CALDECOTE FARM

NEWPORT PAGNELL · MILTON KEYNES

APPENDIX 11

ENVIRONMENTAL STATEMENT

LIGHTING

APPENDIX 11.2
LIGHTING STRATEGY

newlands developments

APPENDIX 11.2 – LIGHTING STRATEGY

INTRODUCTION

To assess the potential lighting impacts from the Proposed Development it is necessary to specify sufficient detail concerning its external lighting. This is the purpose of the Lighting Strategy.

GENERAL PRINCIPLES

External lighting will be provided wherever necessary to provide a safe and secure environment for staff and other users after dark. 'Secured by Design' principles will be adopted and emphasis will be placed on achieving good uniformity of light distribution. All external lighting will be designed to minimise light pollution and optimise energy use. Lighting will comply with the ILP Guidance Notes recommendations for Environmental Zone E2.

Luminaires (lighting units or fittings) will be of the directional type that emit their light downwards. They will be mounted at as low a height as reasonably practicable and will be arranged to direct as much of their emitted light as possible to hard surfacing and task areas. Spill of light outside of the target area for illumination will be minimised through careful design, specification and positioning of lighting equipment.

Illumination levels will be set as low as practicable while complying with safety and security recommendations.

The following sections give details on the lighting solution to be provided for different areas of the Proposed Development, including locations where there is the potential for adverse ecological effects.

INTERNAL ROADS

Internal roads within the Application Site boundary will be lit using standalone lighting columns with a typical mounting height of eight to ten metres. Lighting will comply with the recommendations given in BS 5489-1 'Code of practice for the design of road lighting – Part 1: Lighting of roads and public amenity areas'. Any adoptable internal roads will also comply with local highway authority requirements.

SERVICE YARDS

Lighting for service yards will be provided from column mounted luminaires around the perimeter of the yard and directed towards the building. Maximum column height will be 12 metres. Additional luminaires will be located over loading bays/lorry dock areas and aimed downwards, mounted at a maximum height of 10 metres.

Lighting will comply with the recommendations given in BS EN 12464 'Light and lighting – Lighting of work places – Part 2: Outdoor work places'. The target average illuminance will be 20 lux.

LORRY PARKS AND CAR PARKS

Lorry parks and car parks will be lit by luminaires mounted on standalone lighting columns. Maximum column height will be 12 metres for lorry parks and 10 metres for car parks. The lighting will comply with the recommendations given in BS EN 12464 'Light and lighting – Lighting of work places – Part 2: Outdoor work places'. The target average illuminance will be 20 lux for lorry parks and 10 lux for car parks.

SPECIAL MEASURES CLOSE TO ECOLOGICALLY SENSITIVE AREAS

There are a number of ecological areas that will be particularly sensitive to lighting impacts. Where lighting is to be sited close to such areas there is the potential for such impacts to be significant unless special measures are employed. For the Proposed Development, these areas are:

- M1 Wildlife Corridor, shown in Figure 2 of the Ecological Appraisal;
- habitat corridors to be created along part of the Application Site border with A422 Monks Way and Willen Road.

All lighting sited close to ecologically sensitive areas will be designed to minimise light spill. Ecological advice will be sought at the detailed design stage to confirm any particular constraints to be applied. Where bats are likely to be present the standard guidance issued from time to time by the Bat Conservation Trust in conjunction with the Institution of Lighting Professionals will be followed.

Light sources will be LED with no UV content. Colour temperature will be warm white (3000K) LED wherever possible (but no higher than neutral white 4000K) as this has reduced blue light content, helping to prevent adverse effects on airborne insect and bat populations.

Additional mitigation to be employed where necessary will include one or more of the following: reduced lighting levels; lowest practical mounting height; luminaires with sharp light cut-off; baffles/shields to block unwanted light; additional screening in the form of dense hedgerow planting and fencing.