



Installation of floodlighting facility (6 X 15 metre Columns) to an existing football pitch

Ref: P2024/0598

Response to initial comments:

- 1. With regard to biodiversity issues our ecologists have some concerns regarding the lux levels along the tree lines and have commented that you should be aiming for lux levels of 5 or below along the tree lines to avoid impacts on potential bat flight lines.*
- 2. Environmental Health have requested that a lighting impact assessment be submitted. This has been requested as "this will take account of the current lighting situation and the impacts of the proposal. The assessment should talk us through what these plans are actually showing and provide some comparison of the proposed light levels against acceptable standards"*

- 1. Lux Levels** –The club acknowledge the requirement to lower the overspill of light into the nearby treelines (roadside and trackside). We have engaged with two lighting contractors to provide a solution in which both have indicated that whilst they can lower the lux levels, it would be impossible to bring the lux levels down to 5 given the proximity of the treeline in relation to the proposed lighting columns.

To mitigate the overspill issue we have encountered, we have added rear shields to every floodlight as well as included WSTB fittings on the masts located at the top of the pitch.

When you compare the overspill contours on the Rev D design to our Rev C design, you can see that the 5 Lux contours on the roadside have been brought in from middle of the road to the curb side of the road, which has resulted in the 5 Lux overspill being brought in by roughly 12m.

Whilst we are not ecologist experts, the treeline on the roadside is not particularly dense therefore unsure how many bats actually inhabit that treeline.

However, the majority of the trackside treeline remains at the required 5 Lux which we are confident meets the ecologist requirements.



2. Lighting Impact Statement

Baglan Dragons Senior Football Team currently play in the JD Cymru South which is considered Tier 2 within the Welsh football pyramid. Almost all of the teams that play in this league have floodlights and it is soon to be a minimum criteria to maintain a position in the league to have a floodlit playing surface. Therefore, any proposal for floodlights needs to meet the minimum criteria set out by the Football Association of Wales (FAW).

The club needs to achieve a Lux level of 250 lux and 0.7 uniformity. Criteria below taken from FAW Men's Tier 2 Club Licensing Regulations Edition 2024.

<https://media-faw-cymru.s3.eu-west-2.amazonaws.com/faw/20240905130539/FAW-Mens-Tier-2-Club-Licensing-Regulations-2024.pdf>

1.16 – Floodlighting (C Criteria)

1. The stadium must be equipped with floodlight installations.
2. The stadium floodlight lux levels must be in compliance with the following:
 - a. Achieve a value 250 lux (or 250 lux adjusted which allows for a 10% deviation) for Tier 2 league and league cup matches when tested by an independent organisation.
 - b. Licence Applicants must provide a report stating the lux value, which must be no more than three years old.
 - c. The report must be a 96-point lighting test.

N.B. The FAW may at any time, request a 96-point lighting test to determine the current lux levels of the floodlights If their lux level is considered to be too low by the FAW and/or the host broadcaster.

3. For any Licence Applicants that have floodlights, and intend on using them during the season to fulfil fixtures, they Must supply a valid lux certificate **(A Criteria)**

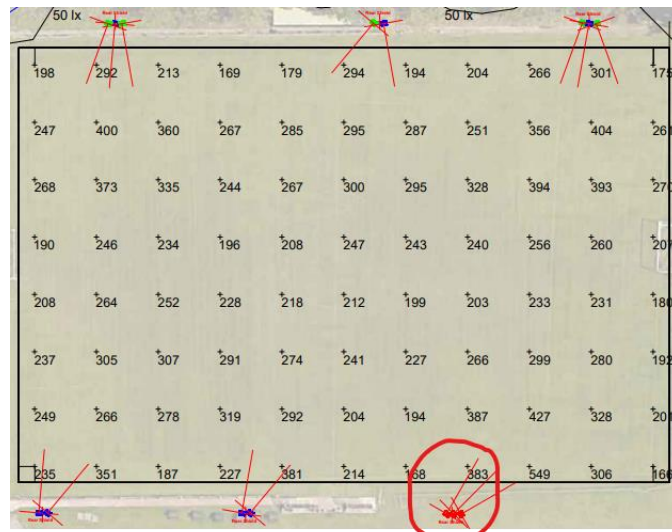
That level is measured by taking the average lux readings across the entire pitch. All surveys submitted to date meet that criteria set out by the FAW. If the criteria is not met, the FAW will not sign off on the project and therefore will not allow league games to be played under the installed lights. There are no concessions to be made by the league and all clubs must adhere to such criteria.

Two lighting contractors who are working independent from one another and are experienced in sports field floodlighting in Wales have proposed very similar standard schemes to meet such criteria.

- Qty 6 x 15m columns
- No more than Qty 15 x 1500 watt or 1243 watt Floodlights

Due to our shared lease agreement with Baglan Cricket club we cannot achieve even spacing between floodlight columns on the trackside of the pitch due to not wanting to encroach on the cricket outfield. This has been agreed internally with all parties. Circled in red below.

This column has been brought in closer to the dugouts and when set up as a cricket field in the summer season, will sit on the boundary of the cricket field. The lighting survey has taken this into account and its proposed that additional floodlights are attached to this column to provide more light due to the position of this column.

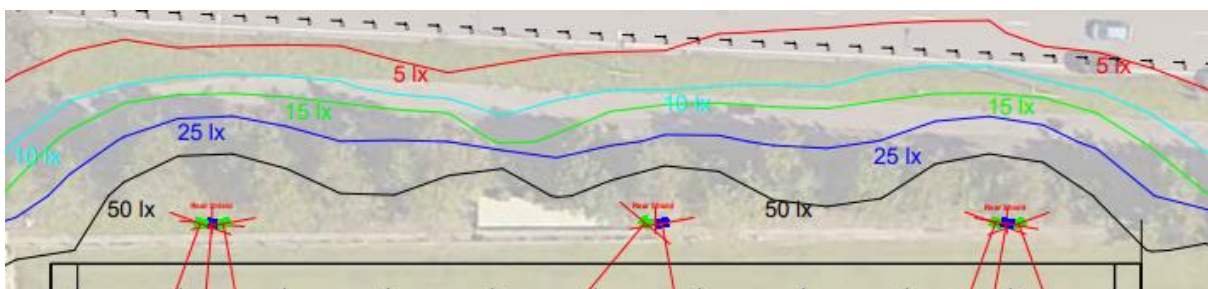


The ecologist response to our initial planning submission requested we try to achieve a Lux level of 5 within the two treelines surrounding our field.

Roadside Treeline

To mitigate the overspill issue we have encountered; we have added rear shields to every floodlight as well as included WSTB fittings on the masts located at the top of the pitch. The 5 Lux contours on the roadside have been brought in from middle of the road to the curb side of the road, which has resulted in the 5 Lux overspill being brought in by roughly 12m. Whilst we can demonstrate we are mitigating overspill it would be impossible to totally eliminate it and bring the lux levels down to 5 given the proximity of the treeline in relation to the proposed lighting column locations.

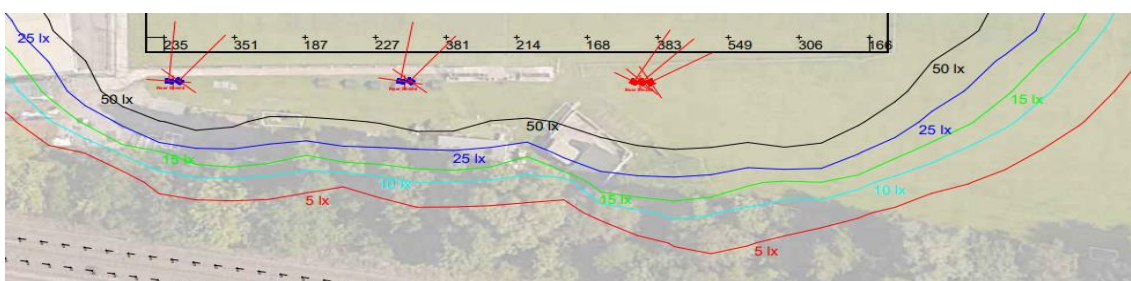
Extract taken from Rev D



Trackside Treeline

To mitigate the overspill issue, we have encountered; we have added rear shields to every floodlight. The majority of the trackside treeline remains at the required 5 Lux which we are confident meets the ecologist requirements

Extract taken from Rev D





Use of Floodlights

A large portion of the floodlight use will be to accommodate senior football. The JD Cymru football season runs from the last week of July to Mid-April. This is subject to change due to postponements throughout the season but its days rather than weeks, if anything.

Currently, we would anticipate playing approx. 18 games at the Evans Bevens per season (League & Cup). The league dictates the spread of games between Friday nights (19:00 K.O) and Saturday day (14:00 K.O) of which the majority are played on Saturday days which do not require floodlights. However, in order to attract more people and improve the match day experience for the local community, we would like to host games under lights on Fridays, so would anticipate possibly 5 to 8 of these games under floodlights.

As we are a large club with numerous teams, we hope the floodlit playing surface would be of benefit to younger teams (both boys and girls) to enjoy also. However, we do **NOT** anticipate or plan to have the floodlights on 7 days a week throughout the football season. This is neither practical nor cost effective for us as a club therefore the usage of these floodlights will be carefully managed.

To be considerate to the time in which bats are active, we would also look to impose a strict management of the timely switch on and off of the lights and not having them on for any longer than necessary. For example, for a Friday night game in November or December it would generally be a 19:30 kick off, with the game likely to finish 21:15. In this instance (subject to light on the day) we would look to bring on the floodlights at 18:30 and switch off at 21:30 (Approx. 3 hours)

During the summer season there are currently no plans for Baglan Cricket Club to use the floodlights therefore will not be in use during the months of May/June/July. From research, this seems to be a particularly busy time for the bat population in which we will not have any negative affect upon.

From further research on bats and their movements during a 12-month period, it seems that from November to February (4 months) bats are mostly in a state of hibernation therefore unlikely to be affected by any overspill of light from the floodlights into the treelines they inhabit at Evans Bevens during that period. This happens to coincide with the period in which we would mostly use the floodlights due to the diminished lighting in the winter months.

When you consider the time in which bats are commonly most active, we also feel that our floodlight usage would have a limited impact. Floodlight usage of 3 hours within a 12–14-hour window of activity and not on regular basis seems a reasonable and balanced compromise.



Summary

We hope you can acknowledge that we have taken the ecologists comments on board and have made significant attempts to mitigate the overspill of the proposed lighting scheme. These additional measures come at a cost to us as a club but are willing to invest to maintain our position as responsible organisation that is both aware and sympathetic to our surroundings, neighbours and local wildlife, whilst also progressing and providing state of the art facilities for the local community.

We can also demonstrate that we will carefully and sensibly manage the usage of the floodlights taking into consideration our surroundings, neighbours and local wildlife, in particular, the bats we have inhabiting our treelines.

It is also evident that the duration and periods in which the flood lights will be used are limited in relation to the affects its likely to have on the bat population that inhabits the Evans Bevens playing fields treeline, therefore posing a limited and diminished impact on the flight path of bats.

As a club, we are also open to bat conservation and how we can play our part in supporting the local bat population and would welcome further discussion on how we achieve this.