

7.3 Glare and Lighting

Introduction and Issues

Artificial light used for the purposes of security, display or general illumination, can generate unwanted light spill. Where this uncontrolled light affects the amenity of adjoining landowners it generates a nuisance and is generally termed as glare. In addition to being a nuisance, glare can also generate health and safety hazards especially where inappropriately directed onto roads. Glare can also be generated by reflective building materials with similar nuisance, health and safety effects.

The principal issues regarding glare and lighting in Hamilton are:

- **Inappropriate use or placement of security/operational lighting can generate unwanted glare.** The use of artificial lighting to meet private security and operational needs within properties is recognised. There is, however, potential for this lighting to create adverse effects on adjoining properties which may be more sensitive to glare effects such as residential areas. Glare can distract road users and may reduce the safety and efficiency of the roading network. Public lighting such as street lighting, traffic signals and navigation lights can also cause a glare nuisance for neighbouring properties.
- **Inappropriate building design or materials and the placement of advertising on buildings can create adverse effects on public safety and amenity.** The use of highly reflective building surfaces, such as mirror glass and the placement of floodlit signage can generate considerable glare nuisance to adjoining land uses or to road users.
- **The upward spill of light from the urban area, particularly from street lights, has the effect of lighting the night sky to the extent that stars and other astronomical phenomena are obscured with a subsequent loss of night-time amenity for residents.** In particular this form of light pollution creates difficulties for those carrying out astronomical research and observation at the Brymer Road observatory.

Objective 7.3.1 Glare and Lighting

To avoid adverse effects of glare from lighting and reflected glare from buildings or building materials.

Policies

- a) Ensure that artificial lighting is installed and utilised so as not to generate adverse light effects on adjoining properties, particularly those that are glare sensitive, and roads.
- b) Control the illumination and lighting of advertising to avoid adverse effects on the amenity of the surrounding area and the roading network.
- c) Mitigate reflective glare from buildings and building materials.

Reasons

Controls on glare are important to assist the maintenance of accepted levels of amenity particularly in glare sensitive environments such as residential, community and recreational areas. The plan, therefore, provides for the control of glare derived from lighting, particularly within or adjacent to these glare sensitive environments, so that adverse effects are mitigated and amenity of residents is ensured. Control of light spill onto roads is also important to avoid adverse effects on road users' vision. Illuminated and floodlit advertising will also be managed to ensure the preservation of amenity and to minimise distraction to road users.

Consideration has been given to the control of reflective light, but it has been concluded that it is impractical to set a quantifiable standard. Accordingly reflective light effects, if serious, will be addressed through the enforcement provisions under Part XII of the Act.

Methods

The Glare and Lighting objective and policies will be implemented through the following methods:

District Plan

- **Lighting and Glare Rules** - based on a lux measurement standard will stipulate the acceptable levels of light at the boundary of sites. The standards are increased or decreased depending on the sensitivity to light effects of adjoining sites.
- **Sign Rules** - will control the illumination of signs, including number of illuminated signs, their visibility and the intensity of the lights utilised.

Other Methods

- **Enforcement Powers under Section 17 of the RMA** - will be used to deal with any nuisance of a reflective nature.
- **Hamilton City Council Environmental Action Plan** - will review the city's street lighting policy evaluating lighting options according to resource use, costs and environmental effects including light pollution.
- **Hamilton City Development Manual** - sets out street lighting standards acceptable in the city.

Anticipated Environmental Results

The following environmental results are anticipated:

- Glare from various sources will be controlled to a level that will minimise any nuisance.