



22 April 2021
L164K_R05_Epping Response P2

Ethos Urban
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Attention: Gareth Bird

Sydney Trains Billboard Signage Response to Epping Submissions

As requested, we have addressed the objections raised.

Background

Prior to 2017 there was little regulatory control of outdoor illuminated signage.

- AS4282:1997 Control of the obtrusive effects of outdoor lighting did not include them in its scope.
- In 2017 the NSW Transport Corridor Advertising and Signage Guidelines were published. These set maximum luminance (brightness) for signs at different time of the day in different areas. It also set the minimum dwell time, the time that an image must remain before it can be changed.
- In 2019 AS/NZS4282:2019 was published. This edition included:
 - Additional limits on sign luminance,
 - Limits on the illuminance on residential properties, before and after 11:00pm, and
 - Threshold Increment, a measure of the impact of the signage on drivers.

As a result, there are many existing signs that exceed the limits of the standards due to predating the standards or being installed or upgraded without approval.

This means that preconception as to the appearance of a sign might be impacted by the knowledge of existing signs in the area.

Objections

The major grounds for objection is the cumulative impact of the lighting.

Any additional lighting in the environment will have a cumulative impact on the sky glow and the surrounding environment.

This is an inevitable impact of growing cities and the increased technology.

It is not possible to stop the increase in overall sky glow without stopping development.

There are measures that can be taken, however, to reduce the impact of future developments. This has been addressed by limiting the upward light output of an installation controlled by the current editions of AS/NZS4282:2019 and AS/NZS1158 Public Lighting Code.

The Obtrusive lighting code must only be based on the contribution of the proposed installation and cannot include the existing installations, otherwise the situation could easily arise where your neighbours had already used the allowance and there is nothing remaining for your site to use.

The standards restrict the impact of new installations but cannot hold the designer responsible for existing installations.

Some people have the opinion that only essential lighting should be allowed and even question the need for streetlighting or sports lighting.



This is basically a set of personal priorities and values, and although they may have some validity they are not necessarily shared in the same proportion by others in society.

For many people signs are a fundamental part of the urban environment and add to the atmosphere of the city.

A discussion as to what forms of lighting should be socially appropriate in an urban area is beyond the scope of this analysis.

It should therefore be adequate to say that:

- Illuminated advertising signs are a legally acceptable form of lighting.
- The design and installation of illuminated signs have been regulated to control their impact through AS/NZS4282:2019 and the NSW Transport Corridor Advertising and Signage Guidelines, which reinforces that they are an accepted form of advertising. They are also controlled by various state and local environmental plans which confirms their general acceptability within those limits.

There is a precedent for the installation of overhead illuminated signs on the M2 with 16 existing signs located at:

Delhi Road x2
Lane Cove Road
Kent Street Footbridge x2
Murry Farm Road
Pennant Hills Road x2
Barclay Road x2
Winsor Road
Watkins Road x2
Ixion Road
Langdon Road
Gooden Reserve

Some of the overhead signs predate the legislation and the proposed signs will have a lower luminance than these signs. The proposed signs represent a 12% increase in the number of signs, however given the area of the M2 it is a relatively small contribution to the overall sky glow.

As the original report of Lighting, Art and Science has shown the proposed signage conforms with the limits in AS/NZS4282:2019 and the NSW Transport Corridor Advertising and Signage Guidelines.



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Sydney Trains Billboard Signage Epping Signage – Summary of recommendations

As requested by the DPIE, we have summarised the results in the following table.
The table summarises the conformance limits for the Transport Guidelines and AS/NZS4282.

The limiting factors are indicated in the notes:

Transport Guidelines	Maximum Zone 3 Luminance Limits	Proposed Luminance Levels
Lighting Conditions		
Full sun on face of signage	Maximum output in cd/m ²	Maximum output in cd/m ²
Day-time luminance	6000 cd/m ²	6000 cd/m ²
Morning and Evening Twilight and Inclement Weather	700 cd/m ²	700 cd/m ²
Nighttime (Sign 1)	350 cd/m ²	102 cd/m ² (note 1)
Nighttime (Sign 2)	350 cd/m ²	120 cd/m ² (note 1)
Australian Standard	Maximum Zone A3 Luminance Levels	Proposed Luminance Levels
Lighting Conditions (Sign 1)		
Pre-Curfew and curfew	250 cd/m ²	102 cd/m ² (note 1)
Lighting Conditions (Sign 2)		
At all times	350 cd/m ²	120 cd/m ² (note 1)

Note 1: the overall luminance is limited by conformance to the threshold increment requirement of AS/NZS4282.

The proposed maximum nighttime luminance values are therefore:

Sign 1

Pre-curfew and curfew 102 cd/m²

Sign 2

Pre-curfew and curfew 120 cd/m²