

Synopsis

This briefing note aims to encourage developers of Multi-Use Games Areas (MUGA's) and Artificial Pitches to include outdoor sports lighting within their proposals. It outlines the benefits of including outdoor sports lighting and sets out 3 key early steps in the design development process:

- Building up a client knowledge base
- Early feasibility study
- Consultation and communication.

It aims to give reassurance about perceived problems such as difficulties in obtaining planning permission, potential nuisance for neighbours and technical complexities.

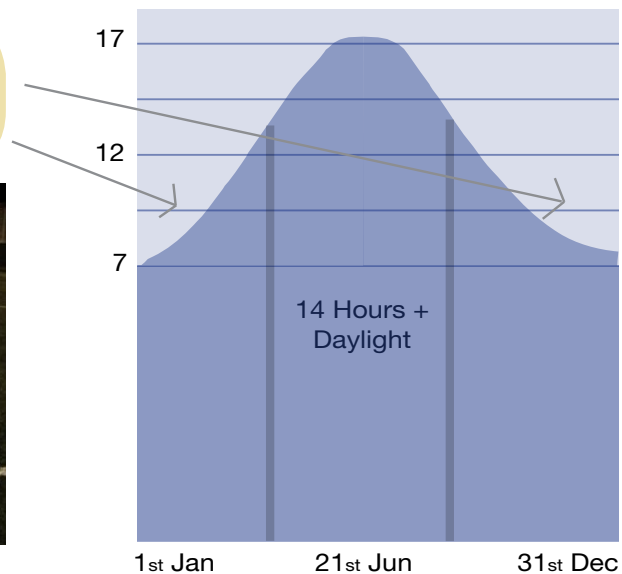
It also outlines further Sport England guidance that is in preparation that will help give a better understanding of the technicalities and potential solutions for sensitive sites.

Outdoor sports lighting

England is fortunate to enjoy long daylight hours in the summer for the pursuit of sport and leisure activities. However, in the winter the daylight can be as little as 7 hours per day and can significantly reduce the opportunity for outdoor sport and recreation.

Well designed outdoor sports lighting is an obvious answer, not just for stadia and the big sporting occasions but also at the grass roots level. Small-scale outdoor sports lighting can help allow local communities to keep fit, play recreational sport or train for local competitions that are played during the weekend.

***The potential for an additional
1000-1500 hours of use with
outdoor sports lighting.
See CIBSE Lighting Guide LG4***



Outdoor sports lighting can help create more playing and training opportunities for playing areas and offer increased programming flexibility for users.

However, outdoor sports lighting schemes can be perceived as controversial, technically difficult and beyond the reach of small organizations. There may be potential concerns from neighbours, misunderstanding over the various technicalities and difficulties in getting planning consents. But, in reality with sensible project management, early consultation and good design practice, all potential concerns can usually be resolved, even on the most difficult sites.

Step 1 - Building up a knowledge base

The essential first step is to build up an understanding of the likely issues.

Sport England's new Guidance Note 'Artificial Lighting for Sport' is written in an easy to read style and has a section on outdoor sports lighting. People involved in outdoor sports lighting projects should use this and other sources such as manufacturers' literature and advice from the sport's national governing body (NGB) to acquaint themselves with the key concepts.

It is important to build a knowledge base within your project team:

- Look at other installations
- Find examples of good practice
- Talk to people who have done similar projects
- Establish the minimum lighting level for the sports' activities proposed
- Check on the general financial feasibility
- Identify specialist companies /consultants who work in this area.

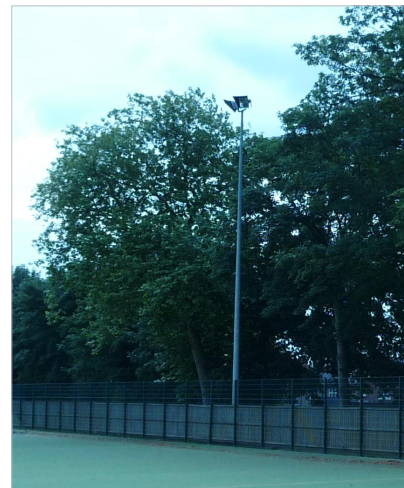
Step 2 – Early feasibility

A second important step is to think about the characteristics of the particular site and the implications of outdoor sports lighting for the surrounding area. The aim should be to identify all the issues that might influence the overall feasibility. For example:

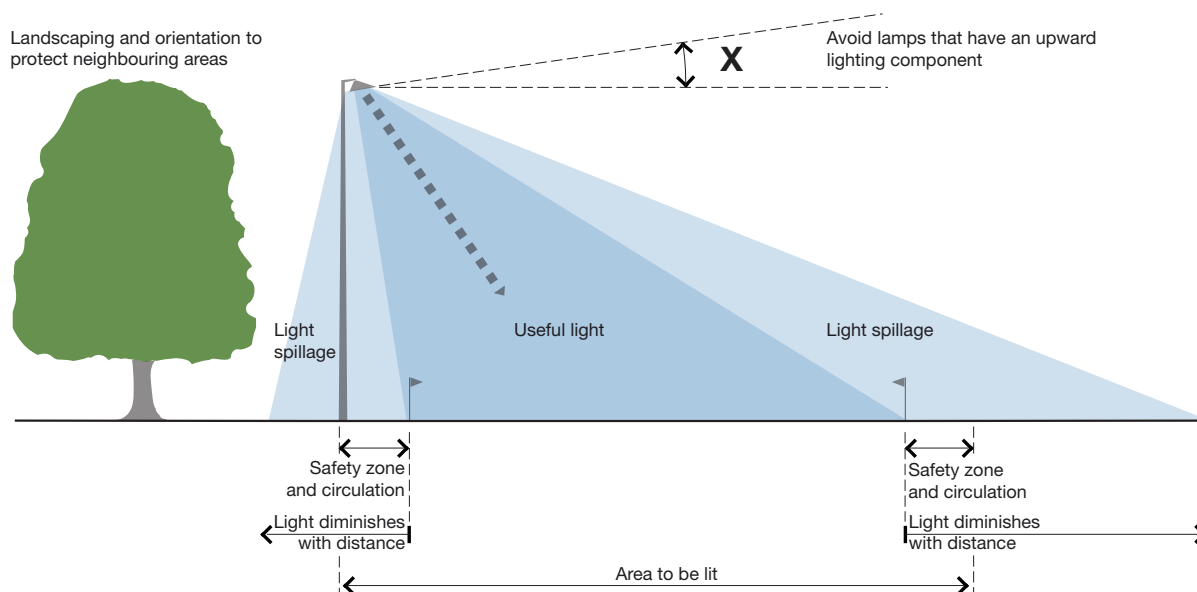
- Neighbouring housing may raise concerns about outdoor sports lighting shining into bedrooms or gardens
- Nearby sensitive areas where light spillage is intrusive
- Alignment with the surrounding highways and road safety
- Visibility of outdoor sports lighting columns from surrounding areas during the daytime.

Well-designed and properly installed outdoor sports lighting should limit and control light spillage, whilst careful site orientation of the pitch and landscaping can reduce the daytime visibility of columns.

Early consultation with the Local Authority Planning Department is essential to establish the 'planning designation' of the site such as being in a 'green belt' or 'conservation zone' and how these may influence the development of the lighting project.



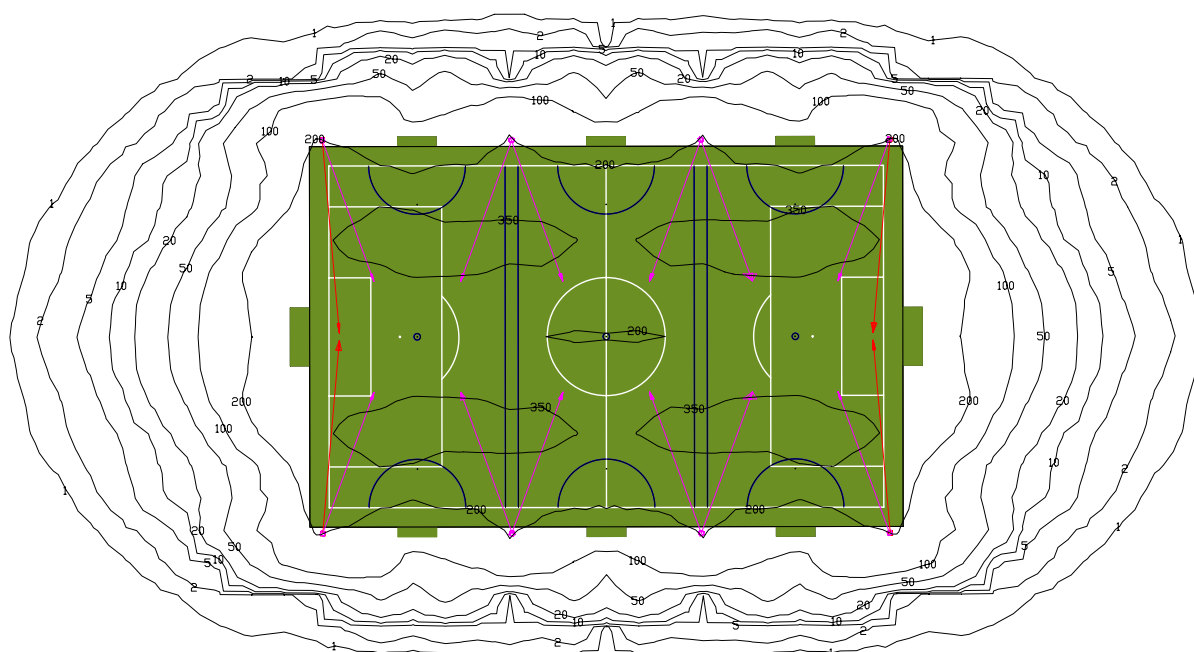
Column in scale with surrounding trees



Professional help may well be appropriate to consider such matters as:

- A survey of the ambient night time lighting level at key points around the site so that the scheme can be designed to ensure that existing conditions are not made any worse
- Critical distances from the pitch to the site boundary
- The adequacy of the existing electricity supply.

There are a number of specialist lighting installation companies that will be prepared to give early advice. Many have computer software that can be used to accurately predict the lighting contours around a new installation and the critical distances from a particular boundary line. Some companies can offer designs based on the use of 'short' or 'telescoping' columns for particularly sensitive locations.





Telescopic lighting columns for a bowling green



Short columns (under 8m)

This type of feasibility exercise may lead to adjustments being considered to the layouts for the existing sports area or alternative locations for a new MUGA or artificial pitch. It may be linked to a wider appraisal of the sports area in the form of a future development plan.

Step 3 - Communication and Consultation

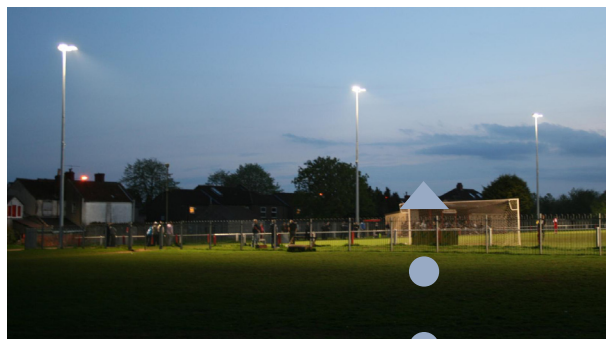
It is important that consultation takes place with all parties that might be affected by a new outdoor sports lighting scheme before any plans become finalised. This will give the opportunity to explain the general scale of the project and to consider how any concerns might be addressed. A comparison with existing street columns and the height of surrounding trees may be a good reference point for explaining the height of the lighting columns. The production of some accurate artist impressions or computer models showing the visual impact may also be helpful.

Consultation and good local communication can help avoid any misconceptions about issues such as the heights of columns, hours of use and actual ambient lighting levels in a particular area. The aim would be to avoid objections during the planning application process.

Example 1

Cadbury Heath Football Club, Bristol

Specialist Contractor	CU Phosco Lighting
Column type	8 x 16m mid hinged columns, counterbalanced to suit outdoor sports lighting loading
System / lamp type	16 x 2KW full cut off outdoor sports lights
Illumination and switching	Lux average – 218 (200 lux governing body guidelines for light level)
Capital cost	Approximately £45,000



Well focused lighting illuminating the pitch with little spillage

Example 2

Prestbury Bowling Club, Cheshire

Specialist Contractor	Sport Lighting UK
Column type	4 x telescopic lighting columns. Height: 2.9m retracted, 8.0m fully extended
System / lamp type	Thorn Champion 1KW sports light
Illumination and switching	100 lux with a 0.6 uniformity
Capital cost	Approximately £40,000



Telescopic lighting columns in raised configuration

Example 3

Fels Point Tennis Club, County Kerry

Specialist Contractor	Abacus Lighting
Column type	10 x 8m base hinged columns
System / lamp type	Challenger 1 outdoor sports lights
Illumination and switching	500 Lux
Capital cost	4 court scheme, approximately £10,000 per court



Glare index of individual lamps controlled to avoid glare in adjacent area