

# Street Lighting Improvements Policy

Responsible Directorate	Infrastructure
Responsible Business Unit/s	Engineering Design
Responsible Officer	Manager Engineering Design
Affected Business Unit/s	Engineering Design Engineering Operations

# **Objective**

This policy is established to provide an overall street lighting plan including performance standards and general design standards.

# Scope

This policy applies to all street and thoroughfares including new infrastructure, redevelopment on existing street and thoroughfares, routine maintenance and improvement or closure of a public access way.

The majority of streetlights in the City (approximately 19,000) are assets that are owned and maintained by Western Power on behalf of the City, which limits the options available to the City. A minimal number of streetlights (approximately 1,000) are assets that are owned, operated and maintained by the City, over which the City retains full control.

# **Policy**

### 1. Introduction

- 1.1 Priority shall be given to the improvement of street lighting to situations where pedestrian and vehicular traffic are of greatest conflict.
- 1.2 The City shall accept no financial responsibility for the conversion of overhead power supply to underground power. Participation in the State Underground Power Program (SUPP) provides the opportunity to replace the older street lighting with more modern and efficient street lighting meeting current design standards. When partnering in a SUPP the City will ensure that the design of replacement street lighting, by Western Power, is the best available and meets the prevailing design standards with as little constraint on future lot redevelopment as possible).
- 1.3 Requests for lighting improvements shall be assessed on their merit and placed on a continuing works programme in order of the following priority:
  - i. Pedestrian crossing lighting.
  - ii. Arterial and district distributor road lighting.
  - iii. Local distributor road lighting.
  - iv. Pedestrian access way lighting.
  - v. Lighting of access roads.

### 2. Western Power Assets

- 2.1 In the majority of the City, in areas where Western Power is responsible for the provision and maintenance of street lighting, most commonly fixed to the overhead power distribution poles, the lighting standard will have been required to meet the standards applicable at the time of installation, which was predominantly set by the distance between power poles. The City will, in accordance with the priorities listed in Clause 1.3, determine whether that (older) standard is met. Additional lighting will be considered and, where merited, a request will be made to Western Power for the provision of an additional asset which the City will meet the cost and transfer future responsibility to Western Power.
- 2.2 Western Power is responsible for the maintenance of its street lighting assets, including all repairs and replacements where necessary. Whilst the City can and does advocate for improved and more efficient lighting, and the manner in which that is achieved, it has no control over how Western Power replaces failed, obsolete or banned assets.
- 2.3 The City is responsible to meet the combined tariff for the ongoing maintenance, in perpetuity, and energising the street light network.
- 2.4 No shielding of street lights will be permitted.

### 3. City of Stirling Assets

- 3.1 In those areas where the City owns the street lighting assets, most commonly in areas of new development where underground power and an improved (non-standard) form of lighting was required, the lighting standard will have met the higher Australian Standards applicable at the time of installation. The City will, in accordance with the priorities listed in Clause 1.3, determine whether that standard has been met. In the unlikely event that the lighting is deficient, then additional lighting will be considered and, where merited, provided by the City and deemed an asset. These services are subject to an unmetered energy supply tariff.
- 3.2 The City has an obligation to maintain its street lighting assets, ensuring structural integrity, visual standard and lighting efficiency and function. The supply of new, or provision of replacement, mercury vapour (MV) street light fittings is now banned and the City is responsible for ensuring that replacements that are provided achieve the best value 'Whole of Life Cost' using best practice technology.
- 3.3 Where a significant proportion of failing obsolete street lighting is identified in an area or road, and where the likelihood of continuing failures would be high, consideration shall be given to a uniform replacement program for that area or road.
- 3.4 The use of light-emitting diode (LED) lighting, as a replacement for City owned assets and for all new installations is preferred as this offers the longest life, greatest reliability, least reactive maintenance and most efficient use of energy and hence cost. LED street lights also offer the best light distribution and control of unwanted light spill, resulting in a 60-70% reduction in energy consumption with significant long term benefits to the City.
- 3.5 In the gradual replacement of obsolete street lighting fittings within the City, the levels of illumination for arterial, district distributor, local distributor and access roads shall be in accordance with the applicable Australian Standards.
- 3.6 Along all arterial and district distributor roads, Western Power shall be requested to install high pressure sodium (HPS) luminaires.

- 3.7 When street lighting is installed in a subdivision, the developer (in consultation with Western Power) shall be requested to locate a street light opposite the end of each footway. The general pattern of street lighting shall be placed accordingly to ensure uniform illumination in accordance with the Australian Standards applicable at the time of installation.
- 3.8 The latest technology provides much better control of light such that no shielding of street lights will be required or permitted.

## **Definitions**

Nil

# Relevant management practices/documents

Nil

# Legislation/local law requirements

Local Government Act 1995 City of Stirling Thoroughfares and Public Places Local Law 2009 AS/NZS 1158:2010 Lighting for Roads and Public Spaces

Office use only				
Relevant delegations	Not applicable			
Initial Council adoption	Date 10 December 2013	Resolution #	1213/007	
Last reviewed	<b>Date</b> 26 May 2020	Resolution #	0520/027	
Next review due	<b>Date</b> 2021			