Whitcher Wildlife Ltd.
Ecological Consultants.

PENISTONE CRICKET CLUB.

OS REF: SE 25435 03459.

LIGHTING STRATEGY.

Ref No: **240803/LIGHTING.**

Date: **1st May 2025.**

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1. INTRODUCTION.

1.1. There are plans to replace the existing cricket club pavilion, score box, and umpire shed with new pavilion (planning application reference number: 2024/0583) at Penistone Cricket Club.

1.2. There are a number of conditions attached to the planning condition. The council have requested the following:

Prior to first use of the site, details of external lighting shall be submitted to and approved in writing by the Local Planning Authority. The details shall be reviewed and produced by a suitably qualified ecologist and clearly demonstrate that lighting will not adversely impact wildlife using key corridors including the River Don, foraging and commuting features and roosting sites.

1.3. This document has been prepared to satisfy that condition.

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2. ECOLOGICAL BASELINE CONDITIONS.

2.1. The baseline ecological conditions of relevance to this report were determined as a result of the Preliminary Ecological Appraisal which was undertake in August 2024 by Whitcher Wildlife Ltd.

2.2. Riparian Mammals

2.2.1. No otter holts were found to be present on either bank of the river. Otter spraints were found on the western bank of the river at SE 25396 03385, showing the river is used by otter.

2.2.2. No water vole burrows or field signs were found along the river, that lacks the grassy banks preferred by the species. The large stoney banks would also deter burrowing.

2.3. Foraging and Commuting Bats

2.3.1. Despite being located adjacent to the River Don corridor, the site provides low high value habitat for foraging and commuting bats. The loss of the habitats on the site are therefore unlikely to have any significant impact on foraging bats providing the vegetation along the river corridor is retained. Lighting spill onto this high value habitat could impact upon foraging and commuting bats.

2.3.2. A dusk emergence survey was carried out on the 21st August 2024. Activity during the survey was moderate to high, with all foraging focused solely along the woodland edge and River Don.

2.3.3. The species of bats recorded on the Anabat Rangers were common pipistrelle, soprano pipistrelle, myotis sp. and noctule, which corresponds to findings of the surveyors. The total number of calls recorded have been shown below.

Species	Count
Common pipistrelle *Pipistrellus pipistrellus*	162
Noctule *Nyctalus noctula*	1
Myotis *Myotis* sp.	44
Soprano pipistrelle *Pipistrellus pygmaeus*	4

2.4. Other Wildlife

Other fauna groups such as birds and invertebrates, utilising the River Don, could also be susceptible to increased lighting levels although there is no background survey information for these species as it was outside the scope of the Preliminary Ecological Appraisal.

2.5. Overall Assessment

Therefore, the proposed lighting on the site could spill onto the River Don, and cause disturbance to a range fauna, including foraging and commuting bats and otters.

2.6. Artificial Lighting Baseline

In order to assess the impacts of the lighting the baseline on site was assessed. The current building is already lit up with similar lights and in similar locations to those proposed. These are highlighted on the photographs below.


B&B TRUCKS
B&B TRACTORS
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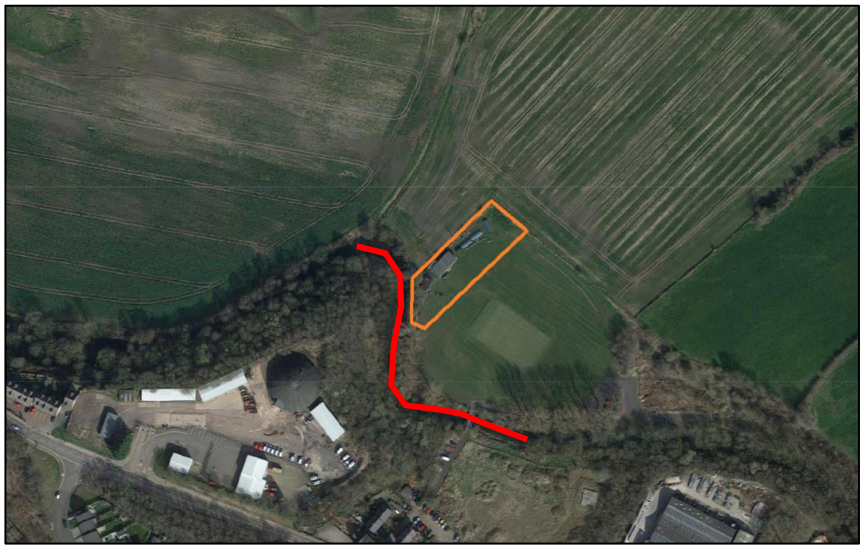
3. LIGHTING PLAN.

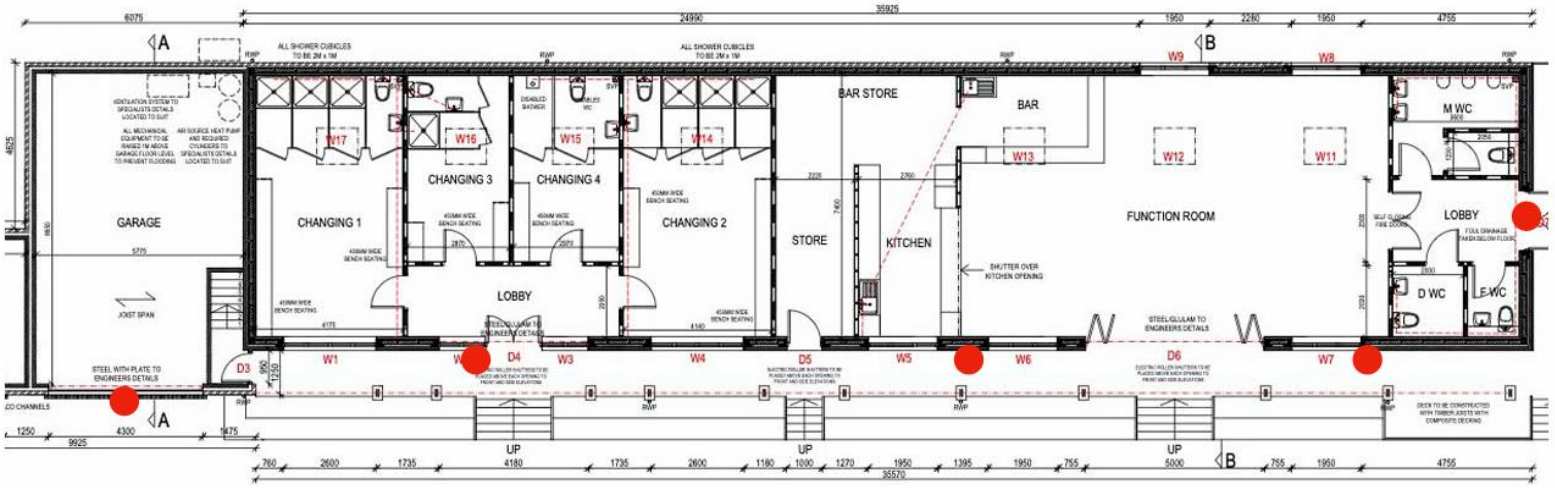
2.1. A copy of the site layout can be found below with the areas that are most sensitive for species such as foraging and commuting bats, which would be susceptible to impacts from lighting, shaded in red.

2.2. The plan below shows the location of the River Don and site boundaries on a wider scale than above. The site boundary is indicated by the orange line.



2.3. A copy of the lighting plan is provided below.

Penistone Cricket Club New Pavilion (2024/0583) - Lighting Plan



Situation of external lights (x5):

- Each light to be situated at eaves level and downward facing
- Each 'bulb' fitting to be 50w Amber LED light (590nm)
- All lights to be turned off before midnight and via a timer switch which will turn lights off 10 minutes after building has been locked and vacated.

2.4. The plan shows that none of the lighting will be directly facing the woodland edge or the River Don.

2.5. The lighting will also be on a timer which will switch off 10 minutes after the building has been locked and all lighting will be off by midnight at the latest.

2.6. All lighting will be downlit and facing into the pitch which mimics what is already currently present and it is not likely there will be any significant increase in lighting that would cause disturbance to wildlife utilising the corridors.

2.7. The LEDs will also be amber in colour which is one of the more wildlife friendly colours. Research has shown that filtered yellow-green and amber LEDs are predicted to have lower effects on wildlife than high pressure sodium lamps, while blue-rich lighting (e.g., $K \geq 2200$) would have greater effects[1].

2.8. It is therefore assessed that there will be a negligible impact on the wildlife as a result of external lighting given the similar background lighting levels expected and due to the mitigation including colour of the LEDs, positioning and the restricted times / automatic timers.

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[1] Longcore, T.; Rodríguez, A.; Witherington, B.; Penniman, J.F.; Herf, L.; Herf, M. Rapid assessment of lamp spectrum to quantify ecological effects of light at night. *J. Exp. Zool. A Ecol. Integr. Physiol.* **2018**, *329*, 511–521.

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