

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

Atterbury Gardens, Caversham, Reading, RG4 7HW

Client:

Hicks Developments LTD

Survey date:

30th October 2024

Project:

This report is prepared to inform a planning application with the Reading Borough Council. The proposal is described as:

The construction of four detached houses.

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2024.](#)

The site survey was undertaken by Jade Lemm BSc (Hons) DipHE MRSB (Natural England Protected Species Licence Numbers: Great Crested Newt (2023-11450-CL08-GCN) and accredited Agent on Natural England Bat Licence Number: 2018-33540-CLS-CLS.					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
30/10/2024	15	76	100	2	None

Ecological Survey Factor	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.
Conclusion, Impact or Recommendations	
Habitats and plants (see habitat map in Appendix 1, location plan in Appendix 2, proposed plans in Appendix 3 and photos in Appendix 4). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
Summary of Survey Findings <u>UKHab codes used:</u> - Other neutral grassland with bare ground and scattered trees g3c 32 510 - Native hedgerow h2a - Non-native and ornamental hedgerow h2b	The site is located at National Grid Reference SU 70359 75947 and has an area of approximately 0.16ha comprising hardstanding, grassland, hedgerow, trees and bare ground. It is surrounded by residential dwellings in all directions. The wider landscape comprises the town of Caversham Heights, pockets of woodland (~350m south-west and ~1.3km west) and agricultural fields. The site has slightly acidic, loamy, and clayey soils. <u>Other neutral grassland with bare ground and scattered trees [g3c 32 510]</u> The majority of the site was managed other neutral grassland (approximately 0.14 ha) with >10% bare ground (~30%), a sward height of 1-6cm and scattered trees. Species composition included Yorkshire fog (A), white clover (A), creeping buttercup (A), perennial ryegrass (F), common nettle (F), ribwort plantain (F), common daisy (O), white dead nettle (O), dandelion (O), common comfrey (O) and silverweed (R). No scrub or bracken was identified within the grassland.

- <i>Developed land, sealed surface u1b</i> - <i>Artificial unvegetated unsealed surface u1c</i> - <i>Built linear features u1e</i>	There were five trees around the site (G1). G1 is a group of five semi-mature beech trees of small size (approximately 2-3m in height and 20-25cm DBH) with no ecological niches or evidence of human disturbance. There is oversailing vegetation (>20%). A large area of bare ground (approximately 80m²) was present on the north-eastern boundary. Due to the site's management, ~90% of the area was bare ground with small patches of ivy growth. <u>Native hedgerow [h2a]</u> Sections of hedgerow (H1 – H4) were present on the western and northern boundaries. - Hedgerow H1 (approximately 25m length x 3m height x 2m wide) was present on the western boundary. The hedgerow had no canopy gaps (<0.5m canopy to base gap), undisturbed vegetation, and invasive species. Species composition included beech (D) and blackthorn (O). The understorey composition was ivy (D), bramble (F) and holly (O). - Hedgerow H4 (approximately 18m length x 5m height x 2m wide) was present on the south-western boundary. The hedgerow had no canopy gaps (<0.5m canopy to base gap), undisturbed vegetation, and invasive species. Species composition included beech (F) and blackthorn (F). The understorey composition was ivy (D) and bramble (O). <u>Non-native and ornamental hedgerows [h2b]</u> Sections of hedgerow (H1 – H4) were present on the western and northern boundaries. - Hedgerow H2 (approximately 20m length x 3m high x 1m wide) was present in the north-western boundary. Species composition was dominated by cherry laurel.
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	- Hedgerow H3 (approximately 12m length x 3m high x 1m wide) was present in the north-eastern boundary. Species composition was dominated by cherry laurel. <u>Developed land, sealed surface [u1b]</u> Areas of concrete hardstanding (approximately 65m²) were present near the northern and eastern boundaries. <u>Artificial unvegetated unsealed surface [u1c]</u> An area (approximately 67m²) of gravel was present on the northern boundary. <u>Built linear features [u1e]</u> Closed board fencing was present on all boundaries. <u>Local notable habitats</u> A range of notable local habitats within 2km of the site. These include: - Deciduous woodland ~350m south-west - Traditional orchard ~450m south-west - Good quality semi-improved grassland ~550m north-east - Lowland calcareous grassland ~1.1km north - Ancient Replanted Woodland ~1.3km west - Ancient & Semi-Natural Woodland ~1.5km north-west
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<i>Foreseen Impacts</i>	The site contains hedgerows which is listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). The proposed development will result in the loss of the grassland and hedgerow H4. This could result in a net loss in biodiversity at the site.
<i>Recommendations</i>	Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). A biodiversity net gain (BNG) report is likely to be required for the proposal as the development is more than 25m ² .
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	The site is not subject to any designation, and no known statutory sites are nearby.
<i>Foreseen Impacts</i>	No impacts to designated sites are anticipated due to the distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers.
<i>Recommendations</i>	None.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species recorded on site.
<i>Foreseen Impacts</i>	N/A
<i>Recommendations</i>	No further surveys but remain vigilant.
Invertebrates	
<i>Summary of Survey Findings</i>	The grassland, hedgerow and scattered trees will likely provide a diverse assemblage of common invertebrates.
<i>Foreseen Impacts</i>	The grassland and hedgerow H4 will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitats locally.
<i>Recommendations</i>	No further surveys.

Bats	
Summary of Survey Findings	Some scattered individual trees are on site and in the surrounding area, and the other residential dwellings could provide suitable foraging habitats for bats within the amenity gardens. Aerial imagery indicated that there were three sheds on site. However, no buildings were present during the survey (areas of concrete foundations remain – Appendix 4, Photograph 4). All of the trees within the site were subject to a Ground Level Tree Assessment (GLTA). The trees were semi-mature beech trees (G1). The trees had no PRFs due to the size/age and management of the trees. Below are further details about each tree (G1). G1 is a group of five semi-mature beech trees of small size (approximately 2-3m in height and 20-25cm DBH). The trees have an excellent natural form and appear to be in good condition. The trees had some ivy growth on the trunks. However, the ivy was thin, and the trunk could be fully observed. Due to the size of the trees, they do not seem to have suitable roosting features.



G1 potential roosting value: None.

There are eleven bat European Protected Species Licences (EPSLs) within 2km of the site, including:

- 2014-3600-EPS-MIT – common pipistrelle – the destruction of a resting place – 600m west
- 2014-2980-EPS-MIT – common pipistrelle and soprano pipistrelle – the destruction of a resting place – 615m south-west
- 2015-18560-EPS-MIT – brown long-eared bat and soprano pipistrelle – the destruction of a resting place – 625m west
- 2017-29064-EPS-MIT – soprano pipistrelle – the destruction of a breeding site – 740m south-west
- 2015-13539-EPS-MIT – common pipistrelle – the destruction of a resting site – 915m south-west
- 2016-27061-EPS-MIT – brown long-eared bat and common pipistrelle – the destruction of a resting place – 920m south

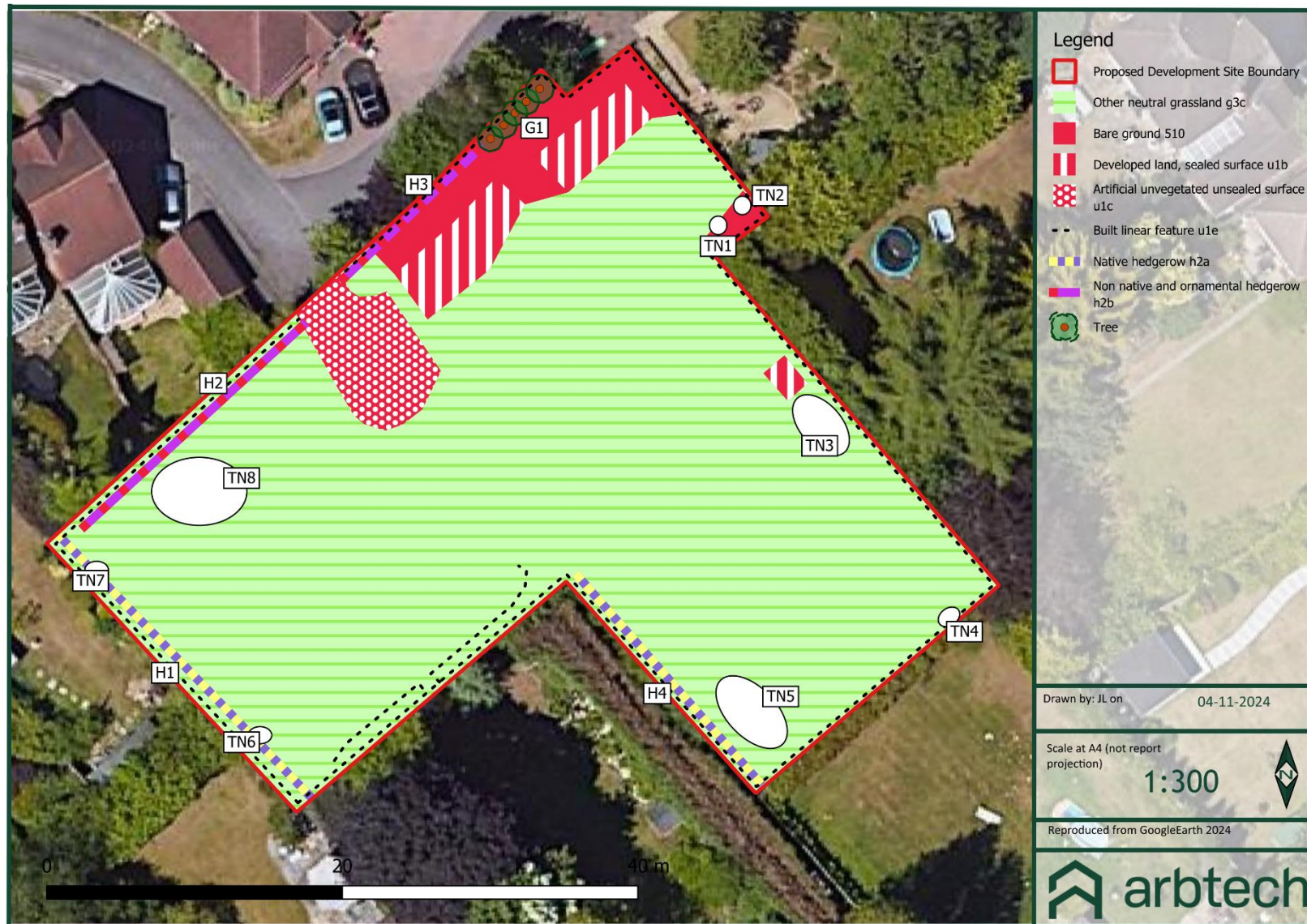
	- 2018-35917-EPS-MIT – common pipistrelle – the destruction of a resting place – 1.1km north-east - 2015-14137-EPS-MIT – common pipistrelle and soprano pipistrelle – the destruction of a resting place – 1.15km south-west - 2014-1343-EPS-BDX – soprano pipistrelle – unknown – 1.43 km south - EPSM2013-6025 – brown long-eared bat – the destruction of a resting place – 1.5km north-east - EPSM2011-3175 – common pipistrelle – unknown – 1.7km south
<i>Foreseen Impacts</i>	The proposed development will lead to an increase in the amount of current lighting of surrounding habitats. This may disturb commuting bats. All trees within the site will be retained for the proposed development.
<i>Recommendations</i>	A low-impact lighting strategy will be adopted for the site during post-development, which outlines the areas that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2 The installation of two bat boxes at the site will provide additional roosting habitat for bats. The bat box will be integrated within the walls of the new dwellings. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light.
Birds	

<i>Summary of Survey Findings</i>	No evidence of nesting birds was found on-site during the surveys; however, birds could use the scattered trees for nesting. The grassland is not suitable for ground nesting birds due to the short sward height. No habitat for schedule 1 birds was observed.
<i>Foreseen Impacts</i>	The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.
<i>Recommendations</i>	Any vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged.
Reptiles	
<i>Summary of Survey Findings</i>	The suitable habitats on site consist of the hedgerows for sheltering opportunities. However, the grassland is sub-optimal due to the short sward height (high predation), and the site is surrounded by urban infrastructure (residential dwellings and roads).
<i>Foreseen Impacts</i>	The grassland and hedgerow H4 will be removed during construction. The likelihood of reptiles being on site is low as the site is poorly connected to the broader landscape (urban fragmentation). If any reptiles were present, it would only be individuals commuting through the site.
<i>Recommendations</i>	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures: Vegetation will be maintained at a short sward (5cm) to discourage reptiles.

	- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. The site could be enhanced for reptiles' post-development with the inclusion of log piles and a compost heap.
Amphibians	
<i>Summary of Survey Findings</i>	The suitable habitat on site consists of hedgerows for sheltering opportunities. However, amphibians also require suitable aquatic habitats in which to breed and fulfil their lifecycle. There are no known ponds 500m when consulting OS maps. Therefore, protected amphibians are likely to be absent around the survey site year-round. There are no great crested newt European Protected Species License (EPSL) within 2km.
<i>Foreseen Impacts</i>	None foreseen.
<i>Recommendations</i>	No further surveys are required.
Badger	
<i>Summary of Survey Findings</i>	No evidence of badgers was found on site (latrines, footprints or setts) or within 30m of the survey boundary. Two excavations (TN1 and TN2) and rabbit scrapes (TN6 and TN7) were found within the site boundary. The excavations were the size (~17cm height and 14cm wide) and shape (circular) of rabbit holes. The site is disconnected from the wider landscape as it is situated in an urban area with residential dwellings and roads in all directions.

<i>Foreseen Impacts</i>	The grassland and hedgerow H4 will be removed during construction. No direct impacts are anticipated on badgers due to the proposed development. However, albeit low, badgers could still commute through the site and get stuck in any excavations (if any) during the construction phase.
<i>Recommendations</i>	Basic precautionary mitigation during work is recommended: • A pre-commencement inspection of the site will be undertaken for any new badger activity if works do not commence within three months. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to habitats which badgers could use. South and west boundaries. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • In the unlikely event that a badger sett is identified within 30m, works must cease and advice must be sought from a suitably qualified ecologist.
Riparian animals	
<i>Summary of Survey Findings</i>	There are no watercourses on or connected to the site.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	N/A
Hazel dormouse	
<i>Summary of Survey Findings</i>	There is no suitable dormouse habitat on the site itself, and the local habitats are heavily fragmented and not connected to core habitats for the species.

	There are no dormouse European Protected Species License (EPSL) within 2km.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The grassland provides limited foraging and commuting opportunities for hedgehogs. There is a lack of connectivity to the wider landscape as the site is well-sealed with fencing for most of the boundary. There is one gap underneath the southern boundary fence (TN4).
<i>Foreseen Impacts</i>	The grassland and hedgerow H4 will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to the presence of more extensive and better-connected habitats locally. However, construction activities could result in the death or injury of hedgehogs if present.
<i>Recommendations</i>	Similar to the badgers, a precautionary working method will be implemented during construction, including the following measures: - Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. - The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.

Appendix 1: Habitat map

Appendix 2: Location map



[illegible]

Appendix 4: Photos



Photo 1: Looking south at the other neutral grassland, hedgerow H4 and rubble pile (TN5).



Photo 2: Looking west at the other neutral grassland and hedgerow H1.



Photo 3: Hedgerow H2.



Photo 4: Hedgerow H3 and hardstanding.



Photo 5: Group of trees G1.



Photo 6: Looking at the bare ground on the northern boundary.

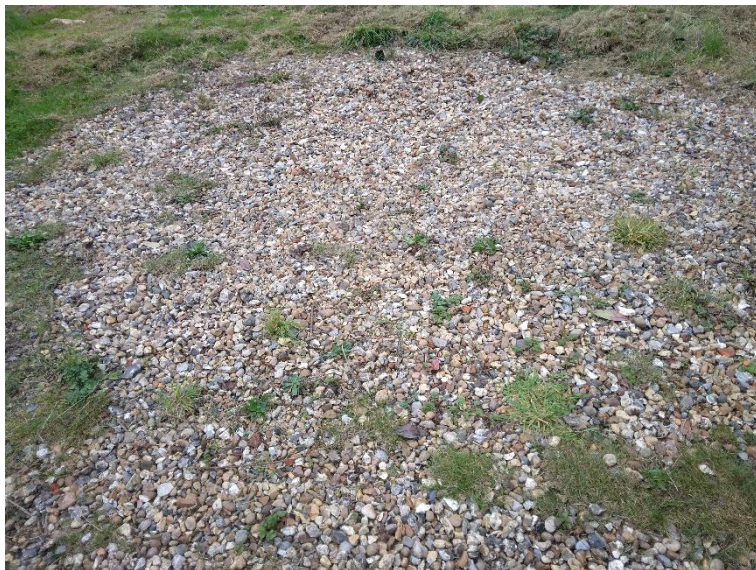


Photo 7: Areas of gravel on the northern boundary.



Photo 8: Rabbit hole (TN1).



Photo 9: Rabbit hole (TN2).



Photo 10: Rubble pile (TN3).



Photo 11: Mammal path underneath fence (TN4).



Photo 12: Rubbish and brash pile (TN5).



Photo 13: Rabbit scrape (TN6).



Photo 14: Rabbit scrape (TN7).



Photo 15: Rubble pile (TN8).



Photo 16: Built in linear feature (stone wall).

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Version control			
Status	Issue	Name	Date
Draft	0.1	Jade Lemm BSc (Hons) DipHE, Consultant Ecologist	01/11/2024
Final	1.0	Jade Lemm BSc (Hons) DipHE, Consultant Ecologist	04/11/2024