Part 3
Chapter 17 – Planning Street Lighting & Illuminated Signs

1 Introduction

1.1 This chapter summarises Hertfordshire County Council's approach to street lighting, which is aimed at reducing energy consumption and carbon impact, light pollution, street clutter and operational costs, whilst continuing to support the local economy, maintaining safety and accessibility and assisting with the prevention of crime and disorder.

1.2 HCC achieves its aims through the application of a 'safe and operational' strategy for the management of its assets, the use of LED lighting and flexible lighting control through a Central Management System (CMS).

1.3 Due consideration should have been given to Hertfordshire's illumination strategy at the master planning stage as it is a potential influencer on the shape and form of the proposed development and streetscape.

1.4 Scheme promoters shall identify the proposed illumination strategy for their development or scheme together with any intentions to use Special Design Apparatus (and may include solar and or wind powered lighting where appropriate) within their proposed Lighting Strategy accompanying the full planning application ready for LTP4 Compliance testing.

1.5 The location of street lighting apparatus within the verge, footway or urban realm can impact on the proposed Place & Movement functionality of the highway, so must be considered at the planning application stage to ensure that there will be adequate clearances to accommodate the intended uses.

1.6 Exceptions to the general lighting strategy are summarised in paragraph 12 below: Lighting within Areas of Special Importance.

2 Illumination Strategy

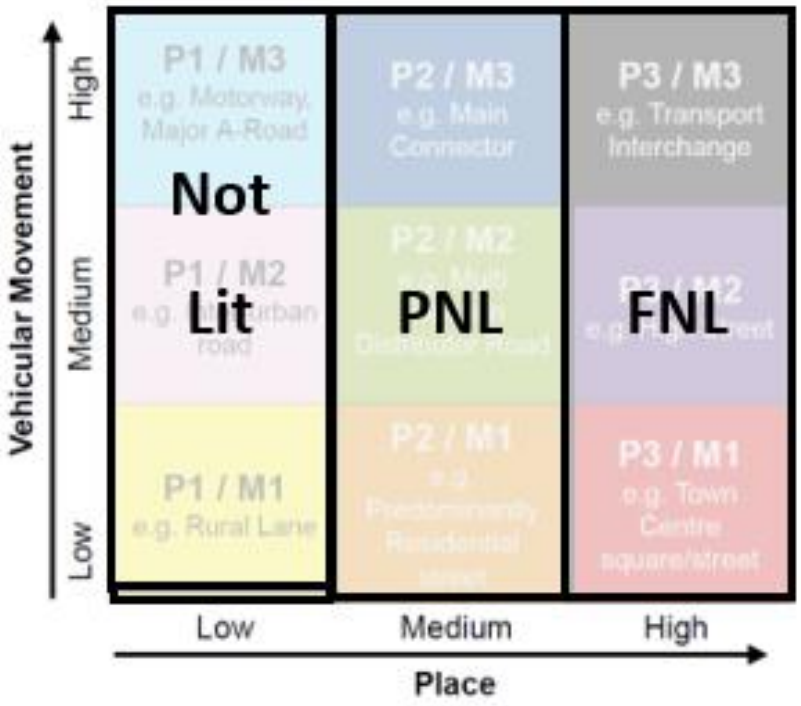
2.1 The highway is not to be illuminated unless in doing so it meets one or more of the criteria of maintaining safety and accessibility, supporting the local economy, or assisting with the prevention of crime and disorder. The illumination strategy is subject to periodic review.

2.2 For safety purposes, major junctions, roundabouts, traffic calming, centre islands, pedestrian crossings, splitter islands, CCTV areas transport hubs and remote footpaths are likely to require full night lighting (FNL).

2.3 Requests for lighting to support crime prevention and to address disorder must be sanctioned by the local Chief Inspector from Hertfordshire Constabulary.

2.4 Highways in towns and villages are subject to Part Night Lighting (PNL) with staged dimming, unless they meet the exception criteria, in which case they are subject to full night lighting. Details and refinement of the Part Night Lighting (PNL) exception criteria are included in the reports to the HCC Highways and Transport Cabinet Panels meetings on 11 January and 15 March 2011. Copies available on the HCC website.

2.5 Subject to the exception criteria, the illumination strategy applies to the Place & Movement Categories as follows:



2.6 PNL is generally applied to new lighting schemes as follows:

- Switch on at dusk until 21.00
- Dim by 50% until 23.00
- Dim a further 30% from 23.00 until 01.00
- Switch off until 05.00
- Switch on at 05.00 and run until dawn, when required
- Must be designed to the requirements set out in BS5489

2.7 Full night lighting is lit to the requirements set out in BS5489 but dimmed by 25% between the hours of 23.00 and 06.00.

2.8 The lighting strategy for major improvements to the inter-urban network shall be considered as an influencing factor during the process of selecting the preferred route and agreed by HCC. Whilst the provision of street lighting and illuminated signs can be a small proportion of the overall capital cost of a major highway scheme, it is likely to be a significant proportion of the overall life cost of the highway scheme. Therefore, due consideration should be given to the interdependence between highway illumination, highway alignment, landscape design, maintainability, and materials specifications at that early stage, with the aim of minimising the whole life costs of the overall highway scheme.

2.9 There may be occasions where a proposed cycleway/footway runs alongside the main carriageway, in this instance one source of lighting shall provide illumination for both the carriageway and cycleway/footway, with the lighting/dimming levels and operating periods dictated by the relevant hierarchy.

2.10 Where the cycleway/footway is remote from the carriageway, there may be more than one source of lighting which can be operated independently to satisfy the required lighting/dimming levels and operating periods.

2.11 If a cycleway or footway is sufficiently remote from a main carriageway the main carriageway may be unlit, but the cycleway or footway is lit.

2.12 The illumination strategy shall be LTP4 Compliance tested at the full planning application stage

Illumination Strategy LTP4 Compliance Test: Full Planning Application
The proposed illumination strategy supporting the full planning application demonstrates minimised energy consumption and carbon impact, light pollution, street clutter and operational costs, whilst continuing to maintain highway safety and accessibility, support the local economy and support the prevention of crime and disorder.

3 Third Party Lighting Systems

3.1 HCC is prepared to maintain and operate third party owned lighting on the highway on a rechargeable basis providing that the lighting assets comply with the requirements of this guidance.

3.2 No additional street lighting installations are to be introduced to the existing highway network unless it becomes a statutory requirement, such as when a traffic calming scheme or junction improvement is introduced, or a safety requirement (i.e., as part of a specific casualty or crime reduction measure/scheme/initiative) for example.

3.3 Hertfordshire County Council Members have the flexibility to use their Highway Locality Budget (HLB) to fund additional street lighting (including commuted maintenance sum for 25 years) on remote footpaths (defined as 5 metres or more from an adjacent carriageway) and may include solar and or wind powered lighting where appropriate.

3.4 HCC will consider converting part night lighting to full night lighting subject to the local chief police inspector confirming in writing it is necessary where there was an evidence-based nighttime crime issue.

3.5 Hertfordshire County Councillors have the discretion to extend the lighting hours from 01.00 to 02.00 and to dim the lighting by 50% between 05.00 and 06.00 within the PNL Regime, where there is a local justification for doing so for a particular street, route, or area within an urban or rural area.

3.6 “Local justification” would be based on destinations which operate until at least 02.00. Members would need to identify and evidence connections (that can be changed from 01.00 to 02.00 and to dim (suggested as by 50%) the lighting between 05.00 and 06.00) to and from such destinations.

3.7 The criteria where there is a local justification for doing so will be street(s), route(s), or area(s) (from A, B and C roads that are in Full Night Lighting) that provide connections to and from the following destinations which operate until at least 02.00:

- Transport Hubs - i.e., major railway stations and bus stations (there are currently 22 railway stations and 4 bus stations / coach interchanges within Hertfordshire which operate until 02.00).
- Hospitals and Emergency Services Headquarters - i.e., which operate a 24-hour 7 day a week emergency facility (there are currently 3 hospitals within Hertfordshire which operate on this basis).
- Places of Key Employment, Amenity, Entertainment and Leisure - i.e., significant organisations / businesses and town centres within Hertfordshire which operate throughout the hours of darkness (i.e., night-time economy).

4 Street Lighting & Landscape Design

4.1 Landscape design should be considered in conjunction with lighting design to ensure that they complement each other, rather than conflict.

4.2 Vegetation (e.g., trees and hedges), in particular, should be selected and sited so as not to impair access to the apparatus door or the lighting effectiveness at ground level when it reaches maturity.

5 Column Design

5.1 Unless in an Area of Special Importance columns should be of tubular, galvanised steel construction and uncoated except at the root.

5.2 Columns should be designed and positioned to be capable of carrying a sign, rectangular in elevation, with a surface area of 0.3m² for columns up to 5m in height and 0.6m² for columns greater than 5m in height.

5.3 Columns located on remote footway or where there is no vehicular access shall be designed with a raise and lowering facility.

5.4 Columns should be located at the rear of the maintained highway within the footway wherever possible or positioned in the easement strip where no footway exists.

5.5 The clearance from edge of carriageway shall not be less than the minimum defined in the Table below.

Speed limit (mph)	Minimum horizontal clearance
20	0.8m
30	0.8m
40	1m
50	1m
60	1.5m
70	1.5m

5.6 Greater clearances may be required due to other factors such as passive safety risk assessments and the needs of the Place & Movement designation for accommodating the needs for pedestrians, cycling and other street furniture.

5.7 Columns should be arranged to avoid potential obstructions to those with a mobility impairment and to partially sighted users and be lined up with other existing street furniture unless detailed within a specific streetscape design.

5.8 Scheme promoters must consult property owners who will be affected by the siting of lighting columns next to their buildings prior to submitting their planning application.

6 Column Peripherals

6.1 Highway lighting columns may be designed or positioned to provide charging points for electric vehicles.

6.2 Lighting columns may need to be designed to support and power attachments such as festive lighting in town and village centre locations.

6.3 Similarly, some columns may be required to accommodate CCTV, ANPR, communications infrastructure, Banners, hanging baskets and the like.

6.4 Scheme promoters shall consult HCC regarding any requirement for such facilities and HCC shall co-ordinate the potential partners involved.

6.5 All non-HCC promoted peripherals shall be subject to a licence or legal agreement with HCC or a ‘shared column’ legal agreement.

7 Mounting Street Lighting on Buildings or Structures

7.1 Consideration should be given by designers to mounting streetlights on buildings or structures to overcome engineering difficulties or to maintain horizontal clearances on narrow footways.

7.2 Written consent for the mounting of lighting on their buildings or structures must be sought from the relevant property owners by the scheme promotor and presented to HCC at the time of planning application

7.3 Subsequently, formal wayleaves must be secured by the scheme promoter and passed onto HCC as a condition of the adoption of the works.

8 Lanterns

8.1 All lanterns shall be LED with electronic dimmable control gear and a suitable node to work with the HCC Telensa CMS system must be fitted.

8.2 Lanterns should be coloured grey and fitted with the manufacturers’ internal or external shields where appropriate.

9 Brackets

9.1 All lanterns are to be fitted post top to columns with suitable reducers where required unless the designed location of the column requires a bracket.

9.2 The following Table indicates the maximum bracket projection by lantern mounting height.

Lantern mounting height	Maximum bracket projection
15m	2.5m
12m	2m
10m	1.5m
8m	1m
6m	Post top (no bracket)
5m	Post top (no bracket)

10 Cabling

10.1 Street lights shall be fed through Distribution Network Operators (DNOs) where possible.

10.2 Supplies to illuminated signs and bollards should be obtained from the nearest lighting columns or feeder pillar via cables laid in 50mm diameter orange ducts

10.3 Earth rods should be installed at the end of each circuit of three or more columns/signs, and at the feeder pillar or column.

11 Illuminated Bollards & Signs

11.1 Careful highway scheme design shall first aim to avoid the need to install signs and bollards, where it is safe to do so and it does not compromise the overall feasibility of the scheme.

11.2 If this is not feasible, then non-illuminated signs and bollards shall be the second aim. See Part 3 Chapter 18 and Part 4 Chapter 17 for more information on non-illuminated signs and bollards.

11.3 Illuminated signs and bollards shall only be installed if necessary and the highway scheme shall be designed in such a manner that they are not prone to collision damage and be self-righting or rebound design where appropriate and may be solar powered where appropriate.

11.4 All illuminated signs and bollards are to utilise LED technology and be fitted with a Telensa node to control switching them on and off.

12 Lighting in Areas of High Place Importance

12.1 Exceptions to the general lighting strategy are considered within Areas of High Place Importance, which generally include the P3 Categories of the Place & Movement matrix, but also the Chilterns AONB, conservation areas, heritage town and village centres.

12.2 The lighting design to be used close to sites of wildlife conservation value or near known populations of rare species shall be determined through early consultation with HCC.

12.3 Replacement lighting or additional lighting necessitated by local highway changes within heritage towns or village centres will need to be sympathetic to the ambient lighting regime and may require a deviation from the general requirements set out in the rest of this guidance. In such circumstances early consultation with HCC is required.

12.4 Proposed columns and lanterns and their colour should be supplied in the specific colour during the design briefing with HCC.

12.5 HCC's 'Safe & Operational' strategy does not allow for the funding of painting and repainting of columns out of its core maintenance budgets other than for columns in Conservation Areas.

12.6 Scheme promotors will be required to fund the ongoing re-painting requirements through a funding agreement, which may be in the form of a commuted sum payment.

12.7 HCC has a palette of 'off the shelf' heritage style columns and lanterns which it uses within Conservation Areas and heritage town and village centres, which already have a heritage lighting regime.

12.8 HCC will adopt and maintain such matching Special Design Apparatus (including shields where applicable) within this palette subject to the payment of a commuted sum.

12.9 HCC is also prepared to consider innovative arrangements (e.g. may include solar and or wind powered lighting where appropriate) for the provision, maintenance and operation of bespoke street lighting regimes in P3 Category Areas, the creation of strategic settlements or the regeneration of strategic sites providing that they are at no net extra cost to HCC over the whole life of the assets when compared to the costs of a scheme conforming to the requirements set out in PMDG and they create no extra carbon impact.

12.10 The contribution to Local Character and Heritage shall be LTP4 Compliance tested at the full planning application stage.

Lighting in Areas of High Importance
LTP4 Compliance test: Full Planning Application

The lighting strategy proposes a lighting design and use of Special Design Apparatus that protects, preserves and enhances the understanding and enjoyment of both the tangible and intangible aspects of Hertfordshire's heritage and archaeology in areas of High Place Importance.

13 Whole Life Management Plan

13.1 The first draft of the Whole Life Management Plan will be required at the Planning Application stage setting out broad proposals as to who is going to own the proposed street lighting assets, who is going to maintain and manage them and how they are going to be funded.

14 Adoption Requirements

14.1 Scheme Promoters should ensure that their street lighting advisors and contractors are good 'completer finishers' and will readily comply with the requirements to provide all the documentation and certificates detailed in Part 4 in a timely manner.

14.2 Scheme Promoters should note that design approvals and adoption shall not take place without full compliance.

14.3 The Scheme Promoter should note that they shall be responsible for all energy and maintenance charges until the date of adoption.

14.4 The scheme promoter shall obtain connection, unmetered and meter supply agreements for energy supplies.