Guideline for Managing</i> <i>Vegetation Near Power Lines</i>	

4.7 Utilities – Gas services

Table 11 shows how any proposed supply of gas services (reticulated or bottle gas) complies with Section 6.8.3 of PBP. Confirmation of gas supply to the proposed activity will be part of the detailed design stage.

 Table 11
 Performance criteria and acceptable solutions for water, electricity, and gas services for SFPP development (Adapted from Table 6.8c of PBP)

Perfo	ormance Criteria	Acceptable Solutions	Compliance notes		
The i	The intent may be achieved where:				
	location and design	reticulated or bottled gas is installed	Can comply		
CES	of gas services will not lead to ignition of surrounding bushland or the fabric of buildings	The advice of a relevant authority or suitably qualified professional should be sought, for certification of design and installation in accordance with relevant legislation, Australian Standards, and table 6.8c of PBP.			
GAS SERVICES		are metal; and if gas cylinders need to be kept close to the building, safety valves are directed away from the building and at least 2m away from any combustible material, so they do not act as a catalyst to combustion; and polymer-sheathed flexible gas supply lines to gas meters adjacent to buildings are not used; and			
		above-ground gas service pipes external to the building are metal, including and up to any outlets.			

4.8 Emergency Management

Table 12 shows how the proposed emergency management plans comply with Section 6.8.3 of PBP.

 Table 12
 Performance criteria and acceptable solutions for emergency management plans for SFPP development (adapted from Table 6.8d of PBP)

Perfo	ormance Criteria	Acceptable Solutions	Compliance notes
The i	intent may be achieved where:		
	A Bush Fire Emergency and Evacuation management plan is prepared	bush fire emergency management and evacuation plan are prepared consistent with the:	Can comply It is assumed that emergency management plans will be
		The NSW RFS document: A Guide to Developing a Bush Fire Emergency Management and Evacuation Plan;	created as the school site is developed
		NSW RFS Schools Program guide;	
		Australian Standard AS 3745:2010 Planning for emergencies in facilities; and	
NAGEMENT		Australian Standard AS 4083:2010 Planning for emergencies – Health care facilities (where applicable). The bushfire emergency and evacuation management plan should include a mechanism for the early relocation of occupants.	
EMERGENCY MANAGEMENT		Note: A copy of the bush fire emergency management plan should be provided to the Local Emergency Management Committee for its information prior to occupation of the development.	
	Appropriate and adequate management arrangements are established for consultation and implementation of the bush fire emergency and evacuation management	an Emergency Planning Committee is established to consult with residents (and their families in the case of aged care accommodation and schools) and staff in developing and implementing an Emergency Procedures Manual; and	Can comply It is assumed that emergency management arrangements will be created for new buildings as the school site is developed
	plan.	detailed plans of all emergency assembly areas including 'on-site' and 'off-site' arrangements as stated in AS 3745:2010 are clearly displayed, and an annual (as a minimum) emergency evacuation is conducted.	

5. Revised Bush Fire Prone Land Mapping

The current BFPL map (Figure 3) does not reflect the approved development of surrounding land and subsequent removal or management of bushfire prone vegetation as part of the surrounding residential development and associated infrastructure currently under development. Furthermore, the vegetation management to be implemented as part of this development proposal (detailed in Section 4) further reduces the extent of surrounding BFPL. It is assumed that the BFPL mapping will be updated to reflect the development in the area once complete.

6. Conclusions

6.1 Evaluation of Environmental Impacts

An evaluation of the environmental impacts has led GHD to conclude the following:

1. The extent and nature of potential impacts are low and will not have significant impact on the locality, community and/or the environment.

2. Potential impacts can be appropriately mitigated or managed to ensure that there is minimal impact on the locality, community and/or the environment.

The proposed activity has been assessed against the specifications and requirements of PBP, as outlined in Table 13 below.

 Table 13
 Proposed bushfire development protection solutions and recommendations

Bushfire Protection Measures	Recommendations	Acceptable Solution	Performance Solution	Report Section
Asset protection zones	APZ dimensions are shown in Figure 5 and Table 4 Landcom has proposed to establish and maintain in perpetuity or until such time as the land is developed and the bushfire hazard is removed, a temporary APZ 50 m to the south and 100 m to the north, east and west.		Ø	4.1
Construction	Bushfire specific construction standards are not applicable or required due to mitigating factors show in Table 6 that mean all bushfire hazards are removed.	Ø	Ø	4.2
Landscaping	Addressing performance criteria or achieving acceptable solutions is recommended for landscaping within the site to achieve bushfire design principles. Fences within 6 m of the buildings shall be of non-combustible material.	Ø		4.3
Access	The site does not currently have road access, however Landcom is expected to deliver the road network and surrounding public domain network in accordance with DA/2022/1279/1. Access to and within the site to be designed with no bridges and hydrant points located outside internal road reserve and parking areas to achieve bushfire design principles.			4.4
Water supplies	The site to be serviced by a reticulated water supply.			4.5
Electrical services	Electricity supply located underground.			4.6

Gas services	Certification of design and installation for gas services are to be undertaken by a suitably qualified professional and in compliance with Section 6.8.3 of PBP.	Ø	4.7
Emergency management	Emergency management plans will be created as the school site is developed.	M	4.8

The aim of PBP in respect of development on bushfire prone land is "to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to the development potential, site characteristics and protection of the environment".

The objectives of PBP (Section 1.1) are:

- Afford buildings and their occupants protection from exposure to bushfire;
- Provide for a defendable space to be located around buildings;
- Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to the buildings;
- Ensure that appropriate operational access and egress for emergency service personnel and occupants is available;
- Provide for ongoing management and maintenance of bushfire prevention measures; and
- Ensure that utility services are adequate to meet the needs of firefighters.

The aims and objectives of PBP can be met for the proposed activity based on the conditions of the site and immediately adjoining areas. A temporary APZ will be required if the development of the school occurs in isolation of all other development, or prior to the commencement of other development on adjoining land.

7. Mitigation Measures

The REF pathway requires that all impacts are mitigated at the design, construction, and operation stages such that they are rendered not significant (Table 14).

 Table 14
 Proposed bushfire mitigation measures

Project Stage*	Mitigation Measures	Reason for Mitigation Measure	Section of Report
D/C/O	APZ: Prior to construction, Landcom must ensure the identified APZ (shown in Figure 5 and Table 4) is constructed to the specification detailed in Section 4.3.1. During operation, Landcom must ensure the identified APZ is managed in perpetuity or until such time as the land is developed and bushfire hazard removed.	To meet PBP requirements and ensure the bushfire risk is minimal at the new primary school at Wilton Junction.	4.1
D/C/O	Construction requirements: Construction requirements are not applicable or required due to mitigating factors that mean all	To meet PBP requirements and ensure the bushfire risk is	4.2

		bushfire hazards are removed. DoE to ensure all fences within 6 m of the buildings shall be of non-combustible material.	minimal at the new primary school at Wilton Junction.	
	D/O	Landscaping: Prior to occupation of the site DoE is to ensure landscaping within the site is designed to achieve PBP acceptable solutions until such time as the surrounding hazard is permanently removed. During operation, DoE must maintain landscaping and fencing in accordance with PBP.	To meet PBP requirements and ensure the bushfire risk is minimal at the new primary school at Wilton Junction.	4.3
	D/C/O	Access: Landcom to deliver the road network and surrounding public domain network in accordance with DA/2022/1279/1. Prior to development, Landcom and DoE to ensure road network designed and operated to achieve bushfire design principles, including a design excluding brides and with fire hydrants located outside of internal road reserve and parking areas.	To meet PBP requirements and ensure the bushfire risk is minimal at the new primary school at Wilton Junction.	4.4
	D/C/O	Water supplies: DoE to ensure the site is serviced by a reticulated water supply.	To meet PBP requirements and ensure the bushfire risk is minimal at the new primary school at Wilton Junction.	4.5
	D/C/O	Gas services: Prior to construction, DoE to ensure certification of design and installation for gas services are undertaken by a suitably qualified professional and in compliance with Section 6.8.3 of PBP.	To meet PBP requirements and ensure the bushfire risk is minimal at the new primary school at Wilton Junction.	4.7
	0	Emergency management: Prior to operation, DoE to prepare emergency management plans.	To meet PBP requirements and ensure the bushfire risk is minimal at the new primary school at Wilton Junction.	4.8

*Note: Project stages include:

(D) Design

(C) Construction

(O) Operation

8. Recommendations

It is recommended that the proposed activity be approved based on the recommendations in Table 13 and subject to the adoption of the mitigation measures provided in Table 14.

9. References

Australian Building Codes Board (2022). National Construction Code Volume One – Building Code of Australia. ABCB

Australian Standard (AS) AS3959:2018 - Construction of buildings in bushfire prone areas. Standards Australia.

Nearmap (2021). Aerial Imagery.

New South Wales Rural Fire Service (2019). Planning for Bushfire Protection – A guide for councils, planners, fire authorities and developers. NSW Government.

New South Wales Rural Fire Service (2022). Planning for Bushfire Protection – A guide for councils, planners, fire authorities and developers – Addendum 2022. NSW Government.

New South Wales Rural Fire Service (2025), Planning for Bushfire Protection – A guide for councils, planners, fire authorities and developers – Addendum 2025. NSW Government.

New South Wales Rural Fire Service (2023). Check if you're in bush fire prone land. NSW Government. <u>https://www.rfs.nsw.gov.au/plan-and-prepare/building-in-a-bush-fire-area/planning-for-bush-fire-protection/bush-fire-prone-land/check-bfpl</u>

New South Wales Government (2021). ePlanning Spatial Viewer. NSW Government. <u>https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address</u>

Appendices

Appendix A

Landcom letter of support: establishment of a temporary APZ around the proposed school at Wilton Junction



7 October 2024

Jeremy Stott School Infrastructure NSW

Dear Jeremy

Establishment of a temporary APZ around the proposed school at Wilton Junction

Based on information School Infrastructure NSW (SINSW) shared about their planning to date, specifically the *Bushfire Due Diligence – Opportunities and Constraints Assessment for the Wilton Junction Public School* produced by GHD date 2nd of July 2024 – attached to this letter – Landcom understands that the proposed school requires the establishment of a temporary Asset Protection Zone (APZ) around the school.

Specifically, as mentioned in the executive summary, this temporary APZ will need to be of 50 meters to the south between the grassland vegetation and the proposed school, and a of 100 m to the north, east and west between the grassy woodland vegetation and the proposed school.

Landcom as the owner and developer of the land 50 m to 100 m around the school is proposing to establish and maintain such an APZ on the land owned by Landcom – and excluding the land to be transferred to SINSW for the Primary School – to enable the Wilton Junction primary school planning, construction and asset protection. This proposal is limited to compliance with Planning for Bushfire Protection (PBP) requirements for landscaping and access – as far as reasonably practical and not cost prohibitive – as described in the GHD report in section 4.2 and 4.3, the other responsibilities resting with School Infrastructure. Landcom's APZ requirements will start when construction (substantial commencement) starts on the primary school. Landcom's APZ requirements will end once the bushfire hazard in permanently removed through the construction of roads, managed parklands, or built form development.

Landcom will do so in good will and at no cost to School Infrastructure, the Department of Education or the community.

When land is dedicated to Wollondilly Council, another state agency or another owner or lessee – for example surrounding roads, lots, development sites, parks or playing fields – Landcom will either transfer the responsibility of this temporary APZ to the landowner or continue to manage the APZ on behalf of the owner or lessee until these developments remove the hazard permanently or until the time these owners can and want to take on the bushfire hazard minimisation and mitigation responsibility for their land that sits in the temporary APZ area.

We are confident this arrangement will facilitate the planning and delivery the Wilton Junction primary school.

Yours sincerely eff Williams **Development Director - North Wilton**



Appendix B NSW RFS email correspondence: APZ solution

From: Anna Jones

Sent: Monday, July 15, 2024 2:43 PM

To: Mick George

Subject: RE: Status update - Pre-DA - Proposed school site Wilton NSW (Copy of RFS: DA-RM20240709020419)

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Hi Mick,

I have reviewed your pre-DA questions in relation to a future school site in Wilton.

Your two questions are:

- 1. Is the approach of temporary APZs acceptable in the instance of scenario 2 whereby the school is developed prior to the surrounding land?
- 2. Will BFPL mapping be amended to remove Cat 3 vegetation hazard in the instance of scenario 1 whereby the school is developed following the construction of the surrounding greenfield subdivision?

In response:

- The RFS will accept temporary APZs outside the school site providing (in accordance with 3.2.5 of PBP 19) the land owner is agreeable to a restriction on title or registered plan of management until such time the hazard is removed permanently.
- 2. The RFS does not have an automated process to make changes to BFPL maps following greenfield development, however spot changes can be applied when councils approach RFS. RFS review spot change requests every six months.

RFS BFPL map team can be reached via this email address: bushFireProne.Mapping@rfs.nsw.gov.au

Please note, as part of this pre-DA response the RFS <u>has not</u> reviewed the assessment parameters of the Bushfire Due Diligence report dated 27 May 2024.

Kind regards Anna

Disclaimer

RFS advice is based on information provided and policy and legislative requirements applicable at the time. The advice should be copied into, or referenced in, any subsequent development application.

All efforts are made to identify issues of relevance and likely concern with the preliminary proposal. However, the comments and views in this document are based only on the plans and information submitted for preliminary assessment and discussion at the pre-DA meeting. You are advised that: -The views expressed may vary once detailed plans and information are submitted and formally assessed in the

development application process, or as a result of issues contained in submissions by interested parties; Given the complexity of issues often involved and the limited time for full assessment, no guarantee is given that every

issue of relevance will be identified; Amending one aspect of the proposal could result in changes which would create a different set of impacts from the original plans and therefore require further assessment and advice; and,

The Pre-DA advice given does not bind Council officers, the elected Council members, or other parties to the DA process.

Anna Jones

Supervisor Development Assessment & Planning Planning & Environment Services - South

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The RFS acknowledges the Traditional Owners of Country throughout Australia. We pay our respects to Elders past and present



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