

# Bush Fire Assessment Report

in relation to the proposed  
warehouses and offices (Buildings 2A, 2B & 3)  
at:



**Lot 23 & 24 DP 262886  
Hollinsworth Road Marsden Park  
(subject site)**

## Document Tracking

Item	Detail
Project Name	Bush Fire Assessment Report, proposed warehouse distribution and office facilities
Project Address	Lot 23 & 24 in DP 262886, Hollinsworth Road Marsden Park
Client Name	Logos Property Group
Project Number	19/0654
Plan Reference	Plans by Pace Architects, numbered 190204 DWG No. 190204-DA100, undated
Prepared by	Laura Richards
Approved by	Catherine Gorrie
BAL	AS35959-2009 Not a Deemed to Satisfy Solution for this building class

Bushfire Consulting Services Pty Ltd Contact Details	
Catherine Gorrie	Managing Director
Office Number	02 4744 5800
Mobile Number	0425 833 893
Email	info@bfcs.com.au

## Document Control

Version	Primary Author	Description	Date Completed
1	Laura Richards	Draft	20/09/2019
2	Catherine Gorrie	Final	20/09/2019
3	Catherine Gorrie	Final, minor corrections from Client	25/09/2019
4	Catherine Gorrie	Final, minor correction from Client	27/09/2019
5	Catherine Gorrie	Final, corrections from Town Planner	30/09/2019

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*It should be borne in mind that the measures recommended in this report cannot guarantee that a building will survive a bushfire event on every occasion. This is due to the degree of vegetation management, the unpredictable behaviour of bushfires and extreme weather conditions. As such, the author is not liable to any person for any damage or loss whatsoever which has occurred or may occur in relation to the person taking action or not taking action based on the recommendations of this report.*

*NOTE: This bush fire assessment shall remain valid for 12 months from the date of issue.*


## Executive Summary

Bushfire Consulting Services was commissioned by Logos to provide a bush fire assessment for warehouse distribution and office facilities at Lot 23 & 24 in DP 262886, Hollinsworth Road Marsden Park, to support a modification application to the existing SSD8606 consent. the proposed development is known as “Buildings 2 & 3”, and is a modification to the originally proposed “Building 3” as approved under the SSD8606 consent. The subject site is mapped as designated bush fire prone land by Blacktown Council.

This proposal falls outside the requirements for specific bushfire safety construction standards as outlined in the NCC and requires only that the general fire safety provisions of the NCC be incorporated. *Planning for Bush Fire Protection* requires only that the proposal complies with the aim and objectives of that document. It is shown in this report that the proposal can comply with the aim and objectives of *Planning for Bush Fire Protection*.

However, sections 3 and 5 of AS3959-2009 (BAL 12.5) is recommended to be incorporated into construction, as a means to prevent the entry of embers to the building and provide a minimal level of protection from bushfire attack.

## Compliance Summary

<p>This Assessment has been Certified by:</p> <p>Catherine Gorrie</p> <p>BPAD-Level 3 Accredited Practitioner</p> <p>FPAA Cert No: BPAD20751</p>	
<p>What is the recommended level of compliance with AS3959-2009?</p>	<p>AS3959-2009 Not a Deemed to Satisfy Solution for this building class, however, BAL 12.5 is recommended</p>
<p>Can this proposal comply with AS 3959-2009 and Addendum to Appendix 3 of Planning for Bush Fire Protection (PBP)?</p>	<p>Yes</p>
<p>Does this development comply with the aim and objectives of PBP?</p>	<p>Yes</p>
<p>Is referral to the NSW Rural Fire Service (RFS) required?</p>	<p>No</p>

## List of Abbreviations

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 – 2009 including Amendment 3
BAL	Bushfire Attack Level
BCA	Building Code of Australia
BPAD	Bushfire Planning and Design (Accreditation Scheme)
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
Council	Blacktown Council
CDC	Complying Development Certificate
DA	Development Application
<i>EP&amp;A Act</i>	<i>Environmental Planning and Assessment Act – 1979</i>
FPAA	Fire Protection Association of Australia
IPA	Inner Protection Area
LPMA	Land & Property Management Authority
NCC	National Construction Code
OPA	Outer Protection Area
PBP	Planning for Bush Fire Protection 2018
<i>RF Act</i>	<i>Rural Fires Act – 1997</i>
RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SIX	Spatial Information Exchange
SWS	Static Water Supply

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# 1. Introduction

Bushfire Consulting Services was commissioned by Logos to provide a bushfire assessment for warehouse distribution and office facilities at Lot 23 & 24 in DP262886, Hollinsworth Road Marsden Park to support a modification application to the existing SSD8606 consent

The subject property is “bushfire prone land” as per the local Council bushfire prone land map as defined by Section 10.3 (s10.3) of the *Environmental Planning & Assessment Act (EP&A) 1979* and therefore the requirements stipulated by legislation apply.

This proposal falls outside the requirements for specific bushfire safety construction standards as outlined in the NCC and requires only that the general fire safety provisions of the NCC be incorporated. *Planning for Bush Fire Protection* requires only that this proposal complies with the aim and objectives of that document. It is shown in this report that the proposal can comply with the aim and objectives of *Planning for Bush Fire Protection*.

This report has considered the elements of bushfire attack and provided the proposed development is constructed in accordance with the recommendations of this report the development satisfies the aim and objectives of *Planning for Bush Fire Protection*.

## 2. Purpose of this Report

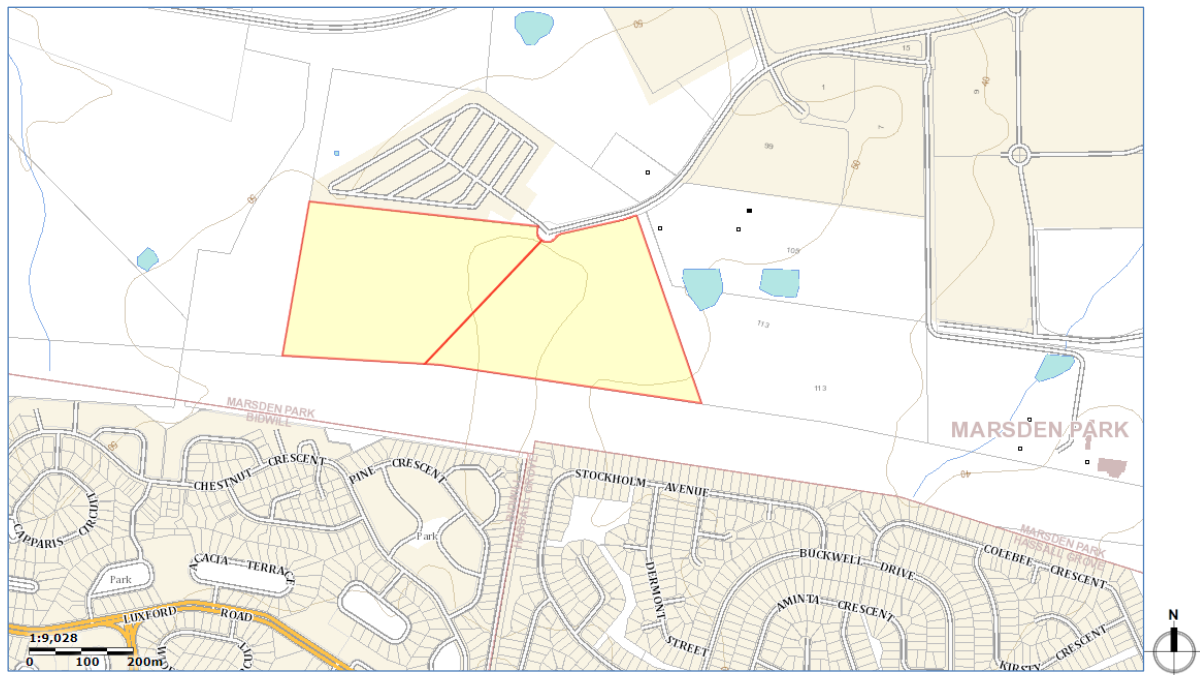
The purpose of this report is to provide the owners, the Consent Authority, the Certifier and the Rural Fire Service with a description of the proposed development as well as the vegetation type, slope and any other factors influencing the likely bushfire behaviour, sufficient to show that the development will be protected from the likely bushfire threat as outlined in current legislation.

This assessment includes recommendations that satisfy the aim and objectives of *Planning for Bush Fire Protection*.

### 3. Location

The site is located and known as Lot 23 & 24 in DP 262886, Hollinsworth Road Marsden Park. The property is part of the Blacktown Council local government area.

**Figure 1. Location Map Lot 23 & 24: Source: LPMA SIX Viewer (NSW Government 2019a)**



*Site location outlined in red*

**Figure 2. Aerial Map Lot 23 & 24: Source: LPMA SIX Viewer (NSW Government 2019a)**



*Site location outlined in red*

**Figure 3. Bushfire Prone Land Map Lot 23 and 24. Source: NSW Government Planning Portal  
(NSW Government 2019b)**



*Approximate site locations outlined in yellow*

### 3.1 Property Description

Lots 23 and 24 are each approximately 10.7 ha in area. Lot 23 faces north, and Lot 24 faces approximately northeast, onto Hollinsworth Road. At the time of site inspection, the lots were a mixture of vacant land involving bulk earthworks and buildings under construction.

Buildings 2A, 2B and 3 are three of eight buildings proposed across the two lots and are sited across both lots 23 and 24. Lot 481 in DP 634363 immediately south of the subject site is identified as the future Roads and Maritime Services (RMS) M9 Motorway corridor. Lots 21 and 22 in DP 262886 adjoining the east of the subject site have been identified by the subject site developer as being owned by Busways Pty Ltd to be developed as a bus depot.

The developer advises that the Sydney Business Park Masterplan by Watson Young numbered 1401, DA01B dated December 2014, highlights that the neighbouring land immediately west will be cleared and developed for industrial purposes as 'stage 3'.

## 3.2 Zoning

The land is zoned IN2 - Light Industrial and SP2 - Infrastructure under State Environmental Planning Policy (Sydney Region Growth Centres) 2006. Adjacent lands to the east and west are zoned IN2 – Light Industrial, adjacent lands to the north are zoned IN1 – General Industrial and SP2 – Infrastructure, and adjacent lands to the south are zoned SP2 - Infrastructure (Figure 5 and 6).

**Figure 4. Zoning Map Lot 23 Source: NSW Government Planning Viewer  
(NSW Government 2019b)**



*Approximate site location outlined in yellow*

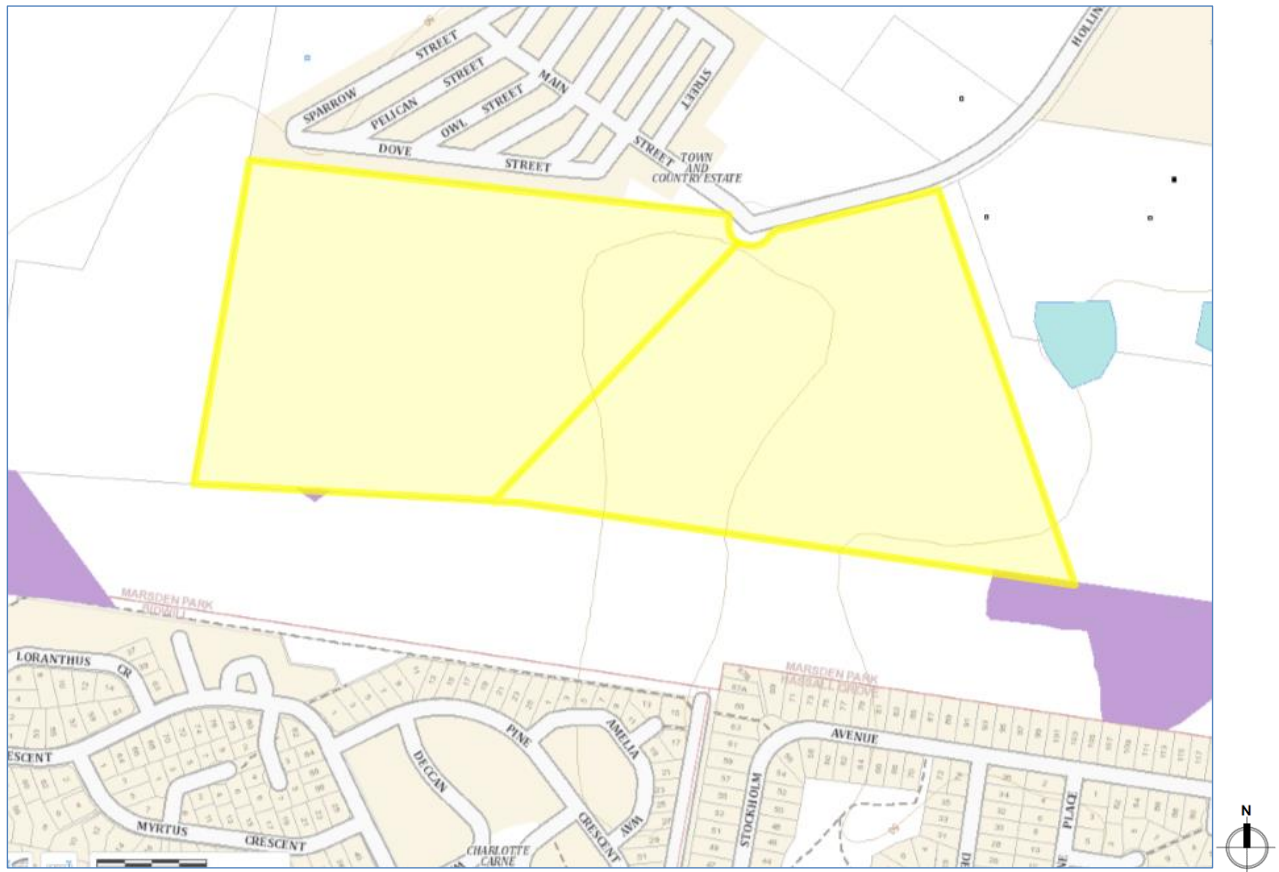


## 4. Biodiversity Values

A search of the NSW Office of Heritage and Environment and Heritage's Biodiversity Values Map has been carried out and has not revealed any high biodiversity values on the land.

**Figure 5: Biodiversity Values Map: Lot 23: NSW Office of Environment and Heritage**

<https://www.lmhc.nsw.gov.au/Maps/index.html?viewer=BOSETMap>



*Approximate site location outlined in yellow*

*Areas mapped in purple indicate land with high biodiversity value*

 Biodiversity Values

## 5. The Proposal

The proposal is for a warehouse distribution and office facilities. Each building (2A, 2B and 3) comprises of a warehouse, office and two awnings. In terms of the NCC, the classification of the building is Class 5, 7a, and 7b.

The NCC describes a Class 5 building as being an office building used for professional or commercial purposes, excluding buildings of Class 6,7,8 or 9. A Class 7b building is described as being ‘a building which is for storage or display of goods or produce for sale by wholesale’.

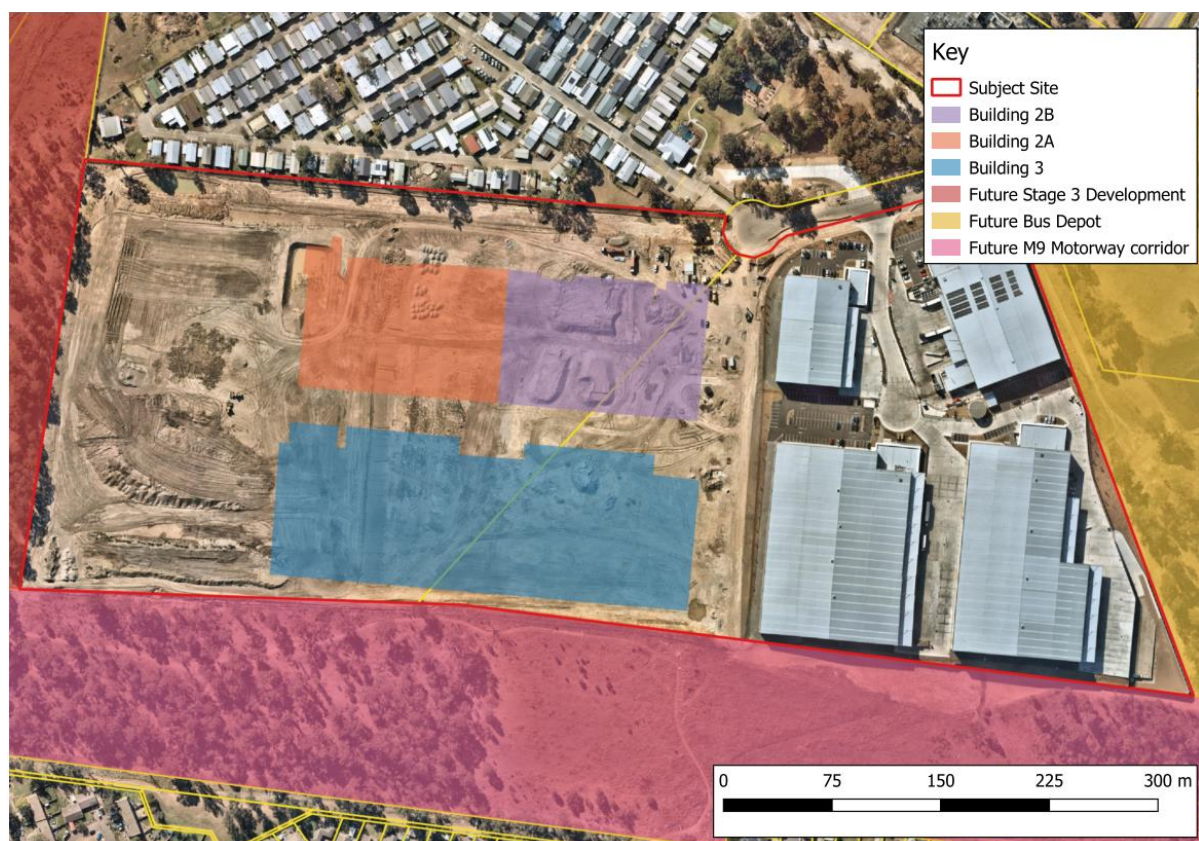
The NCC does not provide for any bushfire specific performance requirements for this class of building and, as such, AS3959-2009 does not apply as a deemed to satisfy provision. The proposal needs only to comply with the general fire safety provisions of the NCC.

However, it is a recommendation of this report that sections 3 and 5 of AS 3959-2009 (BAL 12.5) be applied to the building to provide a level of protection from ember attack and radiant heat up to 12.5kW/m<sup>2</sup>.

## 6. Site Assessment

Bushfire Consulting Services Pty Ltd attended the site on 1 May 2019. The assessment relates to the site plan (reference Appendix 1 below).

**Figure 6: Site Surrounds: Source: Site Plan and LPMA SIX Viewer (NSW Government 2019a)**



## 7. Aim and objectives of PBP 2006

The aim of PBP 2006 is “to provide for the protection of human life and minimise the impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment”.

*Planning for Bush Fire Protection (PBP)* states that the general fire safety construction provisions (NCC) are taken as acceptable solutions but the aim and objectives of PBP apply in relation to other matters such as access, water and services, emergency planning and landscaping/vegetation management”.

Given the above, the aim and objectives of PBP are as follows:

- Afford occupants of any building adequate protection from exposure to a bushfire
- Provide for a defensible space to be located around buildings
- Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition
- Ensure that safe operational access and egress for emergency service personnel and residents is available
- Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads in the asset protection zone (APZ)
- Ensure that utility services are adequate to meet the needs of fire fighters (and others assisting in bushfire fighting)

**Table 1. Compliance with the general objectives of PBP**

Aim and Objectives	Comment	Compliance
Afford occupants of any building adequate protection from exposure to a bushfire	Suitable setbacks (of at least 30m) will limit exposure to a bushfire	Yes, there are suitable setbacks for these non-habitable buildings

<b>Aim and Objectives</b>	<b>Comment</b>	<b>Compliance</b>
Provide for a defendable space to be located around buildings	There is ample defendable space around the structures	Yes
Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition	Separation from the vegetation forming a hazard is provided	Yes
Ensure that safe operational access and egress for emergency service personnel is available	Vehicular access is provided to all buildings and access is available and considered adequate	Yes
Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads in the asset protection zone (APZ)	Normal building and landscaping maintenance will provide this	Yes
Ensure that utility services are adequate to meet the needs of fire fighters (and others assisting in bushfire fighting)	The provision of water, electricity and gas to the development comply with section 4.1.3 of Planning for Bushfire Protection 2006	Yes, potable water is available to all buildings from Hollinsworth Road, power is being supplied, and gas is not proposed

Although the general fire safety provisions of NCC are considered to be adequate, they lack one key bushfire objective and that is to protect the building from ember attack. To aid in the reduction of the potential bushfire attack, the following recommendations are made.

## 8. Recommendations

The following recommendations are made for the bushfire measures for the proposed development of warehouse distribution and office facilities at Lot 23 & 24 in DP 262886, Hollinsworth Road Marsden Park, and are based upon the relevant provisions of the NSW Rural Fire Service Guideline entitled *Planning for Bush Fire Protection 2006*.

1. That Condition B45, Building 3 be deleted and replaced with the following;

### Design & Construction – Building 2 & 3

Where there is no conflict with Fire Safety requirements of the NCC, new construction of buildings 2A, 2B and 3 shall comply with Sections 3 and 5 (BAL 12.5) of Australian Standard AS3959-2009 'Construction of buildings in bush fire-prone areas' and Section A3.7 of the NSW Rural Fire Service Addendum to Appendix 3 of Planning for Bush Fire Protection 2006, or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate.

2. Services

The provision of water and electricity to the development comply with section 4.1.3 of Planning for Bushfire Protection 2006.

3. Emergency and Evacuation Planning

The need to formulate an emergency evacuation is suggested. To do so, occupants can complete a Bush Fire Safety Plan on the NSW RFS Website <http://www.rfs.nsw.gov.au/> under publications / bushfire safety.

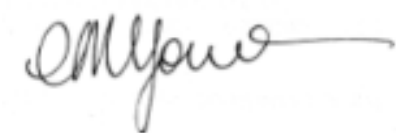
## 9. Summary

This proposal falls outside the requirements for specific bushfire safety construction standards as outlined in the NCC and requires only the general fire safety provisions of the NCC. *Planning for Bushfire Protection* requires only that this proposal complies with the aim and objectives of that document. It is demonstrated that the proposal can comply with the general aim and objectives of *Planning for Bushfire Protection 2006*.

*Notwithstanding the precautions adopted, it should always be remembered that bushfires burn under a wide range of conditions and an element of risk, no matter how small, always remains and there can be no guarantee because of the variable nature of bushfires that any one building will withstand bushfire attack on every occasion.*

*This report is a Bushfire Hazard Assessment that provides the required information to assist local Council and the Rural Fire Service in determining compliance in accordance with Planning for Bushfire Protection. The local Council is the final consenting authority and the construction of the building must comply with the requirements included in the Council's conditions of consent.*

If any further clarification is required for this report, please do not hesitate to contact me using the details below.



**Catherine Gorrie**

**Accredited Bushfire Consultant**

**Fire Protection Association Australia BPAD- LEVEL 3 (BPAD20751)**

Grad Dip Bushfire Protection (UWS 2010)

Diploma Environmental Health & Building Surveying (TAFE 2005)

Corporate Bronze Member Fire Protection Association Australia

**Bushfire Consulting Services Pty Ltd**

**Mob: 0425 833 893**



## 10. References

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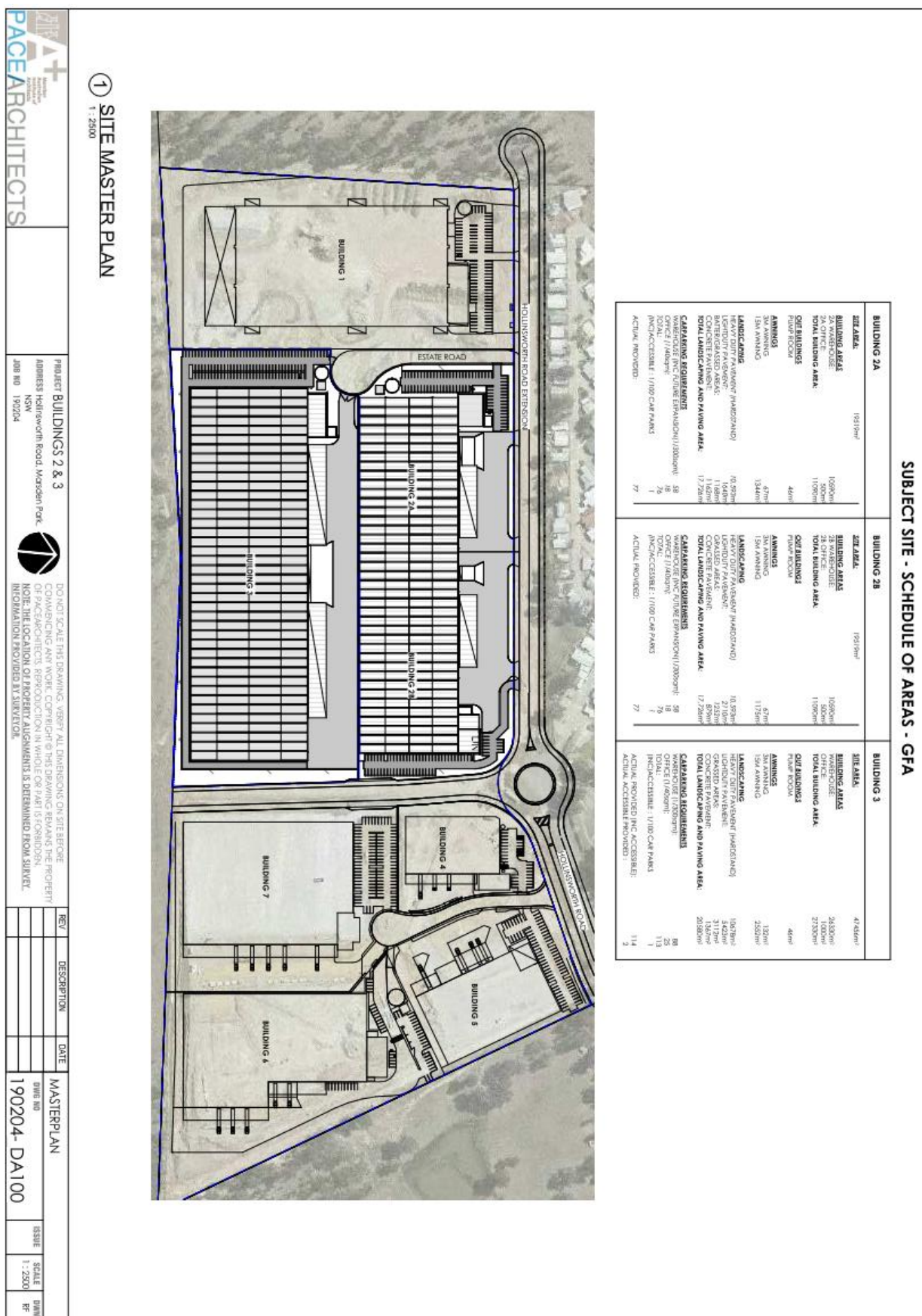
## 11. Legislation

*Environmental Planning & Assessment Act 1979*

*Rural Fires Act 1997*

*Rural Fires Regulation 2013*

*Bushfire Consulting Services Pty Ltd Report No. 19/0654*



## Appendix 2 – Photos of Site and Surrounds

Source: BFCS P/L 1/05/2019



*View to the southwest from Hollinsworth Road showing the subject site*



*The vegetation along the western boundary of the subject site, subject to future development*



*Closer view of the vegetation along the western boundary of the subject site*



*Vegetation along the southern boundary*



*Vegetation along the southern boundary, subject to future M9 roadway*