APPLICATION NO: 15/01171/FUL	**OFFICER: Mr Ed Baker**
DATE REGISTERED: 14th July 2015	**DATE OF EXPIRY:** 13th October 2015
WARD: Lansdown	**PARISH:**
APPLICANT:	Cheltenham Ladies' College
AGENT:	Mr David Jones
LOCATION:	Ladies College Swimming Pool, Malvern Road, Cheltenham
PROPOSAL:	Erection of new sports hall building to provide multi use sport hall, replacement squash courts and ancillary facilities. Erection of floodlighting of external hockey pitch. Demolition of existing squash court building and partial demolition of single storey structure attached to Glenlee House. Alterations to piers to side of access onto Malvern Road.

Update to Officer Report

Floodlighting

The applicant's lighting consultant has provided the following response to the latest objections from residents about the proposed floodlighting.

'I have read with interest the letters of objection written by Mr Wilson and Mr & Mrs Gilbert and many of their objections are repeated although Mr Wilson does expand on his arguments. As such I have picked out the major points raised by both objectors and combined my response:-

The objections can be categorised into three main subjects:-

1. The quality of floodlighting and its conformity to national standards
2. Spill lighting and the effect of mist and rain
3. The appearance of the floodlights and structures

I will answer the objections to each point separately as below:-

The quality of floodlighting and its conformity to national standards

This was answered in my previous email. The minimum illuminance levels recommended for the safe play of all sports within the European Community are set out in BS EB 12193:2007. This document is a legal document and was written following painstaking deliberations with the various sports governing bodies and lighting professionals throughout Europe. The international governing body for hockey the FIH unilaterally raised their illuminance levels in 2007 but following criticism from many separate institutions reverted back to their original lower levels in 2011. The FIH are the world governing body(as FIFA are in football) and it is they who set the standards and guidelines not the national governing body.

Mr Wilson makes much of the 'asymmetric' lighting (his description not mine) of the pitch stating that it is uneven and unsafe. This is completely untrue, the floodlights facing the properties are elevated at 5 degrees lower than the floodlights facing away from the properties. This method of lighting is commonly and successfully used in order to reduce vertical spill light. The degree of asymmetry is negligible but reduces the spill light projected towards the properties by approximately 30% and it will have no discernible detrimental effect on the floodlighting of the pitch.

I will reiterate that the illuminance levels have been chosen to provide safe playing conditions for participants whilst minimising the impact on residents and the conservation area. The illuminance levels exceed the minimum requirements for safe play and that the pitch lighting will not 'uneven' or 'hazardous'.

Spill lighting and the effect of mist and rain

As previously described the spill lighting calculations have been carried out using the methods described in the ILP 'Guidance notes for the reduction of obtrusive light'. The proposed lighting system fully complies with their recommended maximum vertical spill light values and individual source intensities for floodlights using direct lighting values for the agreed environmental zone (E2). This method of calculation has been adopted by all planning authorities throughout the UK as the benchmark for calculating obtrusive light.

I would agree with Mr Wilson that environmental conditions affect the distribution of light and can cause a scattering of light. However, I disagree that there is a standard formula for measuring or quantifying effect of mist and rain due to its variable density.

The spill calculations have been undertaken using an internationally accepted software package(AGi32) and approved manufacturers lamp and floodlight data. The calculations use initial lamp data and assume clean floodlights in their new state. No allowances for the blockage of light from trees, fences or any other screening, therefore, all spill values are worst case direct values.

The appearance of the floodlights and structures

To answer Mr Wilsons claims that the masts will not be safe or will move too much in the wind I refer to my email of 10/9/2015:-

The proposed masts are being designed especially for this project and do not appear in the Abacus standard range (they may be added at a later date). The masts are being designed to comply with the relevant design standards (ie British/European Standards and ILP Technical Papers) and as such will have to meet strict tolerances for carrying capacity, and wind loads. Abacus are the most experienced manufacturer of retractable masts in the world market place and have a wealth of structural experts who have worked on major projects both in the UK and overseas. They were chosen as our preferred manufacturer based upon this experience rather than using unknown manufacturers with totally untried products.

I have tried to answer the queries raised as best I can but as you are aware most of the points have been covered previously. Mr Wilson seems to think that we can invent calculation methods or overlook British Standards which are set to protect the public. The system we have proposed is absolutely fit for purpose and will allow the students of CLC to play in safety.

If we go down the route recommended by Mr Wilson we will over design the lighting system, use 40% more energy, have more lighting structures and have a greater impact on the environment.'