6.3 Outdoor Lighting

6.3.1 Introduction

- a. This introduction is to assist the lay reader to understand how this sub-chapter works and what it applies to. It is not an aid to interpretation in a legal sense.
- b. Sub-chapter 6.3 Outdoor Lighting provides for artificial outdoor lighting throughout the district where it is required for night-time work, <u>rural productive activities</u>, <u>recreation</u> <u>activities</u>, sport, <u>entertainment activities</u>, transportation and public health and safety, while managing the potential adverse effects of light spill and glare.
- c. The provisions in this sub-chapter give effect to the Chapter 3 Strategic Directions Objectives.

6.3.2 Objective and policies

6.3.2.1 Objective

6.3.2.1.1 Objective — Artificial Outdoor Lighting and Glare

- a. Artificial outdoor lighting enables night-time work, <u>rural productive activities</u>, <u>recreation activities</u>, sport, <u>entertainment activities</u>, transportation and public health and safety while:
 - managing adverse effects on residential, commercial, open space and rural <u>amenity values</u>; areas of natural, historic or cultural significance and the night sky; and
 - ii. avoiding interference with the safe operation of transport and infrastructure.

6.3.2.2 Policy

6.3.2.2.1 Policy — Enabling night-time activity while managing the adverse effects of artificial outdoor lighting

- a. Recognise and provide for artificial outdoor lighting for night-time activities and safety while managing its scale, timing, duration, design and direction in a way that:
 - i. avoids, remedies or mitigates adverse effects on the rest or relaxation of residents; or any areas of natural, historic or cultural significance;
 - ii. does not interfere with the safe operation of the transport network or aircraft;
 - iii. minimises unnecessary light spill into the night sky.

6.3.3 How to interpret and apply the rules

- a. The rules that apply to artificial outdoor lighting in all zones are contained in:
 - i. The activity status tables (including activity specific standards) in Rule 6.3.4 Control of Glare;
 - ii. The activity status tables (including activity specific standards) in Rule 6.3.5 Control of Light Spill; and
 - iii. The Light Spill Standards by Zone in Rule 6.3.6.
- b. The following activities generating light spill or glare are exempt from Rules 6.3.4 and 6.3.5:
 - temporary lighting for the purposes of <u>emergency</u> response or public safety, including lighting from <u>emergency</u> response vehicles, lighting at the scene of an <u>emergency</u> and lighting of <u>emergency service facilities</u> in response to an <u>emergency</u>;
 - ii. reflected glare from structures or vehicles;
 - iii. glare from the lights of vehicles, trains, trams and aircraft; and
 - iv. light spill and glare from traffic signals and <u>navigation aids</u>.
- c. Activities involving artificial outdoor lighting are also subject to the rules in the relevant zone chapters.
- d. The activity status tables, rules and standards in the following chapters also apply to activities involving artificial outdoor lighting (where relevant):
 - i. Natural Hazards;
 - ii. The other sub-chapters of General Rules and Procedures;
 - iii.Transport;
 - iv. Subdivision, Development and Earthworks;
 - v. Natural and Cultural Heritage;
 - vi. Utilities and Energy; and
 - vii. Hazardous Substances and Contaminated Land.
- e. Illuminated <u>signage</u> is also subject to the controls on illuminated <u>signage</u> in Subchapter 6.8 Signs.
- f. The standards for lux spill shall be measured and assessed in accordance with Standard AS4282-1997 (Control of the Obtrusive Effects of Outdoor Lighting).

6.3.4 Rules - Activity status tables — Control of glare

6.3.4.1.1 Permitted activities

- a. The activities listed below are permitted activities if they meet the activity specific standards set out in the following table and the activity specific standards in Rule 6.3.5 Control of Light Spill.
- b. Activities may also be restricted discretionary or non-complying as specified in Rules 6.3.4.3, 6.3.4.5 and 6.3.5.3.

Activity		Activity specific standards
P1	Any activity involving artificial outdoor lighting, other than activities specified in Rule 6.3.4.5 NC1 or NC2.	 a. All fixed exterior lighting shall, as far as practicable, be aimed, adjusted and/or screened to direct lighting away from the windows of habitable spaces of sensitive activities, other than residential units located in industrial zones, so that the obtrusive effects of glare on occupants are minimised. b. Artificial outdoor lighting shall not result in a greater than 2.5 lux spill (horizontal or vertical) into any part of a major arterial road or minor arterial road or arterial route identified in Appendix 7.12 where this would cause driver distraction. Advice note: 1. See Appendix 6.11.13 for guidance on lighting design to reduce light spill and glare.

6.3.4.1.2 Controlled activities

There are no controlled activities.

6.3.4.1.3 Restricted discretionary activities

- a. The activities listed below are restricted discretionary activities.
- b. Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in Rule 6.3.7, as set out in the following table.

Activity			The Council's discretion shall be limited to the following matters:
RD1	Any activity listed in Rule 6.3.4.1 P1 that does not meet activity specific standard a		a. Amenity – Rule 6.3.7.1
RD2	a.	Any activity listed in Rule 6.3.4.1 P1 that does not meet activity specific standard b	a. Transport safety – Rule 6.3.7.2
	b.	Any application arising from this rule shall not be publicly notified and shall be limited notified only to the road-controlling authority (absent its written approval).	

6.3.4.1.4 Discretionary activities

There are no discretionary activities.

6.3.4.1.5 Non-complying activities

a. The activities listed below are non-complying activities.

Activity	
NC1 Any activity that results in a greater than 2.5 lux spill (horizontal or vertical) into any outside the Specific Purpose (Airport) Zone that is within 500 metres of the threshold runway at Christchurch International Airport.	
NC2	Any non-aeronautical ground lights in the areas shown in Appendix 6.11.7.4 that shine above the horizontal.

6.3.4.1.6 Prohibited activities

There are no prohibited activities.

6.3.5 Rules - Activity status tables — Control of Light Spill

6.3.5.1.1 Permitted activities

a. The activities listed below are permitted activities if they meet the activity specific standards set out in the following table and the activity specific standards in Rule 6.3.4 Control of Glare.

b. Activities may also be restricted discretionary or non-complying as specified in Rules 6.3.5.3, 56.3.5.5 and 6.3.5..

Activity		Activity specific standards		
P1	Any activity involving outdoor artificial lighting	 a. Any outdoor artificial lighting shall comply: i. with the light spill standards in Rule 6.3.6 as relevant to the zone in which it is located, and; ii. where the light from an activity spills onto another site in a zone with a more restrictive standard, the more restrictive standard shall apply to any light spill received at that site. Advice note: See Appendix 6.11.13 for guidance on lighting design to reduce light spill and glare. 		

6.3.5.1.2 Controlled activities

There are no controlled activities.

6.3.5.1.3 Restricted discretionary activities

- a. The activities listed below are restricted discretionary activities.
- b. Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in Rule 6.3.7, as set out in the following table.

Activity		The Council's discretion shall be limited to the following matters:	
RD1	Any activity listed in Rule 6.3.5.1 P1 that does not meet the activity specific standard.	a. Amenity – Rule 6.3.7.1	

6.3.5.1.4 Discretionary activities

There are no discretionary activities.

6.3.5.1.5 Non-complying activities

There are no non-complying activities.

6.3.5.1.6 Prohibited activities

There are no prohibited activities.

6.3.6 Rules - Light Spill Standards by Zone

- a. The added horizontal or vertical illuminance from the use of artificial outdoor lighting must not exceed the limits in the following table of light spill standards by zone, when measured or calculated 2 metres within the boundary of any adjacent site.
- b. Where a <u>site</u> is divided by a zone boundary, each part of the <u>site</u> shall be treated as a separate <u>site</u> for the purpose of the standards contained in the following table of light spill standards by zone.

Table 6.3.6.1 - Light Spill Standards by Zone

Zone	or scheduled activity	Permitted lux spill (horizontal and vertical)
i.	Open Space Coastal Zone	4.0
ii.	Commercial Central City Business Zone	20.0
iii.	Commercial zones, all other	10.0
iv.	Residential Guest Accommodation Zone	5.0
v.	Industrial Park Zone; Industrial General Zone	10.0
vi.	Industrial zones, all other	20.0

Zone or scheduled activity		Permitted lux spill (horizontal and vertical)
vii.	Open Space Community Parks Zone; Open Space Natural Zone; Open Space Water and Margins Zone and Avon River Precinct/Te Papa Ōtākaro Zone	4.0
viii.	Open Space zones, all other	10.0
ix.	Papakāinga / Kāinga Nohoanga Zone	4.0
X.	Residential zones, all other	4.0
xi.	Rural Quarry Zone	10.0
xii.	Rural zones, all other	10.0
xiii.	Scheduled activities (<u>taverns</u> ; <u>service stations</u>)	10.0
xiv.	Scheduled activities, all other	4.0
xv.	Specific Purpose (Cemetery) Zone; Specific Purpose (Hospital) Zone other than Christchurch Hospital; Specific Purpose (School) Zone; Specific Purpose (Tertiary Education) Zone; Specific Purpose (Flat Land Recovery) Zone	4.0
xvi.	Specific Purpose (Hospital) Zone - Christchurch Hospital; Specific Purpose (Golf Resort) Zone; Specific Purpose (Ruapuna Motorsport) Zone; Specific Purpose (Styx Mill Road Transfer Station) Zone; Specific Purpose (Defence Wigram) Zone	10.0
xvii.	Specific Purpose (Airport) Zone	20.0
xviii.	Transport Zone Advice note: 1. Exemptions from this standard can be found in 6.3.3.	Activities in the Transport Zone must meet the standards for the zones in which the adjacent sites are located.

6.3.7 Rules - Matters of discretion

a. When considering applications for restricted discretionary activities, the <u>Council</u>'s discretion to grant or decline consent, or impose conditions, is restricted to the matters over which discretion is restricted in the tables in Rules 6.3.4.3 and 6.3.5.3, and as set out for that matter below.

6.3.7.1 Amenity

- a. The extent to which the timing, duration, direction, intensity, focus, design, height or type of lighting (e.g. moving or intermittent) create adverse effects on local <u>amenity values</u>, particularly where any of the above is likely to result in sleep disturbance or to restrict the reasonable use of outdoor living or recreation areas;
 - Reference shall be made where appropriate to Australian Standards AS 4282 –
 1997 (Control of the Obtrusive Effects of Outdoor Lighting) to determine degrees of glare or discomfort and appropriate mitigation measures.

- b. Any measures taken to mitigate the effects in a.;
- c. Whether the artificial lighting is necessary for public safety or security;
- d. The consistency of the proposal with permitted background levels of artificial outdoor lighting in the receiving environment and the purpose, function and anticipated activities of affected zones;
- e. The likelihood of additional lighting contributing to cumulative adverse effects on residential, commercial, rural or open space <u>amenity values</u>;
- f. Whether the timing, direction or design of the lighting contributes to avoidable or unnecessary light spill into the night sky, except in the <u>Central City</u>.
- g. The proximity of the proposed artificial lighting to, and any potential adverse effects on:
 - i. any Site of Ecological Significance listed in Schedule A of Appendix 9.1.6.1;
 - ii. any heritage item or heritage setting listed in Appendix 9.3.7.2;
 - iii. any Wāhi Tapu/Wāhi Taonga <u>site of Ngāi Tahu Cultural Significance</u> identified in Schedule 9.5.6.1;
 - iv. any Outstanding Natural Landscape identified in Appendix 9.2.9.2.2;
 - v. any Outstanding Natural Feature identified in Appendix 9.2.9.2.1;
 - vi. any Significant Feature identified in Appendix 9.2.9.2.3; and
 - vii. any Area of Outstanding, or High and Very High, Natural Character in the Coastal Environment identified in Appendices 9.2.9.2.7 and 9.2.9.2.8.

6.3.7.2 Transport safety

a. The risk of any artificial lighting or glare creating a distraction or other impediment to the safe operation of the transport network, ships or aircraft.