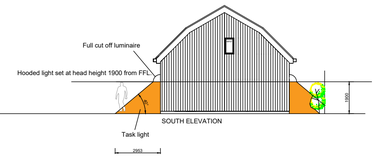
N

0m 5m 10m 15m

Scale Bar 1:200

Bat foraging route along woodland edge





Bat foraging route along woodland edge

Woodland edge

shaded area indicates proposed building curtilage

Woodland edge

New building set
18.5m from woodland edge

light spill

light spill

cycle store

Bin Store

light spill

light spill

Existing area of permeable
gravel drive shown shaded

Mill Farm

The lighting Factors which will minimise the effect on Bats are as follows:

1. Only illuminate what needs to be illuminated – Minimise or Prevent light spill to any other area forming part of the Bats commute. If lighting a Pathway for example, the light ideally would be directed at the Path only, with no uplight or illumination of nearby Trees, bushes, river, waters, buildings, etc. This light we propose has Luminaires that provide no uplight, and has a narrow downward beam of light in order to minimise disturbance, It will be directed at the path only.

2. Reducing the light levels – There is no definite light level below which Bats will not be disturbed. Different species of Bat appear to show more sensitivity than others.

3. Height of Luminaires – If the Bats are commuting at a known height, it may be an option to drop the maximum height of the Luminaires (with good cut-off, no uplight, narrow beams etc) so the Bats may fly over this in a zone of relative darkness. All lights installed will be at head height to provide sufficient light to be safe whilst minimising disturbance to bats.

4.. Type of Light – Generally warm coloured lighting (eg CCT of 2700K or below) seems to be less disruptive than colder coloured lighting (eg. 4000K). Minimising or eliminating UV light is recommended. LED lighting has no UV, HPS has a little (0.2%), and Metal Halide (2%-7%).

We will use LED Luminaires with exact cut-off optics, and warm colour temperature of 2700K or below.

5. Lighting Controls – The peak time for feeding for Bats is dusk. This is when they exit the Roost to go foraging. Our lighting will be controlled by occupancy/motion sensors so that it would remain off/low if there was no pedestrian traffic nearby. .

□ Hooded light set at head height 1700 from FFL.

Project	Scale/ Date	Drawing Title	
The Barn- Mill Farm Mill Lane Itchingfield Horsham RH13 0NP	1:200 June 2024 @ A1	External lighting design for biodiversity	D920/20