# URBAN PRECINCT LIGHTING MASTERPLAN Facade & Landscape

Sydney Swans, October 2019

REV 2

### MOORE PARK VENUES - URBAN PRECINCT DESIGN LIGHTING MASTERPLAN

With the redevelopment of the Royal Hall of Industries and Hordern Pavillion Venues, the urban design throughout the precinct seeks to provide a cohesive design outcome which presents a single entity with consistency in the design elements.

The three key elements which have been identified as opportunities to encourage a unified aesthetic are the paving stones, the planting and the external lighting.

Whereas the landscape design for the full precinct is under the design scope of **Arcadia**, the services design for the individual venues and plaza area are under the design direction of separate consulting groups.

The purpose of this document is to provide advice on some of the external lighting elements which can be used throughout the facility to support the consistency of the design outcome.

It is acknowledged that the two venues and their common forecourt serve very different functions and that the lighting design for each will be developed to best communicate the nature and atmosphere of each space. In that, there will likely be multiple layers of lighting to each area and the advice within this document focuses on only some of those layers and allows ample room for the various lighting designers to employ those elements to their preference and prevalence.







### MOORE PARK VENUES - URBAN PRECINCT DESIGN LIGHTING MASTERPLAN

The three lighting layers which should be considered to provide unity across the development are:

#### **General Circulation Lighting**

The general circulation lighting is the base layer of external lighting to provide general lighting compliance for pedestrian and vehicular circulation and milling. This will typically be achieved through an arrangement of post-top luminaires and possibly bollards.

#### **Urban Furniture and Planting**

Integrated lighting within urban furniture provides strong highlights to the space and can act as a wayfinding medium. This would typically be achieved through concealed linear LED systems within the underside of benches, tables and planter boxes etc.

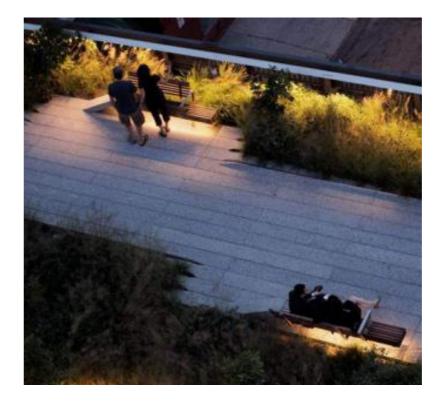
Lighting of the various trees and planting areas assists in visually sub-dividing a space, softening the environment and provides an opportunity to frame up the site and showcase the botanical elements. This can be achieved through a combination of in-ground uplights, adjustable spike-mounted spotlights and can also use linear LED systems.

### **Façade Lighting**

The northern façade of the Royal Hall of Industries and the southern façade of the Hordern Pavillion provide the primary background frame for the plaza area and act as the overall context for the site. The two facades mirror each other in relation to the central plaza as well as in aesthetic dominance and historic significance. The façade design for each venue should provide balance to the space and the lighting for each façade should be applied relatively equal in style, prevalence and intensity.











### MOORE PARK VENUES - URBAN PRECINCT DESIGN GENERAL CIRCULATION LIGHTING

A single post-top luminaire family is to be used throughout all areas of the precinct to provide circulation lighting compliance. Post-top luminaires are a very visible component of the urban landscape and play a role in establishing the character of the scene.

The style of the luminaire should be classic in its overall form to compliment both the heritage of the site and the building architecture, while also having a contemporary construction and appearance to harmonise with the revitalised urban realm development.

The luminaire will have a performance based optic and light distributions which will allow for minimising the luminaire instances and provide an energy efficient design outcome. The luminaire optics will be soft in appearance and restrict direct upwardly-distributed light.

#### Colour temperature

The CCT of the post-top luminaires should be uniform across the precinct -3000K

Mounting Height Post-top mounted -4.5 - 5.0m











### MOORE PARK VENUES - URBAN PRECINCT DESIGN URBAN FURNITURE AND PLANTING LIGHTING

The repeating luminaire types used for landscape lighting and urban feature lighting should be consolidated across the precinct to a small luminaire selection. The design objective shall place emphasis on colour consistency, intensity consistency and consistency of design approach and prevalence for those common elements across all areas.

Potential luminaires which may be used across both developments are in-ground uplights, adjustable spike-mounted spotlights and linear LED's. The design intent from across all areas should be reviewed and appropriate luminaire families chosen to accommodate each objective outcome.

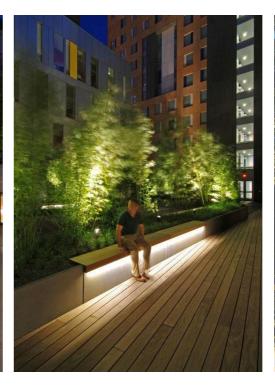
### **Colour temperature**

In-ground uplights – the CCT should be uniform across the precinct -3000K Adjustable spotlights – the CCT should be uniform across the precinct – 3000K Linear LED's – the CCT should be uniform across the precinct – 2700K / 3000K (to be agreed between designers)

Note: there may be a justification for a deviation from the above colour temperatures for certain applications. In these cases, all other aspects of the luminaires construction and intensity should be rationalised with the broader luminaire selection where applicable.









### MOORE PARK VENUES - URBAN PRECINCT DESIGN FAÇADE LIGHTING

Each building façade framing the central plaza has its own unique character, architectural detail and story. To best capture the most interesting aspects of the façade architecture the lighting design approaches can be expected to differ. In support of the site context as a whole however, it is important that the approach to each façade is balanced.

The luminaire types which could be expected to be used within the façade lighting design are in-ground linear or round uplights, sill lights and linear led systems. It is important that the luminaire selection is considered across each design to ensure colour consistency and consistency of intensity and that design saturation is proportionate and appropriate for the site.

### Colour temperature

In-ground uplights – the CCT should be uniform across the precinct -3000K Sill lights—the CCT should be uniform across the precinct—3000K Linear LED's – the CCT should be uniform across the precinct – 3000K

Note: there may be a justification for a deviation from the above colour temperatures. In these cases, all other aspects of the luminaires construction and intensity should be rationalised with the broader luminaire selection where applicable.











### MOORE PARK VENUES - URBAN PRECINCT DESIGN FAÇADE LIGHTING



Façade concept

### MOORE PARK VENUES - URBAN PRECINCT DESIGN LANDSCAPE LIGHTING EQUIPMENT



Indicative equipment allocation



#### 01. Post-Top Luminaire

Used throughout the more open circulation spaces to provide suitable lighting conditions for vehicular and pedestrian movement. The post-top luminaires will support adequate vertical illuminance in these primary forecourt spaces.



#### 02. Bollard Luminaire

Used throughout narrower, pedestrian-only pathways and circulation spaces



### 03. In-ground mounted uplight

Used throughout all areas to showcase the more ornamental botanical elements.



#### 04. Adjustable Spotlight

Used throughout planted areas to showcase the best aspects of the under-storey soft-scaping and support wayfinding.



05. IP rated Flexible LED strip

Integrated within urban furniture to demarcate relaxation spaces and support wayfinding.

## MOORE PARK VENUES - URBAN PRECINCT DESIGN ILLUMINANCE DESIGN DESIGNATION



Typical design categories by space

#### 01. Shared Use Zone

Mixed pedestrian and vehicular circulation spaces designed to category P3 (includes vertical illumination).

#### 02. Pedestrian Area

Pedestrian thoroughfare space designed to category P3.

### 03. Carparking Bays

Exterior carparking bays designed to category P11C.

### 04. Accessible Parking Bay

Accessible carparking bays designed to category P12.

### 05. Plaza / Forecourt

Open pedestrian milling spaces designed to category P6.

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### MOORE PARK VENUES - URBAN PRECINCT DESIGN SUMMARY

The lighting design should compliment the architectural landscape vision and focus on providing the right palette of light utilising different techniques and carefully considering the quantity and quality of light. A consistent language should be used throughout the precinct to create a cohesive design. The facade lighting intent is to capture the heritage building elements and breath new life and vibrancy into the building fabric while respecting the historic character. The lighting strategy is to establish a balance of brightness over surrounding elements and the Hordern Pavilion.

Glare from lighting should be minimized in all applications, through appropriate luminaire selection and positioning.

Lighting to be integrated into architecture and structures where possible to minimize visual distraction and obstruction. Landscape and perimeter lighting should be coordinated with Arcadia and any future lighting solutions shall preserve and protect the night environment by minimising upward light pollution, contributing to sky glow.

The lighting objective is to establish a pedestrian focused place by creating an atmosphere that feels safe, welcoming and warm to facilitate an engaging and safe night-time environment. The lighting shall guide movement and assist in wayfinding by highlighting features and outline edges and site boundaries and direction of lighting in relation to the background activity and night-time environment.



