

NSW RURAL FIRE SERVICE



The Secretary NSW Department of Planning & Environment GPO Box 39 SYDNEY NSW 2001 Your reference: SSD7413 Our reference: D15/3766 DA16081403313AB

Attention: Ms Leanne Grove

7 September 2016

Dear Ms Grove

Agency Comment Environmental Impact Assessment (SSD7413) Grafton Correctional Centre 313 Avenue Road Lavadia

I refer to your correspondence dated 11 August 2016 seeking comments from the NSW Rural Fire Service (NSW RFS) with respect to the above State Significant Development (SSD) application.

The NSW RFS understands the SSD application seeks approval for the concept proposal and stage 1 early works as detailed below:

Concept Proposal

A correctional centre of 1,700 beds comprised of:

- A maximum security section of 1,300 beds that will include:
 - o 1,000 beds for male inmates; and
 - o 300 beds for female inmates;
- A minimum security section that will consist of 400 beds for residential male inmates;
- Internal access and car park for approx 500 car spaces;
- Other associated facilities include recreational oval, special accommodation units, administration, workshops, staff amenities, visits facilities, access, parking and utilities.

Stage 1 Early Works DA

- Vegetation clearance and biodiversity management activities;
- Construction of access roads including fire access roads to the extent required to conduct Stage 1 works;
- Construction of auxiliary facilities such as construction compound, construction staff parking facilities and stockpiles sites;

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- Temporary provision of water, power and communication services within the site to the extent required to conduct Stage 1 works;
- Demolition of the existing house and sheds;
- Bulk excavation and site stabilisation works and landscaping.

The RFS has reviewed the documents provided with the SSD application and provides the following comment:

- The subject land is not mapped bush fire prone by Clarence Valley Council, however evidence suggest that both woodland and grassland hazards are located on the subject and adjoining lands; and
- The opportunity to evacuate the facility due to bush fire threat is very limited. The facility is required to have suitable bush fire prevention measures to compensate for this requirement.
- The NSW RFS is the primary response agency for either bush or structural fires impacting on the facility;
- This correspondence does not consider the final design (stage 2) of the correction facility.

Therefore the NSW RFS recommends the following conditions be attached to any consent granted for stage 1 – early works:

- 1. Construct and maintain a minimum 100 metre Asset Protection Zone (APZ) around the construction site compound. The APZ shall be maintained 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'.
- 2. Construct and maintain 20 metre Asset Protection Zone (APZ) around perimeter of the subject land.
- Construct a fire fighting vehicle access road (to fire trail standard) within the perimeter APZ. The fire fighting vehicle access road shall comply with the following fire trail requirements of section 4.1.3 (3) of 'Planning for Bush Fire Protection 2006'.
 - A minimum carriageway width of 4 metres with an additional 1 metre wide strip on each side of the trail (clear of bushes and long grass) is provided;
 - The trail is a maximum grade of 15 degrees if sealed and not more than 10 degrees if unsealed;
 - A minimum vertical clearance of 4 metres to any overhanging obstructions, including tree branches is provided;
 - The crossfall of the trail is not more than 10 degrees;
 - The trail has passing bays every 200 metres. The passing bays shall be a minimum 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;
 - Fire trails do not traverse a wetlands or other land potentially subject to periodic inundation (other than a flood or storm surge).

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- 4. In recognition that no reticulated water supply is available to the development, a total of 20,000 litres fire fighting water supply shall be provided for fire fighting purposes. The fire fighting water supply shall be installed and maintained in the following manner:
 - a) Fire fighting water supply tank(s) shall be located not less than 5 metres and not more than 20 metres from the approved structure.
 - b) New above ground fire fighting water supply storage's are to be manufactured using non combustible material (concrete, metal, etc). Where existing fire fighting water supply storage's are constructed of combustible (polycarbonate, plastic, fibreglass, etc) materials, they shall be shielded from the impact of radiant heat and direct flame contact.
 - c) Non combustible materials (concrete, metal, etc) will only be used to elevate or raise fire fighting water supply tank(s) above the natural ground level.
 - d) A 65mm metal Storz outlet with a gate or ball valve shall be fitted to any fire fighting water supply tank(s) and accessible for a fire fighting truck.
 - e) The gate or ball valve, pipes and tank penetration are adequate for the full 50mm inner diameter water flow through the Storz fitting and are constructed of a metal material.
 - f) All associated fittings to the fire fighting water supply tank(s) shall be non-combustible.
 - g) Any below ground fire fighting water supply tank(s) constructed of combustible (polycarbonate, plastic, fibreglass, etc) materials shall be shielded from the impact of radiant heat and direct flame contact.
 - h) A hardened ground surface for fire fighting truck access is to be constructed up to and within 4 metres of the fire fighting water supply (tank or Storz fitting).
 - i) Any fire fighting water supply tank(s) located below ground shall be clearly delineated to prevent vehicles being driven over the tank.
 - j) All water supplies for fire fighting purposes shall be clearly signposted as a fire fighting water supply.
 - k) Below ground fire fighting water supply tank(s) shall have an access hole measuring a minimum 200mm x 200mm to allow fire fighting trucks to access water direct from the tank.
 - I) Fire fighting water supply tank(s) and associated fittings, located within 60 metres of a bushfire hazard and on the hazard side of an approved building, shall be provided with radiant heat shielding to protect the tank from bush fire impacts and maintain safe access to the water supply for fire fighters.
 - m) A minimum 5hp or 3kW petrol or diesel powered pump(s) shall be made available to the water supply. A 19mm (internal diameter) fire hose(s) and/or reel(s) shall be connected to the pump. Fire hose(s) and/or reel(s) must be installed so that each elevation of the building can be reached by a fire hose(s). The fire hose(s) and/or reel(s) must be constructed in accordance with 'AS/NZS 1221:1997, Fire hose reels' and shall be installed in accordance with 'AS 2441:1988 Installation of fire hose reels' as in force on 1 September 2005.
 - n) Pumps are to be shielded from the direct impacts of bush fire.
 - o) A Static Water Supply (SWS) sign shall be obtained from the local NSW Rural Fire Service (RFS) and positioned for ease of identification by RFS personnel and other users of the SWS. In this regard:
 - i. Markers must be fixed in a suitable location so as to be highly visible; and
 - ii. Markers should be positioned adjacent to the most appropriate access for the water supply.
 - Note: The definition of below ground dedicated fire fighting water supply tank(s) is when the outlet valve is located below natural ground level.
- 5. During the early works construction phase, a fire management plan is to be prepared that addresses the following requirements:
 - a) Contact person (site supervisor) and 24 hour contact phone number; and
 - b) Schedule and description of proposed bush fire mitigation works including:

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- Location of asset protection zones;
- Location of water supply;
- Internal access roads.

c) A plan identifying the location and storage of bulk flammable liquids and materials;

d) A 'hot works' management plan including:

- Restriction when 'hot works' are limited or prohibited;
- Safety measures to be implemented when 'hot works' are being conducted.
- e) An Emergency/Evacuation Plan is to be prepared consistent with the NSW Rural Fire Service document 'Guidelines for the Preparation of Emergency/Evacuation plans' and Australian Standard AS 3745 2010 'Planning for Emergencies in Facilities'.

A copy of the fire management plan shall be given to the Clarence Valley Fire Control Centre prior to works commencing.

For any queries regarding this correspondence please contact Alan Bawden on 6691 0400.

Yours Sincerely

And

John Ball

Manager - Customer Service Centre Coffs Harbour

The RFS has made getting information easier. For general information on 'Planning for Bush Fire Protection, 2006', visit the RFS web page at www.rfs.nsw.gov.au and search under 'Planning for Bush Fire Protection, 2006'.