



## NSW RURAL FIRE SERVICE

Department of Planning and Environment (Sydney Offices)  
GPO Box 39  
Sydney NSW 2001

Your reference: SSD 9741  
Our reference: DA-2018-05505

**ATTENTION:** Patrick Copas

Date: Thursday 7 November 2019

Dear Sir/Madam,

**State Significant Development –  
Draft Conditions of Consent**

**1//1151370 - 1 SIRIUS ROAD LANE COVE WEST 2066 NSW Australia, 1//1151370 - 1 SIRIUS ROAD LANE COVE WEST 2066**

Reference is made to correspondence dated 13/09/2019 seeking draft conditions of consent for the above State Significant Development in accordance with the *Environmental Planning and Assessment Act 1979*.

New South Wales Rural Fire Service (NSW RFS) has considered the information submitted and provides the following recommended conditions;

### General Conditions

#### Evacuation and Emergency Management:

The intent of measures is to provide suitable emergency and evacuation (and relocation) arrangements for occupants of special fire protection purpose developments. To achieve this, the following conditions shall apply:

**1.0** Arrangements for emergency and evacuation are to comply with section 4.2.7 of 'Planning for Bush Fire Protection 2006', including the preparation of an emergency/evacuation plan consistent with the NSW Rural Fire Service document titled 'Guidelines for the Preparation of Emergency/Evacuation plan'.

#### Asset Protection Zones

The intent of measures is to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting fire fighting activities. To achieve this, the following conditions shall apply:

**2.0** At the commencement of building works, and in perpetuity, the area around the proposed buildings shall be managed as outlined within section 4.1.3 and Appendix 5 of 'Planning for Bush Fire Protection 2006' and the NSW Rural Fire Service's document 'Standards for asset protection zones' as follows:

- South west: Inner Protection Area (IPA) for a distance of 36 metres from the Generator Platform, No 1 and Substation;

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Locked Bag 17  
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- North west: Inner Protection Area (IPA) for a distance of 20 metres from the Generator Platform, No 2;
- North east: Inner Protection Area (IPA) for a distance of 25 metres from the Generator Platform, No 3 and,
- South east: Inner Protection Area (IPA) for a distance of 36 metres from the Generator Platform, No 1 and and Substation and up to the site boundaries from the Data hall and Generator 3.

The IPA must comprise:

- Minimal fine fuel at ground level;
- Grass mowed or grazed;
- Trees and shrubs retained as clumps or islands and do not take up more than 20% of the area;
- Trees and shrubs located far enough from buildings so that they will not ignite the building;
- Garden beds with flammable shrubs not located under trees or within 10 metres of any windows or doors;
- Minimal plant species that keep dead material or drop large quantities of ground fuel;
- Tree canopy cover not more than 15%;
- Tree canopies not located within 2 metres of the building;
- Trees separated by 2-5 metres and do not provide a continuous canopy from the hazard to the building; and,
- Lower limbs of trees removed up to a height of 2 metres above the ground.

### **Construction Standards**

***The intent of measures is that buildings are designed and constructed to withstand the potential impacts of bush fire attack. To achieve this, the following conditions shall apply:***

**3.0** Construction on the south western, north western and north eastern elevations and roofing of the proposed Data Centre shall comply with Sections 3 and 9 (BAL FZ) of Australian Standard AS3959-2009 Construction of buildings in bush fire-prone areas or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate. Except for windows, flaming of the specimen is not permitted and there shall be no exposed timber.

**4.0** Construction on the south eastern elevation of the proposed Data Centre shall comply with Sections 3 and 8 (BAL 40) Australian Standard AS3959-2009 Construction of buildings in bush fire-prone areas or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of Planning for Bush Fire Protection 2006.

**5.0** Construction on the proposed Substation must comply with Sections 3 and 8 (BAL 40) Australian Standard AS3959-2009 Construction of buildings in bush fire-prone areas or NASH Standard (1.7.14 updated) 'National Standard Steel Framed Construction in Bushfire Areas – 2014' as appropriate and section A3.7 Addendum Appendix 3 of Planning for Bush Fire Protection 2006.

**6.0** Construction on the proposed Generator Platforms Nos 1,2 & 3 and diesel fuel tanks must be in accordance with the recommended alternate solution in the design and detailing of the Generator Insulated Base fuel tank thermal Study prepared by Parratech Group Pty Ltd (Doc: 9223-P-381.01, Revision B and dated 16/10/19).

### **Access – Property Access**

***The intent of measures is to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting fire fighting activities. To achieve this, the following conditions shall apply:***

**7.0** Property access roads must comply with the following:

- Atleast one alternative property access road is provided for individual dwellings (or groups of dwellings) that are located more than 200 metres from a public through road.
- Access to a development comprising more than three dwellings have formalised access by dedication of a public road and not by right of way (ROW).

- The road has a minimum carriageway width of 4 metres for rural-residential areas, rural landholdings or urban areas with a distance of greater than 70 metres from the nearest hydrant point to the most external part of a proposed building (or footprint). Any carriageway constriction along the road must be no less than 3.5 metres in width and for a distance of no greater than 30 metres.
- In forest, woodland and heath situations, rural property access roads have passing bays every 200 metres that are 20 metres long by 2 metres wide, making a minimum trafficable width of 6 metres at the passing bay.
- A minimum vertical clearance of 4 metres is provided to any overhanging obstruction, including tree branches.
- A loop road around the dwelling or a turning circle with a minimum 12 metre outer radius is provided.
- Curves have a minimum inner radius of 6 metres and are minimal in number to allow for rapid access and egress. The minimum distance between the inner and outer curves is 6 metres.
- Maximum grades for sealed roads do not exceed 15 degrees and not more than 10 degrees for unsealed roads. The crossfall does not exceed 10 degrees.
- Pavements and bridges are capable of carrying a load of 15 tonnes. Bridges clearly indicate load rating.
- Roads do not traverse a wetland or other land potentially subject to periodic inundation (other than a flood or storm surge).

#### **Access – Fire Trails**

***The intent of measures is to provide suitable access for fire management purposes and maintenance of APZs. To achieve this, the following conditions shall apply:***

**8.0** Fire trails shall comply with the following requirements of section 4.1.3 (3) of 'Planning for Bush Fire Protection 2006':

- A minimum carriageway width of 4 metres is provided with an additional 1 metre wide strip on each side of the trail (clear of bushes and long grass).
- The trail has a maximum grade of 15 degrees if sealed and not more than 10 degrees if unsealed.
- A minimum vertical clearance of 4 metres is provided to any overhanging obstructions, including tree branches.
- The crossfall of the trail is not more than 10 degrees.
- The trail has the capacity for passing by
  - reversing bays using the access to properties to reverse fire tankers, which are 6 metres wide and 8 metres deep to any gates, with an inner minimum turning radius of 6 metres and outer minimum radius of 12 metres; and/or
  - a passing bay every 200 metres, 20 metres long by 3 metres wide, making a minimum trafficable width of 7 metres at the passing bay.
- The fire trail is accessible to fire fighters and maintained in a serviceable condition by the owner of the land.
- Appropriate drainage and erosion controls are provided.
- The fire trail system is connected to the property access road and/or to the through road system at frequent intervals of 200 metres or less.
- Fire trails do not traverse a wetlands or other land potentially subject to periodic inundation (other than a flood or storm surge).
- Gates for fire trails are provided and locked with a key/lock system authorised by the local RFS.
- Fire trail design does not adversely impact on natural hydrological flows.
- Fire trail design acts as an effective barrier to the spread of weeds and nutrients.
- Fire trail construction does not expose acid-sulphate soils.

#### **Water and Utility Services**

***The intent of measures is to minimise the risk of bush fire attack and provide protection for emergency services personnel, residents and others assisting fire fighting activities. To achieve this, the following conditions shall apply:***

**9.0** Water, electricity and gas must comply with the following:

- All aboveground water pipes external to the building must be metal including and up to any taps/outlets/fittings.
- Electrical transmission lines should be located underground where possible. Overhead electricity lines must have short pole spacing (i.e. 30 metres) except where crossing gullies, gorges or riparian areas. No tree may be closer to an electricity line than the distance set out in in ISSC3 Guideline for Managing Vegetation Near Power Lines.
- Gas must be installed and maintained as set out in the relevant standard and all pipes external to the building must be metal including and up to any taps/outlets/fittings. Polymer-sheathed flexible gas supply lines must not be used.

### **Landscaping Assessment**

***The intent of measures is for landscaping. To achieve this, the following conditions shall apply:***

**10.0** Landscaping of the site should comply with following principles of Appendix 5 of 'Planning for Bush Fire Protection 2006':

- Suitable impervious areas are provided immediately surrounding the building such as courtyards, paths and driveways.
- Grassed areas, mowed lawns or ground cover plantings are provided in close proximity to the building.
- Planting is limited in the immediate vicinity of the building.
- Planting does not provide a continuous canopy to the building (i.e. trees or shrubs should be isolated or located in small clusters).
- Landscape species are chosen in consideration needs of the estimated size of the plant at maturity.
- Species are avoided that have rough fibrous bark, or which keep/shed bark in long strips or retain dead material in their canopies.
- Smooth bark species of tree are chosen which generally do not carry a fire up the bark into the crown.
- Planting of deciduous species is avoided which may increase fuel at surface/ ground level (i.e. leaf litter).
- Climbing species are avoided to walls and pergolas.
- Combustible materials such as woodchips/mulch and flammable fuel are stored away from the building.
- Combustible structures such as garden sheds, pergolas and materials such timber garden furniture are located way from the building.
- Low flammability vegetation species are used.

### **General Advice - Consent Authority to Note**

- The NSW Rural Fire Service recognises that the site is constrained and that the proposed development falls within the Flame Zone. Flame Zone development is high risk development; consequently, in situations such as this, the Service seeks to improve the overall fire safety of the existing development. This requires greater emphasis on construction standards, landscaping, siting, and vegetation management practices to ensure improved levels of protection are afforded to the development, its occupants and fire fighters. The Service has undertaken a merit based assessment of the proposal and provides the above advice in accordance with 'Planning for Bush Fire Protection 2006'.
- This letter is in response to a further assessment of the application submitted and supersedes our previous general terms of approval/recommendations dated 8 October 2019.

For any queries regarding this correspondence, please contact Craig Casey on 1300 NSW RFS.

Yours sincerely,

Kalpana Varghese

**Team Leader, Dev. Assessment & Planning  
Planning and Environment Services**