



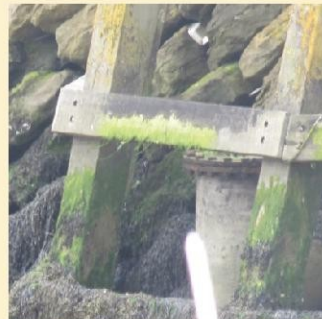
Princes Parade, Hythe

Planning Application Y17/1042/SH

Additional Information and Clarification - February 2018

Appendix 07

Ecological Impacts of Lighting



FAO: Robert Allen,
Shepway District Council

5th February 2018

**Bats and lighting: Ecologist's comments on updated Lighting Impact Assessment:
PRINCES PARADE, HYTHE (APPLICATION REF: Y17/1042/SH):**

Dear Robert,

I am writing to inform you of the results of my review of the updated Lighting Impact Assessment (LIA) for Princes Parade, Hythe (application ref: Y17/1042/SH) in relation to bats.

I have started with a correction that must be taken into account when reviewing the submitted information with regards to bats and lighting.

Correction:

In Technical Appendix 7.7 of the Environmental Statement (ES) (*Bat Report*) (report ref: 3609-LLB-ZZ-XX-CO-Ec-0003), Figure 1 (*Bat Survey Plan*) is incorrectly labelled. The Survey Compartment labels on the survey plan should be reversed. For the purposes of clarity, Survey Compartment 1 comprises the 'canal corridor' - which includes the adjacent canal section and vegetation on the northern embankment of the application site. Survey Compartment 2 comprises the remainder of the application site and is located south of Survey Compartment 1. The dividing line between the two survey compartments shown on the *Bat Survey Plan* remains correct. The text of Technical Appendix 7.7, and the Ecology Chapter of the ES, both refer to the correct survey compartments. Therefore, the mis-labelling of survey compartments on the *Bat Survey Plan* in Technical Appendix 7.7 does not affect the submitted impact assessment with regards to bats and lighting. This matter has been 'flagged' here to ensure clarity.

Background

Environmental Statement

To provide context to this review, I have summarised some key points with regards to bats and lighting.

As detailed in Technical Appendix 7.7, there is a clear difference in the relative importance of the two survey compartments for foraging bats. Bat activity was higher in the 'canal corridor' (Survey Compartment 1), than it was across the remainder of the application site (Survey Compartment 2).

Based on the results of the bat survey work detailed in Technical Appendix 7.7, and as per the assessment set out at paragraph 7.204 of the ES, Survey Compartment 1 (canal corridor) is of ecological importance for foraging bats at the County level. For the purposes of the ES, habitats within this survey compartment are therefore of Medium sensitivity or importance for foraging bats.

As per the assessment set out at paragraph 7.205 of the ES, Survey Compartment 2 is of ecological importance for foraging bats at the Zone of Influence level. For the purposes of the ES, habitats within this survey compartment are therefore of negligible sensitivity or importance for foraging bats.

Habitats within Survey Compartment 2 will be lost to development. Mitigation measures have been devised to minimise the potential adverse effects of artificial light upon bats foraging within Survey Compartment 1. Detail of these mitigation measures is set out in Technical Appendix 7.8 of the ES (*Ecological Mitigation and Enhancement Plan*) (report ref: 3609-LLB-ZZ-XX-RP-Ec-0002).

As stated in Table 7.4 of the ES, if the mitigation measures set out in technical Appendix 7.8 are effectively implemented, the proposed development is likely to have a negligible effect upon foraging bats during both the construction and operational stages of the proposed development.

Subsequent commentary

In an email dated 29th November 2017, Helen Forster of Kent County Council's Ecological Advice Service (KCC EAS) states that:

'the increase in lighting is likely to have a negative impact on the adjacent LWS – I would suggest that this is something that needs to be addressed within the ecological mitigation strategy.

Within this document I'd expect them to demonstrate that the proposed lighting would not have a negative impact on the proposed habitats on site and any adjacent habitats.

The submitted information is not currently sufficient for us to be satisfied that the development will avoid a negative impact and this needs to be addressed prior to the determination of the planning application.'

As stated in the ES, the assessment of potential adverse effects of lighting upon foraging bats was based on a 'worst case scenario' for lighting. Technical Appendix 7.8 sets out the mitigation measures that will be implemented to address this 'worst case' lighting scenario and achieve a 'negligible' effect upon foraging bats utilising the adjacent canal corridor (Survey Compartment 1). For this reason, I disagree with the above statement provided by KCC EAS. Because the submitted information considers a 'worst case' lighting scenario, the 'worst case' impact upon foraging bats can be understood and the submitted information is therefore sufficient to determine the application.

Additional light modelling work

To assist the decision-maker, additional light modelling work has now been undertaken by Elementa Consulting - to provide a more detailed assessment of potential lighting impacts arising from the proposed development of the outline application site, as well as from the detailed element of the application, and to ensure that light levels are within the ILP GN01:2011 guidelines.

This additional modelling work includes the illustrative masterplan and elevations for the future residential properties and the perceived light spill from their internal spaces.

This additional modelling work is detailed in the updated LIA report produced by Elementa (Version 4.0, dated 25th January 2018).

As per the conclusions of the updated LIA, light spill into the canal corridor has reduced when compared with the 'worst case' scenario assessed in the ES.

This is because the lighting from the outline application site area previously (at the time of the ES) included a residential car park lighting scheme without the residential building mass. Now the residential building mass has been included, this has shielded most of the light spill from the car park lighting, and perceived lighting from the internal spaces has not increased the light spill.

As stated in the *Conclusions* section of the updated LIA, the lighting strategy has been designed to limit obtrusive light outside the site boundary over the 'sensitive areas' (including bat foraging habitat within the canal corridor) to 1 lux or less.

The computer simulation detailed in the updated LIA shows that the illuminance upon the canal footpath and canal embankment, at ground level, will be less than 1 lux.

This level of illuminance is unlikely to result in significant adverse effects upon bat foraging activity.

Therefore, the assessment of a 'negligible' effect upon foraging bats (if mitigation measures are effectively implemented), as set out in the ES, remains valid.

Conclusion

For the reasons set out above, it is considered that the decision maker currently has sufficient information regarding the potential adverse effects upon foraging bats, and sufficient detail of the proposed mitigation measures, to determine the application.

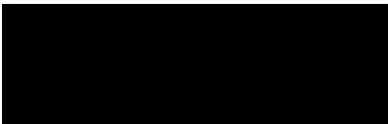
It has been demonstrated that effective implementation of the proposed mitigation measures will allow the project to achieve a 'negligible' effect upon foraging bats.

To ensure that light spill is avoided and minimised at every stage of site development, it is imperative that the decision maker attaches a strict condition to any planning approval to ensure that potential adverse effects upon foraging bat are minimised during both the construction and operational stages.

This condition should require the project to achieve an illuminance level of less than 1 lux upon the canal footpath and canal embankment at ground level during both the construction and operational stages.

I trust that the above addresses the matters raised during consultation with KCC EAS. However, should you require any further clarification, please do not hesitate to contact me.

Kind regards,



Samuel Durham BSc (Hons) ACIEEM

Head Of Ecology

