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## A to Z of Church Maintenance

### Deciding To Floodlight

The first question which a parish should ask of itself is "why floodlight?"

The principal objectives of church floodlighting are generally commendable, amongst them are the following:

- a. to make the church a living building in the settlement;
- b. to show off the visible aspirations of centuries of masons and architects, including their towers and spires, built to the Glory of God, to their best advantage, dramatically against the night sky.

If the principal reason for installing floodlighting is to show the church is a living and used building consideration might be given to keeping the lights on inside the church at night to show that there is "someone at home".

Occasionally a case can be made for the security value of floodlighting but generally, if security lighting is necessary, it should be achieved by a specific security scheme which is the subject of separate advice. Also, in particular circumstances, there may be a requirement for other external illumination, such as a halo-lighted cross or a spotlighted notice board.

The floodlighting of prominent buildings became popular during the 1930s when electricity became readily available and cheap. Commercial buildings came first, in particular those of the modern movement. With the 1939-45 war came the blackout so at the end of hostilities lights were switched on with joy. Since that time floodlighting has become an accepted element of urban life. Offices, town halls, cinemas, theatres, filling stations all have vied to be the brightest and most notable. Churches, certainly smaller ones, have arrived late on the scene. Larger churches and cathedrals entered into the spirit of this enthusiasm and the floodlighting of monuments, such as St Paul's Cathedral, has become one of the sights of the City.

Alongside this movement has come improved street lighting and the continuous lighting of major roads and motorways. For those of us who live in and near towns this has led to our night skies having a permanent orange glow. This phenomenon has become known as light pollution. One has to go far away from urban centres in order to see a night sky sparkling with stars. Amongst others, amateur astronomers are loud in their objections to light pollution. Such objections in cases of rural churches may lead to decisions not to floodlight at all.

Having decided to pursue a floodlighting scheme a parish must also consider the costs, both capital and revenue. Capital expense may be assisted by grant but it is still likely that the major part will have to be found by the parish. Revenue costs, electricity charges and maintenance of the fitting will be ongoing and the installation of a scheme will involve annual expense for future PCCs. Although modern lights have longer lives and are cheaper to run, they are costly to replace. Running costs may be defrayed by having businesses or individuals

sponsoring lighting for certain periods, although this may be a one year wonder for which enthusiasm may fade.

Consideration should be given to the local community. In urban areas there may be little or no objection to such a proposal, but in rural situations there may be local opposition. Views of the parish and district councils should be sought together with those of immediate neighbours. Planning authorities should be consulted on all proposals, even if planning permission is not required. Traffic engineers may have concerns if the lighting affects the highway. The DAC, as ever, should be consulted as early as possible in the planning process.

A specialist lighting consultant will normally be appointed by the parish. Before a consultant is appointed the parish must draw up a brief setting out its specific requirements; for instance which parts of the church are to be floodlit and where might be suitable lines for cabling. The parish must consult its architect at this stage who may be able to offer advice on selecting a consultant.

An appropriate consultant will advise on:

1. Which parts of the church are best suited for floodlighting;
2. The location and type of fittings;
3. The appropriate light source (colour and intensity);
4. How to avoid light overspill onto adjoining properties.

### **Designing Church Floodlighting**

Of its nature floodlighting is from below, or at the very best from a height of 5m or so. English parish churches from Saxon times to the present century have embodied the best of design and craftsmanship. One element of the designs is the play of light and shade which, combined with practical features such as copings, cills, door hoods and string courses, has modelled the buildings and given them their individual characteristics. This modelling depends upon light and shade, the light always coming from above and casting a shadow below. By floodlighting from below, these details become distorted. Window and door hood mouldings throw a shadow upwards creating a reverse image of daylight.

In designing a floodlighting scheme a lighting engineer will seek to avoid too dramatic an emphasis on this upward shadowing but it will be difficult to avoid it altogether. Sometimes there is the opportunity to light part of the building from the roofs. In some urban situations it has even been possible to floodlight off street lighting columns or from fittings mounted on nearby buildings. A good designer will take care that there is minimum light pollution or overspill towards neighbours.

The colour of the light source must be chosen with care. Much will depend upon the natural colouration of the church which should be rendered as closely as possible. Where different materials abut, for instance boarding or rendering against stone, the colour of the light source should ensure the differentiation is maintained.

Special features such as a prominent cross or a gilded weathervane will be

obvious targets for spotlighting. In some cases it may be that only a part of the building would be lit, a tower or spire would be the most likely choice.

The parish should also require the designer to take account of the environmental impacts of energy use.

The problem of possible vandalism will have to be addressed, particularly in urban sites. Ground level fittings will have to be bolted to concrete bases and covers will have to be of toughened glass.

Lines of necessary cable runs must be considered. These may disturb graves or require costly [archaeological investigation](#) - it is wise to consult the Diocesan Archaeological Adviser during the planning stage of a floodlighting scheme.

Floodlighting can be extremely disturbing to bats. For this reason English Nature should be consulted on proposals. Similarly English Heritage may have views and these may be made known when a faculty application is made.

In some cases it has been suggested that lights may be sited in trees. This is not a good idea, either from the point of view of the tree or the light fitting. Trees and other vegetation should also be taken into account when a scheme is designed, in particular young trees will develop and may obscure the lights. Trees in summer provide far more screening than they do in the winter.

The church's insurers will need to be asked whether the church's policy will cover the floodlighting or whether additional insurance cover will be required.

Although local planning authorities may not require a planning application for floodlighting unless the church is in a conservation area, they should be consulted on all major proposals. One of the concerns will be to ensure that the lighting does not detrimentally affect neighbours or traffic on adjoining roads.

## **Faculty Consent**

When a parish has decided it wishes to floodlight and preliminary investigations have been made, including an early approach to the DAC for initial comments, it will be useful to ensure that any problems are resolved before detailed decisions are taken. At this state it may well be that experiments would be worthwhile, both to decide upon the location of fittings and the colour of the light source.

The DAC will not only be concerned with the design of the scheme but also with the principle of floodlighting and with the financial implications, (capital, running and maintenance costs), in the interest of the parish.

For more detailed information about church lighting, please consult the CCC's book *Church Lighting*, available from [Church House Bookshop](#).

This guidance is taken from material produced by Chelmsford DAC.

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