

# Adonis Ecology

## Further Badger Assessment Report for Proposed Development at Breakspear Park, Hemel Hempstead to Support a Planning Application

Project Ref: 1223

Prepared on behalf of:

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## Quality Assurance



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The findings outlined within this report and the data we have provided are to our knowledge true, and express our bona fide professional opinions. This report has been prepared and provided in accordance with the Chartered Institute for Ecology and Environmental Management (CIEEM) Code of Professional Conduct and the British Standard BS 42020:2013 which provides a code of practice for biodiversity in planning and development (BSI, 2013). This standard also recommends compliance with CIEEM Guidelines for Preliminary Ecological Appraisals (CIEEM, 2013) and Guidelines for Ecological Report Writing (CIEEM, 2017) which includes model formats for Preliminary Ecological Appraisal and Ecological Impact Assessment.

As far as the author and report checker are aware, the only differences that occur in this report from the recommended layouts are:

- to enable greater clarity and reduce repetition (e.g. the report author is listed once on the quality assurance page in this report rather than on the front page, quality assurance page and introduction as in the CIEEM model formats);
- where there are inconsistencies in the guideline documents (e.g. the list of what should be included in the summary of an ecological report highlighted in the CIEEM Guidelines for Ecological Report Writing is different to that shown in the model formats in the same document); and
- to retain a proportionate approach in accordance with BS 42020:2013.

No method of assessment can completely remove the possibility of obtaining partially imprecise or incomplete information. Therefore, we cannot guarantee that this assessment completely defines the degree or extent of the occurrence of various species or habitats on the site, or the effectiveness of recommended actions as described in the report. In addition, as the ecological situation of a site is dynamic, this assessment pertains only to the conditions noted during the site visit. Therefore, to achieve the objectives of assessment as stated in this report, the conclusions are based on the information that was available during the time of the assessment and within the limits prescribed by our client in the agreement.

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## 0 SUMMARY

- 0.1 Adonis Ecology Ltd. was commissioned by Zurich Assurance Ltd. to undertake further assessment and legal closure of a suspected outlier badger *Meles meles* sett in close proximity to an area of carpark at Breakspear Park, 39 Breakspear Way, Hemel Hempstead, HP2 4TZ, grid reference (at centre of site) TL 088 073. It was understood that the construction of a new second level to the car park would require piling in the location of the sett and could harm or disturb any badgers that may be using this sett.
- 0.2 Ecoline undertook a site visit on the 27<sup>th</sup> of August 2019 to assess the sett and surroundings prior to a likely licence application. It was considered during that site visit that the sett was likely not in 'current use' and that the badgers seen previously on camera traps were likely passing through the area and investigating the hole, but not using it as a sett. Therefore, further assessment of the sett entrance was undertaken, including initially a further camera trap exercise from the 10<sup>th</sup> to the 17<sup>th</sup> of September 2019 and placement of sticks over the entrance on the 10<sup>th</sup> of September 2019.
- 0.3 On the 18<sup>th</sup> of September 2019, as the sticks had not been moved and as the camera trap results had not indicated any use of the hole by badgers, the hole was soft-filled. A further check on the 27<sup>th</sup> of September again showed no use of the hole by any animal, and further soil was added and compacted in the hole to close the entrance. A final check on the 4<sup>th</sup> of October showed that the hole had not been re-excavated and no other holes had been created in the area.
- 0.4 Following the further assessment works as outlined in this report, it was considered that the sett was not in 'current use' by badgers and was infilled legally without the need for a licence. Therefore, as of the 4<sup>th</sup> of October 2019, it was considered no badger setts were present in the area that would be impacted by the proposed works.
- 0.5 However, as badgers were recorded in the area, a repeat badger assessment should be undertaken of the area within one month prior to works being due to commence on site, to confirm that no new sett has been created in the area and ensure no badgers are harmed during the works. All other impact avoidance and general precautions of the Preliminary Ecological Appraisal should be undertaken (Adonis Ecology, 2019<sup>1</sup>).

# 1 INTRODUCTION

## 1.1 Background

- 1.1.1 Adonis Ecology Ltd. was commissioned by Zurich Assurance Ltd. to undertake further assessment and legal closure of a suspected outlier badger *Meles meles* sett in close proximity to an area of carpark at Breakspear Park, 39 Breakspear Way, Hemel Hempstead, HP2 4TZ, grid reference (at centre of site) TL 088 073.
- 1.1.2 The potential badger sett was initially identified during a Preliminary Ecological Appraisal of the site on the 13<sup>th</sup> of June 2019 (Adonis Ecology, 2019<sup>1</sup>).
- 1.1.3 An initial camera trap exercise was then undertaken on the potential sett in June and July 2019, with badgers shown to investigate the hole, but with no photographs showing the badgers exiting the sett. However, given the presence of badgers in close proximity to the sett, it was considered likely that the sett was in 'current use' as an occasionally used outlier sett. As the risk of impact to badgers potentially using this sett could not be avoided, it was considered that a Natural England mitigation licence would likely be required to close the sett lawfully, and prevent any risk of harm to badgers during the proposed works.
- 1.1.4 Adonis Ecology Ltd. therefore commissioned Ecoline to undertake an initial further site visit, with the original intention being to produce a licence application for the site. This site visit was undertaken on the 27<sup>th</sup> of August 2019, and based on the findings on site and taking into account the photographs taken during the previous camera trap exercise completed in June and July 2019, Ecoline considered that the sett was likely not in 'current use' and proceeded with further assessment of the sett entrance to confirm the status of the sett as described in this report.

### *Development Description*

- 1.1.5 The plan used to determine the boundaries of the site and the likely impacts to the badger sett from the proposed development as outlined in this report was a plan provided by the client highlighting the location of the sett entrance and the works proposed on the site (see Figure 1 in Appendix 1).
- 1.1.6 The site consisted of a carpark comprising tarmac strips divided by low (1-2m in height), well-maintained hedgerows including some larger trees, with an adjacent screening hedgerow. It was understood that the proposals are for a second level carpark to be constructed over the existing carpark, with the carpark below to be retained, though with some resurfacing, but all hedgerows and trees within the development area to be removed, with other surrounding trees and hedgerows/woodland to be retained where possible.

### *Aim and Objectives*

- 1.1.7 The aim of this report is to determine the likely impact of the proposed development of the site on badgers.

1.1.8 To achieve this aim, the report has the following objectives:

- to identify and describe potentially significant impact risks to badgers associated with the proposed development of the site;
- to identify ways in which any significant risk of deleterious impacts could be avoided, wherever reasonably possible;
- for any significant ecological risks that could not reasonably be avoided, to describe actions required for compliance with badger-related legislation.

*Planning Policy and Legislation*

1.1.9 Planning policy and guidance considered for this report included:

- National Planning Policy Framework (NPPF);
- National Planning Practice Guidance (NPPG) – Natural Environment.

1.1.10 Legislation considered for this report included:

- Protection of Badgers Act 1992;
- Wildlife and Countryside Act 1981, as amended;
- Countryside and Rights of Way Act 2000.

1.1.11 Key considerations from the NPPF and NPPG related to ecology and development include that impacts on legally protected species are a material consideration for individual planning consents (MHCLG, 2019).

## **2 METHODOLOGY**

### **2.1 Initial Assessment**

2.1.1 The initial site assessment was undertaken by Ian Tanner of Ecoline on the 27<sup>th</sup> of August 2019 and consisted of a thorough search of the proposed development site and nearby surroundings for signs and evidence of badgers and badger setts.

2.1.2 Definite signs of badger activity were taken to be:

- badgers themselves;
- badger latrines;
- badger paw prints;
- badger hairs.

2.1.3 Signs of possible badger presence were taken to be:

- well trampled animal paths;
- snuffle holes;
- small piles of dry grass and similar on paths;
- any further signs.

## 2.2 Camera Traps and Stick Assessment

### *Camera Traps*

- 2.2.1 On the 10<sup>th</sup> of September 2019, two motion-activated camera traps were positioned on the site by Ian Tanner.
- 2.2.2 The two cameras were positioned close to the sett, one directly facing the sett entrance, the other to the side covering the sett entrance and area in front of the sett.
- 2.2.3 It was considered that at this time of year it would be difficult to determine the difference between an adult badger and a badger cub as they would be a similar size, but that the level of activity in and around the sett would act as an indicator to the type of sett present, if it was in 'current use'.
- 2.2.4 Images from the camera traps were collected on the 18<sup>th</sup> of September 2019 and both cameras were removed at this time.

### *Stick Assessment*

- 2.2.5 During the same visit on the 10<sup>th</sup> of September 2019, a collection of small sticks were placed over the entrance to the hole. The sticks were to be used to determine whether any animal had used the hole, as the sticks would be moved out of the way if any animal was to enter or exit the potential sett.

### *Constraints*

- 2.2.6 There were considered to be no significant constraints to the assessment with the entire area accessible and all assessment materials being maintained on site throughout the assessment.

## 2.3 Monitoring Visits and Sett Closure

- 2.3.1 The site was visited on the 18<sup>th</sup> and 27<sup>th</sup> of September and the 4<sup>th</sup> of October by Ian Tanner to monitor the assessment materials and determine whether the sett was in 'current use' by badgers or any other animals. As there were no signs of the hole being used, the hole was soft-filled with loose soil during the visit on the 18<sup>th</sup> of September 2019. During the visit on the 27<sup>th</sup> of September 2019 as again there were no signs of the hole being used by any animals, more soil was added and compacted in the hole.

### **3 RESULTS AND EVALUATION**

#### **3.1 Summary of Relevant Legislation**

3.1.1 Under the Protection of Badgers Act 1992 it is an offence to:

- wilfully kill, injure, take or attempt to kill, injure, possess or take a badger;
- cruelly ill-treat a badger;
- dig for a badger;
- disturb a badger while it is occupying a sett, or cause a dog to enter a sett;
- interfere with a badger sett by e.g. damaging, destroying or obstructing a sett or any part of it.

3.1.2 The Protection of Badgers Act 1992 defines a badger sett as “any structure or place which displays signs indicating current use by a badger” (OPSI, 2007).

3.1.3 More recent guidance states that badgers are relatively tolerant of moderate levels of disturbance, however, any activity that is likely to cause interference (such as damaging a sett tunnel or chamber or obstructing access to a sett entrance) will require a licence (Natural England, 2009).

#### **3.2 Site Location, Description and Surroundings**

##### *Site Location*

3.2.1 The site consisted of an area of carpark, within the larger carpark of Breakspear Park, which itself laid immediately to the south of the A414 dual carriageway, on the edge of Hemel Hempstead, approximately 1.6km to the east of the town centre. The site was bordered on the northern side by an access road, with the large Breakspear Park building approximately 5m to the north of the site, and the A414 dual carriageway approximately 140m to the north of the site (Google Earth, 2019).

##### *Habitats on Site Including Previous Badger Assessment Results*

3.2.2 The site consisted predominantly of tarmac hardstanding used as a carpark. Between each double row of parking was a low hedgerow (1-2m in height). All of these hedgerows appeared regularly trimmed and contained a number of larger trees.

3.2.3 The eastern boundary of the site consisted of a screening hedgerow containing occasional larger trees. The ground flora consisted almost entirely of a thin covering of ivy *Hedera helix*. The badger sett entrance covered by this further assessment was found within this screening hedgerow, approximately 15m to the south of the proposed development area. The hole was the size and shape of a badger sett entrance, but despite no signs or



evidence of badgers being found at the time of the PEA (Adonis Ecology, 2019<sup>1</sup>) the initial camera trapping exercise showed badgers in the area and showing interest in the potential sett entrance (Adonis Ecology, 2019<sup>2</sup>).

#### *Habitats of Surrounding Area*

- 3.2.4 Immediately to the west were further parking areas of Breakspear Park of a similar design to that of the proposed development site. Beyond the carpark to the west, approximately 140m from the site, was the narrow Buncefield Lane, with hedgerows either side and a residential area plus hotel beyond. Beyond the residential area, approximately 230m to the west of the site, was a narrow area of parkland, widening into a small woodland copse with a balancing pond at its northern edge, adjacent to the A414 dual carriageway. Beyond this were dense residential and commercial areas of Hemel Hempstead spreading for well over 2km from the site (Google Earth, 2019 and Promap, 2019). Beyond the carpark to the south was a small woodland copse which spread along the southern edge of the wider carpark and linked to the screening hedgerow to the east. Beyond this was the narrow but regularly used Green Lane beyond which was part of a pastoral field, with arable land beyond that, before reaching further residential areas of Hemel Hempstead approximately 250m to the south of the site.
- 3.2.5 The eastern boundary of the site was also bordered by Green Lane, beyond which was the same pastoral field as to the south of the site. Beyond that were some large arable fields, with the M1 motorway approximately 600m to the east of the site. On the far side of the M1 was predominantly arable farmland, with the Gorhambury estate beginning approximately 1.5km to the east of the site.
- 3.2.6 There was a very small woodland copse to the south of the site, as well as the small woodland within the area to the west of the site which lay approximately 260m to the northwest of the proposed development site. These were the only areas of woodland within 500m of the site, other than a very small copse to the north of the A414 dual carriageway approximately 340m to the northwest of the site (Google Earth, 2019 and Promap, 2019).
- ### **3.3 Initial Assessment**
- 3.3.1 The potential sett entrance was found on the 27<sup>th</sup> of August 2019 to have a relatively small amount of bare spoil, but no fresh spoil at the entrance and cobwebs could be seen across the entrance. Within the immediate vicinity of this sett entrance were several old collapsed burrows that were almost completely vegetated over and covered in places by fallen timber (Ecoline, 2019).
- 3.3.2 Mammal tracks were found to criss-cross the surrounding area and appeared to extend over to the other side of Green Lane into the pasture fields beyond. It was considered likely that badger setts would occur within the adjacent landscape, which has a highly undulating character with areas of steep embankments and small scrub dominated hollows (Ecoline, 2019).

### 3.4 Camera Traps and Stick Assessment

- 3.4.1 No badgers were recorded on the camera traps during the camera trap exercise between the 10<sup>th</sup> and 17<sup>th</sup> of September 2019, but a significant number of fox *Vulpes vulpes* and muntjac deer *Muntiacus reevesi* were observed showing interest in the hole (Ecoline, 2019).
- 3.4.2 The sticks placed over the potential sett entrance were not moved between the 10<sup>th</sup> and 18<sup>th</sup> of September indicating that neither badgers, nor any other animal, had used the potential sett during this time (Ecoline, 2019).

### 3.5 Monitoring Visits

- 3.5.1 The site visit on the 18<sup>th</sup> of September 2019 showed no evidence of badgers, or any other animal entering or exiting the hole on the camera traps and the sticks had not been moved, indicating the burrow was not currently being used by any animal. Therefore, the hole was soft-filled using loose soil to fill the hole just inside the entrance. The soil was not compacted so that if any animal was within the burrow, they would be able to push through the soil to exit the burrow (Ecoline, 2019).
- 3.5.2 During the site visit on the 27<sup>th</sup> of September 2019, the soil placed in the burrow was found to be intact, indicating again that no animal had used the burrow since the assessment commenced on the 10<sup>th</sup> of September 2019. Therefore, it was considered highly unlikely that any animal was within the burrow, or that the hole was in 'current use' as a badger sett, or in fact used by any other animal. As the risk of harm to badgers or any other animal from filling in the sett was considered to be negligible, and as the hole was not considered to constitute a badger sett in 'current use', further soil was added to the hole and was compacted to close the hole and make it unusable to the majority of wildlife (Ecoline, 2019).
- 3.5.3 A final site visit was completed on the 4<sup>th</sup> of October which showed again that the soil had not been removed from the sett. Therefore, as of this time it was considered that no badger setts were present in the area that would be impacted by the proposed works and the works could proceed with negligible risk of impact to badgers and/or badger setts (Ecoline, 2019).
- 3.5.4 However, as badgers were recorded in the area, are highly mobile and can construct new setts fairly rapidly, if works have not commenced within 30 days of the date of the final site visit outlined in this report (i.e. by the 3<sup>rd</sup> of November 2019) a repeat badger assessment as outlined in Section 4 below should be undertaken to confirm that no new sett has been created in the area and ensure no badgers are harmed during the works.

## **4 RECOMMENDATIONS**

### **4.1 Further Surveys**

4.1.1 It was considered that at this stage, the survey completed was sufficient to be confident in the conclusion that the hole was not a badger sett in 'current use' and given the burrow was closed, the risk of impact to badgers and/or badger setts from the proposed works was considered to be negligible.

4.1.2 However, if the works on site have not commenced within 30 days of the date of the final survey visit outlined in this report (i.e. by the 3<sup>rd</sup> of November 2019), the site should be re-assessed for badgers as it is possible that the sett could have been re-excavated or a new badger sett could have been created in close proximity to the site. The badger assessment should consist of a thorough search of the site and surroundings up to 30m from the site, for any signs or evidence of badgers, particularly any possible badger sett. The assessment should be undertaken no more than 30 days before the works are to commence on site.

### **4.2 Impact Avoidance and Mitigation Measures**

4.2.1 As there was considered to be no risk of impact to badgers or badger setts from the proposed works, no impact avoidance and/or mitigation measures for badger setts were considered necessary. However, as badgers were known in the area, the general precaution, as was outlined in the PEA for the site and as given below should be followed:

- any trenches or holes which will be left overnight should either be fully covered, or have a wooden plank placed in them in such a way that any wildlife that falls in can climb out safely. Alternatively, one end of the trench should be sloped or stepped to allow animals to climb out;

4.2.2 All other impact avoidance measures outlined in the PEA for the site should also be followed (Adonis Ecology, 2019<sup>1</sup>).

## **5 CONCLUSION**

5.1 Further assessment of the potential sett entrance has shown that the hole was not in 'current use' by badgers or any other animal and has subsequently been infilled in compliance with wildlife legislation. The risk of impact to badgers or any other animal using the hole from the proposed works was therefore considered to be negligible.

5.2 With the repeat badger assessment and precautionary measures as outlined in this report undertaken, it was considered the works could proceed with negligible risk of impact to any badgers or badger setts.

## 6 REFERENCES

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## 7 APPENDICES

### 7.1 Appendix 1: Figure

Figure 1: Plan Showing 30m Radius Around Potential Badger Sett Entrance in Relation to Proposed Development at Breakspear Park, Hemel Hempstead.

