



ECOLOGYSOLUTIONS

Part of the ES Group

43A CHURCH ROAD,
CAVERSHAM,
BERKSHIRE

Bat Survey Report

June 2021
9548.BatReport.vf

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Information downloaded from Multi-Agency Geographic
Information for the Countryside (MAGIC)

1. INTRODUCTION

1.1. Background

- 1.1.1. Ecology Solutions was commissioned in December 2020 by Mr Daniel Pagella, to carry out a bat survey at 43a Church Road, Caversham, Berkshire (see Plan ECO1).

1.2. Site Characteristics and Proposals

- 1.2.1. The site comprises two buildings. Building B1 is a Grade II listed residential property divided into three sections: B1a, B1b and B1c. Building B2 is a single storey garage.
- 1.2.2. The proposals for the site are to demolish the garage (Building B2) and to construct a two-storey extension on Building B1.

1.3. Purpose of this Report

- 1.3.1. This report sets out the results of the bat survey work undertaken by Ecology Solutions at the site on 17 May 2021. This report should be read in conjunction with the previously completed building assessment report¹.

¹ Ecology Solutions (2020) *43a Church Road, Caversham, Berkshire – Bat Building Assessment*. Ref: 9548.BatBuildingAssessment.vf(complete)

2. LEGISLATION AND ECOLOGY

2.1. Legislation and Licensing

2.1.1. All bats are protected under Schedule 5 of the Wildlife & Countryside Act 1981 (as amended) and included on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 ("the Habitats Regulations"). These include provisions making it an offence:

- Deliberately to kill, injure or take (capture) bats;
- Deliberately to disturb bats in such a way as to:-
 - (i) be likely to impair their ability to survive, to breed or rear or nurture their young; or to hibernate or migrate; or
 - (ii) affect significantly the local distribution or abundance of the species to which they belong;
- To damage or destroy any breeding or resting place used by bats;
- Intentionally or recklessly to obstruct access to any place used by bats for shelter or protection (even if bats are not in residence).

2.1.2. The words deliberately and intentionally include actions where a court can infer that the defendant knew that the action taken would almost inevitably result in an offence, even if that was not the primary purpose of the act.

2.1.3. The offence of damaging (making it worse for the bat) or destroying a breeding site or resting place is an absolute offence. Such actions do not have to be deliberate for an offence to be committed.

2.1.4. In accordance with the Habitats Regulations, the licensing authority (Natural England) must apply the three derogation tests as part of the process of considering a licence application. These tests are that:

1. The activity to be licensed must be for imperative reasons of overriding public interest or for public health and safety;
2. There must be no satisfactory alternative; and
3. The favourable conservation status of the species concerned must be maintained.

2.1.5. Licences can usually only be granted if the development is in receipt of full planning permission.

2.2. Ecology

2.2.1. There are seventeen breeding bat species in Britain. Many of them are considered threatened due to a variety of factors including habitat loss and disturbance / damage to roosts. Of these seventeen species, a number regularly use buildings as roost sites.

2.2.2. Bats are highly mobile flying mammals, which, in Britain, feed entirely on insects. They are able to fly and feed in the dark by using

a system of echolocation that gives them a 'sound picture' of their surroundings.

- 2.2.3. In winter when prey is scarce, British bats hibernate in humid parts of buildings, caves or hollow trees where temperatures are typically stable. They may wake occasionally but only become fully active again in the spring.
- 2.2.4. Female bats gather together in maternity roosts in summer to give birth and rear their single offspring. Like other mammals, bats have fur and give birth to live young. Infant bats suckle on their mother's milk for several weeks until they can fly and hunt insects for themselves. Bats are long-lived mammals and some British species are known to live to over twenty-five years of age.

3. SURVEY METHODOLOGY

3.1. Field Survey

- 3.1.1. Field surveys were undertaken with regard to best practice guidelines issued by Natural England (2004²), the Joint Nature Conservation Committee (2004³) and the Bat Conservation Trust (2016⁴).
- 3.1.2. The building was surveyed internally and externally to check for bats or evidence of use by bats in December 2020. The survey work was undertaken using a ladder (where necessary), torch, endoscope, and binoculars.
- 3.1.3. Internally, evidence of the presence of bats was searched for. A detailed search was made for bat droppings on the floors of the building (droppings can indicate present or past use by bats and extent of use). Other signs searched for included dead animals, staining on beams or around crevices and areas that were conspicuously cobweb-free.
- 3.1.4. Exterior checks of the building were also undertaken in order to search for signs of any use by bats. An endoscope was used to inspect any inaccessible areas more closely.
- 3.1.5. On the basis of the daytime assessment the building was considered to have low to moderate suitability for roosting bats, and therefore a single emergence / re-entry survey would be required to comply with the current survey guidelines.
- 3.1.6. The single dusk emergence survey was undertaken on 17 May 2021. The survey was undertaken using iPads paired with Echo Meter Touch 2 PRO bat detectors to record the data, which was subsequently analysed using Kaleidoscope bat sound analysis software.
- 3.1.7. The survey methods undertaken aimed to identify any roosting bats leaving in the evening and / or using the wider site for foraging and dispersal. The dusk emergence survey was undertaken from approximately 15 minutes before sunset until approximately two hours after sunset.
- 3.1.8. The survey was conducted when the night-time temperature was above 10°C. The insectivorous diet of bats means there is little or no food available when temperatures fall below this level and consequently, levels of activity are low and may not accurately reflect the value of the site for bats. The weather conditions for the survey were recorded and any limitations were noted.

² Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.

³ Mitchell-Jones, A.J. & McLeish, A.P. (Eds.) (2004). *Bat Workers' Manual*. 3rd edition. Joint Nature Conservation Committee, Peterborough.

⁴ Collins, J. (ed.) (2016). *Bat Surveys – Good Practice Guidelines*. 3rd Edition. Bat Conservation Trust, London.

4. SITE DESCRIPTION

4.1. The Site

- 4.1.1. The site is located in the suburb of Caversham in Reading, Berkshire (see Plan ECO1).
- 4.1.2. Building B1 is a Grade II listed brick-built residential property (see Photograph 1). There are three sections, each containing a separate loft void. B1a is a single storey section with a pitched slate tile roof with ridge tiles. The roof is in good condition with only a few gaps under the slate tiles and ridge tiles. The void of section B1a is small with a wooden frame and sarking boards (see Photograph 2). The height is approximately 1m at the apex. It is 2.5m wide and approximately 5m long. Half of the space is in use as miscellaneous storage. No access points were recorded.
- 4.1.3. B1b is the two-storey section with a pitched slate tile roof and ridge tiles. The majority of the roof is in good condition with a few gaps under the slate tiles and ridge tiles. Lead flashing is present at the join with B1a and surrounding the chimney. Good condition wood cladding is present in the gable at the rear of the building. The void of section B1b is larger with access to the southwestern end blocked by the water tank (see Photograph 3). The remainder of the void is used for miscellaneous storage. The void is approximately 2m at the apex, with a width of 2m and length of 8m. The loft has a wooden frame and no lining which provides access to the slate tiles. A number of potential access points are present.
- 4.1.4. B1c is a single storey section with a lean-to slate tile roof. The roof is in good condition with only a few gaps under the slate tiles. The loft void is 1m tall and 1m wide with a length of 8m. The loft void has a wooden frame with no lining and the slate tiles can be seen. No obvious access points were recorded. The majority of the void is used for miscellaneous storage.
- 4.1.5. Building B2 is a single storey garage with a pitched roof (see Photograph 4). The front of the roof has slate tiles and ridge tiles whereas the rear comprises a shallower bitumen felt section of roof. A wooden soffit is present at the front of the garage. Significant Ivy *Hedera helix* is present at the rear of the building. A small number of gaps were recorded under the ridge tiles.

4.2. Wider Area

- 4.2.1. The site is bounded by a wooded belt to the north. To the south of Church Road, opposite the site, is Caversham Court Gardens with the River Thames beyond. The wooded belt and Caversham Court Gardens are considered to offer higher-quality foraging and commuting resources than the site itself.
- 4.2.2. The closest statutory site for biological importance is Clayfield Copse Local Nature Reserve (LNR), located approximately 2.4km north east of the site (see Appendix 1). This site has been designated for its ancient woodland habitat.

5. SURVEY RESULTS

5.1. Internal / External Inspections

- 5.1.1. No signs of bats were recorded during the internal surveys. The majority of the roofs are in good condition with only a limited number of gaps under slate tiles and ridge tiles. It is considered that building B2 and sections B1a and B1c have low potential for roosting bats. Section B1b is considered to provide moderate potential due to the higher suitability of the loft void.
- 5.1.2. Given that only section B1c and building B2 are to be affected by the proposed works, only these areas were considered to require further surveys.

5.2. Activity Surveys

- 5.2.1. A single emergence survey was completed on 17 May 2021. The timings and weather conditions for this survey are summarised in Table 5.1.

Date	17.05.21
Survey Type	Dusk Emergence
Sunset	20:52
Survey Start	20:37
Survey End	22:52
Cloud Cover (%)	100
Temperature (°C)	12 - 11
Weather & Wind	Gentle Breeze

Table 5.1. Activity survey timings and conditions

Emergence Survey 17.05.21

- 5.2.2. The results of the activity survey completed on the evening 17 May 2021 are summarised below and in Table 5.2, Table 5.3 and illustrated on Plan ECO3. No bats were recorded emerging from buildings B1c and B2.

Species	Number of Registrations	First Recording after Sunset
Common Pipistrelle	59	16 minutes
Soprano Pipistrelle	37	17 minutes
Pipistrelle sp.	3	20 minutes
Total	99	

Table 5.2. Results of Emergence Survey at Position 1.

Species	Number of Registrations	First Recording after Sunset
Common Pipistrelle	59	15 minutes
Soprano Pipistrelle	27	16 minutes
Total	86	

Table 5.3. Results of Emergence Survey at Position 2.

- 5.2.3. All of the registrations were attributed to Common Pipistrelle *Pipistrellus pipistrellus* and Soprano Pipistrelle *Pipistrellus pygmaeus*. The earliest registration was of a Common Pipistrelle bat at Position 2, recorded approximately 15 minutes after sunset. This bat was observed flying above Building B2 from the wooded belt, between the buildings and flying across the road into Caversham Court Gardens. It is considered likely that this bat emerged from a nearby mature tree and passed over the site to foraging habitat to the west of the site.
- 5.2.4. Given the high-quality foraging habitat present within close proximity to the site, it is considered likely that the registrations recorded over the course of the surveys are attributed to foraging and commuting bats.
- 5.2.5. There is no evidence to suggest that the building supports a bat roost.

6. DISCUSSION AND RECOMMENDATIONS

6.1. Use of Building

- 6.1.1. The results of the survey work undertaken in December 2020 showed no signs of bats being present within areas inspected by Ecology Solutions. No droppings, staining around beams and crevices or dead animals were seen.
- 6.1.2. Notwithstanding that no bats or evidence of bats were recorded at the time of the internal and external survey, the presence of bat roosts could not be ruled out. Therefore, a single emergence survey was undertaken to determine presence / absence of roosting bats within the building.
- 6.1.3. No evidence of roosting bats was recorded during the emergence survey. The observations made by surveyors as well as the timings of registrations recorded suggest that bats are commuting over the site between the wooded belt and the neighbouring sites to the south. Some foraging activity was recorded in the garden of the property. The results suggest that the building is of no significance to roosting bats.

6.2. Proposals and Effect

- 6.2.1. The proposals for the site are to demolish Building B2 and construct a two-storey extension attached to Building B1c.
- 6.2.2. Owing to the absence of roosting bats within the building, the building can be demolished without the need for a Natural England European Protected Species (EPS) licence.
- 6.2.3. In the unlikely event that any bats are encountered during the demolition, all work will cease immediately, and Ecology Solutions will be contacted for advice.

7. SUMMARY AND CONCLUSIONS

- 7.1. Ecology Solutions was commissioned in December 2020 by Mr Daniel Pagella, to carry out a bat survey at 43a Church Road, Caversham, Berkshire.
- 7.2. The site comprises two buildings. Building B1 is a Grade II listed residential property divided into three sections: B1a, B1b and B1c. Building B2 is a single storey garage.
- 7.3. The proposals for the site are to demolish Building B2 and to construct a two-storey extension on Building B1c.
- 7.4. Internal and external surveys to determine the presence / absence of roosting bats were undertaken in December 2020. A further emergence survey was undertaken in May 2021.
- 7.5. No evidence was found internally in the building of bats being present. Nevertheless, the presence of bat roosts could not be ruled out owing to the small number of gaps underneath tiles and ridge tiles, and suitability of the loft voids. It was considered that the building had low to moderate suitability for bats, and it was therefore recommended that a single emergence survey be undertaken to establish whether bats were roosting within the building.
- 7.6. No evidence of roosting bats was recorded during the emergence survey carried out on site. The number and timing of registrations recorded, as well as observations made by surveyors, suggest that bats are roosting locally and are foraging and commuting from the wooded belt to the neighbouring sites to the south. Some foraging activity was also recorded in the garden of the property.
- 7.7. The building can be demolished / modified without the need for further survey work or an EPS licence granted by Natural England.
- 7.8. In the unlikely event that any bats are encountered during the demolition, all work will cease immediately, and Ecology Solutions will be contacted for advice.

PLANS

PLAN ECO1

Site Location



KEY:
 SITE LOCATION



 Part of the ES Group	Cokenach Estate Barkway Royston Hertfordshire SG8 8DL +44(0)1763 848084 east@ecologysolutions.co.uk ecologysolutions.co.uk
9548: 43a CHURCH ROAD, CAVERSHAM, BERKSHIRE	
PLAN ECO1: SITE LOCATION	Rev: A JUN 2021

PLAN ECO2

Building Locations



KEY:

-  SITE BOUNDARY
-  BUILDING



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Cokenach Estate
Barkway | Royston
Hertfordshire | SG8 8DL

+44(0)1763 848084
east@ecologysolutions.co.uk
ecologysolutions.co.uk

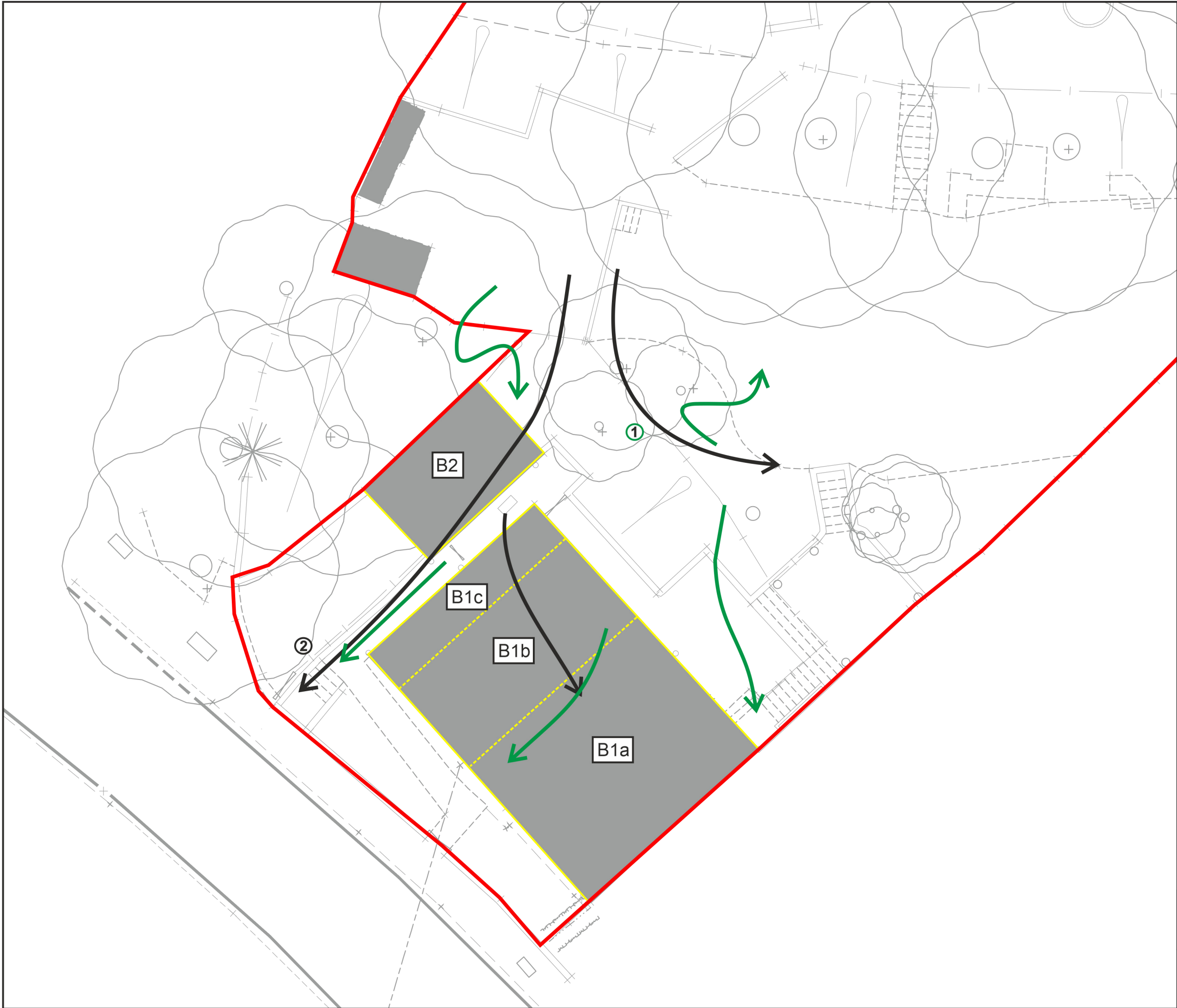
9548: 43a CHURCH ROAD, CAVERSHAM,
BERKSHIRE

PLAN ECO2:
BUILDING LOCATIONS

Rev: A
Jun 2021

PLAN ECO3

Bat Emergence Survey 17.05.21



KEY:

-  SITE BOUNDARY
-  BUILDING
-  SURVEYOR LOCATION - POSITION 1
-  BAT FLIGHT PATH RECORDED BY SURVEYOR 1
-  SURVEYOR LOCATION - POSITION 2
-  BAT FLIGHT PATH RECORDED BY SURVEYOR 2



ECOLOGY SOLUTIONS
Part of the ES Group

Cokenach Estate
Barkway | Royston
Hertfordshire | SG8 8DL

+44(0)1763 848084
east@ecologysolutions.co.uk
ecologysolutions.co.uk

9548: 43a CHURCH ROAD, CAVERSHAM,
BERKSHIRE

PLAN ECO3: BAT EMERGENCE
SURVEY 17.05.21

Rev: A
Jun 2021

PHOTOGRAPHS

PHOTOGRAPH 1: Building B1



PHOTOGRAPH 2: Loft Void within Building B1a



PHOTOGRAPH 3: Loft Void within Building B1b



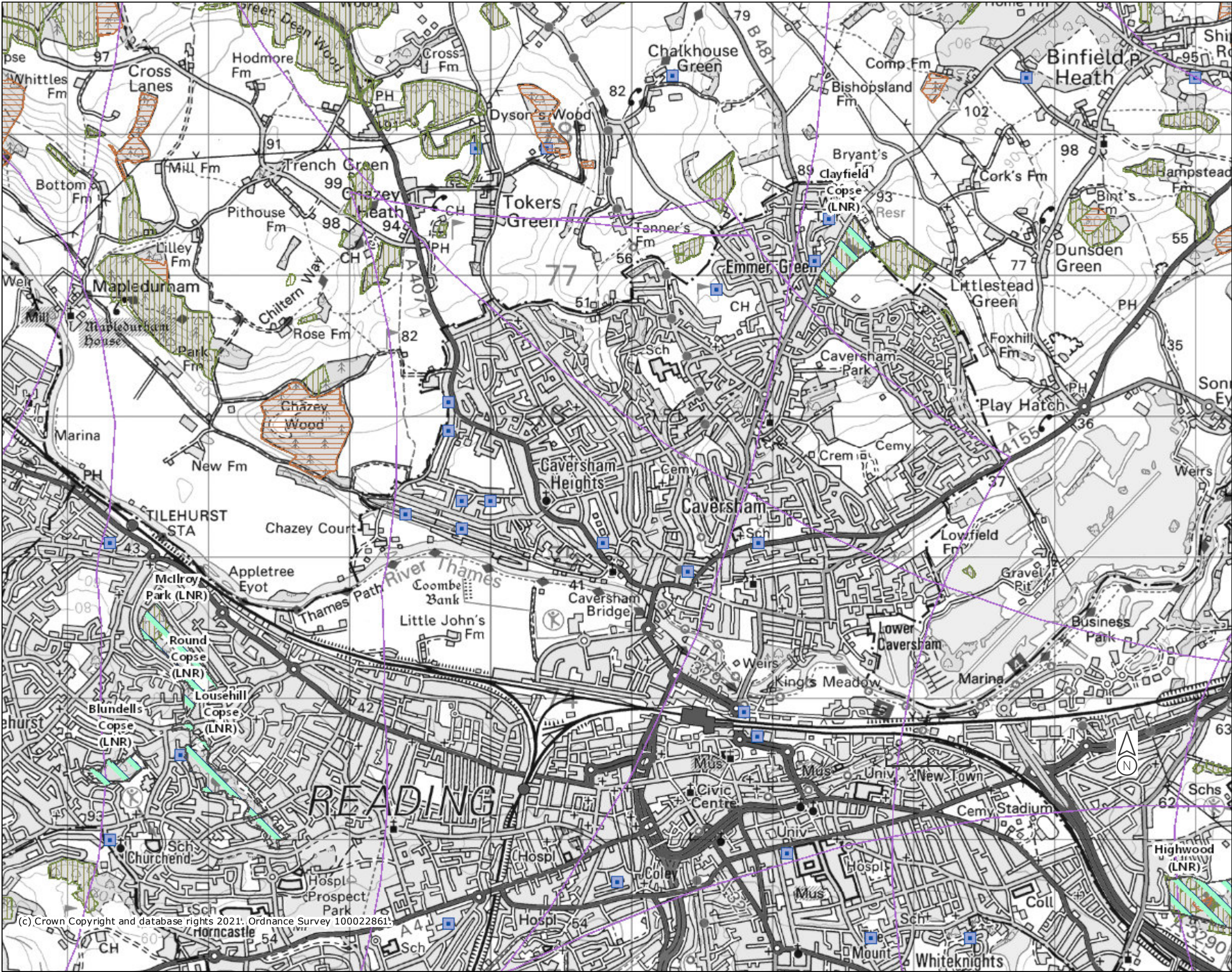
PHOTOGRAPH 4: Building B2



APPENDICES

APPENDIX 1

Information downloaded from Multi-Agency
Geographic Information for the Countryside (MAGIC)



Legend

- Local Nature Reserves (England)
- National Nature Reserves (England)
- Ramsar Sites (England)
- Proposed Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)
- Special Areas of Conservation (England)
- Possible Special Areas of Conservation (England)
- Special Protection Areas (England)
- Potential Special Protection Areas (England)
- Ancient Woodland (England)
 - Ancient and Semi-Natural Woodland
 - Ancient Replanted Woodland
- Granted European Protected Species Applications (England)
 - Amphibian
 - Bat
 - Cetacean
 - Invertebrate
 - Other Mammal
 - Plant
 - Reptile

Projection = OSGB36
xmin = 465300
ymin = 173000
xmax = 476500
ymax = 178000
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ECOLOGYSOLUTIONS

Part of the ES Group

Ecology Solutions Limited | Cokenach Estate | Barkway | Royston | Hertfordshire | SG8 8DL

01763 848084 | east@ecologysolutions.co.uk | www.ecologysolutions.co.uk