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Report prepared for: Carey London Ltd

For the Site of: The Barn, Great North Road, Radwell, Baldock, Hertfordshire, SG7
5EN

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Draft	Susie Handley 11/06/2026	Heather Stuckey 10/07/2026	
Final	Julian Newman 09/07/2026	Martin O'Connor 10/07/2026	Julian Newman 10/07/2026

Cherryfield Ecology has prepared this report for the client. Please see our T&C's.

Ecological reports are limited in shelf life, Natural England usually expect reports for licences to be from the most recent or current season, e.g. May 2025 to May 2026 for bats. Therefore, should the project not proceed within 12 to 18 months of this report an updated survey should be undertaken in order to check for changes that may have occurred on site. Information is believed to be accurate at the time of the survey; recommendations are made without bias based on good practice guidelines within the industry. However, species presence and ecological parameters can change over time.

Julian Newman BSc (Hons), MRSB
Bat Licence Level 1, GCN Level 1
julian@cherryfieldecology.co.uk
07546 987312

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Ecological Appraisal (EA)

0.0 Non-Technical Summary

0.1 Background

This report follows national guidelines JNCC (2010) and UKHab's (2023) allowing for a daytime inspection and recommends for further surveys if considered necessary. If a deviation from the guidelines has been made, this will be detailed in the Method Section.

The following report details the findings and recommendations for the site of The Barn, Great North Road, Radwell, Baldock, Hertfordshire, SG7 5EN.

A preliminary ecological appraisal (PEA) of the site was undertaken by Greengage Environmental Ltd in 2021. The site was found to comprise of predominantly tall ruderal vegetation as well as ephemeral/short perennial vegetation, bare ground, buildings, hardstanding and hedgerow with trees.

Since then, works under planning reference: 25/03197/FP (Erection of detached industrial storage building following demolition of two existing industrial storage buildings and installation of external lighting and increase in material storage height to 6.0m) have commenced.

The PEA recommended that two emergence/re-entry surveys be carried out due to Building B1 providing moderate bat roost potential. It also recommended that areas of refuse be hand-cleared under the supervision of a suitably qualified ecologist to minimise the risk of harm to reptiles, and that development be undertaken outside the bird nesting season (March-August). Where this is not possible, a qualified ecologist should inspect any vegetation to be cleared for nesting birds immediately prior to the commencement of works.

As the Radwell (A507) Road Banks Local Wildlife Site (LWS) lies within 20 m of the site, it was recommended that a Construction Environmental Management Plan (CEMP) be secured through a planning condition to set out the measures required to avoid and

mitigate potential impacts relating to pollution and drainage during site construction and operation.

The subsequent bat emergence surveys confirmed the presence of three day roost locations in use by at least three common pipistrelles and one soprano pipistrelle.

The client commissioned Cherryfield Ecology to undertake an EA as the proposals include for retrospective alterations to the lighting on site under planning reference: 25/03197/FP. Plans have been provided (Appendix I).

0.2 Results and Findings

The site consists of a timber storage barn (B1), a prefabricated office building (B2), developed land; sealed surface, and artificial unvegetated, unsealed land.

- The site provides **negligible** potential for badgers, great crested newts (GCN), reptiles, and other protected species due to comprising of unsuitable habitat and being surrounded by concrete and metal fencing.
- B1 is a **confirmed** bat roost as previous emergence surveys confirmed the presence of three-day roost locations in use by common and soprano pipistrelles on the building (Greengage Environmental Ltd, 2021). Approximately four droppings were identified on the exterior of the building and coincide with one of the previously identified emergence points. The building otherwise provides **moderate** potential for roosting bats due to the numerous lifted areas of the timber cladding. B2 provides **negligible** potential for roosting bats due to the lack of potential roosting features and it is understood that this will not be impacted by the proposals. The site offers limited potential for foraging and commuting due to lacking ecological features and relatively high levels of artificial lighting. Bat boxes are present along the perimeter fence, though no signs of use were identified.
- Breeding birds are **confirmed** on site as evidence of nesting under the lifted timber cladding of B1 was found during the previous PEA (Greengage Environmental Ltd, 2021). A pigeon was seen inside B1 suggesting that it may be

in current nesting use. The site otherwise provides **moderate** potential for breeding birds as the numerous lifted areas of the timber cladding and open-access interior may be used by nesting birds.

- The Radwell (A507) Road Banks Local Wildlife Site (LWS) lies within 20 m of the site boundary and is separated from the site by a bund and a tree-lined hedgerow.

0.3 Impact Assessment and Recommendations

Badger - No further surveys are necessary, as works have already been completed/are in progress under planning. **Should any further works be proposed, they should be subject to ecological assessment where appropriate.** Further surveys, licences, and/or mitigation measures may be required prior to commencement.

Bats - **Update presence/likely absence surveys (moderate)** will be required (two surveys, three weeks apart), with four surveyors to cover the building B1; these must be undertaken between May to August. If bats are found to be present, one further survey may be required (a minimum of three weeks apart), which can be undertaken in September if required.

Breeding Birds - No further surveys are recommended; however, **the development should take place outside the nesting season (March to August).** If this is not possible, it is recommended that a qualified ecologist is on-site to ensure the building is not occupied by breeding birds, prior to demolition. Should an occupied nest be found, a buffer zone would need to be created until the nest is no longer in use.

Great Crested Newt (GCN) - No further surveys are necessary, as works have already been completed/are in progress under planning. **Should any further works be proposed, they should be subject to ecological assessment where appropriate.**

Further surveys, licences, and/or mitigation measures may be required prior to commencement.

Reptiles - No further surveys are necessary, as works have already been completed/are in progress under planning. **Should any further works be proposed, they should be subject to ecological assessment where appropriate.** Further surveys and/or mitigation measures may be required prior to commencement.

Other protected species - No further surveys are necessary, as works have already been completed/are in progress under planning. **Should any further works be proposed, they should be subject to ecological assessment where appropriate.** Further surveys, licences, and/or mitigation measures may be required prior to commencement.

Habitats - All habitats found are common and widespread, no impacts are foreseen.

The findings outlined in this report are valid for 12-18 months, after which updated surveys will be required.

Enhancements and mitigation are recommended (please see Section 4.4 for further details).

1.0 Introduction

1.1 Aim

The aim of this report is to inform of ecological constraints that may affect the development proposals and recommend to the client if further surveys are required for protected species. An impact assessment is undertaken at this stage; however, if further surveys are required, additional and unexpected impacts may result.

1.2 Background Information

The client, Carey London Ltd, has commissioned Cherryfield Ecology to undertake an EA for the site of The Barn, Great North Road, Radwell, Baldock, Hertfordshire, SG7 5EN. Planning permission is being sought for a retrospective alteration to the lighting on site under planning reference: 25/03197/FP.

A preliminary ecological appraisal (PEA) of the site was undertaken by Greengage Environmental Ltd in 2021. The site was found to comprise predominantly tall ruderal vegetation as well as ephemeral/short perennial vegetation, bare ground, buildings, hardstanding and hedgerow with trees.

Since then, works under planning reference: 25/03197/FP (Erection of detached industrial storage building following demolition of two existing industrial storage buildings and installation of external lighting and increase in material storage height to 6.0m) have commenced.

The PEA recommended that two emergence/re-entry surveys be carried out due to Building B1 providing moderate bat roost potential. It also recommended that areas of refuse be hand-cleared under the supervision of a suitably qualified ecologist to minimise the risk of harm to reptiles, and that development be undertaken outside the bird nesting season (March-August). Where this is not possible, a qualified ecologist should inspect any vegetation to be cleared for nesting birds immediately prior to the commencement of works.

As the Radwell (A507) Road Banks Local Wildlife Site (LWS) lies within 20 m of the site, it was recommended that a Construction Environmental Management Plan (CEMP) be secured through a planning condition to set out the measures required to avoid and

mitigate potential impacts relating to pollution and drainage during site construction and operation.

The subsequent bat emergence surveys confirmed the presence of three day roost locations in use by at least three common pipistrelles and one soprano pipistrelle.

This survey has checked all habitats, buildings, trees (from ground level only) or structures due to be affected by the proposals on site; it includes checking for protected species, signs of protected species or habitat value e.g. crevices, badger setts, ponds etc. as well as mapping the habitats on site.

The inspection was conducted 10/06/2026.

Summary of legislation and National Planning Policy that protects wildlife in England:

- The Conservation of Habitats and Species (Habitats Directive, 2017, as amended) (Amendment) (EU Exit) Regulations 2019.
- Wildlife and Countryside Act 1981 as amended.
- Countryside and Rights of Way Act 2000.
- Natural Environment and Rural Communities Act 2006.
- National Planning Policy Framework (“NPPF”).
- Circular 06/05.

This legislation makes it illegal to:

- Intentionally or deliberately kill, injure or capture a protected species.
- Deliberately disturb a protected species, whether at rest or not.
- Damage, destroy or obstruct access to a resting place.
- Possess or transport a protected species or any part of that species, unless acquired legally.
- Sell, barter or exchange a protected species, or any part of a species.

1.3 Species Specific Information

All UK-protected species have the same protection and the detail under Bats also applies to GCN, Dormouse, Otters and the two UK-protected reptiles.

1.3.1 Breeding Birds

All nesting birds are protected under the Wildlife and Countryside Act (as amended) 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. Furthermore, a number of birds enjoy further protection under that Act and are listed on Schedule 1 of the Act. These further protected birds are also protected from disturbance and it may be necessary to operate a “no-go” buffer zone around such nests - typically out to 5m.

1.3.2 Bats

All 18 species of bat common in the UK (17 known to be breeding) are fully protected under the Wildlife and Countryside Act (as amended) 1981 through inclusion in Schedule V of the Act. All bat species in the UK are also included in Schedule II of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which transpose Annex II of the Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (“Habitats Directive”) which defines United Kingdom protected species of animals.

Bats species are afforded further protection by the Countryside and Rights of Way Act 2000; and the Natural Environment and Rural Communities Act 2006.

This combined legislation makes it an offence to:

- Intentionally or deliberately kill, injure or capture bats.
- Deliberately disturb bats, whether at roost or not.
- Damage, destroy or obstruct access to bat roosts.
- Possess or transport bats, unless acquired legally.
- Sell, barter or exchange bats.

1.3.3 Reptiles

There are six species of reptiles in Great Britain (Edgar *et al.*, 2010) and four of these are commonly found; the Barred Grass Snake *Natrix helvetica*, Adder *Vipera berus*, Common Lizard *Zootoca vivipara* and Slow Worm *Anguis fragilis*.

All native British species of reptiles are legally protected through their inclusion in Schedule V of the Wildlife and Countryside Act 1981. As such, all species are protected from deliberate killing or injury. Therefore, where development is permitted, and there will be a significant change in land use, a reasonable effort must be undertaken to avoid committing an offence. The same act makes the trading of native reptile species a criminal offence without appropriate licensing.

Two species of reptile; the Smooth Snake *Coronella austriaca* and Sand Lizard *Lacerta agilis* are further protected under The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which defines UK protected species of animals (“rare reptiles”).

1.3.4 Badgers

Badger *Meles meles* and its habitat are protected under The Protection of Badgers Act 1992, Schedule V of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention 1979.

This legislation makes it an offence to:

- Kill, injure, take or possess a badger.
- Interfere with, damage or destroy a badger sett including e.g. obstructing access to a badger sett.
- Cruelly treat or harm a badger.
- Disturb a badger in a sett.

1.3.5 Great Crested Newts

Great crested newts (GCN) *Triturus cristatus* are listed in both The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and in Schedule V of the Wildlife and Countryside Act 1981.

GCN are afforded further protection by the Countryside and Rights of Way Act 2000; and the Natural Environment and Rural Communities Act 2006.

1.3.6 Otter

The Eurasian Otter *Lutra lutra* is the only Otter species native to the UK. The Eurasian Otter is fully protected under Schedule V of the Wildlife and Countryside Act (as amended) 1981 and in Schedule II of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, which transpose Annex II of the Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (“Habitats Directive”) which defines United Kingdom protected species of animals. This legislation makes it illegal to:

- capture, kill, disturb or injure otters (on purpose or by not taking enough care).
- damage or destroy a breeding or resting place (deliberately or by not taking enough care).
- obstruct access to their resting or sheltering places (deliberately or by not taking enough care).
- possess, sell, control or transport live or dead otters, or parts of otters.

1.3.7 Water Vole

The Water Vole *Arvicola amphibius* is protected under Schedule V of the Wildlife and Countryside Act 1981 and is a priority conservation species. This legislation makes it illegal to:

- intentionally capture, kill or injure water voles.
- damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care).
- disturb them in a place of shelter or protection (on purpose or by not taking enough care).
- possess, sell, control or transport live or dead water voles or parts of them (not water voles bred in captivity).

1.4 Protected Sites and Priority Habitats

Some areas with distinctive plants, animals, habitats, geology or landforms are protected at the international, European, national and local-level under statutory and non-statutory sites. Some habitats have been identified as needing priority conservation action; UK BAP Priority Habitats are a range of semi-natural habitat types that are identified as being the most threatened and requiring conservation action.

2.0 Methods

For the desk study, the Multi-Agency Geographic Information for the Countryside (MAGIC) is checked to identify any statutory sites, Natural England Protected Species (NEPS) and priority habitat within 2km of the site.

Biological records data is requested from the local records centre to provide context and background information. As the data is often sensitive, a synopsis is provided.

Natural England and NatureSpace are checked to determine if the site falls within an impact risk zone for GCN. The categorisation of each zone from both schemes are explained below.

Natural England Scheme -

- Red zones contain key populations of GCN, which are important on a regional, national or international scale and include designated Sites of Special Scientific Interest for GCN. *If in a red zone traditional surveys methods will have to be used going forward.*
- Amber zones contain main population centres for GCN and comprise important connecting habitat that aids natural dispersal.
- Green zones contain sparsely distributed GCN and are less likely to contain important pathways of connecting habitat for this species.
- White zones contain no GCN. However, as most of England forms the natural range of GCN, white zones are rare and will only be used when it is certain that there are no GCN.

NatureSpace Scheme -

- Black - nationally or regionally important site for great crested newt - excluded from development impacts under the District Licence Scheme.
- Red - highly suitable habitat - the most important areas for great crested newts.
- Amber - suitable habitat - great crested newts are likely to be present.

- Green - moderate habitat suitability - great crested newts may be present.
- White - low habitat suitability - low probability of great crested newt presence.

The field survey follows the national guidelines JNCC (2010) and UKHabs (2023), and the following equipment is available for the inspection:

- Torches (e.g. LED Lensar type).
- Ladders (Standard 4m telescopic surveying ladder).
- Endoscope where holes, cracks and crevices are accessible.
- Mirrors (extendable and movable mirror face).
- Binoculars (Pentax close focus).
- Thermometer/hygrometer.
- Camera.
- Sample bags for collecting dropping and feeding evidence.
- Quadrat for vegetation sampling.

The survey can be conducted year-round with the optimal period between mid-March and mid-October (south)/1st April and 30th September (north). However, it can be limited due to bad weather and in the winter, when some species are not as active, thus evidence and species are often not found. During these periods, habitat value (likely presence) becomes more important to the assessment of the site.

Habitats on site are assessed against the Habitat Condition Assessments (Defra, 2023) to provide information on the baseline condition of the habitats presence, to inform a Biodiversity Net Gain (BNG) if required.

Trees and building exteriors are checked from ground level only. Buildings are checked internally where access is available.

Where accessible, the zone of influence around the site boundary is assessed for protected species. In addition, nearby ponds are checked in person if accessible. If access is not available, for example, the pond is situated on private land, ponds are

assessed as far as is possible from satellite imagery. Ponds are assessed against the Habitat Suitability Index (HSI, Oldham *et al* 2000). The categorisation of the HSI scores is given below.

Table 1: Categorisation of HSI scores

HSI		Pond suitability
< 0.5	=	poor
0.5-0.59	=	below average
0.6-0.69	=	average
0.7-0.79	=	good
> 0.8	=	excellent

The likelihood of protected species presence is assessed against the below. Target notes are made when appropriate to highlight, for example, protected species evidence or other feature(s) of ecological note.

Table 2: Habitat value (likelihood) of protected species presence assessed against Collins (2023), Edgar *et al.* (2010) and Natural England (2007) etc.

Likelihood of species presence (Habitat Value)	Features that species can use, regardless of evidence being present.
Confirmed Presence	Species are found to be present during the survey. Evidence of species is found to be present during the survey.
Higher likelihood of presence	Buildings, trees or other structures or habitat features of particular significance for use by protected species e.g. nesting habitat, roosting opportunities, and ponds. Habitat of high quality for foraging e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting species e.g. river and or stream valleys and hedgerows. Site is close to known locations of records for protected species.

Moderate and Lower likelihood of species presence	Several potential habitat opportunities in buildings, trees or other habitats. Habitat could be used for foraging e.g. trees, shrub, grassland or water. Site is connected with the wider landscape by linear features that could be used by commuting species e.g. lines of trees and scrub or linked back gardens. A small number of less significant habitat opportunities. Isolated habitat for foraging e.g. a lone tree or patch of scrub. An isolated site not connected by prominent linear landscape features.
Negligible likelihood of species presence	No features suitable for roosting, minor foraging or commuting.

Table 3: Guidelines for categorising potential suitability of PRFs in trees against Collins (2023) guidelines *Source: Adapted from Collins (2023) pp 62, Table 6.2.*

Table 6.2. Guidelines for categorising the potential suitability of PRFs on a proposed development site for bats, to be applied using professional judgement.	
Suitability	Description
PRF-I	PRF is only suitable for individual bats or very small numbers of bats either due to size or lack of suitable surrounding habitats.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.

Table 4: Example of types of PRFs within trees, against Collins (2023) guidelines *Source: Adapted from Collins (2023) pp 65, Table 6.6*

Table 6.6. PRF types that can be exploited by bats and how they form (adapted from Bat Roosts in Trees, BTHK, 2018).		
PRFs formed by disease and decay	PRFs formed by damage	PRFs formed by association
woodpecker holes squirrel holes knot holes pruning cuts tear outs wounds cankers compression forks butt rots	lightning strikes hazard beams subsidence cracks shearing cracks transverse snaps welds lifting bark desiccation fissures frost cracks	fluting ivy

2.1 Limitations

This survey provides a snapshot of the site at the time of the survey only. Species are highly mobile and can turn up from time to time unexpectedly. Health and Safety restrictions or obstructions may limit the ability to find evidence.

All care has been taken to ensure the results and recommendations are suitable to the context of the development and the information gathered on surveys.

If a deviation from the guidelines has been made the reason and justification will be explained below:

No deviation from the standard guidelines has been made for this survey.

3.0 Results

The following section details the results of the desk study, inspection and survey; it includes MAGIC information, biological records data and map/aerial photo information. The results detail the building, structure or tree (numbered for reference) description of any evidence found and habitat value if no evidence has been located.

3.1 Desk Study

The desk study is centred on Grid Reference - TL 23519 36320 and Postcode - SG7 5EN.

3.1.1 MAGIC

The following statutory sites, Natural England Protected Species (NEPS) and priority habitats have been located within the 2km search area (Figure 1).

Table 5: MAGIC search results

Receptor	Distance and Direction to Nearest (m/km)	Description
Statutory sites	~1463m SSE	Ivel Springs LNR
	~878m WNW	Stotfold Mill Meadows LNR
Priority habitat	~600m NNE	Traditional Orchard
	Adjacent to W boundary	Deciduous Woodland
	~571m SW	Chalk Rivers
	~1497m SE	Lowland Meadows
	~771m SW	Good Quality Semi-Improved Grassland
Granted protected species licences	n/a	None within search area

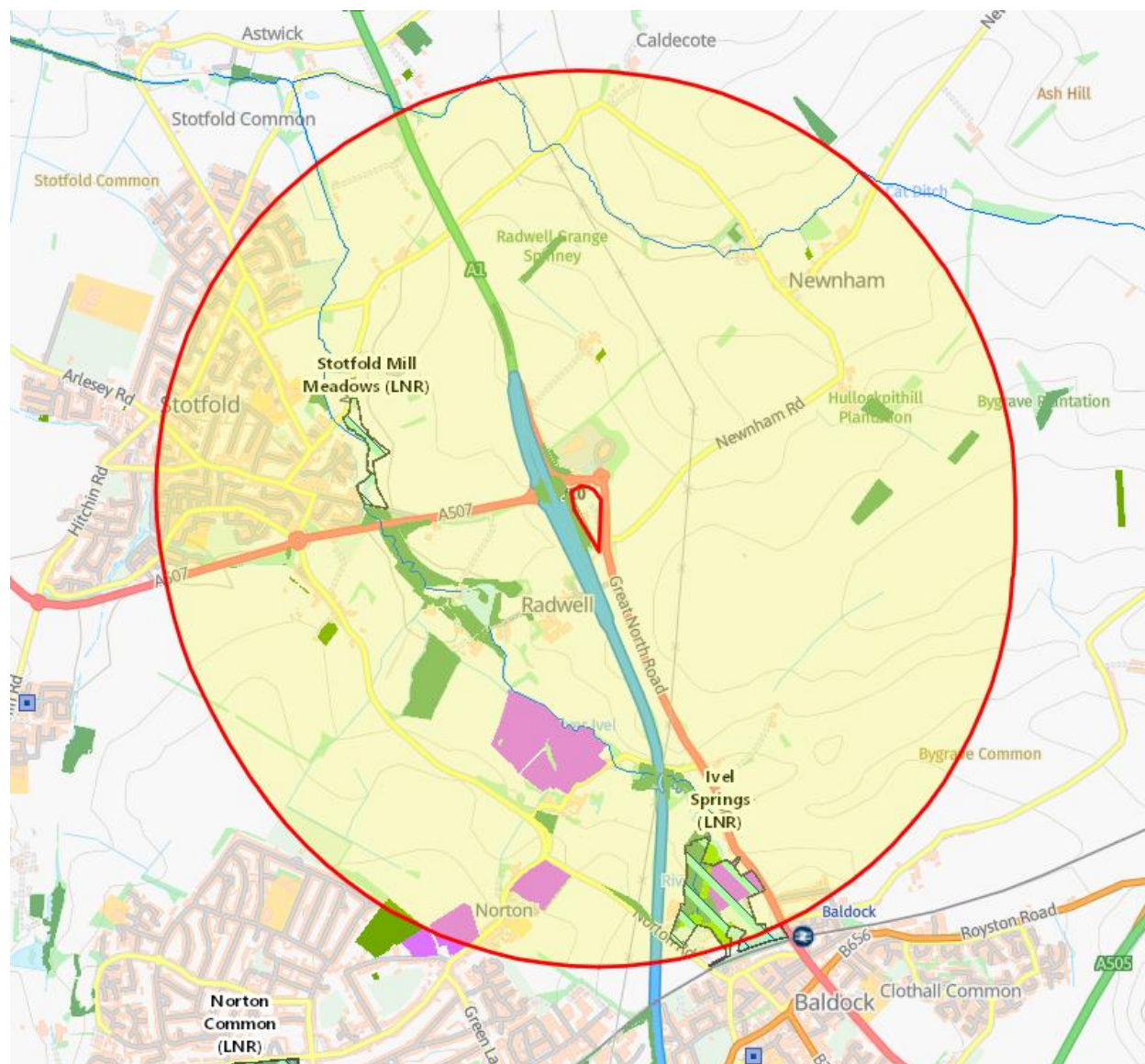


Figure 1: MAGIC Map Search.

3.1.2 GCN DLL Zone

The site falls within a **green** zone under the Natural England District Level Licencing Scheme (DLL) in Hertfordshire.

3.1.3 Biological Records Data

A standard data search of existing records for protected species and nature reserves has been commissioned, below details the results and site context. *Data older than 10 years old will not be included.*

Biological records were obtained from Herts Environmental Records Centre (2026)

Table 6: Biological Records

Species	Number of Records	Closest Record (accuracy)	Most Recent Record (year)
Amphibians			
Common Frog <i>Rana temporaria</i>			
Common Toad <i>Bufo bufo</i>			
Great Crested Newt <i>Triturus cristatus</i>			
Palmate newt <i>Lissotriton helveticus</i>			
Smooth newt <i>Lissotriton vulgaris</i>			
Bats			
Barbastelle <i>Barbastella barbastellus</i>			
Brown Long-Eared <i>Plecotus auritus</i>	2	420m (10m)	2017
Common Pipistrelle <i>Pipistrellus pipistrellus</i>	6	0m (1km)	2017
Daubenton's <i>Myotis daubentonii</i>			
Leisler's <i>Nyctalus leisleri</i>			
Nathusius' Pipistrelle <i>Pipistrellus nathusii</i>			
Natterer's <i>Myotis nattereri</i>			
Noctule <i>Nyctalus noctula</i>	2	0m (1km)	2016
Serotine <i>Eptesicus serotinus</i>	3	0m (1km)	2017
Soprano Pipistrelle <i>Pipistrellus pygmaeus</i>	1	0m (1km)	2017
Unidentified Bat <i>Chiroptera</i> sp.			
Unidentified Long-Eared <i>Plecotus</i> sp.			
Unidentified <i>Myotis</i> <i>Myotis</i> sp.			
Unidentified Pipistrelle <i>Pipistrellus</i> sp.			

Unidentified Vesper <i>Vespertilionidae</i> Whiskered <i>Myotis mystacinus</i>				
Mammals (exc. Bats) Badger <i>Meles meles</i> Hazel Dormouse <i>Muscardinus avellanarius</i> Otter <i>Lutra lutra</i> Water Vole <i>Arvicola amphibius</i> West European Hedgehog <i>Erinaceus europaeus</i>		19	Withheld	2022
Reptiles Adder <i>Vipera berus</i> Common Lizard <i>Zootoca vivipara</i> Grass Snake <i>Natrix helvetica</i> Slow-Worm <i>Anguis fragilis</i>				
Other Birds, Invertebrates, Plants etc.		Various	n/a	n/a
Non-Statutory Sites (see Figure 2)				
Name	Distance and Direction to Nearest (m/km)	Type	Description/designated for	
Radwell Meadows Northwestern Field	810	LWS	Wildlife Site criteria: Grassland indicators.	
Radwell Lake	510	LWS	Old mill pond with marshy ground, ornamental gardens and mixed copse woodland. Site of importance for birds, particularly wildfowl. Wildlife Site criteria: Species.	
River Ivel, Nortonbury	650	LWS	River with marginal vegetation, scrub and trees. Important for Water Vole (<i>Arvicola amphibius</i>) and Common Kingfisher (<i>Alcedo atthis</i>). Wildlife Site criteria: Species.	

Radwell (A507) Road Banks	20	LWS	Road verges supporting areas of species-rich calcareous grassland.
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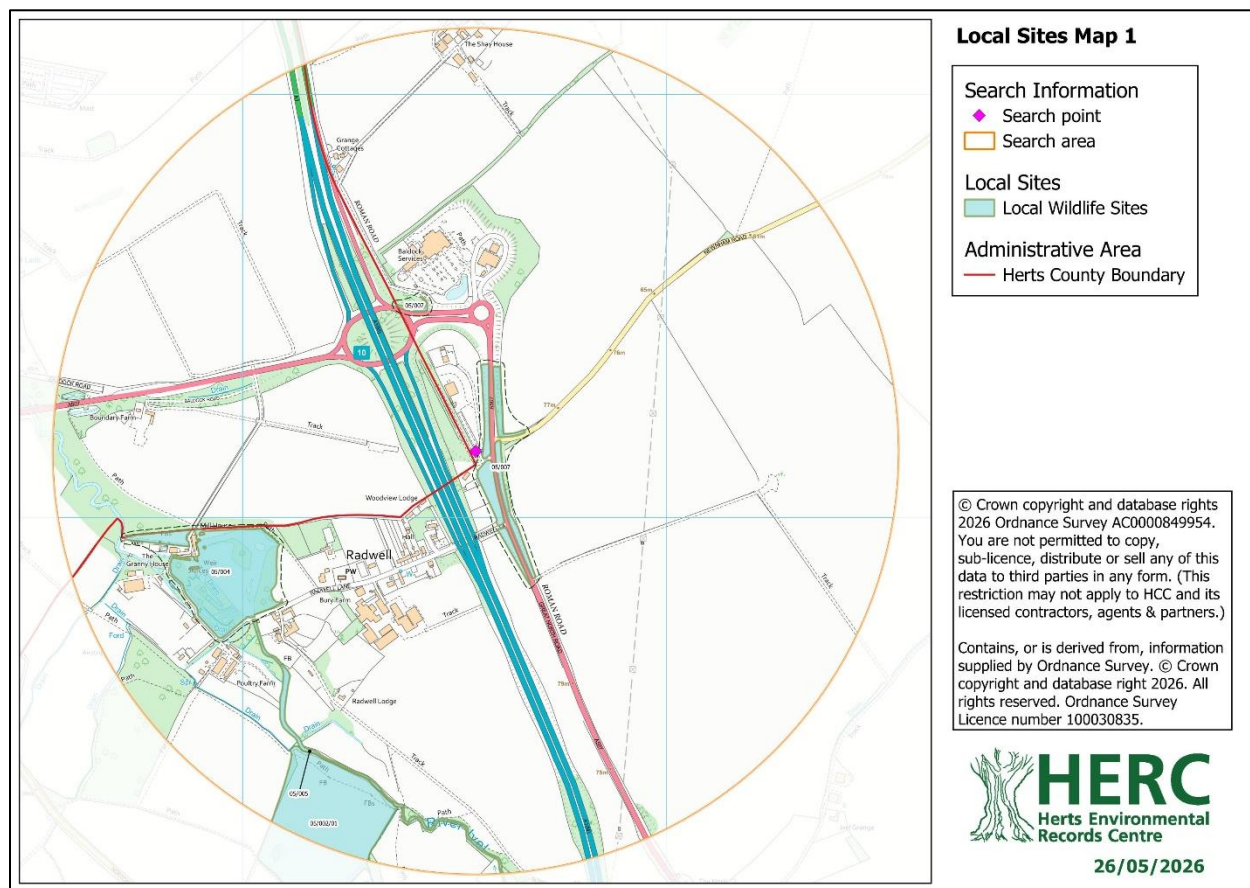


Figure 2: Non-statutory sites.

3.1.4 Site Location and Surrounds

The site is located in Radwell, Hertfordshire and is surrounded by arable fields, pasture, woodland and the A1 in the immediate locale. Table 7 details the commuting, feeding and habitat features in a 1km radius of the site.

Table 7: Habitat features suitable for use by protected species.

Feature	Description
Watercourses	The river Ivel is ~640m SW.
Waterbodies	There is a pond ~70m N. There is an oxbow lake ~500m SW. There is a cluster of approximately 11 ponds and ditches to the SW, the closest is ~690m. There are nine ponds to the W, the closest is ~809m.
Woodland	Woodland is adjacent to the W site boundary. Woodland and trees can be found lining the edges of the river throughout the search area. Additional small areas of woodland can be found scattered within the search area.
Linear e.g. hedgerows	Field margin hedgerows are abundant within the search area.
Pasture/arable/grassland	Arable fields and pasture dominate the search area.
Other	n/a

3.2 Habitat, Building, Tree or Other Structure

This section details the structures/habitat reference and descriptions (see Figure 11 for Site Plan).

Table 8: Weather Records

Parameter	Unit/Value
Temperature	15° C
Cloud cover	100%
Precipitation	Raining
Wind	3/12

3.2.1 Habitats

Habitats found on site are mapped using UKHab (UKHab, 2023). Where deviations from UKHabs occurs, these are informed by the user guidance for the Statutory Biodiversity Metric (DEFRA 2024). There are no hedgerow or watercourse features on site.

Table 9: Habitat features found on site.

Habitat Features		
UKHab Habitat Type (to the appropriate level)	UKHab Essential & Additional Secondary Codes (where relevant)	Description
Developed Land; Sealed Surface (Buildings)		B1 is a large storage barn with a weatherboarded exterior and a pitched roof covered with corrugated metal (Figure 3 - 4).  Cherryfield Ecology 10/06/2026 12:00:24 Figure 3: Front of B1.



Figure 4: Rear of B1.

B2 is a single-storey, prefabricated office building with a flat roof (Figure 5 - 6).



Figure 5: Front of B2.

		 Cherryfield Ecology 10/06/2026 12:27:45 Figure 6: Rear of B2.
Developed Land; Sealed Surface		The site predominantly comprises a sealed concrete surface used for material storage (Figure 7 - 8).  Cherryfield Ecology 10/06/2026 12:20:16 Figure 7: Concrete surface.

		 Figure 8: Concrete surface with portacabins.
Artificial Unvegetated, Unsealed Land		The remainder of the site comprises unsealed, bare ground (Figure 9 - 10). This area contains sparse forbs, though these do not exceed 10% cover of the total area. Species include teasel <i>Dipsacus fullonum</i>, buddleia <i>Buddleja davidii</i>, nettle <i>Urtica dioica</i>, common mallow <i>Malva sylvestris</i> and elder <i>Sambucus nigra</i>.  Figure 9: Bare ground.

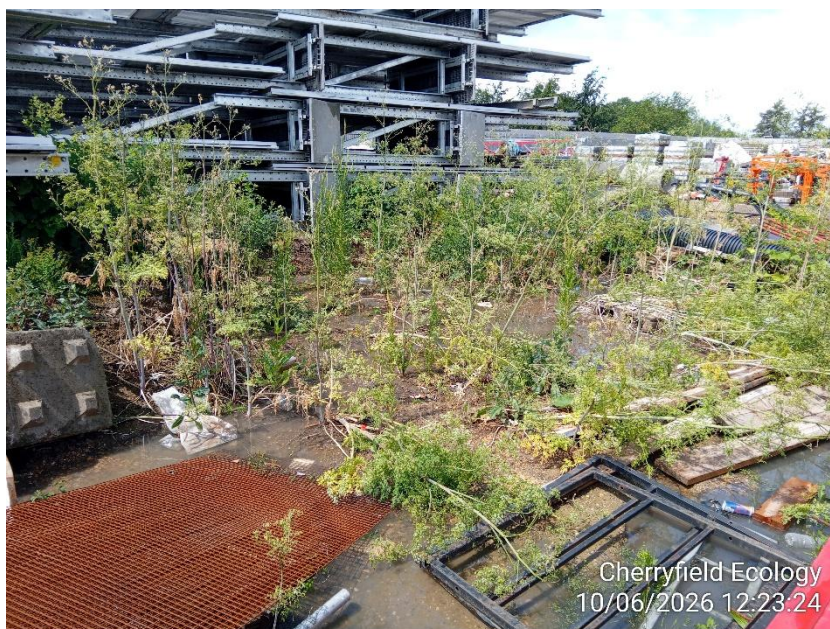


Figure 10: Bare ground with forbs.

Linear Features		
UKHab Habitat Type (to the appropriate level)	UKHab Essential & Additional Secondary Codes (where relevant)	Description
n/a	n/a	n/a
Watercourse Features		
UKHab Habitat Type (to the appropriate level)	UKHab Essential & Additional Secondary Codes (where relevant)	Description
n/a	n/a	n/a

Table 10: Target Notes

Target Note	Description
n/a	n/a

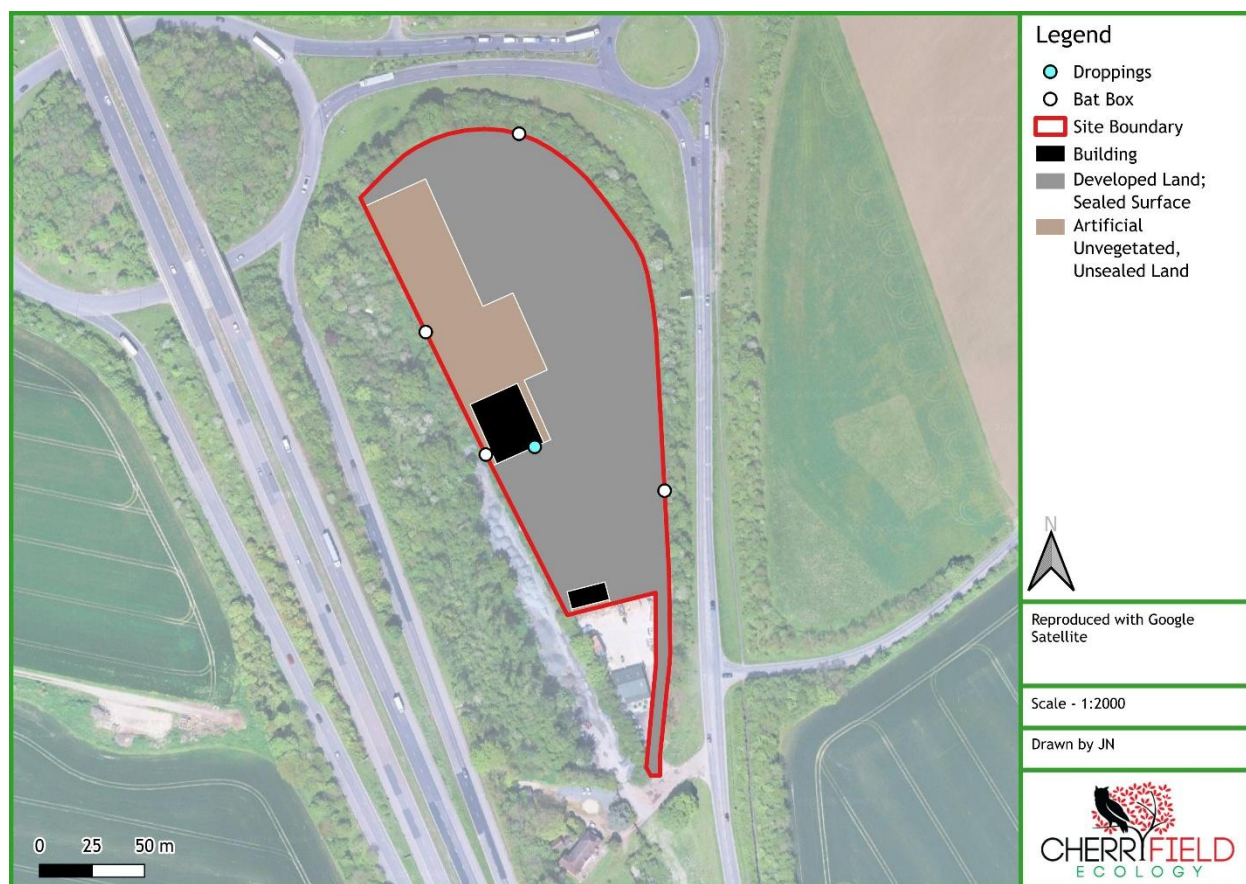


Figure 11: Site Plan.

3.2.2 Species List

Table 11: Species found on site with relevant *DAFOR abundance.

Common Name	Scientific Name	*DAFOR Scale	Habitat
Annual Meadow-Grass	<i>Poa annua</i>	0	Artificial Unvegetated, Unsealed Land
Bristly Oxtongue	<i>Picris echioides</i>	0	Artificial Unvegetated, Unsealed Land

Buddleia	<i>Buddleja davidii</i>	0	Artificial Unvegetated, Unsealed Land
Cleavers	<i>Galium aparine</i>	0	Artificial Unvegetated, Unsealed Land
Comfrey	<i>Symphytum sp.</i>	0	Artificial Unvegetated, Unsealed Land
Common Chickweed	<i>Stellaria media</i>	0	Artificial Unvegetated, Unsealed Land
Common Mallow	<i>Malva sylvestris</i>	0	Artificial Unvegetated, Unsealed Land
Cow Parsley	<i>Anthriscus sylvestris</i>	0	Artificial Unvegetated, Unsealed Land
Dock	<i>Rumex sp.</i>	0	Artificial Unvegetated, Unsealed Land
Elder	<i>Sambucus nigra</i>	0	Artificial Unvegetated, Unsealed Land
Forget-Me-Not	<i>Myosotis sp.</i>	0	Artificial Unvegetated, Unsealed Land
Greater Plantain	<i>Plantago major</i>	0	Artificial Unvegetated, Unsealed Land
Ground-Ivy	<i>Glechoma hederacea</i>	0	Artificial Unvegetated, Unsealed Land
Groundsel	<i>Senecio vulgaris</i>	0	Artificial Unvegetated, Unsealed Land
Guernsey Fleabane	<i>Erigeron sumatrensis</i>	0	Artificial Unvegetated, Unsealed Land
Herb-Robert	<i>Geranium robertianum</i>	0	Artificial Unvegetated, Unsealed Land
Lesser Burdock	<i>Arctium minus</i>	0	Artificial Unvegetated, Unsealed Land
Mullein	<i>Verbascum sp.</i>	0	Artificial Unvegetated, Unsealed Land

Nettle	<i>Urtica dioica</i>	0	Artificial Unvegetated, Unsealed Land
Perennial Rye-Grass	<i>Lolium perenne</i>	0	Artificial Unvegetated, Unsealed Land
Perforate St John's-Wort	<i>Hypericum perforatum</i>	0	Artificial Unvegetated, Unsealed Land
Ragwort	<i>Senecio jacobaea</i>	0	Artificial Unvegetated, Unsealed Land
Shepherd's Purse	<i>Capsella bursa-pastoris</i>	0	Artificial Unvegetated, Unsealed Land
Smooth Sow-Thistle	<i>Sonchus oleraceus</i>	0	Artificial Unvegetated, Unsealed Land
Spear Thistle	<i>Cirsium vulgare</i>	0	Artificial Unvegetated, Unsealed Land
Sycamore	<i>Acer pseudoplatanus</i>	0	Artificial Unvegetated, Unsealed Land
Teasel	<i>Dipsacus fullonum</i>	0	Artificial Unvegetated, Unsealed Land
White Clover	<i>Trifolium repens</i>	0	Artificial Unvegetated, Unsealed Land
Willowherb	<i>Epilobium sp.</i>	0	Artificial Unvegetated, Unsealed Land

*DAFOR - Dominant, Abundant, Frequent, Occasional and Rare

3.3 Evidence or Likelihood of Species Presence & Potential Constraints

This section details the evidence located and likelihood of species presence.

3.3.1 Bats

Table 12: Bats, evidence or the potential for the species use.

Bats found	No bats were found at the time of the survey.
Evidence of bat use	Approximately four droppings were identified below lifted timber cladding on the exterior of B1 (Figure 12). The droppings were located quite high on the building and therefore could not be closely inspected,

	however, they coincide with a previously identified emergence point (Greengage Environmental Ltd, 2021).  Figure 12: Droppings on B1.
Potential for bat use	B1 is a confirmed bat roost as previous emergence surveys confirmed the presence of three day roost locations in use by common and soprano pipistrelles on the building (Greengage Environmental Ltd, 2021). Approximately four droppings were identified on the exterior of the building and coincide with one of the previously identified emergence points. The building otherwise provides moderate potential for roosting bats due to the numerous lifted areas of the timber cladding (Figure 13 - 14).



Figure 13: Lifted timber cladding.



Figure 14: Lifted timber cladding.

B2 provides **negligible** potential for roosting bats due to the lack of potential roosting features and it is understood that this will not be impacted by the proposals.

The site offers limited potential for foraging and commuting due to the lack of linear ecological features and relatively high levels of artificial lighting. Previous emergence surveys (Greengage Environmental Ltd, 2021) recorded low to moderate levels of bat activity, with at least eight species commuting through the site. However, foraging behaviour was only observed in common pipistrelle and, on a small number of occasions, soprano pipistrelle, which used the edges of the barn as linear features for both commuting and foraging.

Bat boxes are present along the perimeter fence (Figure 15), and though no signs of use were identified, these may be used by roosting bats.



Figure 15: Example of a bat box on site.

3.3.2 Badgers

Table 13: Badgers, evidence or the potential for the species use.

Badgers found	No badgers were found at the time of the survey.
Evidence of badger use	No evidence of badger use was found at the time of the survey.
Potential for badger use	The site provides negligible potential for badgers due to comprising of unsuitable habitat and being surrounded by concrete and metal fencing, limiting the site's connectivity.

3.3.3 Breeding Birds

Table 14: Breeding birds, evidence or potential for the species use.

Breeding birds found	No breeding birds were found at the time of the survey.
Evidence of breeding bird use	A pigeon <i>Columba</i> sp. was seen on a ledge inside B1 (Figure 16).  Figure 16: Pigeon inside B1.
Potential for breeding bird use	Breeding birds are confirmed on site as evidence of nesting under the lifted timber cladding of B1 was found during the previous PEA (Greengage Environmental Ltd, 2021). A pigeon <i>Columba</i> sp. was seen on a ledge inside B1 suggesting that it may be in current nesting use. The site otherwise provides moderate potential for breeding birds as the numerous lifted areas of the timber cladding (see Figure 13 - 14) and open-access interior may be used by nesting birds.

3.3.4 Amphibian

Table 15: Amphibians, evidence or potential for species use.

Amphibians found	No great crested newt (GCN) were found at the time of the survey.
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Evidence of amphibian use	No evidence of GCN was found at the time of the survey.
Potential for amphibian use	The site provides negligible potential for GCN due to comprising of unsuitable habitat. Several waterbodies are found within 1km of the site, however, it is surrounded by concrete and metal fencing which limits the site's connectivity. The site falls within a green zone under the Natural England district level licencing scheme suggesting that the area contains sparsely distributed GCN and is less likely to contain important pathways of connecting habitat for this species.

3.3.5 Reptile

Table 16: Reptiles, evidence or potential for species use.

Reptiles found	No reptiles were found at the time of the survey.
Evidence of reptile use	No evidence of reptiles was found at the time of the survey.
Potential for reptile use	The site provides negligible potential for reptiles due to comprising of unsuitable habitat and being surrounded by concrete and metal fencing, limiting the site's connectivity.

3.3.6 Other Species e.g. Hazel Dormouse / Otter / Water Vole

Table 17: Other protected species, evidence or potential for species use.

Species found	No other protected species were found at the time of the survey.
Evidence of species use	No evidence of other protected species was found at the time of the survey.
Potential for species use	The site provides negligible potential for other protected species due to comprising of unsuitable habitat and being surrounded by concrete and metal fencing, limiting the site's connectivity.

3.3.7 Invasive Non-Native (Schedule 9 Species)

Table 18: Invasive non-native species found.

Species found	No invasive non-native species were found at the time of the survey.
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3.3.8 Priority Habitats, Statutory and Non-Statutory Sites

Table 19: Priority Habitats, Statutory and Non-Statutory Sites

Site/Habitat Name	The Radwell (A507) Road Banks Local Wildlife Site (LWS) lies within 20 m of the site boundary and is separated from the site by a bund and a tree-lined hedgerow. It was previously recommended that a Construction Environmental Management Plan (CEMP) be secured through a planning condition to set out the measures required to avoid and mitigate potential impacts relating to pollution and drainage during site construction and operation (Greengage Environmental Ltd, 2021). As the proposals are retrospective and the development has already been completed, no further impacts on the LWS are anticipated.
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4.0 Conclusions, Discussion, Impacts and Recommendations

The following section details the conclusions, discussion, impacts and recommendations in the context of the proposed works.

4.1 Conclusion and Discussion

The proposals include for a retrospective alterations to the lighting on site under planning reference: 25/03197/FP.

The site consists of a timber storage barn (B1), a prefabricated office building (B2), developed land; sealed surface, and artificial unvegetated, unsealed land.

- The site provides **negligible** potential for badgers, great crested newts (GCN), reptiles, and other protected species due to comprising of unsuitable habitat and being surrounded by concrete and metal fencing.
- B1 is a **confirmed** bat roost as previous emergence surveys confirmed the presence of three day roost locations in use by common and soprano pipistrelles on the building (Greengage Environmental Ltd, 2021). Approximately four droppings were identified on the exterior of the building and coincide with one of the previously identified emergence points. The building otherwise provides **moderate** potential for roosting bats due to the numerous lifted areas of the timber cladding. B2 provides **negligible** potential for roosting bats due to the lack of potential roosting features and it is understood that this will not be impacted by the proposals. The site offers limited potential for foraging and commuting due to lacking ecological features and relatively high levels of artificial lighting. Bat boxes are present along the perimeter fence, though no signs of use were identified.
- Breeding birds are **confirmed** on site as evidence of nesting under the lifted timber cladding of B1 was found during the previous PEA (Greengage Environmental Ltd, 2021). A pigeon was seen inside B1 suggesting that it may be in current nesting use. The site otherwise provides **moderate** potential for breeding birds as the numerous lifted areas of the timber cladding and open-access interior may be used by nesting birds.

- The Radwell (A507) Road Banks Local Wildlife Site (LWS) lies within 20 m of the site boundary and is separated from the site by a bund and a tree-lined hedgerow.

Recommended surveys are found in section 4.3.

4.2 Potential Impacts

Impact assessments must be proportionate to the scale of the development (CIEEM, 2018) and Table 20 details a proportionate impact assessment based on current information.

Table 20: Impact Assessment

Impact	Bats - A bat roost will be lost in the development on B1. Breeding Birds - Active nests may be lost in the development.
Characterisation of unmitigated impact on the feature	Bats - A low-level loss/impact at a local level. Breeding Birds - A low-level loss/impact at a local level.
Effect without mitigation	Without mitigation, individual bats and birds could be killed, injured or trapped during the works.
Mitigation and/or potential enhancement	See Table 22 and Table 23
Significance of effects of residual impacts (after mitigation)	Bats - If lost roosts are replaced by bat boxes, the effects would be negligible. Breeding Birds - If lost habitat is replaced by bird boxes and mitigation is followed, the effects would be negligible.

4.3 Recommendations

Badger - No further surveys are necessary, as works have already been completed/are in progress under planning. **Should any further works be proposed, they should be subject to ecological assessment where appropriate.** Further surveys, licences, and/or mitigation measures may be required prior to commencement.

Bats - **Update presence/likely absence surveys (moderate)** will be required (two surveys, three weeks apart), with four surveyors to cover the building B1; these must be undertaken between May to August. If bats are found to be present, one further survey may be required (a minimum of three weeks apart), which can be undertaken in September if required.

Breeding Birds - No further surveys are recommended; however, **the development should take place outside the nesting season (March to August)**. If this is not possible, it is recommended that a qualified ecologist is on-site to ensure the building is not occupied by breeding birds, prior to demolition. Should an occupied nest be found, a buffer zone would need to be created until the nest is no longer in use.

Great Crested Newt (GCN) - No further surveys are necessary, as works have already been completed/are in progress under planning. **Should any further works be proposed, they should be subject to ecological assessment where appropriate.** Further surveys, licences, and/or mitigation measures may be required prior to commencement.

Reptiles - No further surveys are necessary, as works have already been completed/are in progress under planning. **Should any further works be proposed, they should be subject to ecological assessment where appropriate.** Further surveys and/or mitigation measures may be required prior to commencement.

Other protected species - No further surveys are necessary, as works have already been completed/are in progress under planning. **Should any further works be proposed, they should be subject to ecological assessment where appropriate.** Further surveys, licences, and/or mitigation measures may be required prior to commencement.

Habitats - All habitats found are common and widespread, no impacts are foreseen.

The findings outlined in this report are valid for 12-18 months, after which updated surveys will be required.

4.4 Additional Recommendations

Table 21: Additional Recommendations

Work	Specification
General information	The following must be undertaken: - All works must be undertaken within 12-18 months of this report, thereafter a material change check will be required to check for changes that could affect potential protected species habitat. - If any protected species are found at any point whatsoever during works, works will stop and further advice will be sought.
General Precautions	- Trenches and open holes - All trenches and open holes should be covered overnight, or if the hole or trench can't be covered it should be filled in or a rough sawn timber plank installed as an escape route for any species. - General maintenance - If grassland and vegetation is kept in a mown/cut state this should be maintained for the duration of the works. - Store all material on hardstanding or in buildings to prevent artificial refuges from being created.
General bat Information	No development will occur until bat surveys consistent with the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edition) (Collins, 2023) have been undertaken in the appropriate survey season, May to September (Mid-May to August optimal). The Three Tests to be answered before planning can be granted (NE, 2017): <i>Test 1:</i> Regulation 53(2)(e) states: a licence can be granted for the purposes of “preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment”.

	Test 1 can be achieved via the ‘imperative reasons of overriding public interest’. Although not for the ecologist to determine the planning officer will on grant of consent. Test 2: Regulation 53(9)(a) states: the appropriate authority shall not grant a licence unless they are satisfied “that there is no satisfactory alternative” Test 2 would be achieved on the grant of consent as no other sites have been considered for the development. Test 3: Regulation 53(9) (b) states: the appropriate authority shall not grant a licence unless they are satisfied “that the action authorised will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.” Test 3 will be achieved once full emergence/re-entry surveys are conducted and full mitigation appropriate to species and population has been designed and implemented via an NEPS licence issued from the statutory authority (Natural England) if this becomes necessary following a dusk and pre-dawn survey.
Lighting	Any lighting near or shining onto any trees/ hedgerows/ buildings etc, will be designed to minimise the impact it has on potential species and commuting. Lighting will be in line with the BCT lighting guidelines (Bats and Lighting in the UK (Bat Conservation Trust, 2023) https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/ This lighting, where possible, will be of low level, be on downward deflectors and be on PIR sensors. Using LED directional lighting can also be a way of minimising the light spill affecting the habitat. No up-lighting should be used. Light spill must be minimised to as low as possible. This will ensure that the foraging and commuting resources that the protected species are likely to be using is maintained.

Table 22: The local authority has a duty to enhance biodiversity in its day-to-day duties; the following are suggested enhancements that are easily installed into a development and can be cost-effective whilst ensuring a gain for local wildlife.

Work	Specification
Bat, bird and insect box enhancement.	Bat boxes are already present on site. To enhance the site for other species, a variety of bird boxes can also be installed.

A selection of open-fronted boxes and songbird boxes can be installed (Figure 17 - 18); it is recommended that a minimum of two of each of the boxes are installed. These will be installed at a minimum of 2m high and ideally face north to east.



Figure 17: Robin box.



Figure 18: Songbird box.

A variety of insect boxes can be installed in the area; a minimum of one of each box is recommended (Figure 19 - 20).



Figure 19: Urban bee nesting box, used for solitary bees and wasps.



Figure 20: Bug biome, ideal for ladybirds, lacewings and bees.

Swifts *Apus apus*

Warehouses and factories, including those constructed with steel frames and metal cladding, can provide excellent opportunities for establishing swift colonies. Fitting ready-made nestboxes (Figure 21) onto high external walls can greatly increase available nesting sites for swifts and other bird species.

Guidelines for installing swift nestboxes:

- Provide one swift nestbox per 6 m² of wall surface (nestboxes can be securely bolted to the underlying steelwork through the cladding).
- Install nestboxes near the roofline, grouped in clusters of three or more, with around 1 metre between entrance holes.
- Maintain at least 7 metres of clearance below and 5 metres of open space in front of the nestboxes.

- Place them in shaded areas under the eaves, avoiding spots with heavy work activity.
- Although swifts generally do not foul the area beneath their nests, it is still best to avoid installing nestboxes above doors and windows to reduce disturbance for both birds and building users.

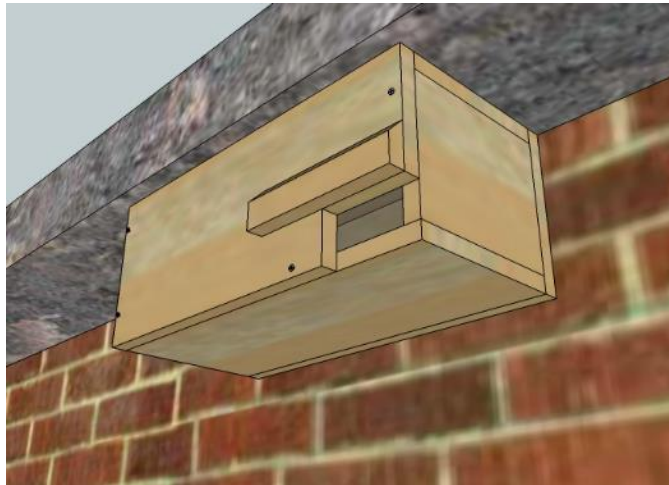


Figure 21: Swift nestbox, *source:*

<http://actionforswifts.blogspot.com/p/diy-swift-box-designs.html>

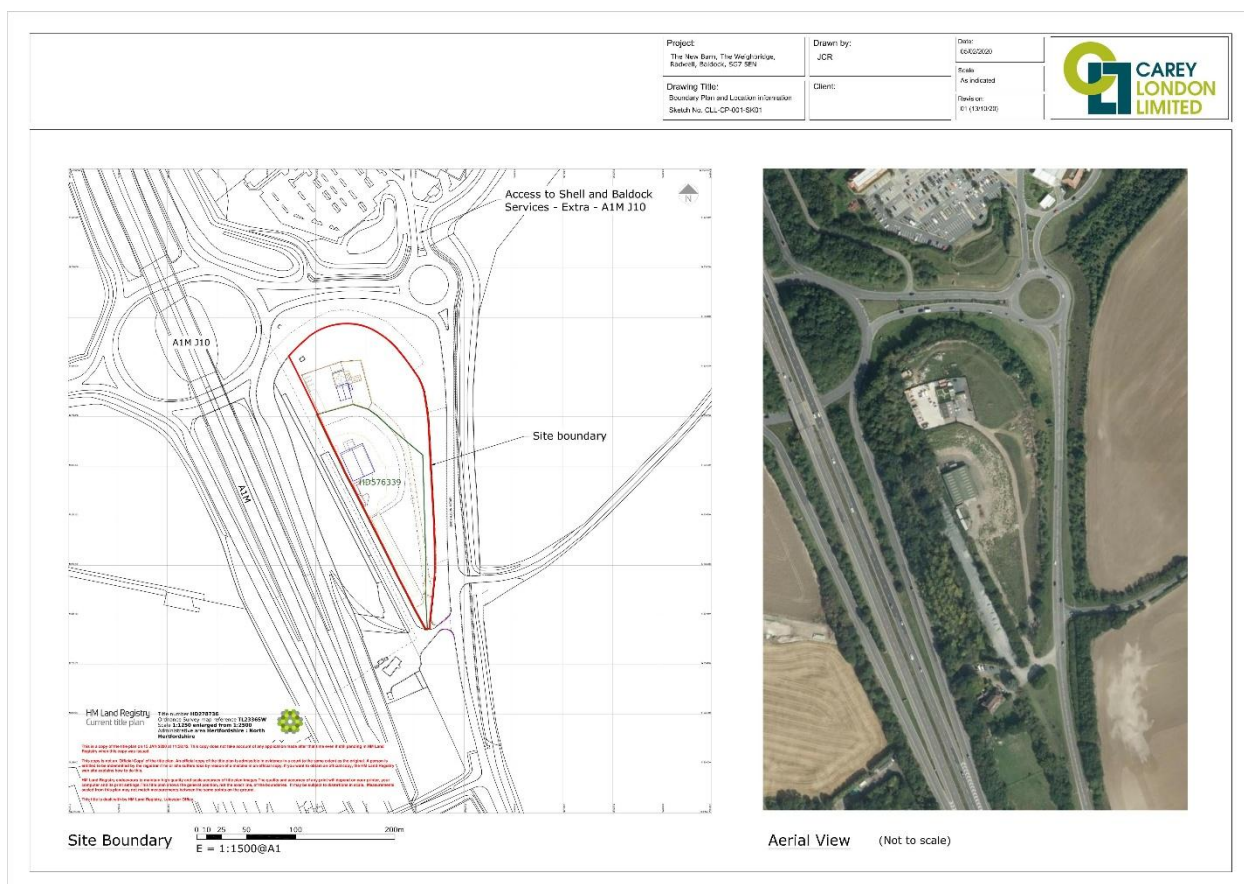
5.0 References

- BCT/ILP (2023), Bats and artificial lighting at night,
<https://www.theilp.org.uk/documents/guidance-note-8-bats-and-artificial-lighting/> accessed as report date
- CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater and Coastal, September 2018. Chartered Institute of Ecology and Environmental Management, Winchester, online at
<https://www.cieem.net/data/files/ECIA%20Guidelines.pdf>
- Collins, J. (ed.), (2023), Bat Surveys for Professional Ecologists: Good Practice Guidelines 4th Edition, BCT, London
- Google Earth, (2026) Located on site postcode, online
- Greengage (2021) Preliminary Ecological Appraisal and bat survey reports (2021)
- Hedgerow Survey Handbook (2nd Edition), DEFRA, 2007, online at
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/69285/pb11951-hedgerow-survey-handbook-070314.pdf accessed on 20/10/2022
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey a technique for environmental audit.
- MAGIC, (2026): Magic maps and designated sites, online
<http://www.magic.gov.uk/Login.aspx?ReturnUrl=%2fMagicMap.aspx>,
accessed as report date.
- National Planning Policy Framework, 2025
- Natural England (2007). Badgers and Development a Guide to Best Practice and Licensing. Natural England. Bristol.
- Paul Edgar, Jim Foster and John Baker (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth
- Records: Herts Environmental Records Centre (2026)
- The Great British Hedgerow Survey (2019), People's Trust for Endangered Species, online <https://hedgerowsurvey.ptes.org/>, accessed report date.

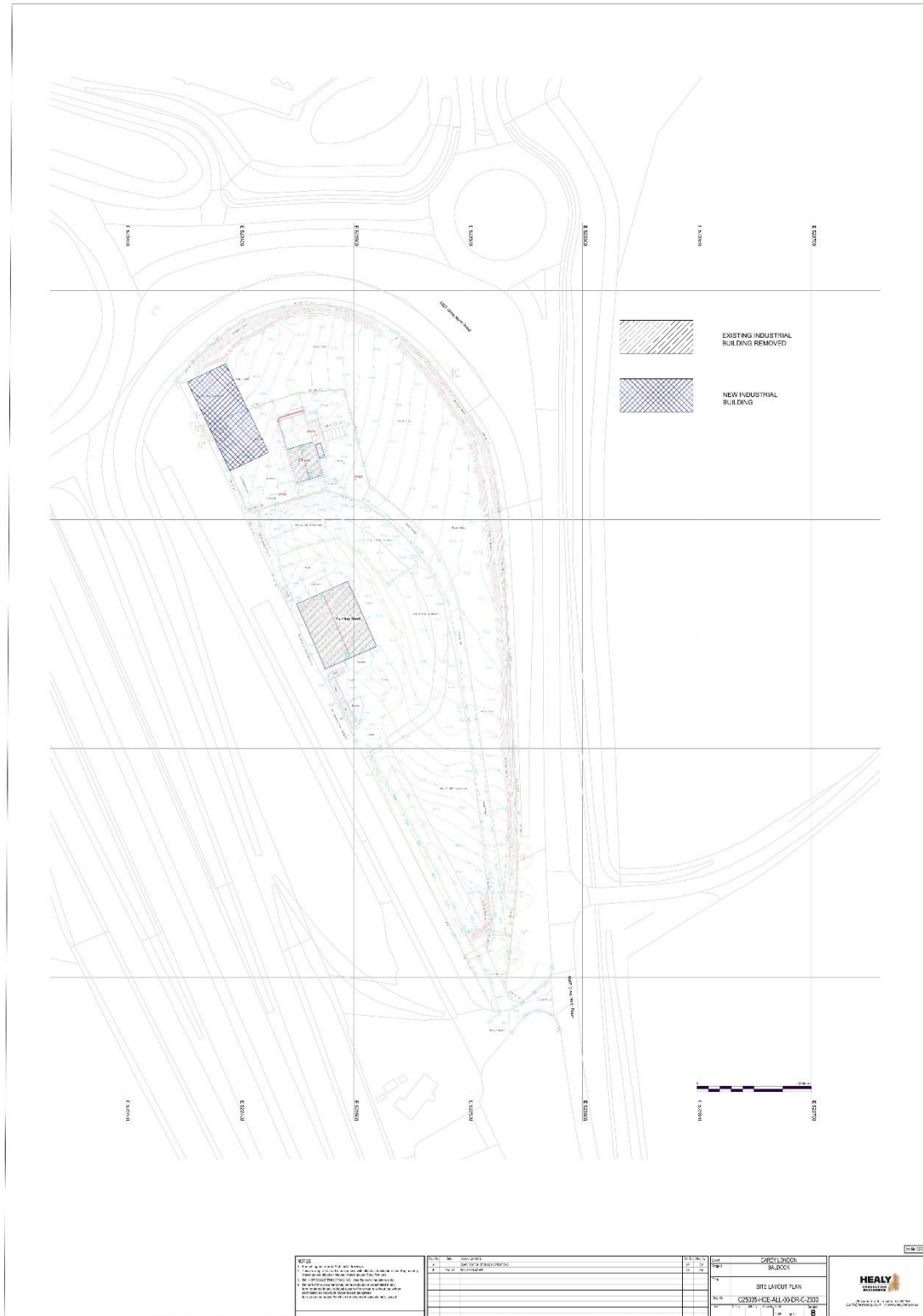
Tom Langton, Catherine Beckett and Jim Foster (2001). Great Crested Newt
Conservation Handbook. Froglife.

UKHab (2023), *UKHabitat Classification*, UKHab, [Online] <https://ukhab.org/>
(Accessed at time of report)

Appendix I - Site Plans



Existing Site Plan (Carey London Ltd, 2020)



Proposed Site Plan (Healy Consulting Engineers, 2026)