



Umow Lai

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Principal
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Dear Phil

RE: HAHS Hawkesbury SSSA Response to Submission “Planning for Bushfire Protection – 2006”

With reference to the document; “Complete-Planning-for-Bush-Fire-Protection-2006”, Section 4.2.7 – Services. The table below provides a summary of the design of relevant services in responded to performance criteria and acceptable solutions as stated in the document.

Performance Criteria	Acceptable Solutions	HAHS Hawkesbury Proposed Solution
Reticulated water supplies		
Water supplies are easily accessible and located at regular intervals	Access points for reticulated water supply to SFPP developments incorporate a ring main system for all internal roads.	Reticulated water supply is available to the site, via the Western Sydney University (WSU) campus fire water ring main. The WSU campus ring main system features 500 kL of on site water storage and ring main arrangement of fire water supply throughout the internal roads within the campus.
	Fire hydrant spacing, sizing and pressures comply with AS 2419.1 – 2005. Where this cannot be met, the RFS will require a test report of the water pressures anticipated by the relevant water supply authority, once development has been completed. In such cases, the location, number and sizing of hydrants shall be determined using fire engineering principles.	The hydrant system spacing, sizing and pressures are designed to be compliant with AS2419.
	The provisions of public roads in section 4.1.3 in relation to parking are met.	

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Non-reticulated water supply area		
A water supply reserve dedicated to firefighting purposes is installed and maintained. The supply of water can be an amalgam of minimum quantities for each lot in the development and be reticulated within dedicated firefighting lines.	10,000 litres is the minimum dedicated water supply required for firefighting purposes for each occupied building, excluding drenching systems.	As above
	The provision for suitable connection for RFS and/or NSW Fire Brigades purposes in section 4.1.3 in relation to water supplies is made available.	As above
Electricity		
Location of electricity services will not lead to ignition of surrounding bushland or the fabric of buildings or risk to life from damaged electrical infrastructure.	Electrical transmission lines are underground	The new HV electrical transmission supply from Londonderry Road to the transformers serving the site is to be underground. The new LV electrical reticulation between the new transformers and each building is to be underground.
Gas		
Location of gas services will not lead to ignition of surrounding bush land or the fabric of buildings	Reticulated or bottled gas is installed and maintained in accordance with AS 1596 - 2002 and the requirements of relevant authorities. metal piping is to be used.	No gas cylinders are proposed for the site.
	All fixed LPG tanks are kept clear of all flammable materials and located on the non-hazard side of the development.	No gas cylinders are proposed for the site.
	If gas cylinders need to be kept close to the building, the release valves must be directed away from the building and away from any combustible material, so that they do not act as catalysts to combustion.	No gas cylinders are proposed for the site.
	Polymer sheathed flexible gas supply lines to gas meters adjacent to buildings are not to be used.	Natural Gas is supplied to the site via buried pipework. All above ground pipework is to be metallic.

Yours Sincerely
UMOW LAI



Paul Jacobsen
Director