



Ms Jackie Holm  
Principal Planning Officer  
Strategy and Engagement  
Department of Planning, Lands and Heritage  
140 William Street  
Perth WA 6009

11<sup>th</sup> April 2019

Dear Jackie

*Further to recent conversations with our members please find below our thoughts and concerns regarding the proposed amendments to Element 3: Vehicular Access of the Guidelines for Planning in Bushfire Prone Areas:*

The Australian Institute of Landscape Architects (AILA) interests range across the full gamut of the built and natural environments, particularly where this concerns our quality of life, the design of built form and protection of the natural environment. As such our comments primarily concern themselves with these matters.

#### **1. Review**

To date, the Department has undertaken a targeted consultation approach in the formulation of the Guidelines. However, the potentially far-reaching impacts of the proposed changes across the built environment and the ongoing issues with the application and interpretation of the guidelines, particularly in regard to alternative solutions is such that broader consultation and review should be considered.

It would also be beneficial if consultation and review across State agencies and policies were to be undertaken before future iterations are released to identify where inconsistencies with existing practices and policies exist.

#### **2. Performance Principal**

AILA appreciate that the revised Performance Principle seeks to minimise risk as it relates to emergency management. However, in doing so, this introduces other risks and potential costs. One concern is that the intent of the proposed Performance Principles is incongruent with current DFES emergency management practice.

P3 - The proposed Performance Principle states:

*“The layout, design and construction of public and private vehicular access and egress to and within the site allows for safe and efficient evacuation by the community, whilst simultaneously providing a safe operational environment for emergency service personnel during firefighting and emergency management.”*

Current public bushfire emergency management practice, as espoused by DFES, is that residents should leave early or if too late, they should prepare to actively defend and shelter in place. This practice is based upon the evidence that more lives are lost due to residents leaving too late. The P3 Principle would allow, and effectively encourage, such unsafe behaviour.



Therefore, AILA queries whether it is appropriate to establish a performance standard and corresponding guidelines that potentially encourages residents to evacuate when it is too late to do so safely and at the same time potentially clash with firefighting activities, a situation that would be exacerbated if visibility was unpredictable due to smoke conditions.

In short, the proposed revised performance Principle is fundamentally inconsistent with the current practice of emergency management.

### 3. Acceptable Solutions

1. Greater clarity in the structure of the document is required. The structure of the Guidelines and corresponding text is confusing. For example, A3.4 - Cul-de-sac - '*Should be avoided and should only be considered where it is demonstrated that an alternative design option does not exist due to site constraints*'.  
However, cul-de-sacs are, within the structure of the document, listed under the heading 'Acceptable Solutions' and as such should be more applicable than any 'alternative design options' not explicitly outlined. Yet the text suggests the unspecified alternative design options are preferred, so the inclusion of cul-de-sac's as an acceptable solution is confusing. Furthermore Section A3.4 goes on to describe how a cul-de-sac should be designed.
2. State Policy 7.0 Design of the Built Environment sets out a number of principles that are considered imperative to the successful delivery of economic, environmental, social and cultural benefits in the built environment in Western Australia. The proposed Element 3 Acceptable solutions directly and/or indirectly impact the ability to meet, *inter alia*, the following principles:
  - Context and Character
  - Landscape Quality
  - Sustainability
  - Amenity
  - Safety
3. Section E3B providing clarity within the planning process is a welcome addition, however requiring the location (albeit indicative) of future dwellings on a structure plan, even subdivision, is problematic. The requirement to demonstrate dwelling locations at these phases is onerous and unnecessary as lot layout is not fixed or sometimes it is not even known at structure plan stage and at subdivision the BAL Assessment and BMP is sufficient to determine the suitability of development.
4. We would also suggest consideration of including Local Development Plan in Section E3B
5. The acceptable solutions have clearly been tested within a rural development context. However, they do not appear to have been not tested within an urban built form environment. When the provisions are applied across infill development and greenfield development sites, a number of inconsistencies arise between various existing planning policies and the proposed changes.



6. When the required standard services alignments, various government vegetation retention, greening and LGA street tree policies and other technical requirements are taken into account, the minimum road reserve width for public roads would be 19.4m. This is a significant impact on development, particularly when considered against the current guidelines that a standard subdivision road reserve width of 15m is acceptable.
7. Shaded, comfortable and safe streets promote walking and improve physical and mental health. The proposed horizontal clearance requirements within table 6 will significantly impact the opportunity to create streets that facilitate and encourage pedestrian and cycle movements and will instead encourage increased vehicle use and/or subject pedestrians to much greater sun exposure and likely increase the risk of skin cancer.
8. The approach would also compromise various street tree and beautification initiatives, increase erosion and sedimentation, and create hotter micro climates – worsening the potential health impacts of heatwaves, which are predicted to become more extreme due to the effects of climate change. The historical death toll from heatwaves in Australia is larger than that of all other natural disasters put together. (source: <https://riskfrontiers.com/risks/heatwave/>) and consideration should be given to population health impacts this may have.
9. There is a direct correlation with wider streetscapes and driver behaviour, with an increased tendency to speed. Conversely, narrowing a streetscape and a driver's view corridor with canopy vegetation has been demonstrated to influence driver behaviour causing them to slow down. This fact is the cornerstone of the Department of Transport's new initiative 'Safe Active Streets'. Driver behaviour represents a genuine 'day-to-day' risk to community safety and while wider streets may make it safer for those fighting fires it will put more lives at risk at all other times.
10. The Acceptable Solution for A3.5 Communal roads servicing strata developments being public road standards for strata developments for 3 lots is unrealistic.
11. The dimensions along the length of roads presumes that fire fighters will operate at every point along a road reserve to fight fires on both sides of the road. This would seem to be unrealistic in so far as there are few areas of design within the built environment where you design to meet maximum capacity across the board.
12. It is understood that the DWER clearing exemptions do not apply to the removal of vegetation to manage a hypothetical risk of future fire, but only if the vegetation represents an imminent threat. This requirement imposes further issues in the realisation of the acceptable solution in areas with existing vegetation and in infill development areas.
13. Extensive clearing along verges to facilitate the required 12m horizontal clearance as shown in Figure 1 would create space for weed infestation which would increase ongoing management costs for residents and local governments, and if unmanaged, result in a Grassland bushfire risk undermining the original intent.
14. Figure 8 Design Requirement for a turn-around area Type A, B and C indicate a radius of 17.5m, double that of the current guidelines. Should this be required, the land take on private property is excessive and appears unnecessary given this is larger than a standard cul-de-sac. In fact, if this requirement were applied to say the property as shown in Figure 7 on the same page of the Guidelines, it would likely take up most of the lot, leaving no room for a house or a garden.



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15. Loss of vegetation on rural and scenic roads to accommodate the Acceptable Solutions is of considerable concern and potentially undermines the environmental health, tourism experience and landscape values of our regional areas.
16. The proposed widening of impermeable areas associated with the requirements of Table 6 and Figure 1 will also lead to increased stormwater management requirements, increased construction and maintenance costs, all of which is born by ratepayers.

We welcome the opportunity to discuss the issue with you in further detail.

Yours sincerely,

Andrew Thomas  
AILA WA Chapter President