

1544 Kirkby Golf Course – External Lighting Strategy Report

1. Introduction

This report outlines our initial proposals for the external lighting around the new development at Kirby Golf Course. The areas included in these proposals are as follows.

- Car Park and Access roads
- Adventure Golf Course and putting Green
- Sports areas (Bowling green, football pitches, and tennis courts)
- External exits and walkways by buildings
- Driving Range Lighting

2. Car Park and Access roads.

Lighting to the car parks and access roads shall be designed in accordance with The Society of Light and Lighting, Lighting Guide 6 – The Exterior Environment. All fittings shall be selected to ensure light pollution and overspill from the lit area is minimised.

Flood lighting to the Car park areas shall be installed on 6m columns and the optics shall be such that there is zero upward light. Fittings shall be IP65 and made of robust non corrosive materials. This will be in keeping with the height of the street lighting on the main road outside the site. The lighting at the perimeter of the site is also directed back onto the site rather than out towards the road.

The car park lighting would be operated via photocells and ideally a time clock to knock off the lighting during the night when the site is not in use. However this will be reviewed with security requirements as part of the detailed design.

Lighting shall be provided to the pedestral bridge across the river, which gives access to the first hole of the golf course. This will be low level lighting to ensure the walking route is safe during twilight hours.

3. Adventure Golf Course and Putting Green

It is intended that the Adventure Golf course be used after dark in the evenings and as such needs to be artificially lit to a suitable standard.

The lighting for the course shall be a mixture of low level bollard lighting, and additional flood lighting around the perimeter to provide working illumination then accent lighting to features of the course shall be provided by buried uplighters. The lighting shall be switched via a photocell with an manual override switch so that the lighting can be switched off during the middle of the night when the park is not operational.

Flood lighting shall also be provided to the putting green to allow for its use during the same hours as the adventure golf.

4. Sports Lighting

There are different grades of sports lighting which are listed below.

- Class 1 – Top Level Competition
- Class 2 – Intermediate Level Competition
- Class 3 – Lower Level Competition and supervised training

The lighting for the tennis courts, football pitches and bowling green have been designed to a class 2 standard, which will be appealing for local clubs and groups.

We propose an LED flood light designed for sports lighting but that still minimises light pollution from upward components. A key part of sports lighting is achieving a good uniformity across the court or pitch and sports flood lights are built with this and reducing glare to the players in mind.

To achieve high uniformity and ensure no glare from the LED lamp the mounting height of sports lighting will need to be at 8m. Spill calculations have been done to show that there will be no spill out past the site boundary that could effect the properties on the other side.

Lighting should be controlled via a photocell with a main override switch located at a manned location within the driving range, so lighting can be switched off when the site is not in operation.

5. External exits and walkways by buildings

All exits of buildings such as the sports hall, driving range, and clubhouse will need an emergency fitting to illuminate the exit of the building in the case of an emergency.

A discrete over door LED fitting shall be used to keep with the aesthetic of the clubhouse and driving range buildings, these fittings are more decorative than standard bulkheads and also direct the light down onto the pavement reducing visual impact from afar.

Lighting to walkways alongside the building can be provided via wall mounted LED bulkheads, which come in an eyelet version to ensure light is thrown down at the path and not up into the air.

Flood lighting would be provided to the external areas of the clubhouse to allow use in the evening, these would be mounted to the soffit of the overhang to light the terrace area. The terrace faces away from the road so this lighting which would be used in the evenings will be directed away from the residential areas.

Consideration has been given to the bat nesting location on the existing clubhouse. Any development in this area would use motion detection to ensure lighting is not on when not needed, light spill from the windows will be minimised by selecting fittings with asymmetric distribution and siting fittings away from windows.

6. Driving Range Lighting

The driving range will be lit for use in evenings after dark, a BERN lighting system has been proposed, where the flood lighting is installed within the ground in built up mounds, with the lighting directed out across the targets. The lighting is installed along the length of the range to avoid high power flood lights around the entire perimeter.