



# CLEVE HILL SOLAR PARK

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BADGER SURVEY

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# Cleve Farm - Badger Survey Report



2014

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## Summary

AECOM was commissioned by Hive Energy Ltd in April 2014 to undertake a badger survey at Cleve Farm, Graveney, Kent (hereafter referred to as the Site). The purpose of this was to identify any potential constraints to proposed development works related to the presence of this species within the Site boundary.

It is understood that the Site is to be developed for sustainable solar energy. The Site consists of large arable fields surrounded by a network of drainage ditches. The Swale Special Protection Area (SPA), Site of Special Scientific Interest (SSSI) and Ramsar site surrounds the Site to the north, east and west.

Badgers and their setts receive protection under the Protection of Badgers Act 1992 and the Wildlife and Countryside Act 1981 (as amended).

Two surveys were conducted during May 2014 to assess the presence of badger within suitable areas of habitat within the Site boundary. Suitable areas of habitat within the Site include the rough grassland habitat associated with the network of drainage ditches, and boundary features such as tree lines and the adjacent Nature Reserve edge habitat. No populations of badgers or evidence of the species using the Site were recorded during the surveys.

By January 2016 the detailed design regarding the scale and layout of the proposed development has not been determined. Badger is a dynamic species and animals readily move around the countryside and dig new setts. If construction is going to commence after three years since survey, the Site should be resurveyed for badger. If badger is found to be using the Site, consideration for this species should take place. Providing that all works associated with the development at the Site are to be conducted away from areas of habitat considered suitable to support badger, no further mitigation would be required. However, where works to impact on habitat suitable to support this species, further update surveys and/or mitigation in the form of sett closure and replacement sett(s), may be required.

## 1 Introduction

AECOM was commissioned by Hive Energy in April 2014 to undertake a badger survey of all areas within the boundary of the proposed Solar Farm at the Site. The Site is located approximately 500m to the northwest of the village of Graveney, Kent. The approximate National Grid reference for the centre of the Site is TR 044 637. Figure 1 illustrates the Site boundary for this Site.

Section 2 of the report outlines relevant legislation. Section 3 outlines methodologies used for the survey. Sections 4 and 5 outline the results and conclusions respectively.

## 2 Legislation

Badgers and their setts receive protection under the Protection of Badgers Act 1992 and the Wildlife and Countryside Act 1981 (as amended). Under the above legislation it is an offence to:

- Wilfully kill, injure or ill-treat a badger;
- Cruelly ill-treat a badger, or
- Damage, destroy or obstruct access to a sett or any part thereof.

A badger sett is defined in the legislation as any structure or place, which displays signs indicating current use by a badger.

## 3 Methodology

Following best practice guidelines, the survey was conducted by an experienced mammal ecologist from AECOM on the 16<sup>th</sup> and 20<sup>th</sup> May 2014. The survey encompassed all accessible land within the proposed scheme boundary.

The survey was conducted following the methodology described by Harris *et al.* (1989). The survey involved walking the entire Site paying particular attention to areas of woodland/tree line edge, scrub edge, hedgerows, ditch network and field margins where setts and other signs of badger activity are commonly found. The following signs of badgers were sought.

- Setts;
- Bedding material;
- Footprints;
- Paths;
- Latrines;
- Hairs;
- Foraging signs including 'snuffle holes'.

The position of any setts and other signs of badger activity identified would be mapped on appropriate scale mapping. Any features recorded would be used to build a picture of activity and where possible any badger territory boundaries.

According to the standard survey methodology (Harris *et al.*, 1989) setts are assessed for the level of use and the number of entrance holes and thus classified into four types: 'main', 'annexe', 'subsidiary' and 'outlying'. These and other relevant terms are defined in full in Appendix A.

During the Phase 1 Habitat survey undertaken on 3<sup>rd</sup> and 4<sup>th</sup> August 2015 any signs of badger activity or suitable badger habitat were noted. However, the surveys on these dates were not a dedicated badger survey.

## 4 Results

During the survey visits, no setts were observed within or were visible adjacent to the Site boundary. No signs of badgers such as runs were observed from within the Site boundary or immediately outside the Site boundary.

During the Phase 1 Habitat survey undertaken in 2015, no signs of badger were observed.

### *Other notable and/or protected species*

During the survey an adult grass snake (*Natrix natrix*) was observed basking along one of the ditches that runs north to south through the centre of the Site. Additionally a red fox (*Vulpes vulpes*) was observed along the southern boundary of the Site during the survey.

## 5 References

Harris, S., Cresswell, W. and Jeffries, D. (1989). *Surveying Badgers*. London, Mammal Society Occasional Publication No 9. Mammal Society, London.

Appendix A.- Standard Badger Set Classification and Terminology

Sett Category	Description
Main	Have several entrance holes with high levels of activity, including large spoil mounds, freshly excavated earth, "well marked" paths and usually a fresh latrine present. There is often evidence of discarded bedding, which may indicate breeding.
Annex	Close to a main sett and usually clearly linked to a nearby main sett by well-worn paths. Normally active with several holes, although with some holes displaying less obvious signs of badger activity. The size of the annex sett can vary depending on the size of the local badger population.
Subsidiary	Generally less than 5 entrance holes and some distance from a main sett and without obvious linking paths. The holes can be very variable in signs of usage and are often much less consistently in use than those of main or annex, although this very much depends on the size and density of the local badger population. Subsidiary setts can also be used for breeding, often by a sub-dominant female, which is linked to the size of the local population and hierarchy.
Outlier	Usually consists of a single or double hole with varying levels of activity. Outlier setts can sometimes be used for breeding, often by a sub-dominant female, which is linked to the size of the local population and hierarchy.

Level of Usage	Description
Well used	Badger holes generally clear of all vegetation, litter or debris, except where bedding has been left in the entrance. They are likely to show signs of wear at the entrance, including scratch marks along the site on entrance holes, which can also be smooth and worn, thus devoid of vegetation such as moss.
Partly used	Leaves or twigs in badger entrance hole which have not been cleared by regular use, although may be brought into regular use with relatively little clearance or new digging. Caution is to be given during autumn, as falling leaves can give an impression of only partial usage, although closer inspections can reflect a well-used entrance hole
Disused	Badger holes show no signs of recent usage, often partly or wholly blocked and may require considerable digging to re-open

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File Name: I:\5004 - Information Systems\47069809 - Cleve Farm\_Winter\_Birds\project\_files\MXDs\Ecology\Figure 1 Badger Survey Area.mxd



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**LEGEND**

Site boundary

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Purpose of Issue

**FINAL**

Client

**CLEVE HILL SOLAR PARK LIMITED**

Project Title

**CLEVE HILL**

Drawing Title

**BADGER SURVEY AREA**

Drawn <b>JW</b>	Checked <b>AH</b>	Approved <b>RM</b>	Date <b>25/07/2016</b>
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