Lighting and Electrical

The City of Adelaide has a unique urban design legacy with a distinctive plan which has its own historic character and identity.

The City of Adelaide wished to complement this by having a vibrant and functional night time environment for all users of the public realm. The streets and pathways are to be well lit for pedestrian and vehicular movement. The City of Adelaide wishes to enhance the unique, and not so unique (in their unlit form), aspects of built form around the City, through the use of light.

Some lighting policies have already been established and embodied in the document “Streets, Squares, and Park Lands”.

Further to this, the City of Adelaide is in the process of establishing a Lighting Strategy that will suit the City of Adelaide.

Outcomes from this strategy that have been identified, so far, are as follows:

- A “white” light policy with the use of Metal Halide or Mercury Vapour lamps.

- The use of cut-off type (flat glass) street light luminaires, and minimal upward light from post top luminaires.

- The addition of under verandah lighting where a verandah may obscure the footpath lighting from the street light luminaires.

- The current suite of post top luminaires will remain until possible changes are suggested as an outcome of the Lighting Strategy.

- The establishment of a lighting pole suite distinctive to the City of Adelaide is currently being assessed.

- To facilitate and coordinate the decorative lighting of structures throughout the City, these built forms can be in the form of buildings, bridges, structures, artworks, etc.

The City of Adelaide has a long term plan to underground the electrical reticulation throughout the City. Part of this process is to replace the existing poles and luminaires. Vehicular and pedestrian lighting is to be designed in accordance with current Australian Standards.

To meet the above objectives, the City of Adelaide has established its own lighting and electrical standards.

Updates, including this summary document, will occur over time.
Footings to specification as in construction drawings. Design pole in accordance with AS1170.2 ‘Wind Loads’ using Terrain Category 2 with a minimum basic wind speed for serviceability limit state of 38m/s.

The ‘Adelaide’ light fitting is used in selected historic Park Lands precincts, to celebrate ‘micro gateways’ at entrances to heritage precincts, bridges or structures. Visually, the luminaire integrates well with heritage buildings and structures and should be limited to highlight heritage features.

Supplier:
Subject to supply contract

Materials:
Wrought iron, steel post, cast aluminium base

Finish:
Two pack polyurethane wet coat
Colour: Dulux Oyster No. 35858 or equivalent

Maintenance:
Retouch paint, replace lamp every two years or as necessary. Inspect electrical wiring/components at six yearly intervals. Inspect columns for corrosion/damage at six yearly intervals. Replace diffusers every fifteen years or as required.
Lighting details

PARK LANDS

FOOTPATH

ACC Fuse pit

Light pole location preferred at a minimum of 5.0m clear of tree

PLAN

Overall height 3.5 metres

<table>
<thead>
<tr>
<th>Typical Maximum Spacing (S)*</th>
<th>Lamp Type</th>
<th>AS1158.3.1 'P' Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>tba</td>
<td>100W MH</td>
<td>P1, P8</td>
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<tr>
<td>tba</td>
<td>80W MV</td>
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<td>tba</td>
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<td>P6</td>
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<tr>
<td>tba</td>
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</tr>
</tbody>
</table>

* Typical spacing based on 3.5m high and 2m pathway width. For any other variations, lighting design to be done in accordance with AS1158 Roadway Lighting Standards.

Not to be used for any other 'P' category

SPACING OF LIGHTS IN PARK LANDS

©Adelaide City Council 2002
This light fitting is used where additional pedestrian lighting is required on the City’s parklands.

The lighting poles have a typical pole height of 3.5 metres. The pole itself is comprises of painted galvanised steel.

The lighting fixture should provide a high level of colour rendition to the surrounding area.

Spacing of the lights is dependant on such elements as trees, and the amount of additional lighting required.

Manufacturer:
Lighting fixture: Louis Poulsen
Mini Orbitor or equivalent
Pole: Vicpole or equivalent

Materials:
Lighting fixture:
Aluminium & Polycarbonate
Pole: Painted Galvanised steel pole

Finish:
Two pack polyurethane wet coat
Colour: Dulux Notre Dame, No. 36672 or equivalent.

Maintenance:
Retouch paint, replace lamp every two years or as necessary.
Inspect electrical wiring/components at six yearly intervals or as required. Inspect columns for corrosion/damage at six yearly intervals. Replace diffusers every fifteen years or as required.
Overall height 3.5metres

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* Typical spacing based on 3.5metre high and 2metre pathway width. For any other variations, lighting design to be done in accordance with AS1158 Roadway Lighting Standards.

Not to be used for any other 'P' category.
The standard Heritage light fitting is used where additional pedestrian lighting is required on the City's parklands.

The lighting poles have a typical overall height of 3.5 metres. The pole is manufactured from painted galvanised steel.

The lighting fixture should provide a high level of colour rendition to the surrounding area.

Spacing of the lights is dependent on such elements as the night time usage of the parklands, pedestrian and bicycle volumes.
Lighting details

Overall height 3.5 metres

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* Typical spacing based on 3.5 metre high and 2 metre pathway width. For any other variations, lighting design to be done in accordance with AS1158 Roadway Lighting Standards.

Not to be used for any other ‘P’ category

SPACING OF LIGHTS IN PARK LANDS

©Adelaide City Council 2002
This light fitting is used where additional pedestrian lighting is required on the City’s streetscapes.

The lighting poles have a typical overall height of 3.5 metres. The pole itself is comprises of painted galvanised steel.

The lighting fixture should provide a high level of colour rendition to the surrounding area.

Spacing of the lights is dependant on such elements as trees, and the amount of additional lighting required.

Footings to specification as in construction drawings. Design pole in accordance with AS1170.2 ‘Wind Loads’ using Terrain Category 2 with a minimum basic wind speed for serviceability limit state of 38m/s.

Manufacturer:
Lighting fixture: Selux Saturn2 or equivalent
Pole: Vicpole or equivalent

Materials:
Lighting fixture: Aluminium and Polycarbonate
Pole: Painted Galvanised steel pole

Finish:
Two pack polyurethane wet coat
Colour: Dulux Notre Dame, No. 36672 or equivalent.

Maintenance:
Retouch paint, replace lamp every two years or as necessary. Inspect electrical wiring/components at six yearly intervals or as required. Inspect columns for corrosion/damage at six yearly intervals. Replace diffusers every fifteen years or as required.
**SPACING OF LIGHTS IN STREETS**

* Typical spacing based on 3.5metre high and 2metre pathway width. For any other variations, lighting design to be done in accordance with AS1158 Roadway Lighting Standards.

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Not to be used for any other ‘P’ category.
This wall mounted light fitting is used where additional pedestrian lighting is required and it is impractical to use a lighting pole.

The light fittings are typically mounted at a height of 3.5 metres, where 250mm clearance is achievable, otherwise mount at 5.0 metres.

The lighting fixture should provide a high level of colour rendition to the surrounding area.

Spacing of the lights is dependant on such elements as the pedestrian and criminal activities in the area.

Manufacturer:
Lighting fixture: Selux Saturn2 or equivalent
Wall bracket: Thorn or equivalent

Materials:
Lighting fixture: Aluminium and Polycarbonate
Wall bracket: Painted Galvanised steel pipe

Finish:
Two pack polyurethane wet coat
Colour: to suit environment

Maintenance:
Retouch paint, replace lamp every two years or as necessary. Inspect electrical wiring/components at six yearly intervals or as required. Inspect columns for corrosion/damage at six yearly intervals.
Replace diffusers every fifteen years or as required.
250mm minimum clearance for 3.5metre high wall mounted light

* Typical spacing based on 3.5metre high and 2metre pedestrian thoroughfare. For any other variations, lighting design to be done in accordance with AS1158 Roadway Lighting Standards.

<table>
<thead>
<tr>
<th>Maximum Spacing (S)</th>
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Not to be used for any other ‘P’ category

**SPACING OF LIGHTS IN STREETS**

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The cover is always associated with an underground fuse pit or underground switchboard.

The cover identified by ACC lettering, laser cut onto the chequer plate.

The cover has counter sunk holes in opposite corners to accommodate counter sunk slotted head screws to eliminate trip hazards to pedestrians.

The cover is fixed down by screws to minimise the risk of removal other than by City of Adelaide staff.

**Manufacturer:**
Corporation of the City of Adelaide

**Materials:**
Mild steel chequer plate and frame
Reinforced precast concrete plinth

**Finish:**
Hot dip galvanised

**Maintenance:**
Replace damaged parts
LOCATION OF PIT COVER/PIT IN RELATION TO THE LIGHTING POST/COLUMN

©Adelaide City Council 2002
The 6.5 metre column and light fixture are a general purpose combination for the lighting of residential and minor roads, laneways and bicycle tracks.

The column may also be used to support street signs, traffic and/or pedestrian activated signal lights.

The light fixture should provide a high level of colour rendition to the surrounding area.

Spacing of the lights in the area is dependant on such elements as the pedestrian, cycle and vehicular traffic and the other activities in the area.
**DESIGN NOTES**

*Lighting*

**Typical Spacing (S) based on 6.5 metre high, zero set back and 7 metre roadway width. For any other set backs and roadway width variations, lighting design to be done in accordance with AS1158 Roadway Lighting Standards.**

<table>
<thead>
<tr>
<th>Maximum Spacing (S)</th>
<th>Lamp Type</th>
<th>Street Lighting Category</th>
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<tbody>
<tr>
<td>tba</td>
<td>100W MH</td>
<td>V5</td>
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</tbody>
</table>

**Not to be used for any other ‘P’ & ‘V’ category**

* Typical spacing (S) based on 6.5 metre high, zero set back and 7 metre roadway width. For any other set backs and roadway width variations, lighting design to be done in accordance with AS1158 Roadway Lighting Standards.
Footings to specification as in construction drawings. Design pole in accordance with AS1170.2 ‘Wind Loads’ using Terrain Category 2 with a minimum basic wind speed for serviceability limit state of 38m/s.

The 9.0 metre column and light fixture are a general purpose combination for the lighting of main roads.

The column is available with 2.0 metre, 3.0 metre and 4.5 metre outreach arms for maximum versatility.

The column may also be used to support street signs, pedestrian light fixture on rear of pole, banners, traffic and/or pedestrian activated signal lights.

The light fixture should provide a high level of colour rendition to the surrounding area.

Spacing of the light fixtures in the area is dependant on such elements as the night time pedestrian, cycle and vehicular traffic volumes.

**Manufacturer:**
Lighting fixture: Rexel Optispan Aero or equivalent
Lighting column: Taperline, Polo or equivalent.

**Materials:**
Lighting fixture: Diecast Aluminium and flat glass

**Pole:**
Round tapered Galvanised steel

**Maintenance:**
Replace lamp at three yearly intervals or as required. Inspect electrical wiring/components at six yearly intervals or as required. Inspect poles for corrosion/damage at six yearly intervals.
DESIGN NOTES

Lighting

LOCATION OF POLE IN TYPICAL FOOTPATH

- ACC fuse pit. Locate adjacent to lighting post as per project drawing to suit trench route and pavement layout.
- Lighting column (access opening on opposite side to outreach arm)

CARRIAGeway

- 600min
- 700 preferred
- 900min
- 1000 maximum
- 1500 desirable

LOCATION OF POLE IN NARROW FOOTPATH

- ACC Fuse pit. Locate adjacent to lighting post as per project drawing to suit trench route and pavement layout.
- Lighting column (access opening on opposite side to outreach arm)

CARRIAGeway

- 600min
- 100 from property boundary to column face
- 300 preferred

ROADWAY

- Overall height 9.0metres
- Spacing (S) to be calculated in accordance with AS1158 Roadway Lighting Standards

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<td>150/250W MH</td>
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<tr>
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©Adelaide City Council 2002
Footings to specification as in construction drawings. Design pole in accordance with AS1170.2 ‘Wind Loads’ using Terrain Category 2 with a minimum basic wind speed for serviceability limit state of 38m/s.

The 10.5 metre column and light fixture are a general purpose combination for the lighting of main roads.

The column is available with 2.0 metre, 3.0 metre and 4.5 metre outreach arms for maximum versatility.

The column may also be used to support street signs, pedestrian light fixture on rear of pole, banners, traffic and/or pedestrian activated signal lights.

The light fixture should provide a high level of colour rendition to the surrounding area.

Spacing of the light fixtures in the area is dependant on such elements as the night time pedestrian, cycle and vehicular traffic volumes.

Manufacturer:
Lighting fixture: Rexel Optispan Aero or equivalent
Lighting column: Taperline, Polo or equivalent

Materials:
Lighting fixture: Diecast Aluminium and flat glass

Pole:
Round tapered Galvanised steel

Maintenance:
Replace lamp at three yearly intervals or as required. Inspect electrical wiring/components at six yearly intervals or as required. Inspect poles for corrosion/damage at six yearly intervals.
DESIGN NOTES

Lighting

ACC fuse pit. Locate adjacent to lighting post as per project drawing to suit trench route and pavement layout.

LOCATION OF POLE IN TYPICAL FOOTPATH

LOCATION OF POLE IN NARROW FOOTPATH

Overall height 10.5 metres
Spacing (S) to be calculated in accordance with AS1158 Roadway Lighting Standards

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SPACING OF LIGHTS IN STREETS
The 10.5 metre double outreach column and light fixture are a general purpose combination for the lighting of main roads with a large central median. It is particularly useful where large established trees adorn external road reserve areas.

The column is available with 2.0 metre, 3.0 metre and 4.5 metre outreach arms for maximum versability.

The column’s impact absorbing properties increases public safety.

The light fixture should provide a high level of colour rendition to the surrounding area.

Spacing of the light fixtures in the area is dependant on such elements as the night time pedestrian, cycle and vehicular traffic volumes.
**DESIGN NOTES**

*Lighting*

**SPACING OF LIGHTS IN STREETS**

- Overall height 10.5metres. Spacing (s) to be calculated in accordance with AS1158 Roadway Lighting Standards

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