Proposed Development:

63 Street End

Sidlesham

Lighting and Noise Assessment

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Ref: DD1814/L&A

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Revision	Description	Date	Initials
O	Initial issue	July 2023	ER

1.0 INTRODUCTION

1.1 Appointment

1.1.1 Kad Properties Limited has been commissioned to produce a lighting statement and noise assessment in support of a planning application for the proposed development of holiday lets at 63 Street End, Sidlesham.

1.2 Objective of Assessment

1.2.1 The assessment is focused on the impacts and potential constraints to any proposed redevelopment.

1.2.2 The assessment consists of a desk study, data research and a walk over survey of the site.

2.0 Introdcution

2.1 Site Location

2.1.1 The application site is located between the settlements of Hunston and Sidlesham. It was previously in use for horticulture which would have involved regular vehicle movements, and a large amount of light spill. Generally, the surrounding area is characterized by low intensity use which is mainly domestic in nature with a growing number of holiday lets. The proposed development would be in keeping with the surrounding area.

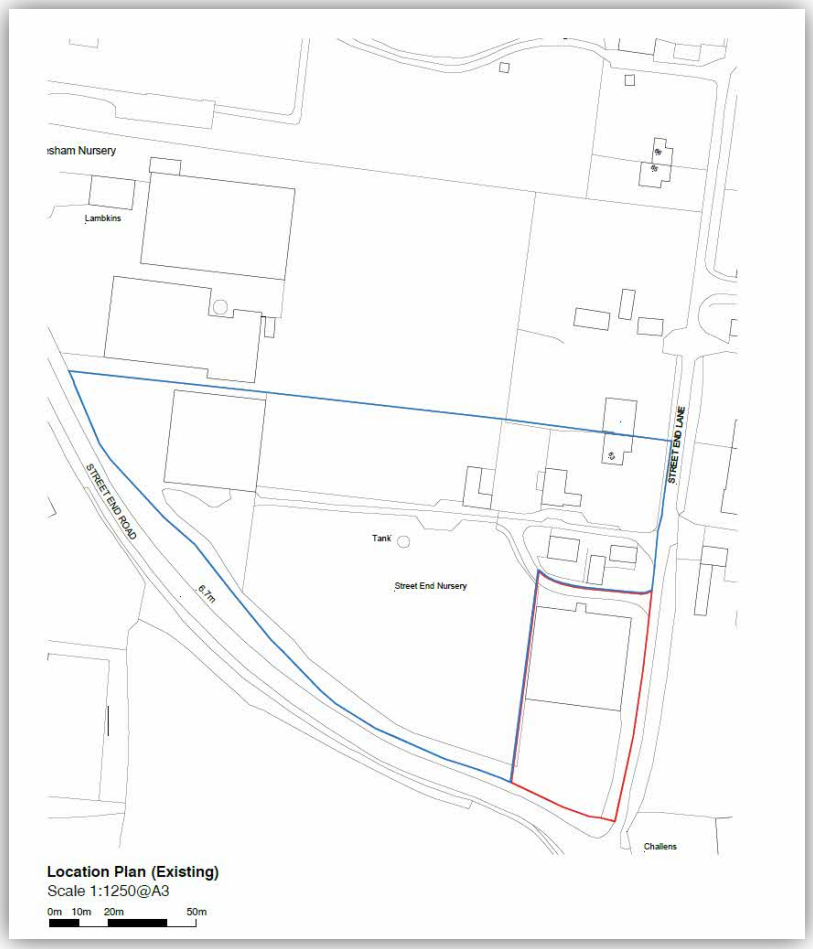

Figure 1. Site Location

2.2 Noise Assessment

2.2.1 A high-level acoustics review of the development proposals has been undertaken.

2.2.2 This review was planned and carried out with due regard to existing standards and good practice guidelines including:

- ► BS 8233:2014: Guidance on sound insulation and noise reduction for buildings
- ► BS 4142:2014: Methods for rating and assessing industrial and commercial sound
- ► BS 7445-1:2003: Description and measurement of environmental noise
- ► BS EN 61672-3 2002: Electroacoustics - Sound level meters periodic tests
- ► BS EN 60942 2003: Electroacoustics - Sound calibrators Noise Environment.

2.2.3 Given the rural setting of the site and its surroundings, the noise environment is, as expected, tranquil.

2.2.4 The main and constant source of sound at the time of the site visit was birdsong and rustling leaves. Occasional noise from aircraft flyovers, and faint traffic noise was also audible at times.

2.2.5 The courtyard nature of the proposed development will limit noise spill. Once the design has been further progressed for the Planning Application, if it is considered appropriate a detailed noise impact assessment can be completed for submission to the Local Authority.

2.3 Lighting Statement

2.3.1 Sensitive Lighting for Nocturnal Species

2.3.2 All new lighting should be sensor activated to maintain dark periods for as long as possible to minimise light pollution and associated impacts upon foraging and commuting bats. The use of low level, directional, LED lighting is recommended. A new document (Guidance Note 08/18 Bats and Artificial Lighting in the UK) has recently been produced via a collaboration between the Institute of Lighting Professionals (ILP) and the Bat Conservation Trust (BCT), which outlines the latest recommendations to minimise the impacts of increased artificial lighting on bats.

2.3.3 The key recommendations within this document have been outlined below and will be implemented provided there are no conflicts with any legal limits of illumination (in which case a suitable compromise should be reached). 'Luminaires come in a myriad of different styles, applications and specifications. The following should be considered when choosing luminaires:

- All luminaires should lack UV elements when manufactured. Metal halide, fluorescent sources should not be used. LED luminaires should be used where possible due to their sharp cut-off, lower intensity, good colour rendition and dimming capability.
- A warm white spectrum (ideally <2700Kelvin) should be adopted to reduce blue light component.
- Luminaires should feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats (Stone, 2012).
- Internal luminaires can be recessed where installed in proximity to windows to reduce glare and light spill.
- The use of specialist bollard or low-level downward directional luminaires to retain darkness above can be considered. However, this often comes at a cost of unacceptable glare, poor illumination efficiency, a high upward light component and poor facial recognition, and their use should only be as directed by the lighting professional.
- Column heights should be carefully considered to minimise light spill.
- Only luminaires with an upward light ratio of 0% and with good optical control

should be used –See ILP Guidance for the Reduction of Obtrusive Light.

- Luminaires should always be mounted on the horizontal, i.e. no upward tilt.
- Any external security lighting should be set on motion-sensors and short (1min) timers.
- As a last resort, accessories such as baffles, hoods or louvres can be used to reduce light spill and direct it only to where it is needed (Fig 11).
- Curfew for external lighting will be set between 10pm –7am throughout the year.

Figure 11. (a) Shield 'barn doors' (b) cowl hood; (c) shield and; (d) external louvre Images from ILP (2018)A topographical survey for the site confirms that the site is predominantly flat with a slight slope from north to south. This has been confirmed by a site walkover.