

Our reference: A13113-JT/NVD:

5 February 2014

The Planning Group NSW Pty Ltd
Via email marian.higgins@tpgnsw.com.au



Attention: Marian Higgins

Dear Marian

**Re: Bushfire Constraints Feasibility
River Road, Oatley**

Travers bushfire & ecology (TBE) has reviewed the bushfire constraints posed to the site at River Road, Oatley to assess the feasibility of future development including those classified by the NSW Rural Fires Service as 'special fire protection purpose development' (SFPP).

In January 2014 *TBE* produced Schedule 1 – Bushfire Protection Measures. Our assessment included an analysis of the bushfire risk posed to the site and an assessment in accordance with *Planning for Bushfire Protection 2006 (PBP)* was undertaken to guide future development options.

It is understood that Council have now reviewed our Schedule 1 and as a result have further questions / queries expressed in an email from Alex Wilson – Manager Property Assets at Hurstville City Council (dated 23rd January 2014). As a result we provide the following additional information to provide clarification on the types of development that can occur within each zone as depicted in Schedule 1 as well as evacuation constraints and options.

- The *Special Fire Protection Purpose (Developable area)* (depicted in blue hatch) identifies the developable area and is restricted to a small area (0.2032ha) within the north-eastern portion of the site. Buildings for habitable use (residential units related to SFPP use) are restricted to this area only.
- The Bushfire Construction Standards AS3959 (2009) (depicted in orange, red and blue) are the BAL ratings which have been determined using Table 2.4.2 of AS3959 – *Construction of buildings in bushfire-prone areas*. These BAL ratings have been shown to provide an indication of future construction cost if Council choose to utilise the site for future residential development or for buildings associated with the construction of a SFPP development (i.e. administration buildings). Structures such as detached garages, sheds, outbuildings, carparks, roads, parks and gardens can be located within these zones.
- The *asset protection zone* (depicted in light green) identifies the minimum setback required for residential subdivision. Although habitable buildings cannot be located within this zone other Class 10 (Building Code of Australia) structures such as detached garages, sheds, outbuildings, carparks, roads, parks can be located within the APZ. Please note that a separation of 10m from the habitable building is required

to ensure that the structure does not require compliance with AS3959 *Construction of buildings in bushfire-prone areas*.

Evacuation Capability

PBP requires the following objectives to be considered in relation to SFPP development.

1. Provide for the special characteristics and needs of occupants. Unlike residential subdivisions, which can be built to a construction standard to withstand the fire event, enabling occupants and fire fighters to provide property protection after the passage of fire, occupants of SFPP developments may not be able to assist in property protection. They are more likely to be adversely affected by smoke or heat while being evacuated.
2. Provide for safe emergency evacuation procedures. SFPP developments are highly dependent on suitable emergency evacuation arrangements, which require greater separation from bushfire threats. During emergencies, the risk to fire fighters and other emergency services personnel can be high through prolonged exposure, where door to door warnings are being given and exposure to the bushfire is imminent.

Access to the site is restricted to a single access only via River Road to the north. This access is adjoined directly by bushland vegetation to the west and as a result safe evacuation needs careful consideration. In this regard we provide the following recommendations based on either a SFPP development (within or without secondary access) or a residential subdivision.

Option 1 – Construction of SFPP development (no additional access provisions)

- Maintain the entire River Road corridor (20m) up to Mulga Road as an APZ, including the provision of an additional 10m wide APZ within the adjoining public reserve (subject to relevant approvals).
- Upgrade the road to provide a carriageway width of at least 8 metres
- Minimise the length of the road to ensure direct access to the retirement village.
- Consider the erection of a radiant heat barrier between the road boundary and the adjoining bushland.
- The preparation of a bushfire evacuation plan.

Option 2 – Construction of SFPP development

- Council should consider creating a new road parallel to the railway corridor. This would require purchase of residential allotments to the north of the site to allow for a primary access point to the site (minimum 6.5m wide).
- Provision of a secondary access on the current access.
- The preparation of a bushfire evacuation plan.

Option 3 – Residential subdivision

The developable land currently available for a residential subdivision / units is substantially larger than that for a SFPP development. In addition the evacuation capability for a subdivision is somewhat less onerous than that for a SFPP development. The following recommendations for future subdivision / unit development should also be considered.

- Maintain the entire River Road corridor (20m) up to Mulga Road as an APZ.
- Upgrade the road to provide a carriageway width of 8 metres

If you require any further information please do not hesitate to contact the undersigned on (02) 4340 5331 or at info@traverseecology.com.au.

Yours faithfully



John Travers

BA Sc. / Ass Dip / Grad Dip / BPAD-A 15195 (FPA)

Managing Director – **Travers bushfire & ecology**



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Accreditation by the Fire Protection Association Australia*