

North West Leicestershire District Council

**Supplementary Planning
Guidance for
Lighting Schemes**



November 2003

SUPPLEMENTARY PLANNING GUIDANCE

LIGHTING SCHEMES

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1 INTRODUCTION

1.1 This document sets out Supplementary Planning Guidance (SPG) for lighting schemes within North West Leicestershire. This guidance has been prepared by the District Council to supplement Local Plan policies in respect of external lighting schemes having regard to national policy and guidance.

1.2 Historically there has been very little Government guidance, advice or legislation concerning the control of lighting even though it is an increasingly important aspect of many developments.

1.3 In the absence of any clear guidance external lighting schemes associated with industrial and commercial developments, as well as residential properties, have developed in an ad-hoc fashion. And whilst existing schemes may fulfil their function adequately, they often create wider problems that could be mitigated given a more co-ordinated approach to their design and implementation. The justification for providing Supplementary Planning Guidance on lighting design lies in the fact that poorly designed lighting schemes can:

- Lead to lower levels of road safety;
- Threaten personal safety or lead to increased incidence of crime;
- Cause glare;
- Waste energy;
- Threaten air safety around East Midlands International Airport;
- Affect the growing seasons of plants and trees and the breeding patterns of some animals, and
- Affect the visibility of the night sky.

1.4 With these issues in mind the aim of this guide is to provide advice, which can inform any organisation or person considering the installation of a lighting scheme through:

- Providing guidance on best practice associated with lighting schemes to be implemented in new or existing developments;
- Detailing the ways that the negative impacts of lighting schemes can be mitigated and;

- Outlining what an applicant will need to provide in terms of technical information when preparing a planning application involving artificial lighting, in order that the Council has sufficient information to determine any proposed schemes.

- 1.5 Following adoption by North West Leicestershire District Council this document will have the status of Supplementary Planning Guidance. Planning Policy Guidance Note 12 (Development Plans) advises that SPG may be taken into account as a material consideration in the determination of planning applications. The Secretary of State will give substantial weight to SPG that derives out of and is consistent with the development plan, and has been prepared in the proper manner.
- 1.6 SPG should be prepared in consultation with interested parties and their views taken into account before it is finalised. A statement of consultation that details the process undertaken in the preparation of this document is given in Appendix One.
- 1.7 All references to the Local Plan are a reference to the North West Leicestershire Local Plan as adopted on the 22 August 2002.
- 1.8 Throughout this guidance there are inevitably a number of technical issues considered. The glossary provided within Appendix Three provides definitions and further information on many of the technical phrases and terms used within the guide.

2 CIRCUMSTANCES WHERE YOU WILL NEED TO SUBMIT A PLANNING APPLICATION FOR LIGHTING SCHEMES

- 2.1 If you are just undertaking maintenance, improvement or other minor alterations that only affect the interior of the building or do not 'materially' affect the external appearance of the building then it is unlikely that you require planning permission. This is because the installation of artificial light itself is not classed as 'development'. However, if the proposed schemes has a material effect on the external character of a building, or if additional structures or installations, such as columns, are required as part of the scheme then it is likely that planning permission will be required.
- 2.2 If you are in doubt whether planning permission is needed before installing any lighting scheme you should check with officers of the Council's Planning and Environment Division who can offer additional guidance and advice. When seeking advice you should provide detailed information on the scheme you are looking to implement. This information will include details of the area to be lit, the number of lights, their likely light output and the height of columns (if applicable). Without this information the planning division may be unable to determine whether any proposed schemes will require planning permission.
- 2.3 If a proposed scheme does not require planning permission, this guidance document can still provide useful information and pointers on designing a scheme which will meet your requirements without affecting the amenity of others. As a local authority North West Leicestershire District Council has few statutory powers concerning the control of lights which can be installed without planning permission. However, if a lighting scheme you install affects other 'householders' or individuals they may have recourse through private nuisance actions to require you to mitigate the impacts of any excessive lighting. This is primarily a matter for civil law. Through following guidance contained in this document, you can from the outset seek to avoid installing any schemes that are detrimental to neighbouring properties, save money and conserve energy.
- 2.4 In particular, information contained within Section 5 (general advice) of this SPG will be particularly useful. If you are a householder or small business owner further useful

information is also outlined in the specific advice section, in paragraphs 6.2 and 6.4 respectively.

2.5 Where a proposed scheme will require planning permission, in addition to the information normally required in submitting a planning application, for developments involving lighting you will also need to provide details of the following:

- A statement of why the lighting is required, the proposed frequency of use, and the hours of illumination;
- A site plan showing the areas to be lit relative to the surrounding area indicating parking or access areas where appropriate, and detailing any significant existing or proposed landscape or boundary features;
- A technical report, prepared by a qualified lighting engineer, indicating the type, number, mounting height and alignment of luminaires together with the beam angles and upward waste ratio of each light; and
- An assessment detailing predicted illuminance levels at critical locations within the site, or at the boundary of the site or where the site abuts the highway or residential properties.

2.6 In determining any planning application the planning division will look for evidence that you have taken account of information and advice detailed within this SPG.

Planning Conditions

2.7 Where the local planning authority grants planning permission for a development, conditions controlling the lighting scheme may be applied. These could include:

- Limits on the hours of illumination and/or lighting levels;
- Specification and colour treatment for lights and luminaires;
- Restrictions on column heights, or where appropriate the use of demountable columns;
- Use of planting and bunding to contain lighting effects;
- Retention of screening vegetation where this already exists;
- The erection of demonstration luminaires; and
- A review of lighting impacts after installation.

2.8 Where a proposed lighting scheme will affect a listed building or its grounds you should in all instances contact the Conservation Officer of the authority. In most instances the installation of lighting, on, or within the curtilage of a listed building will require Listed Building Consent.

3 PLANNING POLICY BACKGROUND

National Planning Policy

- 3.1 Within the national planning policy framework the Government has indicated that the principal means of tackling lighting issues is through increasing public awareness of the possible problems that badly designed and installed lighting can lead to. In order to achieve this Central Government is keen to see planning authorities provide better advice on how the potential impacts of lighting schemes can be minimised as well as the more extensive use of planning powers to control larger schemes. One method through which these goals can be met is through the adoption of Supplementary Planning Guidance.
- 3.2 Planning Policy Guidance Note 1 (PPG1) (1997): *General Policy and Principles* provides guidance on the role of design considerations in planning (paras 13-20) and advises that the Local Plan and Supplementary Planning Guidance should set out design policies against which development proposals are to be considered. It further states that “*SPG may usefully include advice about matters such as lighting where...these are likely to have a significant impact on the character or quality of the existing environment*”, (PPG1 1997 Annex 1).
- 3.3 PPG17 (2002, para. 19): *Planning for Open Space, Sport and Recreation*: states that “*in considering applications for floodlighting, local authorities should ensure that local amenity is protected. The impact...on the character of the countryside, of flood light towers or pylons should be a key factor in determining whether planning permission should be granted*”.
- 3.4 PPG23 (1994, para 2.18): *Planning and Pollution Control*: states the need for local planning authorities to assess “*the possible impact of potentially polluting development on land use, including the effects on health, the natural environment or generally amenity resulting from releases to water, land or air, or of dust, vibration, light or heat*”
- 3.5 In addition to PPGs the Government has also recently published a best practice guide: *Lighting in the Countryside: Towards Good Practice* (DETR, 2001). This guidance states explicitly that development plans and Supplementary Planning Guidance can help

inform people about lighting issues and indicate ways in which they should be addressed within development proposals.

Local Plan Policy

- 3.6 The North West Leicestershire Local Plan (adopted August 2002) does not contain any specific guidance concerning lighting. It does, however, contain general policies that seek to protect the environment from inappropriate development. Relevant policies include Policy E3 which states development will not be permitted that would be significantly detrimental to the amenities enjoyed by the occupiers of existing nearby dwellings. Policy E4 further states the need for new development to respect the character of its surroundings. Additional guidance is also outlined in Policy L3. This stipulates that development on recreational sites outside the Limits to Development will only be permitted where it would not be detrimental to the local landscape or rural environment. Further detail of these policies is outlined within Appendix One.

4 THE ISSUES

4.1 Lighting itself is not a problem. However, it can become a problem where it is excessive, poorly designed or badly implemented. In particular, problems arise from light pollution which is caused by:

Skyglow – the glow that occurs when poorly directed upwards light reflects off particles in the atmosphere. It reduces the ability of people to see in the natural night sky and is often characterised by the orange glow that can be seen above towns and villages.

Glare – the uncomfortable brightness of a light source when viewed against a darker background.

Light trespass – the spill of light beyond the boundary of the property, or the area to be lighted. This is often a source of nuisance to neighbours.

4.2 Light pollution resulting from one or more of these factors is not only distracting, it can also be dangerous. In particular over-bright light can be dazzling, causing momentary blindness for drivers moving rapidly from dark to relatively well-lit areas.

4.3 Light spill from a misdirected source can also upset the balance of exterior lighting and may cause particular anxiety to 'home-owners' where it impinges directly on residential areas. Furthermore, poorly-designed lighting schemes can detract from the character of many rural or Conservation Areas with insensitive lighting schemes blurring the distinction between towns and countryside as well as having significant implications for some types of wildlife.

4.4 It should be noted, however, that correctly installed, artificial lighting does provide a range of benefits. It can reduce the fear of crime, increase levels of road safety, and provide community benefits arising from the greater use of leisure and commercial facilities. For this reason, lighting schemes can be an important part of any development. However, given the increasing frequency that complaints surrounding artificial lighting are coming forward, (Government figures suggested a 44% increase between 1993 and 1996 alone¹), there is now some justification for providing detailed guidance on the technical design and specification of lighting schemes regardless of

¹ Lighting the Countryside: Towards Good Practice, 2001. DETR

size. It is therefore intended that this SPG promotes well thought out and functional lighting schemes that are sensitive to the needs of the wider community.

5 GENERAL ADVICE

5.1 Considerations

In determining any planning application for lighting the District Council has identified a number of factors which will be taken into consideration. These include:

5.2 An Assessment of Lighting Need

Before undertaking new development the local planning authority will require the applicant to assess the need for any proposed lighting scheme. This assessment should take into account whether the development could proceed without lighting, whether the advantages of installing lighting outweigh the disadvantages and if there are any alternative design measures that can be implemented to reduce the need for artificial lighting. These could include improved site layout, site security, fencing and CCTV. In producing an assessment the local planning authority will also require that the impact of lighting on the local highway network and local environment be considered. Applicants should also ensure that guidance outlined in this Authorities Designing Out Crime SPG is considered.

5.3 The Siting and Impact of the Proposal on Neighbouring Uses

5.3.1 Where a proposed lighting scheme is adjacent to, or located close enough to affect areas of nature conservation, e.g. Sites of Special Scientific Interest, National Nature Reserves and Sites of County or District Ecological or Geological Interest as defined in the adopted Local Plan, external lighting will only be permitted in exceptional circumstances.

5.3.2 Where a proposed lighting scheme falls within prescribed boundaries of the safeguarded area for the airport, the airport operator will be consulted on the acceptability of lighting schemes. Where it is considered that any development may threaten safety this will be a material consideration in determining the appropriateness of any planning application.

5.3.3 Irrespective of location, lighting schemes will only be permitted if the applicant can satisfy the authority that the proposal is the minimum required for safety, security and/or working purposes and that obtrusive light from glare is kept to a minimum.

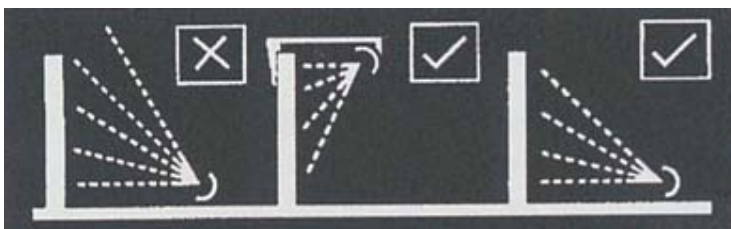
5.3.3 The Institution of Lighting Engineers has produced guidance outlining acceptable levels of illumination for various types of urban and rural locations. This can be viewed in Appendix Four. Further information is also available at www.dark-skies.org/ile-gd-e.htm. The District Council will require applications to demonstrate that this guidance has been considered.

5.4 Lighting Design

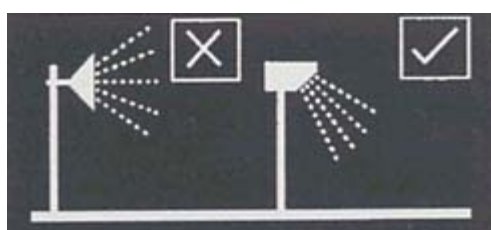
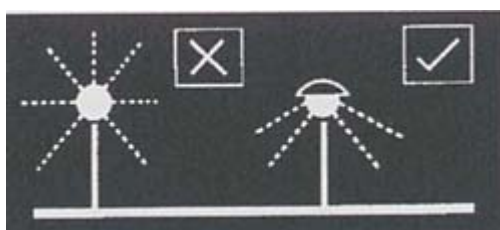
5.4.1 Sensitively designed lighting schemes can play an important role in reducing light pollution. Evidence of good design within a lighting scheme will be sought and treated as a material consideration in determining any planning application, where lighting is or could be an issue. The following measures can help reduce intrusive light.

5.4.2 **Switch Lights Off.** There is often little point in illuminating areas all night as it is both costly and inefficient and can be damaging to the amenity of surrounding areas. In submitting a lighting proposal, thought should be given to the potential users and whether safety, security and the operation of the site would be compromised by restricting its usage to specific times, or through implementing a reduced lighting scheme. In all cases applicants will be expected to limit the hours of operation to the minimum required to fulfil the function of that scheme.

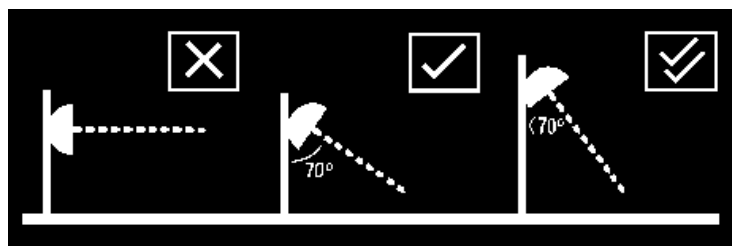
5.4.3 **Direct Lighting Downwards.** When lighting vertical structures, wherever possible, lighting should be directed downwards as this can help minimise skyglow. If there is no alternative to uplighting, then the use of shields, baffles and louvres should be used to reduce 'spill light' around and above the structure to a minimum.



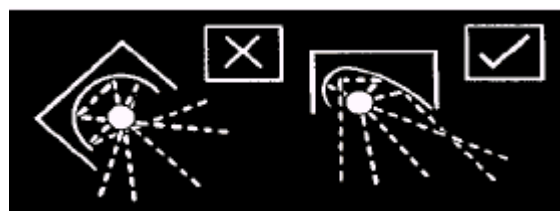
5.4.4 **Avoid Light Wastage above the Horizontal.** Ensure that lighting is specifically designed to minimise the upward spread of light near to or above the horizontal as this also creates 'skyglow'.



5.4.5 **Do Not Overlight.** Overlighting is a indicator of poor design and is a waste of resources. There are published standards for most lighting tasks. Further information detailing where these standards can be obtained is outlined in Appendix Five. Wherever possible ensure that the main beam angle of all lights directed towards any potential observer is kept below 70 degrees. The higher the mounting height the lower the main beam angle could be. This could help reduce the effect of glare and light spill on neighbouring dwellings, passing motorists, pedestrians etc. There will, however, be a need to balance the advantages gained from mounting lighting units from higher positions where this will require the provision of new structures which could themselves affect the amenity of the area. In areas with a low ambient lighting level, glare can be a particular problem and extra care should be taken when positioning and aiming lighting equipment.



5.4.6 **Use Specifically Designed Lighting Equipment.** The use of luminaires (the casing in which the lamp is fitted) with double asymmetric beams designed so that the front glazing is kept at or near to parallel to the surface being lit can assist in the reduction of glare provided that the units are correctly targetted. Similarly, modern, well-controlled projector type luminaires, which can be aimed very precisely, can provide excellent cut-off beyond the lit area, and help reduce light spill and glare.



5.4.7 **Aim Light into the Site.** Place luminaires in a way that allows light to be aimed into the site, for example consider placing lighting around the site perimeter in order that buildings and other structures can be used to minimise light trespass and other forms of light spill.

5.4.8 **Consider the Daytime Appearance of Lighting and Associated Structures.** The height, size, colour and position of the lighting equipment should be considered in relation to its daytime appearance in order that its impact on the surrounding built and natural environment is minimised.

6 SPECIFIC ADVICE

6.1 Introduction

Some development proposals warrant more specific guidance. In determining any planning application relating to one of these schemes the local planning authority will look for evidence that these issues have received due consideration.

6.2 Domestic and Small Scale Commercial Security Lighting

There is currently little published information available to advise specifically on the design and installation of security lighting. In addition, security lighting is increasingly installed by members of the public who must rely on the instructions which accompany the product. These are typically limited and make little or no reference to light pollution. The following points will help minimise the impact any lighting scheme will have on the surrounding area without compromising its effectiveness:

- Lighting should be controlled by photo-electric switches and should be set to the minimum setting. Sensors that can be tripped by small animals, road or footway users should be avoided;
- A 150W (2000 lumen) tungsten halogen lamp is more than adequate for domestic security lighting. Lamps of higher intensity create glare and dark spots which can actually reduce visibility around the site to be illuminated. Where porch lights are required the Institution of Lighting Engineers recommends the use of a 9W (600 lumen) compact fluorescent tube;
- Lighting should be directed down to illuminate its target and mounted below the property boundary height so as to reduce light spill; and
- Wherever possible, develop an integrated approach to security lighting, balancing the levels of light with other lighting in and around the site to avoid glare, dark spots and light spill.

6.3 Residential Developments

Many new residential developments include lighting as an integral part of their design. As a result newer residential areas in many towns and villages may be very well lit whilst the rest of the settlement may be relatively dark by comparison. In designing a lighting scheme for a new residential development:

- Consider whether lighting is required at all, and where it will be most effective
- Keep lighting in new residential areas in balance with that of the wider settlement
- Where a new development is within the countryside, consider the views from the surrounding area and avoid a line of lights defining the edge of a village; and
- Where appropriate, consider guidance highlighted in North West Leicestershire District Council's Supplementary Planning Guidance on crime and safety: *Designing Out Crime – Designing In Community Safety*.

6.4 **Commercial Developments**

Many commercial developments utilise lighting extensively. Possible uses include car park and road lighting, promotional lighting associated with advertising, security lighting and in some instances working lights which allow the outdoor use of loading bays etc. In designing a lighting scheme to be associated with any commercial development it will be necessary to ensure that:

- All lighting has a clear purpose. The use of lighting to create a 'presence' at night should be avoided;
- Concentrate lights where they are needed and establish a clear hierarchy, with minimum lighting around the outer perimeter of the site;
- Reduce the scale of street/road lighting and consider the height and spacing of lights in relation to buildings
- Direct all floodlights carefully to where they are needed and design equipment to minimise light pollution;
- Place promotional lights and signs so that they are not visible from the open countryside; and
- Consider whether lighting needs vary throughout the day and design schemes accordingly.

6.5 **Road Accesses**

In some instances private road accesses may need to be lit for reasons of safety. In such locations lighting should usually be designed to achieve the minimum light levels as stipulated in the British Standard (BS 5489). Nonetheless lighting schemes should:

- Site lighting equipment carefully and consider the colour of lighting columns in relation to the surrounding landscape. For example use a dark colour if the columns

are set against a backdrop of vegetation; light colours if lighting structures will be mostly viewed against the sky. In all instances use matt colours.

- Keep the number of columns to a minimum
- Use luminaires with full horizontal cut-off to minimise upwards light wherever an artificially lit road access is necessary; and
- Undertake a visual appraisal and design lighting schemes to minimise visual intrusion of light at night and of structures by day.

A contact address for the British Standards Institute is given in Appendix Six.

6.6 Car Parks

Car parks are at high risk from car crime and vandalism. Appropriate lighting schemes can enhance the safety of pedestrians and the security of parked cars. In designing an appropriate scheme effort should be made to:

- Direct lighting downwards, using equipment that can reduce the level of light spill and Glare;
- Consider the use of alternative measures in place of, or in conjunction with any possible lighting scheme;
- Site lighting and associated structures carefully making use of the backdrop provided by any existing vegetation and introduce new planting to help integrate lighting structures and minimise the visual impact of both equipment and lighting; and
- Ensure any new planting conforms to additional guidance contained within North West Leicestershire District Council's Supplementary Planning Guidance on crime and safety: *Designing Out Crime – Designing In Community Safety*, in order that any planting does not obscure light or offer any new opportunities for anti social behavior.

6.7 Signs and Advertisements

Most illuminated signs require express consent under the Town and Country Planning (Control of Advertisements) 1992, (amended 1994). Occasionally, however, within some parts of Ashby-de-la Zouch and Coalville, as well as some other larger villages some lighted advertisements are permitted, without the need for submitting a formal planning application. Further details of whether a scheme will require planning permission can be obtained from the Council's Planning and Environment Division. An address is given on page 20. In all instances:

- The level of lighting should relate to its surroundings, with signs only being visible on the most prominent face of the building;
- Only fascias should be highlighted; and
- Signs should only be lit when people are around to view them.

6.8 **Petrol Filing Stations**

Many petrol stations and other roadway service areas now use lights for both lighting and signage purposes. In most rural parts of the district lighted signage will in all instances require planning permission. Before installing illuminated signs:

- Consider reducing lighting or avoiding it altogether during daylight hours;
- Design and position signs so that they are only visible from the carriageway and not from the surrounding landscape; and
- Integrate the design of promotional signage with that of the canopy, but ensure that signs on canopies do not cause additional light spill.

Where lighting is for security purposes and for lighting the forecourt area at night:

- Position canopy lights so that light spill from within the canopy is avoided;
- Avoid lighting the internal fascia around the canopy; and
- Direct lighting to where it is needed.

6.9 **Sports Lighting**

Many outdoor sporting facilities now make extensive use of floodlights in order to extend the hours they can be operated. There is a need to balance the need for floodlit sports facilities with the impact lighting schemes can have on local communities or the general amenity of an area. Before implementing any lighting scheme:

- Consider the potential for temporary floodlighting and for lowering lighting columns in the summer, when they are not in use;
- Design lighting to be as directional as possible using the minimum number of lights possible to reduce light pollution;
- Consideration should be given to the daytime appearance of lighting columns. In order to minimise their appearance light colours should be used where they are likely to be seen against the sky, dark colours if they will be mostly viewed against a

backdrop of vegetation or buildings. In all instances matt colours should be used; and

- Floodlights should only be used when the area to be artificially lit is in use.
- Wherever possible consider relevant guidance set out in Sport England's Technical Guidance Note on Floodlighting, (see Appendix 5).

This guidance only gives a brief background regarding artificial lighting for sports facilities. Applicants are therefore advised to refer to more technical guidance from the Chartered Institute of Building Services Engineers, *Lighting for Sports*, LG4, 1990. A contact address for CIBSE is given in Appendix Six. Similarly, Sport England have also published a handbook on sport and recreation facilities for outdoor sports.

Lighting schemes for sports-related developments often require considerable technical expertise. In submitting an application for floodlighting applicants should be prepared to provide appropriate technical specifications, produced by reputable manufacturers or suppliers of lighting equipment in order to demonstrate that their product not only meets the level of illumination required, but does so in a way that minimises visual intrusion and obtrusive light.

6.10 **Farms and Garden Centres**

Many farms and garden centres are located within largely rural areas. There is therefore, a particular need to implement schemes that do not have a significant impact on local amenity. In designing a lighting scheme ensure that:

- Lights are mounted below the roof height of buildings and that light is directed to where it is needed;
- The use of sensors that can be tripped by animals is avoided; and
- Lights are positioned so they are shielded by buildings, and not visible from the surrounding countryside.
- Wherever possible consider relevant guidance available through the Farm Energy Centre. Contact Details are available in Appendix 6.

6.11 **East Midlands Airport**

For the purposes of navigation, development involving the erection of lighting apparatus within the boundaries of East Midlands Airport, and up to a distance of 8km on

operational land outside the airport is usually permitted development. This means that it can be undertaken without requiring planning permission. It is worth noting therefore, that as a planning authority North West Leicestershire District Council has very little control over lighting which is required for aircraft navigation purposes. Applications for non-navigation related lighting within East Midlands Airport itself is subject to normal planning control.

8 CONTACT DETAILS

8.1 Further Information concerning this guidance is available from:

Planning and Environment Division
North West Leicestershire District Council
Council Offices
Coalville
Leicestershire
LE67 3FJ

Tel: (01530) 454678

APPENDIX ONE

Local Plan Policies

Policy E3

Development will not be permitted which, by reason of its scale, height, mass, design, oppressiveness, proximity, noise, vibration, smell, fumes, smoke, soot, ash, dust, grit or excessive traffic generation, would be significantly detrimental to the amenities enjoyed by the occupiers of existing nearby dwellings.

Residential development will not be permitted where any of the likely effects emanating from an existing nearby land use would be significantly detrimental to the amenities enjoyed by its occupants.

Policy E4

In the determination of planning applications regard will be had to the wider setting of new buildings; new development should respect the character of its surroundings, in terms of scale, design, density, height, massing, materials of construction, the spaces between and around buildings, and the street scene generally.

Policy L3

Built development on recreational sites outside Limits to Development, identified on the Proposals Map, will only be permitted where it:

- (a) Is strictly ancillary to the recreational use proposed;
- (b) Is sited, where possible, in association with existing buildings or make use of existing rural buildings; and
- (c) Would not be detrimental to the local landscape or rural environment.

APPENDIX TWO

Statement of Consultation

The draft supplementary planning guidance was published for consultation between the 20th August 2003 and 1st October 2003. Consultations were undertaken with:

- Government Office for the East Midlands
- Civil Aviation Authority
- East Midlands Airport
- Health and Safety Executive
- Highways Agency
- Countryside Agency
- English Nature (Eastern Area Team)
- English Heritage
- Sport England
- Leicestershire Constabulary
- Leicestershire County Council
- South Derbyshire District Council
- Erewash Borough Council
- Hinckley and Bosworth Borough Council
- Charnwood Borough Council
- Lichfield Borough Council
- Rushcliffe Borough Council
- Broxtowe Borough Council
- North Warwickshire Borough Council
- CPRE (Leicestershire and Derbyshire Branches)
- Housebuilders Federation
- Donington Park Leisure Ltd
- Campaign for Dark Skies
- Institution of Lighting Engineers
- Parish Councils

Copies were made available for public inspection at the District Council offices and on the development planning section of the Council's website.

(www.nwleics.gov.uk/development_planning).

In total 10 letters of representation were received. A report summarising the main tenets of the representations along with an officer consideration of each was considered by the District Council's Executive Board of 18th November 2003. Having considered the representations and recommended alterations the Executive Board resolved that the guidance be adopted as supplementary planning guidance to the policies of the North West Leicestershire Local Plan. Whilst not having the same status as an adopted plan policy the document may be taken into account as a material consideration in the determination of planning applications.

NORTH WEST LEICESTERSHIRE DISTRICT COUNCIL

EXECUTIVE BOARD - 18 NOVEMBER 2003

REPORT OF THE MANAGER OF PLANNING AND ENVIRONMENT

SUPPLEMENTARY PLANNING GUIDANCE FOR LIGHTING SCHEMES

Purpose of report

To consider the responses received to the consultation on draft Supplementary Planning Guidance in respect of external lighting schemes and to seek its adoption as Supplementary Planning Guidance

Remit of Board

Formal resolution

Policy matters

This guidance builds upon the Council's established (but somewhat limited) policies contained in the adopted North West Leicestershire Local Plan

Financial/staff resources

No discernible implications

Health/Anti-poverty issues

No discernible implications

Crime and disorder

The implementation of the guidance will, when considered in tandem with the Designing Out Crime SPG help support the Council's Crime and Disorder Strategy and the work of Partnership on Safer Communities.

Human rights

No discernible implications

E-Government implications

No discernible implications

1 BACKGROUND

- 1.1 Members may be aware that insensitive lighting schemes are a frequent cause of neighbour dispute or nuisance. Yet unlike noise, local authorities such as North West Leicestershire District Council have few statutory powers concerning the control of external lighting schemes. However, there is increasing recognition that the planning system provides one mechanism through which greater control can be exerted over lighting schemes. This is particularly the case for new development where lighting can be considered in terms of its impact on local amenity whilst determining a planning application and controlled through the use of planning conditions.
- 1.2 In addition, the provision of Lighting Guidance also fits in well with this Authorities Draft Community Strategy. This seeks to provide a better quality of life for people living and working in the District through tackling broad issues such as the quality of the built and natural environment. In particular this draft SPG goes some way to tackling the issue of light pollution, which can clearly affect the perception people have of the environment in which they live and work.
- 1.3 The formal adoption of this SPG coincides with the United Kingdom's Parliamentary Select Committee Report on Light Pollution and Astronomy published on 6 October 2003. This document strongly advocates the use of SPG to help control external lighting schemes.
- 1.4 The draft SPG was published for consultation between the 20 August 2003 and the 1 October 2003. The draft document was subject to direct consultation with all parish councils and a variety of other relevant stakeholder groups and organisations. In addition, the document was placed on the Council's web site.
- 1.5 The purpose of this report is to consider the responses received and to seek its formal adoption as Supplementary Planning Guidance. It is considered that it would be appropriate to include the responses, together with this report, in the adopted version of the document for ease of reference and to demonstrate the procedures followed.
- 1.6 A copy of the draft document, together with the responses received has been placed in the members room.

1.5 RESPONSES RECEIVED

Response

- 2.1 **The Society of Light and Lighting**, states that the guidance is "generally very good, well balanced and clear" but suggests a number of minor alterations.

Considerations

- 2.1.1 Generally speaking the amendments put forward are considered acceptable. In particular it is recognised that there is perhaps scope to make it clearer that the SPG relates only to external lighting schemes early on in the document so that

- 2.1.2 In respect to the suggestion that section 5.2 should say that “only areas or parts of the building/area that need lighting should have it”. This point is accepted, however, it is considered that the requirement for applicants to assess the need for a lighting scheme, and wherever possible use alternatives to lighting in the interests of security etc. already restricts applications for lighting schemes to those which are functionally ‘needed’. It is therefore considered that no change is required in relation to these comments.
- 2.1.3 With regard to the assertion that a new section (5.4.8) on the ‘Daytime appearance of lighting equipment’ would help promote better design this point is noted and a further small paragraph (5.4.8) dealing with the daytime appearance of lighting apparatus has been inserted into the final document.

Response

- 2.2 **The British Astronomical Association Campaign for Dark Skies** suggests a number of minor alterations which are considered in detail below.

Considerations

- 2.2.1 A main remit of the Campaign for Dark Skies is the promotion of the opinion that everybody has a right to view the night sky. Accordingly it was suggested paragraph 1.3 should state “*affect the visibility of the night sky*” rather than “*affect the ability of astronomers to view the night sky*”. It is considered this is a worthy point and the suggested change made.
- 2.2.2 With regards to comments received back suggesting that anecdotal evidence exists suggesting well-lit car parks may be more likely to be targeted for crime, this point is duly noted. The requirement to consider alternative security measures in place of, or in conjunction with lighting, will be added to section 6.6 (Car Parks)
- 2.2.3 The suggestion by the BAA that the statement: “signs should only be lit when there are people around to view them” (para 6.7), is capable of loose interpretation is not supported. That said, the suggestion that curfews could provide a better way of controlling lighting is accepted. However, the use of curfews is outlined within the draft SPG as a potential condition to be attached to any planning application involving lighting. It is therefore considered that no change is required in relation to these comments.
- 2.2.4 With regard to comments that there is useful guidance (including the avoidance of light pollution) available from the farm energy centre, and this organisation should be included within the addresses section in appendix 6. This point is noted and the suggested change made.

Response

- 2.3 **British Astronomical Association (Leicestershire Branch)** It is noted in the response from the local Branch of the BAA that the issue of astronomy is largely overlooked within this guidance, whilst other cultural activities such as sports provision are covered in some detail. In addition to this general statement, a number of technical issues, which are considered in detail below were highlighted.

Considerations

- 2.3.1 It is worth noting, that sports provision will often require the installation of an external lighting scheme whereas astronomy is an activity that is carried out without the need for external lighting. In this context, astronomy is not within the scope of this SPG although it will clearly benefit from any steps to reduce excessive light.
- 2.3.2 A further issue raised by the BAA (Leicestershire Branch) is the adoption of the Institution of Lighting Engineers Guidance Notes for the Reduction of Light Pollution. It was felt that adoption of this guidance note as an indicative guide for suitable lighting levels around the district could, in some instances, exacerbate light pollution, particularly in urban settlements. It should be noted, however, that this is just a guide, and it will ultimately be the responsibility of the relevant case officer to determine applications on a case by case basis considering a range of issues. It is therefore considered that such a guide could be useful in establishing upper limits on acceptable pollution levels. Under these circumstances it is considered that no change is necessary.
- 2.3.3 The Local Branch of the BAA also suggested that curfews be placed on external lighting and illuminated signs when not in use. This matter has been considered previously in para 2.2.3. It is therefore considered that no further change is required in relation to these comments.
- 2.3.4 With regard to the comment that illuminated car parks may encourage people to enter sites this point has been previously raised in section 2.2.2. It is considered that no further change is required in relation to these comments.

Response

- 2.4 **East Midlands Airport** considered the SPG to be a useful document but suggested a number of minor changes. These are as follows:

Considerations

- 2.4.1 In particular the Airport Company was keen to point out its responsibilities to safeguarding the airport in respect of development within specified distances of the airport site. With the safeguarding regime in mind the airport was keen to emphasise its role as a statutory consultee in determining planning applications falling within the safeguarded zone. This point is accepted and an additional paragraph explaining this point has been added to Section 5.3.
- 2.4.2 The Airport Company suggests that residents living with the safeguarded zone may find it beneficial to consult '*Safeguarding of Aerodromes: Advice Note 2*,

Lighting near Aerodromes". This point is noted and the relevant guidance contained in this document will be made available to applicants on request.

Response

- 2.5 **Hinckley and District Astronomical Society** stated that the Society would like to endorse the comments made by the UK British Astronomical Association's campaign For Dark Skies

Considerations

Representations made by this organisation and suggested changes have been considered in section 2.2. There are no further changes, in additions to those already stated considered necessary.

Response

- 2.6 **Leicestershire Constabulary**. In general it was suggested that Leicestershire constabulary's Architectural liaison Officer supported additional planning guidance on the design and implementation on external lighting schemes. However, a number of specific modifications were suggested. These are detailed as follows:

Considerations

- 2.6.1 Leicestershire Constabulary acknowledged with regard to para 5.2 (page 12) that lighting should be "*part of a range of measures incorporated into new developments*" (**SPG on Designing Out Crime P11 para.4.9.1**) and should be sensitively designed. However the representative of Leicestershire Constabulary suggested that the tone of the SPG was to suggest on their own, '*improved site layout, site security fencing and CCTV*' could be effective in reducing the fear of crime. Having considered the drafting of paragraph 5.2 it is considered the text already states that improved site layout, site security fencing and CCTV are a range of measures which can be implemented to reduce the need for artificial lighting. In this context it is unnecessary to change the wording of this paragraph. That said, in light of recent work done by this authority on the draft designing out crime SPG there is perhaps some merit in suggesting that external lighting schemes take account of this guidance when undertaking any assessment of need. This requirement will be included in the final draft of the lighting SPG.
- 2.6.2 In respect of comments received surrounding the need to switch lights of when not in use, it is accepted that this statement may not be appropriate in all instances as it is not easy to establish precise usage patterns in some types of development. This comment is duly noted, however, whilst the existing draft guidance does ask applicants to consider whether restricted hours of operation are appropriate, it does not state that it is compulsory. Given this point, in determining planning applications the guidance does allow for types of development where it may not be appropriate to limit hours of operation. It is

therefore considered there is no change required in response to this representation.

- 2.6.3 With regard to the comment that *“the fight against light pollution should essentially be in the control of design of fittings and direction and levels of illumination rather than one of limiting provision”*. It is only considered that this view is correct up to a point. Where there is clearly no need for the provision of a lighting schemes for domestic or commercial developments there is clearly scope to limit provision unless other considerations such as safety or crime issues suggest otherwise. Since the Draft guidance already makes this point it is considered that no change should be made to para 6.2 (page 15),
- 2.6.4 The suggestion by Leicestershire Constabulary’s Architectural Liaison Officer that non-adopted road accesses should not be treated any different from adopted provision (section 6.5) is duly noted. However, whilst in many larger modern development schemes it is recognised that lighting provision will be an integral part of the scheme, in some less comprehensive development schemes unadopted roads could provide access to sites. In these circumstances it has to be acknowledged that the installation and maintenance of lighting schemes is unlikely. And although it is recognised that such accesses should be lit for reasons of safety and security it should be recognised that this goal is not always achievable. It is therefore considered that no change to paragraph 6.5 is required.
- 2.6.5 With regard to the suggestion that where tree planting is used to minimise the impact of lighting and associated structures that care should be taken to ensure that such planting is adequately maintained in order that it does not, itself, compromise the effectiveness of lighting. It is considered that this point is well made. In light of this comment it would be appropriate to modify paragraph 6.6 to specify the need to ensure that planting does not itself lessen the impact of external lighting schemes.

Response

- 2.7 **Heather Parish Council.** It was suggested by the Parish Council that the document was “full of helpful and practical stuff”. There were, however, no suggestions relating to how any of the content of the document could be improved.

Considerations

- 2.7.1 There have been no changes in respect of this consultation response.

Response

- 2.8 **Castle Donington Parish Council.** It was noted that Castle Donington Parish Council had no specific comment to make in respect of the draft SPG on lighting.

Considerations

2.8.1 There have been no changes in respect of this consultation response.

Response

2.9 Sport England It was stated in Sport England's response to the Draft SPG that reference should be made to Sport England's Technical Guidance Note on Floodlighting in paragraph 6.9.

Considerations

2.9.1 This change will be made and the cross referenced to appendix five where relevant publications outlining lighting standards are listed in detail. In addition, it was further noted that the contact Address for Sport England's National Office was due to change in October 2003. The contact Address in the Draft document would therefore be out of date by adoption of this SPG. The new address has been included within Appendix 6.

2.10 Health and Safety Executive

Response. The Health and Safety Executive stated that the SPG did not consider issues which fell "within the terms of DETR 04/2000" and therefore declined to comment.

Considerations. There have been no changes arising as a result of this comment.

Recommendations

- (i) **THAT THE DRAFT SUPPLEMENTARY PLANNING GUIDANCE BE AMENDED AS OUTLINED ABOVE AND;**
- (ii) **THAT THE GUIDANCE BE ADOPTED AS SUPPLEMENTARY PLANNING GUIDANCE**

Background papers:

Select Committee on Science and Technology (Seventh Report)

B. E. WOLSEY
Manager of Planning and Environment

5 November 2003

(Contact officer – Kevin Exley - extension 678).

APPENDIX THREE

Glossary of Terms

Asymmetrical Beam - A fan shaped lighting beam emitted by floodlights.

Candela - the unit of luminous intensity of a light source in a given direction.

Glare - the uncomfortable brightness of a light source when viewed against a darker background. Direct Glare normally occurs when the viewer can see the light source,

Illumination - the lighting of an object or surface.

Light Trespass – illumination beyond the area that needs to be lit, usually perceived to be a nuisance.

Lumen - the unit of luminous flux (light) emitted from a light source or falling on an object.

Luminaire – the protective unit in which the lamp is fitted.

Luminance – the light reflecting from the surface of an object.

Lux - the unit used to measure illuminance, (the amount of light falling on an object). One lux equals one lumen per square metre.

Mounting Height – the vertical distance between the luminaire and the ground/floor.

Sky glow - the glow that occurs when poorly directed upwards light reflects off particles in the atmosphere.

APPENDIX FOUR

The Institute of Lighting Engineers has produced guidance outlining acceptable levels of illumination for various types of urban and rural locations

E1: Charnwood Forest

E2: Areas designated as countryside in the Adopted Local Plan, or villages not defined as being within the **E3/E4** category.

E3: Areas of "medium district brightness" to include Castle Donington, Measham, Ibstock and Bardon Hill Industrial Estate

E4: Areas of "high district brightness" Ashby and Coalville

Obtrusive Light Limitations for Exterior Lighting Installations						
Environmental Zones	Sky Glow UWLRL [Max.%]	Light into Windows E_v [lux]		Source Intensity I [kcd]		Building Luminance L [cd/m ²]
		Before curfew	After curfew	Before curfew	After curfew	Average Before curfew
E1	0	2	1*	0	0	0
E2	5	5	1	50	0.5	5
E3	15	10	5	100	1.0	10
E4	25	15	10	100	2.5	25

Where: UWLRL (*Upward Waste Light Ratio*) = Maximum permitted percentage of luminaire flux that goes directly into the sky.

E_v Vertical illuminance in Lux normal to glazing

I Light Intensity in Candelas

L Luminance in Candelas per square metre

(1) Light Into Windows. These values are suggested maximums and need to take account of existing light trespass at the point of measurement.

* Acceptable from public road lighting installations ONLY

(2) Source Intensity. This applies to each source in a potentially obtrusive direction, *outside* of the area being lit. The figures given are for general guidance only and for some large sports lighting applications with limited mounting heights, may be difficult to achieve. If the aforementioned recommendations are followed then it should be possible to further lower these figures

(3) Building Luminance. This should be limited to avoid over lighting, and relate to general district brightness. In this reference building luminance is applicable to buildings directly illuminated as a night time feature as against the illumination of buildings caused by spill light from adjacent or floodlights fixed to a building but used to light the adjacent area.

Source ILE © 2000.

Note. This guidance is taken from the Institution of Lighting Engineers: Guidance Notes for the Reduction of Light Pollution. It is aimed at local authorities wanting to designate specific environmental zones (as regard to lighting) within their Development Plans or within any Supplementary Planning Guidance. In particular, North West Leicestershire District Council would welcome representations on the settlements proposed for each environmental zone as this information will help the planning department designate set standards which will be taken into account when determining planning applications in individual settlements.

APPENDIX FIVE

Relevant Publications Outlining Lighting Standards

British Standards	BS5489	Road Lighting
	BS5433	Luminaires
CIBSE	LC1	Code for Interior Lighting
	LG1	The Industrial Environment
	LG4	Sports
	LG6	The Exterior Environment
CIE Publications	92	Guide to the Lighting of Urban Areas
	94	Guide to Floodlighting
	115	Recommendations for the lighting of Roads for Motor and Pedestrian Traffic
	126	Guidelines for minimising Sky Glow.
ILE Technical Reports	TR5	Brightness of Illuminated Adverts
	TR24	A Practical Guide to the Development of a Public Lighting Policy for Local Authorities.
Sport England	N/A	Floodlighting Guidance Note (1994)

CIBSE Chartered Institute of Building Service Engineers

CIE International Commission on Illumination

ILE Institution of Lighting Engineers

APPENDIX SIX

Contact Addresses

British Standards Institution
389 Chiswick High Road,
London
W4 4AL
Tel: 0181 9967000

Chartered Institute of Building Service
Engineers
(Lighting Division)
222 Balham High Road
London
SW12 9BS
Tel: 0181 6755211

International Commission on
Illumination
Central Bureau
Kegelgasse 27,
A-1030 Wien
Austria
Tel: 001 431 714 3187

Institution of Lighting Engineers
Lennox House
9 Lawford Road
Rugby
Warwickshire
CV21 2DZ
Tel: 01788 576492

Lighting Industry Federation
Swan House
207 Balham High Road
London
SW14 7BQ
Tel: 0171 8396537

Sport England
3rd Floor Victoria House
Bloomsbury Square
London
WC13 4SE
Tel: 020 7273 1500

Farm Energy Centre
N.A. C. Stoneliagh Park
Kenilworth
Warwickshire
CV8 2LS
Tel: 02476 696512

British Astronomical Society
Burlington House
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W1J ODU
Tel: 0207 734 4145

