

CONSULTANT ADVICE NOTICE

PROJECT: BAPS HINDU MAHĀ-MANDIR, MELBOURNE

CAN NO: N-001[3.0]

Date: 11 February 2026

Project No: 41091 - 002

Pages: 3

NAME	COMPANY	EMAIL
To: Vivek Brahmbhatt	BAPS	akshardham.01@au.baps.org
Cc: Jenna Barker	Nature Advisory	Jennab@natureadvisory.com.au
Chris Armstrong	Nature Advisory	Chrisa@natureadvisory.com.au
Damian Condello	NDY	d.condello@ndy.com

ECOLOGICAL LIGHTING

This Consultants advice is intended to inform Designers and the project of best practice lighting design guidelines applicable to the BAPS Hindu Mahā-Mandir, Melbourne located at 1390-1450 Western Port Hwy, Cranbourne South Vic 3977. This advice should be read in conjunction with Australian Standards, AS/NZS 4282:2023 *Control of the Obtrusive Effects of Outdoor Lighting* and The National Light Pollution Guidelines for Wildlife and Nature Advisory documentation.

General

While its specific impact on habitat varies and in specific instance may be unknown, artificial lighting can modify behaviour of local wildlife, reduce foraging, reproductive success and increase physiological stress. As a result, lighting needs to be designed in good practice to minimise potential impacts on wildlife.

General recommendations are provided within the Australian standards and the National Light Pollution Guideline for Wildlife. A summary of these guidelines are provided below.

Management actions summary:

- Start with natural darkness and only add light for specific purposes.
- Use adaptive light controls to manage light timing, intensity and colour.
- Light only the object or area intended – keep lights close to the ground, directed, and shielded to avoid light spill. Using mechanical methods (shields, snoots, diffusers) to prevent spill light and ensure light spill is restricted to areas needing illumination
- Use the lowest intensity lighting appropriate for the task.
- Use non-reflective, dark-coloured surfaces.
- Use lights with reduced or filtered blue, violet and ultraviolet wavelengths
- External construction limited to daylight hours so no artificial light is used

This copied document to be made available for the sole purpose of enabling its consideration and review as part of a planning process under the Planning and Environment Act 1987. The document must not be used for any purpose which may breach any copyright

Objective:

To ensure that lighting design and implementation at the site – encompassing car parks and communal areas – minimises the impact on surrounding ecological environments, particularly Grassy Woodlands and the designated Glossy Grass Skink Habitat.

Site overview:

Our understanding of the site and respective sensitive areas is the following:

- Glossy Grass Skink habitat - this is located centrally within the southern portion of the proposed development. Refer Nature Advisory documentation for specifics of the defined zone.
- Retained Woodland / Conservation zone - Areas of retained vegetation. The conservation areas designated along the south eastern boundary of the site. Refer Nature Advisory documentation for specifics of the defined zone.
- Wildlife corridor – connects to the retained woodland and extends to the south western boundary of the development. Refer Nature Advisory documentation for specifics of the defined zone.

Recommendations:

The below are guidelines and recommendations, which have been developed in consultation with Nature Advisory, to specifically address the application of light at BAPS Hindu Mahā-Mandir, Melbourne, based on the advice and information provided to us.

Note: specific light levels, lighting parameters, light pollution mitigation strategies, recommendations and the like, should be applied where specified by an Environmental Impact Assessment (EIA). This advice and the recommendations herein are not based on the results or findings of an EIA. These are general only and are based on good practice design and tailored to the site based on information provided to us.

1. Light Intensity and direction

- a. Use low intensity shielded luminaires to reduce light spill and glare. This includes the use of shields such as snoots, diffusers, visors, etc. used appropriately and as needed to minimise and/or eliminate unwanted light spill to areas that are not intended to be illuminated.
- b. Ensure lights are directed downward and focussed on necessary areas to prevent light from spilling into natural habitat.
 - i. Use of luminaires with Upward Light Output Ratio (ULOR) equal to 0%.
 - ii. Use adjustable (tiltable) luminaires
 - iii. Use luminaires with low peak intensities

2. Light Colour Temperature (Correlated Colour Temperature – CCT)

- a. Opt for warmer colour temperatures (below 3000K) to minimise disruption to wildlife.
- b. Consider the use of tuneable luminaires with LED's that have little to no blue light.

3. Lighting controls

- a. Use of lighting controls, motion sensors and timers to limit lighting to periods where needed, reducing prolonged exposure. Use of lighting controls allows the flexibility to adjust the lighting strategy in future, should it be required.

4. Vegetation Buffering

- a. Consider utilisation of vegetation buffers or barriers to help block and diffuse light before it reaches sensitive habitats.

5. Light Level Boundaries

This addresses specific zones within the development which have been identified as sensitive, specifically the retained woodland and the Glossy Grass Skink habitat and notes specific recommendations that should be considered in the design and application of light.

a. Glossy Grass Skink Habitat and Retained Woodland

- i. The defined habitat zone should have little to zero direct light spilling into the habitat from adjacent or nearby luminaires. It is recommended that a calculation be undertaken to determine the amount of direct spill light, if any, and consultation with Nature Advisory to understand the suitability / impact to the respective ecological

zone. We recommend calculations be undertaken as described in Section 3 of AS/NZS 4282:2023 which specifically describes boundary locations within environmentally sensitive areas/zones.

- ii. Points 1, 2, and 3 above should be applied to the area, nominally, within 10 meters of the defined habitat zone.
- iii. Point 4 above should be considered in instance where illuminance level requirements do not allow or prohibit satisfying point (i) above.

By adhering to these recommendations, good design practices and the specific clauses within AS/NZS 4282:2023, it is anticipated that there would be no unwanted, direct spill light within, approximately, 10m of ecologically sensitive areas. Therefore, we can maintain a balance between community needs and ecological preservations whereby the lighting supports both human activity and wildlife conservation.

NDY, A Tetra Tech Company



Sharbel Dammo | Senior Associate
s.dammo@ndylight.com

**ADVERTISED
PLAN**