Applegarth Farm Shop, Headley Road, Grayshott, Hampshire, GU26 6JL

Ecological Appraisal Report

February 2021

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Ecological Appraisal Report
Applegarth Farm Shop, Headley Road, Grayshott, Hampshire, GU26 6JL
for
Mr Benson

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This report represents sound industry practice; reports and recommends correctly, truthfully and objectively; is appropriate given the local site conditions; scope of works proposed and resources allocated to us by the client; and avoids invalid, biased, and exaggerated statements.

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Contents

1 EXECUTIVE SUMMARY 5

2 INTRODUCTION 8

2.1 PURPOSE OF THIS REPORT & BACKGROUND 8
2.2 SITE DESCRIPTION 9
2.3 PROPOSED ACTIVITIES 9
2.4 CURRENT PLANNING STATUS 9
2.5 STRUCTURE OF THIS REPORT 10

3 METHODS 11

3.1 DESK STUDY 11
3.2 FIELD SURVEY 11
3.2.1 General 11
3.2.2 Dates, times and weather 12
3.2.3 Personnel 13
3.2.4 Botanical surveys - Phase 1 Habitat Survey 13
3.2.5 Animal surveys 13
General 13
Bats 14
Badger 14
Birds 14
Dormice 15
Widespread species of reptile 15

4 RESULTS 16

4.1 DESK STUDY 16
4.1.1 Designated sites 16
4.1.2 European Protected Species 16
4.2 HABITATS AND PLANT SPECIES 18
4.2.1 Habitats (The Ecology Co-operation Ltd, 2019) 18
4.2.2 Plant species 19
4.3 PROTECTED VERTEBRATES 19
4.3.1 Bats 19
Bat emergence & re-entry survey results 19
Bat roost suitability of trees 21
Commuting and foraging habitat 21
4.3.2 Dormice 21
4.3.3 Great crested newt 21
4.3.4 Badger 22
4.3.5 Birds 22
4.3.6 Widespread species of reptile 22

5 INTERPRETATION AND EVALUATION 23

5.1 CONSTRAINTS ON THE SURVEYS 23
5.1.1 Constraints on the survey data 23
5.1.2 Constraints on the mitigation, compensation and enhancement measures 23
5.2 SURVEY REPORT EXPIRY 23
5.3 LEGAL CONTEXT 24
5.4 POTENTIAL IMPACTS OF THE PROPOSED DEVELOPMENT 24
5.4.1 Desk study 24

5.4.2 Habitats and plants *24*
5.4.3 Bats *25*
Shop 25
Barn 25
Trees 25
Foraging and commuting habitat 25
5.4.4 Dormice *26*
5.4.5 Great crested newt *26*
5.4.6 Badger *26*
5.4.7 Birds *26*
5.4.8 Widespread species of reptile *27*
5.5 FURTHER SURVEY 27
5.6 OUTLINE MITIGATION & ENHANCEMENT MEASURES 27
5.6.1 General *27*
5.6.2 Habitats *28*
5.6.3 Bats *28*
General 28
Mitigation and enhancement measures 28
Lighting 30
5.6.4 Birds *31*
Mitigation 31
Enhancement – bird boxes 31
5.6.5 Widespread species of reptile *32*
5.6.6 Invertebrates *33*
5.6.7 Amphibians & hedgehogs *34*
5.6.8 Planting *34*
5.7 REQUIREMENT FOR NATURAL ENGLAND LICENCES 37
5.7.1 Habitat Regulation licences *37*
5.7.2 Protection of Badgers Act (1992) licences *38*

6 FIGURES 39

7 PHOTOGRAPHS 44

8 REFERENCES 45

9 APPENDIX A: PROTECTED SPECIES LEGISLATION 47

9.1 GENERAL 47
9.2 BATS 47
9.3 DORMICE 47
9.4 GREAT CRESTED NEWT 48
9.5 BADGER 48
9.6 BIRDS 49
9.6.1 Birds - general protection *49*
9.6.2 Birds - specially protected species *49*
9.7 WIDESPREAD SPECIES OF REPTILE 49
9.8 NATURAL ENGLAND LICENCES 49
9.9 NATIONAL PLANNING CONTEXT 50
9.9.1 General *50*
9.9.2 National Planning Policy Framework (NPPF) *50*

10 APPENDIX B: SEED MIX COMPOSITION 52

1 EXECUTIVE SUMMARY

1. This report provides information from reports and surveys carried out by Hampshire Ecological Services Ltd and a Preliminary Ecological Appraisal Report by The Ecology Co-operation Ltd, produced for Mr Benson, in connection with a proposal to demolish then redevelop the farm shop buildings at Applegarth Farm Shop, Headley Road, Grayshott, Hampshire, GU26 6JL (approximate Ordnance Survey Grid Reference SU858358). The site location is shown in *Figures 1* and *2*; and a site plan is given in *Figure 3* (see *Section 6*).

2. Ecological surveys used within this report were carried out by The Ecology Co-operation Ltd and Hampshire Ecological Services Ltd in 2019 and 2020.

3. The site consists of a collection of predominately wooden buildings with the Shop and Barn the largest amongst several smaller sheds. The immediate surroundings are seating areas, a children's play area, a carpark and a storage/yard area. The habitats are shown in the Phase 1 Habitat Survey map given in *Figure 4* (see *Section 6*).

4. The majority of the habitats and plant species observed on site are widespread and common; the habitats are of negligible nature conservation value from a botanical perspective. The exception is mature trees and hedgerows on site. These are of high ecological value and should be retained and protected where possible (see *Section 5.6*).

5. No plant species listed on *Schedules 8* or *9* of the *Wildlife and Countryside Act 1981* (as amended) were recorded on the site.

6. An ecological impact assessment, dusk emergence and pre-dawn re-entry surveys carried out by Jonathon Cox Associates (2015) assessed the buildings as having bat roost suitability. Common pipistrelle and soprano pipistrelle were recorded emerging and re-entering the Barn during these surveys.

7. A preliminary ecological appraisal carried out by The Ecology Co-operation Ltd (2019) the shop was assessed as having moderate bat roost suitability and the barn was identified as a confirmed bat roost based on the presence of bat droppings.

8. The trees on site were identified as having negligible bat roost suitability (The Ecology Co-operation Ltd, 2019).

9. The mature trees, ornamental planting and nearby woodland and hedgerows provide good foraging habitat for bats. They also link to a network of hedges, tree-lines and strips of woodland providing links into and from the wider landscape in all directions.

10. The hedges are suitable habitat for dormice. There is also suitable habitat on adjacent land. Previous dormouse surveys carried out on the Applegarth Vale development site by New Leaf

Ecology (2014), found one nesting dormouse in a tube, within the north-west hedgerow. However, this hedge is outside the boundaries of this site. It is understood that the current proposals do not directly impact on the suitable habitat and all suitable dormouse habitat will be retained. Therefore no impacts are anticipated on dormice in the area and no further surveys are proposed.

11. No badger setts were found during any of the surveys, however some minor evidence of foraging activity was observed in the field to the north of the site.

12. The removal of any vegetation with the potential to support nesting birds should be undertaken outside of the bird breeding season (which is late February to August inclusive) to avoid the destruction of active bird nests and hence comply with the law (*Wildlife and Countryside Act 1981* (as amended)). If this is not possible, and vegetation has to be removed during the nesting season, then it should be inspected (by an ecologist) for nests immediately prior to removal of the vegetation. If any active nests are found during the works, a 5m buffer zone should be established around it and be temporarily fenced off to prevent plant or personnel disturbing the nest until the end of the breeding bird season (or until the nest is no longer in use).

13. Suitable habitat for reptiles is present on the farm shop site. Reptile surveys confirmed the presence of common lizards on the farm shop site and previous surveys in 2014 found slow worm and grass snake on the edges of the receptor site. A translocation scheme and enhancements have been devised, these are detailed in *Applegarth Farm, Headley Road, Grayshott, Hampshire, GU26 6JL. Reptile Survey & Mitigation Strategy Report* (Hampshire Ecological services Ltd, 2021).

14. To minimise the impact on the retained trees and hedges, Heras fencing or similar should be used to protect the roots of retained trees and bushes during construction. The guidance provided in BS 5837 *Trees in relation to Construction* provides further advice.

15. National Planning Policy Framework (NPPF 2019) states "*opportunities to incorporate biodiversity in and around developments should be encouraged*" as part of the consideration for "*presumption in favour of sustainable development*". Therefore, the following outline mitigation and enhancements are proposed:
    - A detailed method statement with a mitigation strategy aimed at maintaining the conservation status of bats will need to be prepared as part of a bat licence from Natural England. The proposed mitigation and enhancement works for the site include provision of like-for-like bat roost replacement in the new buildings, these are detailed in *Section 5.6.3.* and in *Applegarth Farm Shop & Barn, Headley Road, Grayshott, Hampshire, GU26 6JL. Bat Survey Report* (Hampshire Ecological Services Ltd, 2021).
    - The site will be enhanced for birds. The bird boxes should consist of a mixture of boxes, including;
        - at least two small hole bird boxes such as Vivara Pro Seville 28mm Woodstone Nest Box, suitable for blue tits and coal tits;

- at least two large hole bird boxes, such as Vivara Pro Seville 32mm Woodstone Nest Box, suitable for blue tits and great tits;
- one multi-chamber box suitable for house sparrows, such as a Vivara Pro WoodStone House Sparrow Nest Box;
- two or more swift boxes, such as Ibstock Eco-habitat either incorporated into the build structure or mounted on the building.

The proposed bird boxes are summarised in *Table 5.6.4.1*

- To enhance the site for invertebrates, ten 'bug boxes' will be installed. The boxes should be suitable for a range of invertebrates (see *Table 5.6.6.1*);
- Any fencing will have 15cm x 15cm gaps beneath to allow wildlife such as amphibians and hedgehogs to access the landscaping; and
- Plants that attract insects are generally helpful and trees, shrubs and flowering plants can provide cover for wildlife. Therefore, to enhance the ecological value of the site, the landscaping should incorporate a mixture of native and non-native species of value to wildlife (see *Section 5.6.8*).

16. This survey data is valid for a maximum of 12 months. If more than 12 months elapses after completion of all surveys, it may be advisable to conduct further survey work to obtain up-to-date information prior to commencement of construction to ensure protected species compliance.

17. There are five statutory designated sites within 5km of the site. In addition, there is one Site of Importance for Nature Conservation (SINC), which is also an ancient semi-natural and ancient replanted woodland, within 500m of the site.

18. As a result of its proximity to these designated sites, the impacts of any works on the SPAs and SACs must be considered. The redeveloped farm shop may lead to an increase in recreational pressure on nearby designated sites. Due to the increase in people using the site, a financial contribution may be required to the local authority towards the creation and maintenance of areas of Suitable Alternative Natural Greenspace (SANG), such as the adjacent Applegarth Vale site.

19. There have been three granted European Protected Species (EPS) licences for bats within 2km of the site. These are listed in *Table 4.1.2.1.* and their locations are shown in *Figure 4.1.2.1.*

2 INTRODUCTION

2.1 Purpose of this report & background

This report provides information from reports and surveys carried out by Hampshire Ecological Services Ltd and a Preliminary Ecological Appraisal Report by The Ecology Co-operation Ltd, produced for Mr Benson, in connection with a proposal to redevelop the farm shop site at Applegarth Farm Shop, Headley Road, Grayshott, Hampshire, GU26 6JL (approximate Ordnance Survey Grid Reference SU858358). The site location is shown in *Figures 1* and *2*; and a site plan is given in *Figure 3* (see *Section 6*).

This project is being undertaken concurrently with a proposal to create Eco Pods on the field immediately north of the Farm Shop site, within the wider ownership of the site. This project is subject to a separate planning application and separate ecological appraisal report (Hampshire Ecological Services Ltd, 2021)

Previously an ecological impact assessment was carried out by Jonathon Cox Associates (2015) in 2013 and 2014. As part of the surveys a static bat detector was deployed on the 18th September 2013 and dusk emergence and pre-dawn re-entry surveys were carried out on the 8th, 27th & 30th June 2014. Common pipistrelle and soprano pipistrelle were recorded emerging and re-entering the Barn during these surveys.

A preliminary ecological appraisal was carried out by Owen Crawshaw BSc (Hons) ACIEEM of The Ecology Co-operation Ltd (2019) on the 21st August 2019, to conduct an appraisal of the buildings and identify potential ecological constraints. The Shop was assessed as having moderate bat roost potential and it was recommended that two emergence/ re-entry surveys were carried out on this building. The Barn was identified as a confirmed bat roost based on the presence of bat droppings and the emerging bats observed during the surveys in 2014. It was recommended that three emergence/ re-entry surveys were carried out on this building.

Hampshire Ecological Services Ltd were commissioned to carry out dusk emergence surveys and pre-dawn re-entry surveys in 2019 to identify if bats are using the Shop and to update the information on the Barn. In 2020 a further update dusk emergence survey was carried out on the Barn.

Hampshire Ecological Services Ltd were commissioned to carry out reptile surveys in 2020 to identify if the grassland areas around the farm shop site supported a reptile population. A previous survey of the adjacent Applegarth Vale development site was carried out by Jonathan Cox Associates between April and June 2014 (Jonathan Cox Associates, 2014) and found a low presence of grass snake (two individuals) and slow worm (one individual) on the earth bank (driving range bund) on the northern part of the wider site.

2.2 Site description

The site consists of a collection of predominately wooden buildings with the Shop and Barn the largest amongst several smaller sheds. The immediate surroundings are seating areas, a children's play area, a carpark and a storage/yard area. Plans and aerial photos showing the buildings and areas surveyed are shown in *Figures 1 & 2* in *Section 6*.

The site lies on the north-east side of Headley Road, between the villages of Grayshott and Headley Down. The immediate surroundings are the residential properties of a new housing development (Applegarth Vale) to the east; a derelict golf driving range and grassland to the north-west; and Grayshott Health Spa to the south-west. There are extensive areas of woodland in all directions. Ludshott Common SSSI (part of the Wealden Heath Phase II SPA) is to the south-east.

2.3 Proposed activities

These surveys were carried out in connection with a proposal to carry out the following works:

- To redevelop the farm shop site, through demolition then new buildings.

2.4 Current planning status

Planning permission is being applied for at this site.

2.5 Structure of this report

This report is structured as follows:

- *Section 1* contains the executive summary;
- *Section 2* contains an introduction;
- *Section 3* describes the survey methods;
- *Section 4* describes the results;
- *Section 5* evaluates the findings;
- *Section 6* contains the figures including:
    - *Figure 1* gives aerial photographs showing the site location;
    - *Figure 2* gives an Ordnance Survey map showing the location of the site;
    - *Figure 3* gives a site plan;
    - *Figure 4*-gives Phase 1 Habitat Survey map of the site; and
    - *Figure 5* gives a plan showing the mitigation and enhancement measures on the site.
- *Section 7* gives photographs of the site;
- *Section 8* lists the references;
- *Appendix A* lists key legislation and regulations; and
- *Appendix B* lists seed compositions for enhancement planting over the site.

3 METHODS

3.1 Desk study

The *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk) was used to search for designated sites on or adjacent to the site including Local Nature Reserves (LNRs), National Nature Reserves (NNRs), Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Ramsar sites. The search area was 5km for SAC and SPA sites and 2km for LNRs, NNRs, Ramsar sites and SSSIs, as specified in Hampshire's *Biodiversity Checklist*. The search area is also 500m for Sites of Importance to Nature Conservation (SINCs) and ancient semi-natural and ancient replanted woodlands.

In addition, the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk) was used to search for granted European Protected Species (EPS) licences within 2km of the site.

A data search from the Hampshire Biodiversity Information Centre (HBIC) has not been commissioned in relation to this site.

3.2 Field survey

3.2.1 General

An ecological appraisal was carried out on this site. This type of survey is not designed to prove presence or absence of significant or protected species; it is used to highlight habitat that is suitable and to identify where further work to show presence or absence is required. However, in some circumstance's species can be ruled out because there is unsuitable habitat or barriers to inward migration.

Significant species were defined as follows:

- European Protected Species (listed on *Schedules 2* and *5* of the *Conservation of Habitats & Species Regulations 2017)*;
- nationally protected species under *Schedules 1*, *5* and *8* of the *Wildlife & Countryside Act 1981*, the *Protection of Badgers Act 1992* (as amended) and the *Deer Act 1991*;
- non-native pest species listed on *Schedule 9* of the *Wildlife & Countryside Act 1981* (as amended);
- species listed as Critically Endangered, Endangered or Vulnerable on the *IUCN Red List*;
- all species listed on the RSPB *Birds of Conservation Concern 2015* as Red or Amber; and
- Nationally Rare or Nationally Scarce species.

3.2.2 Dates, times and weather

An ecological impact assessment was carried out by Jonathon Cox Associates (2015) in 2013 and 2014. As part of the surveys a static bat detector was deployed on the 18th September 2013 and dusk emergence and pre-dawn re-entry surveys were carried out on the 8th, 27th & 30th June 2014.

A preliminary ecological appraisal of the farm shop site was carried out by The Ecology Co-operation Ltd (2019) on the 21st August 2019, to conduct an appraisal of the buildings and identify potential ecological constraints.

Five bat dusk emergence and pre-dawn re-entry surveys were carried out on the shop and the barn, by Hampshire Ecological Services, between the 28th August and 24th September 2019 and an update survey was carried out on the 31st August 2020. Details of the dates, weather and times of the surveys are given in *Table 3.1.1.*

Table 3.2.2.1. Dates, times and weather conditions during the bat surveys.

Date	**Start time**	**End time**	**Sunset/ sunrise**	**Temperature at start & end (**°C**)**	**Wind (Beaufort scale)**	**Cloud cover (%)**
28/08/2019	04:38	06:23	06:08	19.2 – 18.0	1	90
30/08/2019	04:47	06:27	06:12	15.0 – 14.0	0	40
11/09/2019	19:13	20:58	19:28	18.0 – 18.2	0	100
16/09/2019	19:01	20:46	19:06	17.2 – 17.1	1	100
24/09/2019	18:43	20:28	18:58	16.2 – 15.1	0	100
31/08/2020	19:34	21:19	19:49	10.0 – 9.0	0	0 - 20

Artificial reptile refugia were placed around the development site on the 10th September 2020 in suitable reptile habitat and left for a four-day settling period. Seven visits (*Table 3.2.2.2*) were then carried out between the 14th & 29th September 2020 to assess the presence or likely absence of reptiles.

Table 3.2.2.2. Dates, times and weather conditions during the reptile surveys.

Date	**Time**	**Temp (°C)**	**General weather**
14/09/20	11:25	20.0	Very warm, clear and dry with a light air (Beaufort scale 1)
17/09/20	09:50	15.0	Warm, clear and dry with a light breeze (Beaufort scale 2)
20/09/20	10:40	18.0	Warm and dry with 50% cloud cover and a light air (Beaufort scale 1)
21/09/20	10:10	15.0	Cool and dry with 33% cloud cover and light air (Beaufort scale 1).
27/09/20	14:35	14.0	Mild, overcast and dry with a moderate breeze (Beaufort scale 4)
28/09/20	14:05	17.0	Warm, clear and dry with a gentle breeze (Beaufort scale 3)
29/09/20	14:25	17.0	Warm, clear and dry with a light air (Beaufort scale 1)

3.2.3 Personnel

The preliminary ecological appraisal of the farm shop site was carried out by was carried out by Owen Crawshaw BSc (Hons) ACIEEM of The Ecology Co-operation Ltd.

The dusk emergence and pre-dawn re-entry surveys were carried out by John Poland CEnv MCIEEM CBiol MSB (Bat Class Licence registration number 2015-11159-CLS-CLS), Nicola Pyle BSc MCIEEM (Bat Class Licence registration number 2015-18259-CLS-CLS), Calum Cooper BSc (Hons) GradCIEEM, Chloe Mockridge MSc GradCIEEM, Claire Ford MSc, Ben Willers BSc (Hons), Sophie Jones BSc, Andrew Lomas MSc, Ellie Welch BSc and Nathan Dixon. All surveyors are experienced in carrying out bat surveys using detectors.

The reptile surveys were carried out by Rozel Hopkins MSci (Hons), Andrew Lomas BSc (Hons) MSc and Ellie Welch BSc (Hons) who are all experienced in carrying out reptile surveys and collecting biometric data from captured reptiles.

This report was reviewed by John Poland CEnv MCIEEM CBiol MSB, who is a full member of the CIEEM, a Chartered Environmentalist (CEnv), a Chartered Biologist (CBiol) and multi-species licence holder with 20 years of experience in ecological consultancy and Victoria Russell MCIEEM who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) with over 23 years of experience in ecological consultancy.

All staff adhere to the Chartered Institute of Ecology and Environmental Management's (CIEEM) *Code of Professional Conduct*.

3.2.4 Botanical surveys - Phase 1 Habitat Survey

The botanical surveys in this report are based on the Phase 1 Habitat Survey methodology (Joint Nature Conservation Committee 2003) and involve the following elements: habitat mapping using a set of standard colour codes to indicate habitat types on a Phase 1 Habitat Survey map; and descriptions of habitats and features of ecological or nature conservation interest relating to locations on the Phase 1 Habitat Survey map.

Basic Phase 1 Habitat Survey methods are described in detail in Joint Nature Conservation Committee (JNCC, 2003). Limits to the method are discussed in Cherrill & McClean (1999).

Plant nomenclature in this report follows Poland & Clement (2009) for native, naturalised and garden species of vascular plant. Plant names in the text are given with scientific names first, followed by the English name in brackets.

3.2.5 Animal surveys

General

The habitat was assessed to determine whether or not it is suitable for those protected vertebrates that occur in the region. Initial surveys do not usually confirm species presence or absence, but

obvious signs and incidental sightings of protected species would have been noted had they been encountered.

An assessment was made of the likelihood of protected vertebrates using the site. Taking into consideration the geographical region and habitat type, species and groups that might be encountered are:

- bats;
- dormice;
- badger;
- nesting birds; and
- reptiles.

According to aerial photographs (GoogleEarth™) and online Ordnance Survey 1:25,000 maps, there are no ponds within 500m or rivers on or adjacent to the site, therefore great crested newt, otter and water vole are not considered further.

Details of initial survey methods for each of the relevant species that might have been encountered are given below and an overview of the legal protection of the species and groups is provided in *Appendix A*.

Bats

General

The surveys for bats concentrated on identifying foraging opportunities and potential roost locations or hibernation sites.

Assessment of commuting and foraging habitat

Bats use a variety of habitats for foraging, in particular hedgerows, woods and water bodies, and roost in a range of structures including buildings, trees, bridges and caves. Areas that could be used for foraging were noted.

Badger

An initial assessment was carried out to identify areas that might be used by badger for commuting, foraging and sett-building within at least 30m of all areas potentially affected by the works (where access was possible). Evidence of badgers including setts, latrines, feeding signs and paths were searched for.

Birds

Habitat that might be used by nesting birds was identified. Different bird species use buildings, trees and shrubs, undergrowth or even open fields to nest. The suitability of the site for use by a range of bird species was assessed, giving consideration to factors such as cover, food, disturbance and other habitat requirements.

Dormice

The site was assessed for habitat with the potential to support dormice. Habitats typically suitable for dormice include:

- deciduous woodland, with a dense understory, species-rich shrub-layer and thick ground cover;
- continuous, thick, wide hedgerows over 4m high with connections to nearby suitable woodland;
- hazel or sweet chestnut coppice; or
- thick continuous areas of scrub, particularly bramble, close to hedgerows or woodlands.

Widespread species of reptile

The site was assessed for widespread species of reptile, with particular attention paid to those features that could be used as basking areas (*e.g.* south-facing slopes), hibernation sites (*e.g.* banks, walls, piles of hardcore) and opportunities for foraging (rough grassland and scrub). The site was assessed for its suitability for each of the four widespread reptile species which have broadly similar habitat requirements. However, more specific requirements include the following (Beebee & Griffiths 2000):

- common lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to walls and pastures, although one of their favoured habitats is rough grassland;
- slow-worms (*Anguis fragilis*) use similar habitats to common lizards, and are often found in rank grassland, gardens and derelict land;
- grass snakes (*Natrix natrix*) have broadly similar requirements to common lizards with a greater reliance on ponds and wetlands, where they prey on common frogs; and
- adders (*Vipera berus*) use a range of fairly open habitats with some cover, but are most often found in dry heath.

Reptile activity is highly seasonal; they hibernate over the winter (October to March) and are active over the summer months. They become increasingly active as temperatures increase in spring, and in most years they are fully active by mid-April. Reproduction varies between species, but generally peaks in mid-summer when reptiles are at their most active. In late September/ October, activity begins to decrease as reptiles seek frost-free refuges for hibernation.

4 RESULTS

4.1 Desk study

4.1.1 Designated sites

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there are five statutory designated sites within 5km of the site. In addition, there is one Site of Importance for Nature Conservation (SINC), which is also an ancient semi-natural and ancient replanted woodland, within 500m of the site. These are listed in *Table 4.1.1.1.*

Table 4.1.1.1. Statutory designated sites within 5km of the site and Sites of Importance for Nature Conservation (SINCs) and ancient semi-natural and ancient replanted woodlands within 500m of the site.

Level of designation	**Designation**	**Name**	**Distance & direction from site**
International	SPA	Wealden Heaths Phase II	*c.*500m south-west *c.*4,180m south-west
		Thursley, Hankley & Frensham Commons	*c.*3,160m north
	Ramsar	-	-
	SAC	Thursley, Ash, Pirbright & Chobham	*c.*3,250m north
		Woolmer Forest	*c.*4,700m south-west
National	SSSI	Bramshott & Ludshott Commons	*c.*500m south-west
	NNR	-	-
County	LNR	-	-
Local	SINC	Whitmoor Hanger	*c.*75m north-east
	Ancient woodland	Whitmoor Hanger	*c.*75m north-east

4.1.2 European Protected Species

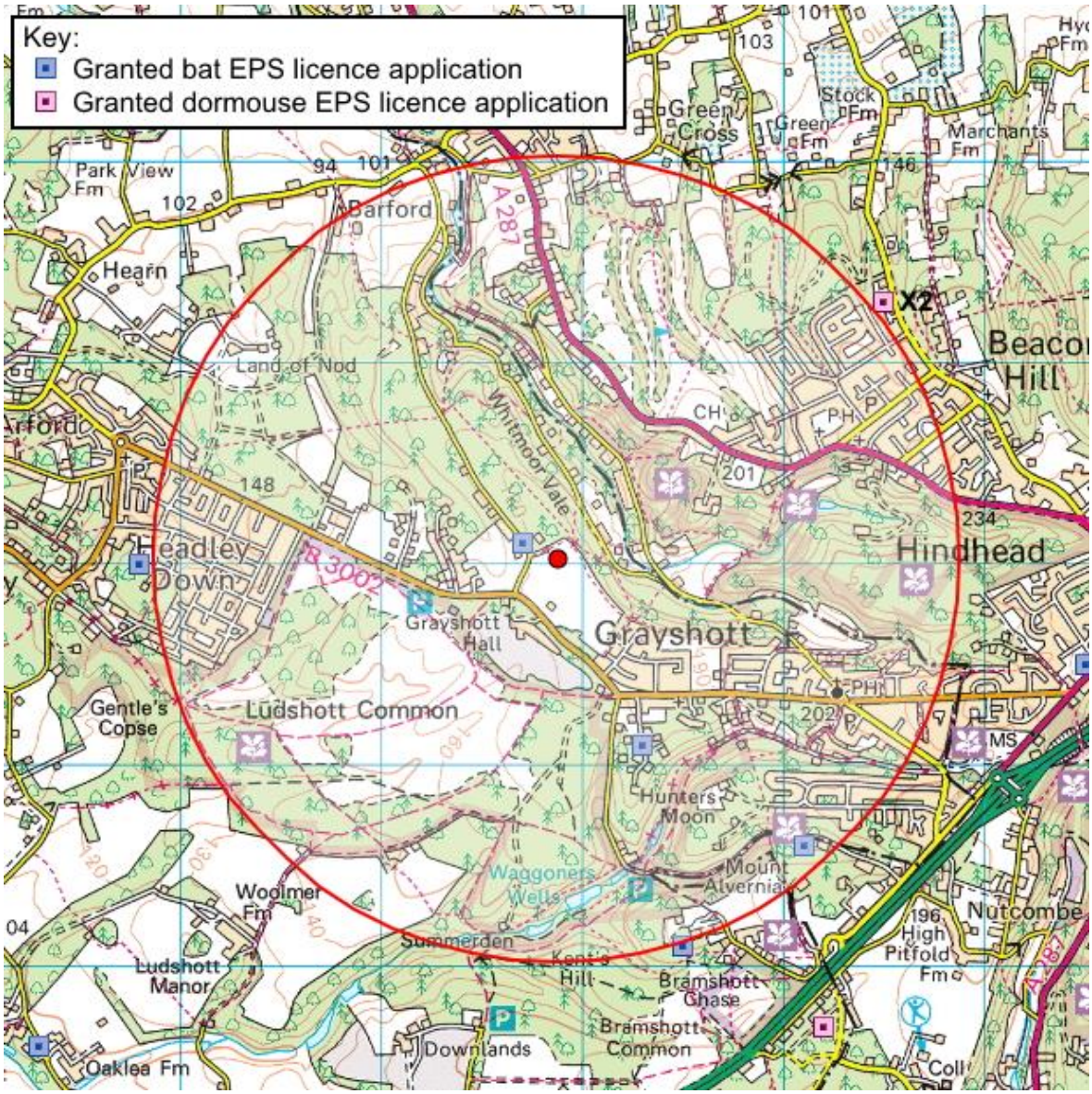
According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been three granted European Protected Species (EPS) licences for bats within 2km of the site. These are listed in *Table 4.1.2.1.* and their locations are shown in *Figure 4.1.2.1.*

Table 4.1.2.1. Granted European Protected Species (EPS) licences within 2km of the site.

Species subject of licence	**Type of habitat affected**	**Date licence was granted**	**Distance & direction from site**
Common pipistrelle & soprano pipistrelle	Breeding site & resting place	17/10/2012	*c.*100m west
Brown long-eared bat	Resting place	22/10/2013	*c.*1,010m south
Soprano pipistrelle	Resting place	01/09/2017	*c.*1,880m south-east

In addition, there are four granted EPS licence applications just beyond 2km of the site for; common pipistrelle, brown long-eared bats and hazel dormouse.

Figure 4.1.2.1. Location of sites with granted EPS licences within 2km of the site. The site location is shown by a red dot.



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4.2 Habitats and plant species

4.2.1 Habitats (The Ecology Co-operation Ltd, 2019)

The south-western and north-western site boundaries are marked by tree lines consisting of semi-mature: sycamore *Acer pseudoplatanus*, horse chestnut *Aesculus hippocastenum*, beech *Fagus sylvatica*, alder *Alnus* sp., cherry *Prunus* sp. and sessile oak *Quercus petraea*. A row of young-semi-mature trees exists to the immediate southeast of the buildings. Species present include sessile oak, hawthorn *Crataegus monogyna* and sycamore. Semi-mature/mature trees are considered to be of high value within the context of the site but are of lower value within the wider surroundings.

A collection of young/semi-mature trees exist to the north-west of the buildings with sycamore, lime *Tilia* sp., hawthorn and spruce.

A small area of semi-improved grassland exists at the eastern corner of the site. This area was identified as bare ground/gravel hard-standing in 2014.

The grassland has an approximate sward height of 10cm, species of grass present include: Yorkshire fog *Holcus lanatus*, bents *Agrostis* spp., false oat-grass *Arrhenatherum elatius*, perennial ryegrass *Lolium perenne*, crested dog's-tail *Cyonsurus cristatus* and meadow grasses *Poa* species.

The grassland contains an abundance of perennial and ephemeral herbaceous species including: white clover *Trifolium pratense*, hare's-foot clover *T. arvense*, buttercup *Ranunculus* sp., ribwort plantain *Plantago lanceolata*, greater plantain *P. major*, bird's-foot trefoil *Lotus corniculatus*, scentless mayweed *Tripleurospermum inodorum*, selfheal *Prunella vulgaris*, yarrow *Achillia millefolium*, common mouse-ear *Cerastium fontanum*, black meddick *Medicago lupulina*, creeping thistle *Cirsium arvense*, welted thistle *Carduus crispus*, germander speedwell *Veronica chamaedrys*, common field speedwell *V. persica*, musk mallow *Malva moschata*, smooth hawksbeard *Crepis capillaris*, stinging nettle *Urtica dioica*, red-deadnettle *Lamium purpureum*, hedge woundwort *Stachys sylvatica*, bittersweet *Solanum dulcamara*, bristly ox-tongue *Helminthotheca echioides*, sorrel *Rumex acetosa*, broad-leaved dock *R. obtusifolius*, eyebright *Euphrasia officinalis*, prickly lettuce *Lacutuca serriola*, cutleaved crane's-bill *Geranium dissectum*, scarlet pimpernel *Anagallis arvensis*, willowherb *Epilobium* sp., forget-me-not *Myosotis* sp., fennel *Foeniculum vulgare*, spurge *Euphorbia* sp. and redshank *Persicaria maculosa*.

The north-western half of the site consists of a field of grassland which is divided up into paddocks used for grazing of horses. Yorkshire fog was identified as the dominant species of grass. Species present amongst the grasses include dandelion *Taraxacum officinale*, selfheal, ribwort plantain, greater plantain, yarrow, white clover, creeping buttercup *Ranunculus repens*, and perforate St. John's wort *Hypericum perforatum*.

Two large earth bunds exist at the north-eastern edge of the site. These embankments are covered by ruderal species of vegetation including stinging nettle, field bindweed *Convolvulus arvensis*, ragwort *Jacobaea senecio*, bristly ox-tongue, hogweed *Heracleum sphondylium*, ribwort plantain,

bramble *Rubus fruticosus* agg., pineapple weed *Matricaria discoidea*, willowherb *Epilobium* sp. and agrimony *Agrimonia* species.

The Barn is arranged over a rectangular footprint and created from concrete render and blockwork with timber clad weatherboarding on the exterior. The roof of the building is created from a pitched arrangement of corrugated metal with metal wrapped edging at its gable ends. The interior of the barn is arranged over two levels and does not contain any enclosed loft voids.

The Shop is a rectangular structure created concrete render walls which are fitted with painted timber cladding. The main roof is created from corrugated asbestos sheeting with an area of slate tiling on the roof of the entrance at the south-western aspect. A large open-sided plastic lean-to section created from Perspex exists at the south-western side of the building. A flat-roof section exists at the eastern corner of the building.

Several simple prefabricated wooden huts exist to the south-west of the Barn and are constructed from wooden shiplap with pitched roofs of bitumen and hessian roofing felt.

A large car park of tarmacked hard-standing exists along the south eastern edge of the site and to the north of the buildings. An existing access road runs through the improved grassland within the north western half of the site.

A hedgerow created from introduced shrubs *i.e.* grape vines exists within the car park towards the southern corner of the site.

A Phase 1 Habitat Survey map showing the location of the various habitats is given in *Figure 4* (see *Section 6*).

4.2.2 Plant species

No plant species listed on *Schedules 8* or *9* of the *Wildlife and Countryside Act 1981* (as amended) were recorded on the site.

Vascular plant species recorded from each habitat type (along with relative abundance) on the proposed Eco Pods field are given in *Appendix B.*

4.3 Protected vertebrates

4.3.1 Bats

Bat emergence & re-entry survey results

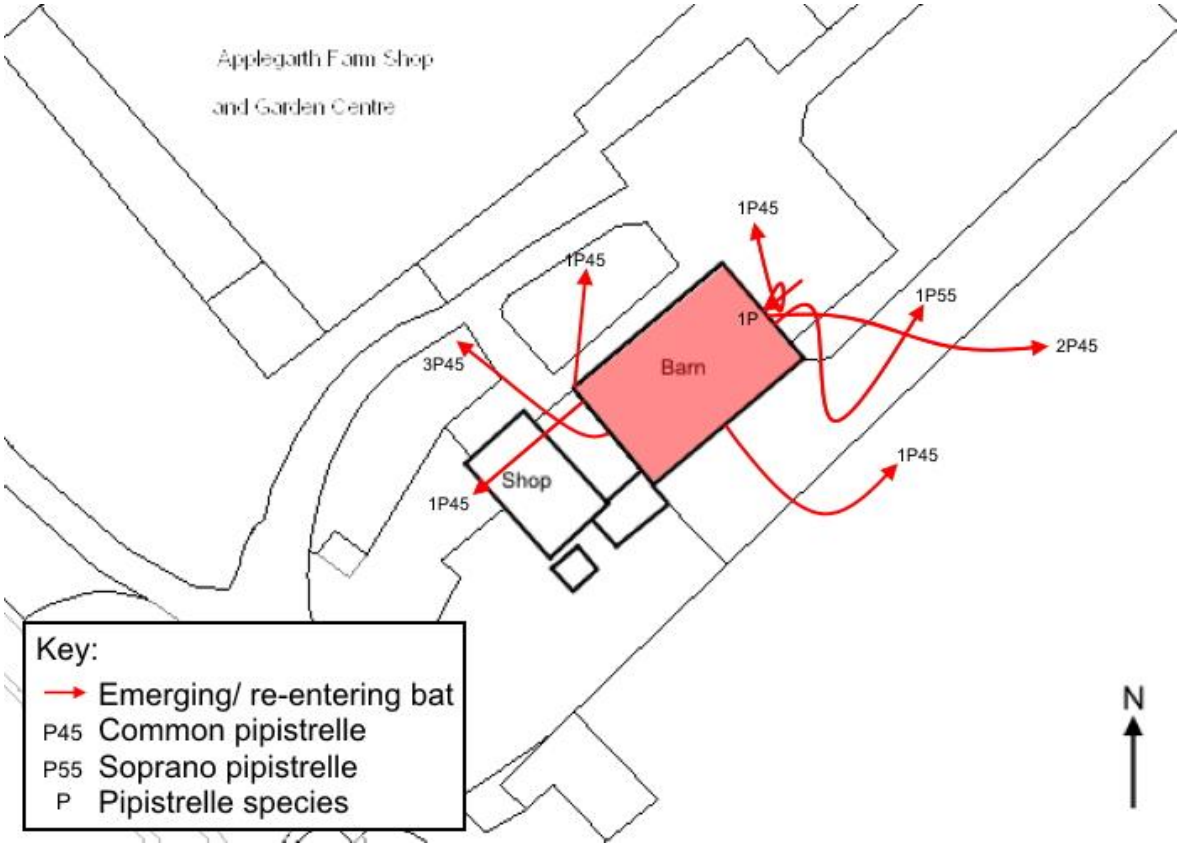
No bats were observed emerging from or re-entering the Shop.

Common pipistrelle and soprano pipistrelle were observed emerging from and re-entering the Barn. These are summarised in *Table 4.3.1* and illustrated in *Figure 4.3.1.*

Table 4.3.1.1. Summary of the emergences from and re-entries to the Barn during the surveys.

Date	No.	Species	Description
30/08/19	1	Pipistrelle species (not identified to species)	Re-entering a gap in the wooden cladding near the apex on the north-east elevation.
	1	Soprano pipistrelle	Emerging from a gap in the wooden cladding near the apex on the north-east elevation.
11/09/19	1	Common pipistrelle	Emerging from a gap in the wooden cladding near the west corner on the south-west elevation.
	3	Common pipistrelle	Emerging from a gap in the wooden cladding near the apex on the north-east elevation.
24/09/19	-	-	-
31/08/20	3	Common pipistrelle	Emerging from a gap in the wooden cladding on the south-west elevation
	1	Common pipistrelle	Emerging from a gap in the wooden cladding near the west corner on the south-west elevation.
	1	Common pipistrelle	Emerging from a gap in the wooden cladding on the south-east elevation

Figure 4.3.1.1. Plan summarising the emergences from and re-entries to the Barn.



Common pipistrelle, soprano pipistrelle, noctule and serotine bats were recorded feeding and commuting on the site, indicating the weather was suitable for bat activity.

The full data from the surveys and plans showing the locations of bats observed during the dusk emergence and pre-dawn re-entry surveys are given in *Applegarth Farm Shop & Barn, Headley Road, Grayshott, Hampshire, GU26 6JL. Bat Survey Report. (Hampshire Ecological Services Ltd, 2021)*

Bat roost suitability of trees

A ground assessment of the trees on site was carried out by The Ecology Co-operation Ltd (2019). None of the trees on the site were assessed to have potential bat roosting features and have negligible bat roost suitability.

Commuting and foraging habitat

The mature trees, ornamental planting and nearby woodland and hedgerows provide good foraging habitat for bats. They also link to a network of hedges, tree-lines and strips of woodland providing links into and from the wider landscape in all directions.

Bats follow linear landscape features such as lines of trees, hedges, buildings and waterways in order to commute from their roost sites to their feeding grounds. Likewise they use these features to navigate between feeding areas and alternative roosts.

4.3.2 Dormice

The hedges are suitable habitat for dormice. There is also suitable habitat on adjacent land. The hedgerows contain a mixture of plants producing flowers and berries such as *Crataegus monogyna* (Hawthorn) and *Rubus fruticosus agg*. (Bramble); in addition to the nut producing *Corylus avellana* (Hazel). This mixture of different species provides food sources throughout the year and as such provide good foraging habitat. The connectivity of the woodland and hedgerows with other areas of suitable habitat in the wider landscape provides a means of colonisation and dispersal.

Previous dormouse surveys carried out on the Applegarth Vale development site by New Leaf Ecology (2014), found one nesting dormouse in a tube, within the north-west hedgerow. However, this hedge is outside the boundaries of this site.

4.3.3 Great crested newt

According to aerial photographs (GoogleEarth™) and online Ordnance Survey 1:25,000 maps there are no suitable ponds within 500m of the site. The site is on a prominent hill in the landscape, with little opportunity for natural ponds and few neighbouring properties likely to have garden ponds.

The grassland on site, is usually horse-grazed and/ or used for silage production. Therefore, it usually has a short sward with no cover. This is sub-optimal terrestrial habitat for great crested newt.

4.3.4 Badger

No signs of any badger activity were seen during the survey assessment of the shop and barn site, though there are habitats of value for this species within the site and surrounding landscape.

4.3.5 Birds

All the trees and bushes on the site have the potential to support nesting birds during the breeding season.

There are many bird species on the UK and Local BAP (or in the RSPB *Birds of Conservation Concern*) that could be using this site for nesting and foraging.

4.3.6 Widespread species of reptile

On the farm shop site, the patches of rough grassland, bare ground and bramble scrub on the site are suitable foraging habitat for widespread reptile species such as slow-worms and grass snake.

A total of one common lizard was recorded within suitable habitat across the survey area. The common lizard was recorded on the south-east corner of the rough grassland field, alongside the earth bank. As a result of these surveys, it was concluded that a low population of common lizards (≤20/ha) is present.

Based on the survey results (and available suitable habitat) a low population of common lizard is present. The total number of common lizards recorded was one. However, refugia surveys generally always give an underestimate of numbers and only indicate approximate population size class.

As slow worm and grass snake were recorded in the receptor site during previous surveys of the site in 2014, it is considered likely that these species may be present on the site (although not recorded during this survey). These were in low numbers, therefore, as a precautionary measure, the translocation and mitigation will include the possibility of low populations of these species being present on site.

Full details of the reptile surveys is given in *Applegarth Farm, Headley Road, Grayshott, Hampshire, GU26 6JL. Reptile Survey & Mitigation Strategy Report* (Hampshire Ecological services Ltd, 2021).

5 INTERPRETATION AND EVALUATION

5.1 Constraints on the surveys

5.1.1 Constraints on the survey data

The reptile surveys were closely spaced and carried out late in the season. Therefore, some individuals may have already gone into deeper cover or hibernation and, with a low population, this would make them difficult to detect.

During one of the reptile survey visits, maintenance staff were observed strimming part of the suitable reptile habitat in the survey area. Artificial refugia were disturbed but replaced in the same location. Further strimming activity was discouraged, but with advice that care be given to preventing harm to reptiles. In addition a staff member on site reported that local children had been observed inspecting some of the artificial refugia, this may have impacted the survey due to disturbance of reptiles.

Habitat within the site is suitable for widespread species of reptiles and artificial refugia surveys showed common lizard to be present on site. Establishing population size is difficult for reptiles without substantial effort (20+ visits). In this case, a precise estimate of population size was not required for impact assessment and mitigation planning. However, the surveys give a crude assessment of the population size for mitigation purposes.

5.1.2 Constraints on the mitigation, compensation and enhancement measures

The bat mitigation, reptile translocation area and compensation and enhancement options under the current plans are subject to the confirmed location and shape of the new layout.

There are limitations to bat compensation options under the current plans due to the demolition of the Barn and rebuilding of the buildings on site. However, given the roost is low numbers of common species it is unlikely to have a significant impact to bat populations in the area.

In addition, the placement of the buildings and the car-parking means that the light levels and timing of lit areas will need to be carefully considered.

5.2 Survey report expiry

This survey data is usually valid for a maximum of 12 months. Bats frequently move around and adopt new roosting sites, reptile populations may fluctuate, therefore if more than 12 months elapses it may be advisable to conduct further survey work to obtain up-to-date information to advise work, thereby ensuring protected species compliance.

Survey data supporting Natural England licence applications must be up-to-date *i.e.* have been conducted within the current or most recent optimal survey season (May to August for bats).

Therefore, if licensable work is delayed until, during or after the next survey season, updated survey(s) will be required to support an application.

Given the mobility of bats (and the presence of bats in the barn), it is recommended that a walkover of the site to update the survey information is undertaken prior to the development commencing, if this does not occur before the end of September 2021.

5.3 Legal context

Habitat has been identified on site that is suitable for protected species. Different species are afforded different levels of protection; as detailed in *Appendix A.*

The site is not designated for its wildlife interest at an international, national or local scale.

5.4 Potential impacts of the proposed development

5.4.1 Desk study

According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there are five statutory designated sites within 5km of the site. In addition, there is one Site of Importance for Nature Conservation (SINC) and one ancient semi-natural and ancient replanted woodland within 500m of the site. None of these will be directly affected by this project.

The site is within 5km of the Wealden Heaths Phase II SPA (including Woolmer Forest SAC) to the south-west (*c.*500m at the closest point) and Thursley, Hankley & Frensham Commons SPA/ Thursley, Ash, Pirbright & Chobham SAC to the north. Both SPAs are designated for nesting birds including dartford warbler, nightjar and woodlark. Both SACs are also designated for the habitats they contain, including: northern atlantic wet heaths; European dry heaths; natural dystrophic lakes and ponds; and depressions on peat substrates of the Rhynchosporion.

As a result of its proximity to these designated sites, the impacts of any works on the SPAs and SACs must be considered. The redeveloped farm shop will likely lead to an increase in recreational pressure on nearby designated sites. Due to the increase in people using the site, a financial contribution may be required to the local authority towards the creation and maintenance of areas of Suitable Alternative Natural Greenspace (SANG), such as the adjacent Applegarth Vale site.

5.4.2 Habitats and plants

The habitats and plant species observed on site are widespread and common and as such have no conservation importance from a botanical point of view. The exceptions are the mature trees on the boundaries that would take many decades to replace. These are of high ecological value and should be retained and protected were possible.

5.4.3 Bats

Shop

No bats were recorded emerging from or re-entering the Shop. Therefore, it is not a bat roost and a bat licence is not required for works on this building.

Barn

Evidence of roosting bats (droppings) was previously found within the exterior wooden cladding of the Barn by The ecology Co-operation Ltd, indicating bats are using the building as a roost. In addition, there were previous records of bats roosting in the Barn from 2014 (Jonathon Cox Associates).

Common pipistrelles and soprano pipistrelles were recorded emerging and re-entering the Barn (see *Section 4.1*). The number of bats using the wooden cladding at the north-east, south-east and south-west elevations suggests that these areas are non-breeding day roosts for low numbers of common pipistrelles and soprano pipistrelles.

The demolition of the Barn has the potential to kill, injure or disturb roosting bats. The impact to the roosts will be roost loss (if no mitigation). New buildings are proposed to be constructed to the west of the existing barn, bat mitigation and enhancements will need to be incorporated into the new buildings and the wider site.

A bat licence from Natural England will be required before any works can take place to demolish the barn.

The works will be carried out in line with the methods detailed within the Natural England bat licence. A summary of proposed mitigation and enhancement measures is given in *Section 5.6*.

Trees

The trees on site were identified as having negligible bat roost suitability. Retained trees should be protected (where appropriate) during construction (see *Section 5.6*).

Foraging and commuting habitat

There is suitable foraging habitat for emerging bats in the immediate vicinity of the buildings including nearby mature trees. These connect to a network of hedges, tree-lines and high quality foraging habitat in the wider landscape such as woodland.

Common pipistrelles, soprano pipistrelle, noctule and serotine bats were recorded commuting and foraging on and around the site.

The boundary trees will be unaffected and all links will be maintained. Retaining connectivity around the edges of the site will help minimise any potential impact to foraging bats and bat populations in the local area.

Changes in lighting can affect foraging, commuting and roosting bats. Therefore no lighting should be directed onto retained vegetation, and security lights should operate on a timer, to avoid any negative impact on bats.

Any lighting installed should avoid spillage of greater than 1 lux onto retained vegetation. The use of non-UV LED lighting (preferably using warm spectrum wavelengths) is strongly recommended so as to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.

There is good quality foraging habitat for bats on and adjacent to the site. Therefore, it is likely that bats are using the site for foraging and/or commuting. Retaining and enhancing connectivity (*e.g.* the hedges) around the edges of the site will help minimise any potential impact to bat populations in the local area. Maintaining areas of long grassland where possible around the edges of the site will support the local populations of invertebrates, which in turn the bats will feed on.

5.4.4 Dormice

Given the connectivity and suitable habitat, it is considered that dormice are using the boundary hedgerows of this site. However, it is understood that the current proposals do not directly impact on the suitable habitat and all suitable dormouse habitat will be retained. Therefore no impacts are anticipated on dormice in the area and no further surveys are proposed.

5.4.5 Great crested newt

The grassland on site is usually horse-grazed and used for silage production and therefore usually has a short sward, with no cover. This is sub-optimal terrestrial habitat for great crested newt, although they could use it for foraging.

Given the lack of suitability and absence of any prominent ponds within 500m of the site, it is highly unlikely that great crested newts are using the site.

5.4.6 Badger

As no badger setts were found on site, development works are free to proceed without further regard to this species, although if a badger sett is subsequently discovered within 30m of the proposed works then it may require a licence from Natural England to proceed. Guidance to what may be classed as disturbance to a badger (when occupying a sett) can be found at:
https://www.gov.uk/guidance/badgers-protection-surveys-and-licences.

5.4.7 Birds

All trees and bushes provide suitable habitat for nesting birds. Any affected vegetation with the potential to support nesting birds should be cut to near ground level (approximately 30cm) outside

the bird breeding season (which is late February to August inclusive). The destruction of active bird nests is prohibited under the *Wildlife and Countryside Act 1981* (as amended). If this is not possible, and vegetation has to be removed during the nesting season, then it should be inspected (by an ecologist) for nests immediately prior to removal of the vegetation.

If any active nests are found during works, a 5m buffer zone should be established around them and be temporarily fenced off to prevent plant or personnel disturbing the nest until the end of the breeding bird season (or until the nest is no longer in use).

5.4.8 Widespread species of reptile

Habitat within the farm shop site (*c*.3,750m^2) is suitable for widespread reptile species. This includes the field of rough grassland, patches of bramble scrub and log piles. Artificial refugia surveys showed a low population of common lizard to be present.

Based on the survey results (and available suitable habitat) a low population of common lizard is present. The total number of common lizards recorded was one. However, refugia surveys generally always give an underestimate of numbers and only indicate approximate population size class.

As slow worm and grass snake were recorded in the receptor site during previous surveys of the site in 2014, it is considered likely that these species may be present on the site (although not recorded during this survey). These were in low numbers, therefore, as a precautionary measure, the translocation and mitigation will include the possibility of low populations of these species being present on site.

5.5 Further survey

No further surveys are recommended.

5.6 Outline mitigation & enhancement measures

5.6.1 General

From the 19th February 2019, the Government published the revised National Planning Policy Framework (Ministry of Housing, Communities and Local Government, 2019). The document sets out the government's planning policies for England and how these are expected to be applied. This replaces a previous version which was published in March 2012. It states: "*at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).*"

It also states "*opportunities to incorporate biodiversity in and around developments should be encouraged*" as part of the consideration for "*presumption in favour of sustainable development*".

The updated National Planning Policy Framework (NPPF) also states (paragraph 170) that:

"*Planning Policies and decisions should contribute to and enhance the natural and local environment by… minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.*"

The updated Planning Policy Guidance (PPG) for the Natural Environment, updated in July 2019 states (paragraph 020) that:
"*Net gain in planning describes an approach to development that leaves the natural environment in a measurably better state than it was beforehand*."

The updated PPG provides examples of how biodiversity net gain can be achieved. Measures suggested include "creating new habitats" and "enhancing existing habitats".

It is proposed that the enhancements to provide net gain will also be in the form of new bat roost provision, lighting restrictions (for bats), new bird nesting provision, new reptile refugia and new invertebrate boxes. These enhancements are detailed in the following sections.

All proposed mitigation and enhancement measures are subject to confirmed plans and construction materials, as a result the measures outlined are indicative.

5.6.2 Habitats

Heras fencing or similar should be used to protect the roots of retained mature trees during construction. The guidance provided in BS 5837 *Trees in relation to Construction* provides further advice on minimising the impact to retained trees on a development site.

5.6.3 Bats

General

A detailed method statement with a mitigation strategy aimed at maintaining the conservation status of bats will need to be prepared as part of a bat licence from Natural England. The proposed mitigation and enhancement works on the site are described in the following sections.

Mitigation and enhancement measures

A toolbox talk will be given to the contractors, prior to any work commencing, to inform them on how to protect bats during the works. It will include an overview of the ecological issues and licensing implications on site, the precautions to be taken and the method of hand demolition in sensitive areas.

A minimum of two woodstone bat boxes (e.g. Vivara Pro Woodstone or Beaumaris Woodstone or similar) will be erected in a large nearby tree prior to the commencement of the works. These bat boxes will be erected between 2.5m and 5m, facing south or south-east with a clear exit path. These bat boxes will remain on site permanently (and shall be repaired or replaced as necessary).

A destructive search of the wooden cladding on the barn will be carried out. Works should ideally commence in either September/October before bats have begun to hibernate; or in March/ April after bat have come out of hibernation. However, work at any time of year may be acceptable depending on the status of the roost and subject to licensing from Natural England. This could include the destructive search being carried out in mild spells (above 5ºC) in winter, as long as, a pre-works check does not suggest the status of the roost has changed. The wooden cladding will be removed carefully by hand under strict ecological supervision.

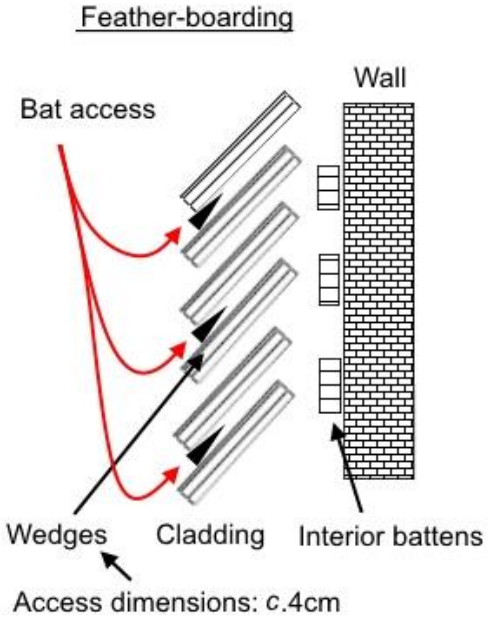
Any bats found during the destructive searches will be placed within the bat boxes. Bats will be captured by hand by the ecologist and, after being checked for injuries, transported immediately in cotton drawstring holding bags.

In the event that an injured bat is encountered during the destructive search it will be taken to a veterinary surgeon so that the extent of its injuries can be assessed. If not life-threatening it will be taken to one of Hampshire Bat Group's designated carers.

Once the supervising ecologist is satisfied that all affected structures that may provide bat roosting opportunities have been safely searched and removed or made unsuitable for further bat habitation, the remaining works will proceeded without further supervision by a suitably qualified ecologist. The action to take if any bats are discovered during unsupervised works will also be made clear.

Access is currently gained behind the wooden cladding via lifted and warped boards. As the existing access points are lost due to the demolition, like-for-like replacement bat access points must be created in similar locations and aspects on the new buildings (see *Figure 5* in *Section 6*). This will involve inserting wedges or cutting/drilling access holes into the feather-board external cladding to create gaps for bat access (see *Image 5.6.3.1*.).

Image 5.6.3.1. Example of bat access into wooden cladding.



The lining behind the wooden cladding on the new buildings **must** consist of bitumen type 1F felt with a hessian matrix (**NOT** a breathable membrane such as Tyvek™ or other non-woven membrane). This is currently a Natural England licence requirement whilst a safe alternative is being researched. This is because bats can become entangled in breathable membranes and die. Although breathable membranes appear smooth, crawling or hanging bats may become tangled in the fibres as a result of their claws catching on the membrane. A struggling bat may also puncture the membrane, thus invalidating the guarantee of the material and causing water ingress. The building contractor or client may be liable for both damage of the property and killing or injuring bats. Only bitumen type 1F felt with a hessian matrix will be permitted under a bat licence from Natural England.

To further enhance the site for bats, it is proposed that integrated bat boxes (*e.g.* a Habibat™ Bat Box or an Ibstock Enclosed Bat Box, a Schwegler Bat Tube or similar) are incorporated into the new buildings (see *Figure 9* in *Section 6*). These bat features should be located on all elevations near to retained or planted vegetation. This will optimise potential roosting opportunities.

Only timber treatments recommended by Natural England should be used in line with Natural England's *Remedial timber treatment products suitable for use in bat roosts (2013)* available at: https://www.gov.uk/guidance/bat-roosts-use-of-chemical-pest-control-products-and-timber-treatments-in-or-near-them.

Lighting

Changes in lighting can affect foraging and roosting bats. Therefore, no works should take place in the hours of darkness or under artificial lighting. In addition, no lighting should be directed onto retained or planted vegetation (particularly the boundary bushes) and any lighting installed should avoid spillage of greater than 1 lux near to or directly onto the bat enhancements (bat brick) and vegetation so that light disturbance is not a problem. This is because lighting can impact bat populations directly by disturbing roosts and reducing their foraging area, or indirectly by severing commuting routes from roosts. Therefore, the following (modified from *Bats and lighting in the UK* (ILP 2018)) should be undertaken:

- **Aim of light** The light should be aimed to illuminate only the immediate area required by using as sharp a downward angle as possible. This lit area must avoid being directed at, or close to, any retained vegetation. A shield or hood can be used to control or restrict the area to be lit. Avoid illuminating at a wider angle as this will be more disturbing to foraging and commuting bats, as well as people and other wildlife.

For any security lighting, the following should also apply:

- **Power** It is rarely necessary to use a lamp of greater than 2000 lumens (150W) in security lights. The use of a higher power is not as effective for the intended function and will be more disturbing for bats.
- **Movement sensors** Many security lights are fitted with movement sensors which, if well installed and aimed, will reduce the amount of time a light is on each night. This is more easily achieved in a system where the light unit and the movement sensor are able to be separately aimed.

- **Timers** If the light is fitted with a timer this should be adjusted to the minimum to reduce the amount of 'lit time'.
- **Alternatives** The requirement for security lighting in each instance should be carefully considered and only used where absolutely necessary to deter crime.

The use of non-UV LED lighting (preferably using warm spectrum wavelengths) is strongly recommended to avoid the most deleterious impacts of lighting on biodiversity and bats in particular.

5.6.4 Birds

Mitigation

All trees and bushes provide suitable habitat for nesting birds. Any affected vegetation with the potential to support nesting birds should be cut to near ground level (approximately 30cm) outside the bird breeding season (which is late February to August inclusive). All demolition works should take place outside the breeding bird season (which is late February to August inclusive). If this is not possible, and buildings have to be removed during the nesting season, the building should be checked for nests (by an ecologist) immediately prior to works. The destruction of active bird nests is prohibited under the *Wildlife and Countryside Act 1981* (as amended). If this is not possible, and vegetation has to be removed during the nesting season, then it should be inspected (by an ecologist) for nests immediately prior to removal of the vegetation.

If any active nests are found during works, a 5m buffer zone should be established around them and be temporarily fenced off to prevent plant or personnel disturbing the nest until the end of the breeding bird season (or until the nest is no longer in use).

Enhancement – bird boxes

In addition, the site will be enhanced for birds. To maximise the number of species of bird attracted, several different types of bird boxes will be placed in various locations within the development site. It is not advisable to place many boxes with identical dimensions, because individuals of the same species would not tolerate each other's presence, especially in built-up areas with limited food resources. The proposed bird boxes are summarised in *Table 5.6.4.1.*

Table.5.6.4.1. Bird boxes to be erected within the development site with additional details on positioning to increase chances of occupancy.

Type (example)	Typical species	No.	Height	Additional information
Vivara Pro Seville 32mm Woodstone Nest Box 	Blue tits, great tits	2	2-4m	• Position on a building or tree, angled north-east (away from prevailing winds) and tilt forward slightly. • Chances of occupation can be increased by positioning boxes near vegetation.

Vivara Pro Seville 28mm Woodstone Nest Box 	Blue tits, coal tits	2	2-4m	• Position on a building or tree, angled north-east (away from prevailing winds) and tilt forward slightly. • Chances of occupation can be increased by positioning boxes near vegetation.
Vivara Pro WoodStone House Sparrow Nest Box 	House sparrows	1+	≥ 2m	• Either incorporate into the build structure or mount on sturdy building. Do not fix onto fences or garden sheds due to its weight. • Position out of direct sunlight (below eaves on the north elevation), away from windows and in a straight line. • Should be in an open area so that it is less accessible to predators and birds are not obstructed as they leave the nest. • Avoid mounting in close proximity to other integrated bird (or bat boxes) *i.e.* on the same elevation/ wall.
Ibstock Eco-habitat 	Swifts	2	≥ 5m	• Either incorporate into the build structure or mounted on a building. • Position out of direct sunlight (below eaves on the north elevation), away from windows and in a straight line. • Should be in an open area so that it is less accessible to predators and birds are not obstructed as they leave the nest.

5.6.5 Widespread species of reptile

The full details of the reptile mitigation and enhancement measures are outlined in *Applegarth Farm, Headley Road, Grayshott, Hampshire, GU26 6JL. Reptile Survey & Mitigation Strategy Report* (Hampshire Ecological Services Ltd, 2020)

A mitigation strategy (an *in situ* translocation) has been devised prior to site clearance to ensure compliance with the law and planning policy. An *in situ* receptor site is preferable to an *ex situ* receptor site (off-site). The strategy has two main aims:

- to avoid harm to reptiles; and

- prevent any net loss of local conservation status.

The strategy involves the removal of captured reptiles to the receptor site at the edges of the proposed Eco Pods field north of the farm shop site, prior to works.

Prior to the translocation the receptor site will be enhanced by allowing the grassland to grow into a taller sward. This will result in a denser vegetation cover and deep grass litter layer with greater foraging potential. In addition, scrub and brambles will be managed to prevent them encroaching on the grassland. Log piles and compost heaps will be added to the receptor site and the wider farm shop site (after the works) to create refugia.

5.6.6 Invertebrates

To enhance the site for invertebrates, ten 'bug boxes' will be installed. The boxes should be suitable for a range of invertebrates. The boxes will be positioned in a warm sunny spot, preferably on a south-facing wall or tree, with no vegetation in front of the holes. Ideally they should be positioned at a height of at least 1 metre from the ground.

Bee-friendly and insect friendly plants should be located nearby so that the bees and insects using the boxes have food. Lavender, honeysuckle and buddleia are all pollinator-friendly plants. The boxes suggested in *Table 5.6.6.1* (especially the BeePot planter) have been chosen so that they form an attractive feature as part of the landscaping. Solitary bees are non-aggressive and as such are suitable for gardens with pets and children.

Table 5.6.6.1. Examples of insect hotels and towers that could be erected on site.

Type & example	**Species**	**Height**	**Additional information**
BeePot Bee Hotel 	Solitary bees	>1m from the ground	The BeePot should be positioned in a warm sunny spot, preferably on a south-facing wall, with no vegetation in front of the holes
Insect Tower 	Butterflies, solitary bees, lacewings and ladybirds	>1m from the ground	The different sections of the Insect Tower have been designed to provide a habitat for a variety of insect species. Suitable for mounting on buildings, tress or fences.
Urban Bee Nester 	Solitary bees and a range of other insects	Between 0.75m and 1.5m above ground	The selected canes and the holes are the optimum size for solitary bees but other insects may overwinter in the nester.

Urban Insect Hotel 	A wide range of insects	Between 0.75m and 1.5m above ground	Adding natural materials such as drilled canes, hollow stems or bark in the triangular spaces will encourage more insects to the hotel.
Bee and Bug Biome 	A wide range of insects	>1m from the ground	Best placed near vegetation. Provides plenty of nooks and crannies for insects such as ladybirds, earwigs and lacewings.

5.6.7 Amphibians & hedgehogs

Any fencing will have 15cm x 15cm gaps beneath to allow wildlife such as amphibians and hedgehogs to access the landscaping. This could be achieved by removing all or part of the baseboard/ gravelboard.

5.6.8 Planting

There will be new hedges/planting around the edges of the site. These will consist of a mixture of native species such as *Acer campestre* (Field Maple), *Carpinus betulus* (Hornbeam), *Cornus sanguinea* (Dogwood), *Corylus avellana* (Hazel), *Crataegus monogyna* (Hawthorn), *Fagus sylvatica* (Beech), *Fraxinus excelsior* (Ash), *Prunus spinosa* (Blackthorn), *Quercus robur* (Pedunculate Oak), *Viburnum lantana* (Wayfaring-tree) and *Viburnum opulus* (Guelder-rose). These species will provide a mixture of leaf shapes and colours through the seasons. In addition, the hedges will contain *Ilex aquifolium* (Holly) and *Taxus baccata* (Yew) to provide an evergreen component for the winter months, and to provide a contrast to the colours of the other plants during the spring, summer and autumn.

All new hedges will be under-sown with Emorsgate seed mix EH1 Hedgerow mixture (or equivalent). This will provide cover for wildlife such as hedgehogs as well as providing an attractive feature while the new hedges become established.

Areas of amenity grassland (verges and lawns) will be sown with a species-rich seed mix for lawns such as Emorsgate seed mix EL1 and EG1 (or equivalent). This will increase the plant diversity on site.

The seed mix EL1 will be sown mainly around the edges of lawns and on verges, where it can be mown less frequently without interfering with the amenity value of the grassland. The seed mix EG1, as a purely grass mix, will be sown in the centre of the grassland.

Details of the species present in the proposed seed mixes are given in *Appendix C*.

Plants that attract insects are generally helpful and trees, shrubs and flowering plants can provide cover for wildlife. Therefore, to enhance the ecological value of the site, the landscaping should incorporate a mixture of native and non-native species of value to wildlife. This mixture will be planted to encourage a diversity of insects, which in turn will attract different species. Flowers that bloom throughout the year, including both annuals and herbaceous perennials, are beneficial. Night-flowering blossoms attract night-flying insects, which in turn provide prey for bats. Examples of suitable plant species that could be planted to encourage wildlife include those in *Tables 5.6.8.1.* and *5.6.8.2.* Approximate flowering periods are listed in the tables.

Table 5.6.8.1. Native and non-native species that could be incorporated into the landscaping.

Species	**Common Name**	**Approximate flowering period**
Achillea millefolium	Yarrow	Early summer
Aubretia species	Aubretia	Spring to early summer
Berberis darwinii	Darwin's Barberry	Spring
Iberis sempervirens	Candytuft	Summer to autumn
Centaurea montana	Cornflower	Spring to summer
Centaurea scabiosa	Knapweed	Summer to autumn
Centranthus ruber	Red valerian	Summer to autumn
Cornus sanguinea	Dogwood	Summer
Dianthus barbatus	Sweet William	Summer
Echinacea species	Echinacea	Summer to autumn
Erysimum species	Wallflowers	Spring to early summer
Glebionis segetum	Corn marigold	Spring to summer
Hebe species	Hebes	Summer to autumn
Hedera helix	Ivy	Autumn
Hesperis matronalis	Dame's-violet	Spring to summer
Hyacinthoides non-scripta	English Bluebell	Spring
Hylotelephium spectabile	Ice plant 'Pink lady'	Early autumn
Hypericum species	St John's wort	Spring
Ilex aquifolium	Holly	Spring to summer
Jasminum officinale	Common White Jasmine	Summer to autumn
Lavandula angustifolia	Garden Lavender	Summer
Leucanthemum vulgare	Ox-eye daisy	Summer
Limnanthes douglasii	Poached egg plant	Summer
Lonicera caprifolium	Perfoliate Honeysuckle	Summer
Lonicera etrusca	Italian Honeysuckle	Summer to autumn
Lonicera japonica	Japanese Honeysuckle	Spring
Lonicera periclymenum	Honeysuckle	Summer to autumn
Lunaria annua	Honesty	Spring
Malus domestica	Apple	Spring
Malus sylvestris	Crab Apple	Spring
Malva species	Mallow	Summer to autumn
Matthiola longipetala	Night-scented stock	Summer
Myosotis sylvatica	Wood forget-me-not	Spring
Nicotiana species	Tobacco plant	Summer
Oenothera species	Evening primroses	Summer to autumn
Papaver rhoeas	Corn poppy	Summer
Phacelia species	Phacelia	Summer to autumn
Primula vulgaris	Primrose	Spring
Rosa species	Rose	Summer
Rubus fruticosus agg.	Bramble	Spring to summer
Saponaria officinalis	Soapwort	Summer

Saxifraga fortunei	Cherry pie	Summer to autumn
Scabiosa species	Scabious	Summer
Silene dioica	Red campion	Spring
Silene noctiflora	Night-scented Catchfly	Summer to autumn
Silene vulgaris	Bladder Campion	Summer
Verbena species	Vervain	Summer to autumn
Viburnum lantana	Wayfaring-tree	Spring to summer
Viburnum opulus	Guelder-rose	Summer

Table 5.6.8.2. Examples of suitable garden herbs that could be planted in and around the site to encourage wildlife.

Species	**Common Name**	**Approximate flowering period**
Angelica species	Angelica	Summer to autumn
Borago officinalis	Borage	Spring to early autumn
Calendula officinalis	English marigolds	Summer to autumn
Foeniculum vulgare	Fennel	Summer to early autumn
Hesperis matronalis	Dame's-violet, often sold as Sweet Rocket	Spring to summer
Hyssopus officinalis	Hyssop	Summer to early autumn
Matthiola bicornis	Night-scented Stock	Spring to autumn
Melissa officinalis	Lemon balm	Summer
Monarda species	Bergamot	Summer to early autumn
Nicotiana species	Tobacco-plant	Spring to autumn
Oenothera species	Evening-primroses	Summer
Origanum vulgare	Marjoram	Summer
Rosmarinus officinalis	Rosemary	Spring
Saponaria officinalis	Soapwort	Summer to autumn
Silene noctiflora	Night-scented Catchfly	Summer to autumn
Silene vulgaris	Bladder Campion	Spring to summer
Tanacetum parthenium	Feverfew	Summer to early autumn
Thymus species	Thyme	Summer

A mixture of trees, shrubs and flowering plants will be planted to encourage a diversity of insects, which in turn will attract different species. Flowers that bloom throughout the year, including both annuals and herbaceous perennials, are beneficial. Night-flowering blossoms attract night-flying insects, which in turn provide prey for bats. Approximate flowering periods are listed above.

5.7 Requirement for Natural England licences

5.7.1 Habitat Regulation licences

A bat licence from Natural England will be necessary before work commences on the Barn.

A licence from Natural England permits activities that may otherwise be offences under the *Conservation of Habitats & Species Regulations 2017.*

Evidence is required from further surveys in order to gather enough information about populations to support a licence application.

Survey data supporting licence applications must be up-to-date *i.e.* have been conducted within the current or most recent optimal survey season. Therefore, if licensable work is delayed until, during or after the next survey season, updated survey(s) will be required to support an application.

Natural England takes a minimum of 30 working days to process licence applications following receipt of all the relevant documentation. This includes an application form and a Method Statement. The latter includes a detailed mitigation strategy to eliminate or reduce impacts.

It is not possible to apply for a licence until full planning permission has been granted and any conditions relating to wildlife fulfilled, although Local Planning Authorities usually request the information prior to determining a planning application request. Additional time will be required where any revisions to a proposed mitigation strategy are necessary to obtain the licence.

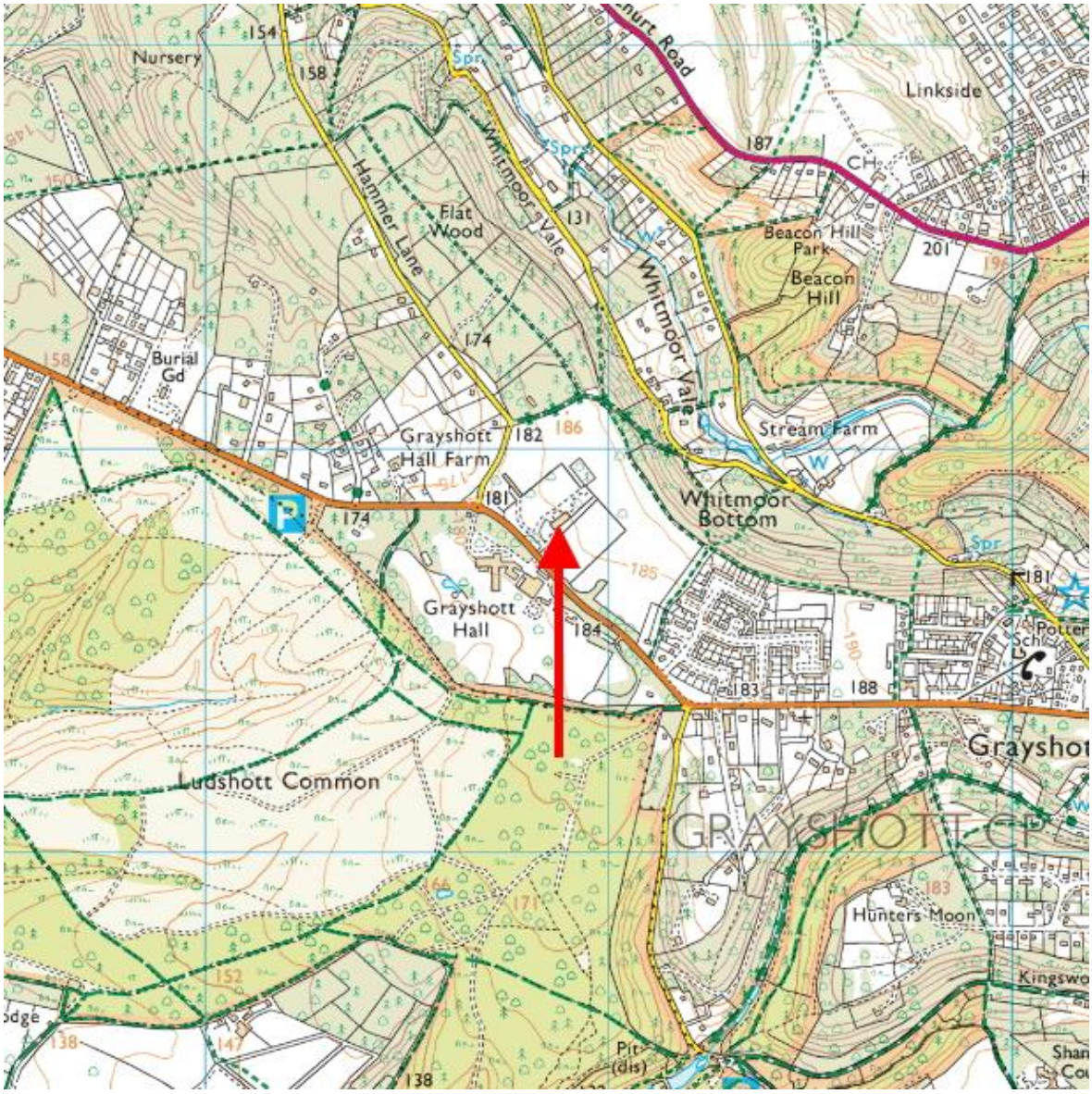
5.7.2 Protection of Badgers Act (1992) licences

As no setts have been identified within (or close to) the site boundary, a licence is currently not required.

6 FIGURES

Figure 1. Aerial photographs showing the location of the site.

Figure 2. Ordnance Survey map showing the location of the site (as indicated by the red arrow).



Reproduced with permission of Ordnance Survey under licence no. 100049977.

Figure 3. Plan showing the site boundary outlined in red.

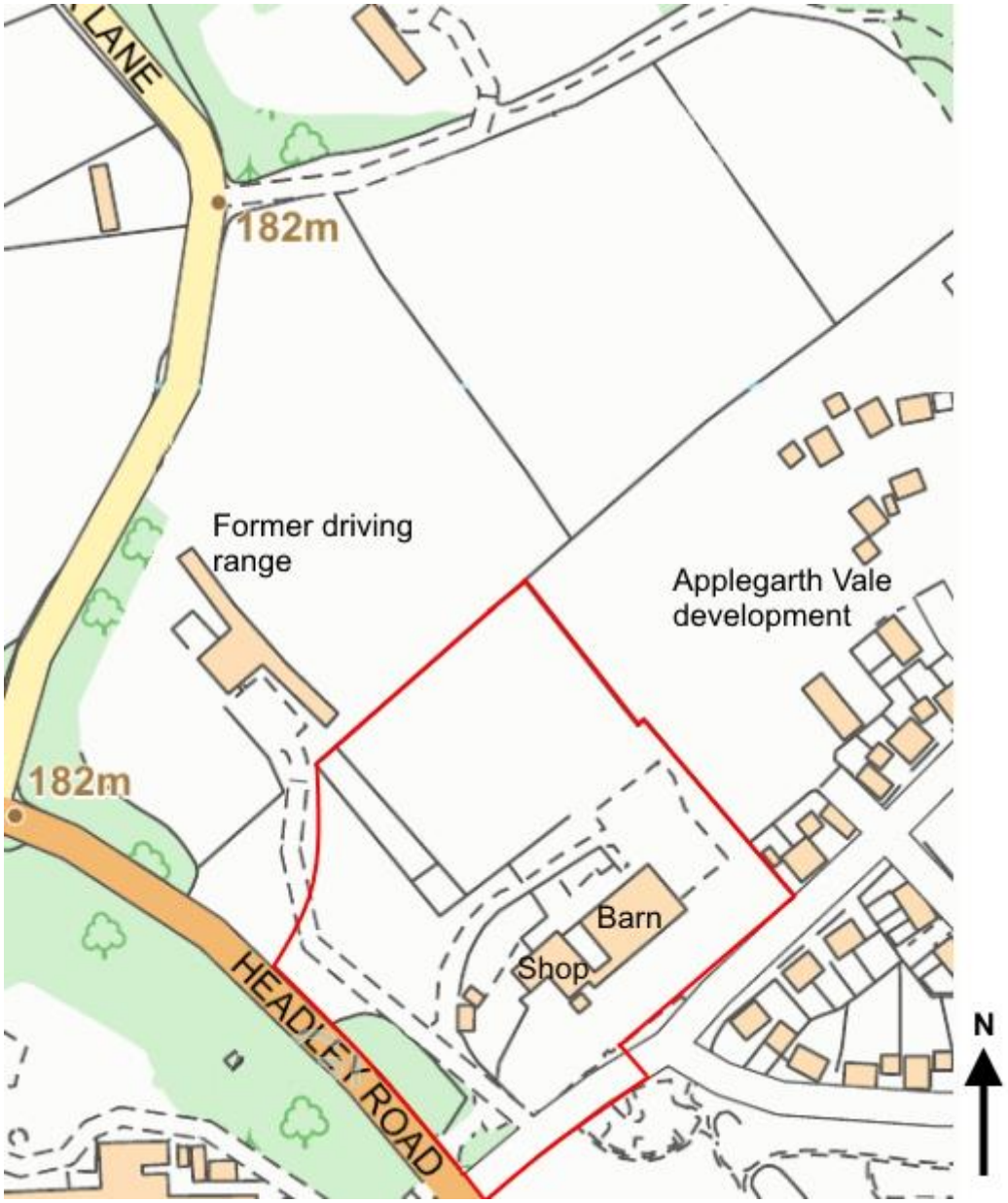


Figure 4. Phase 1 Habitat Survey map of the Applegarth Farm site

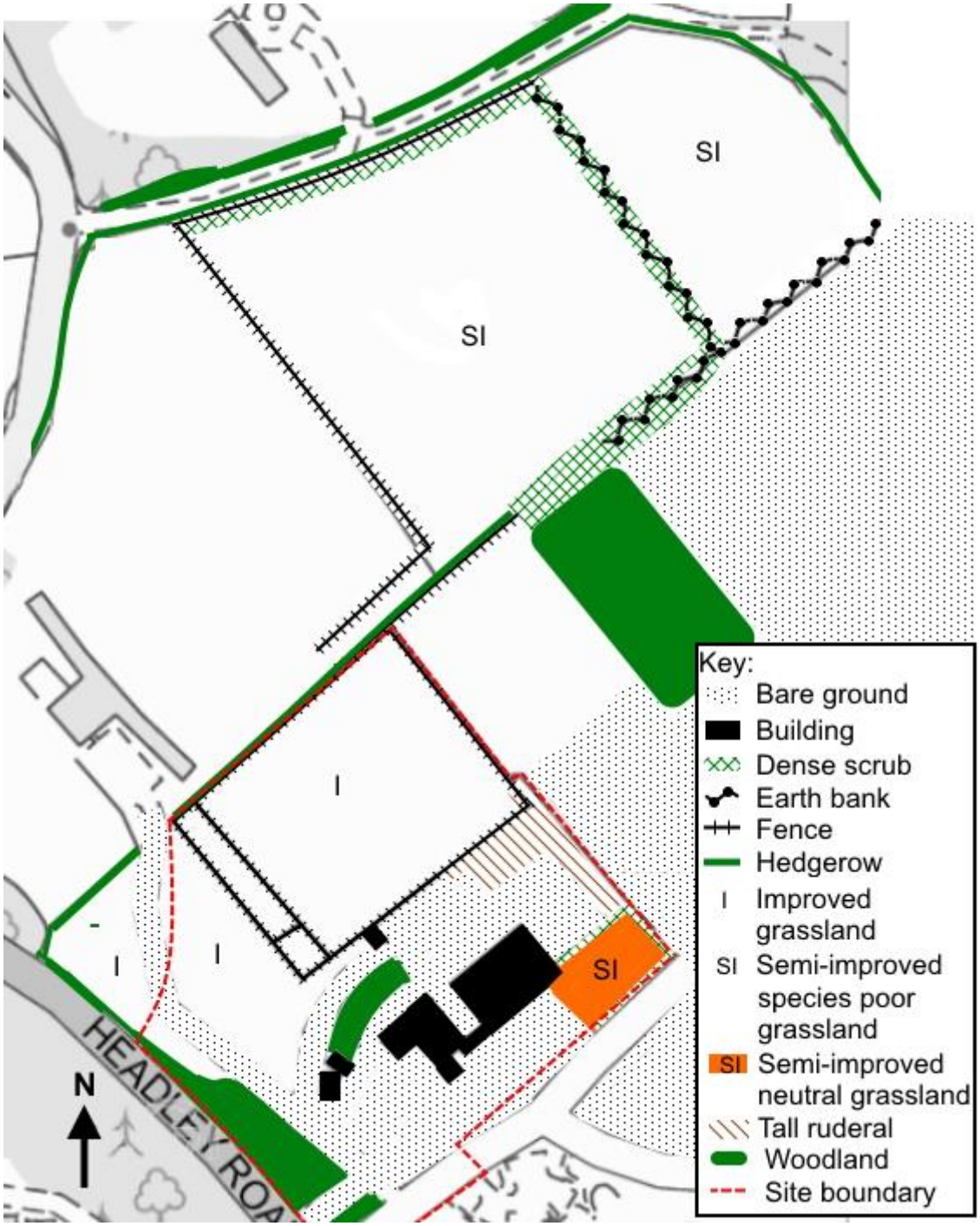
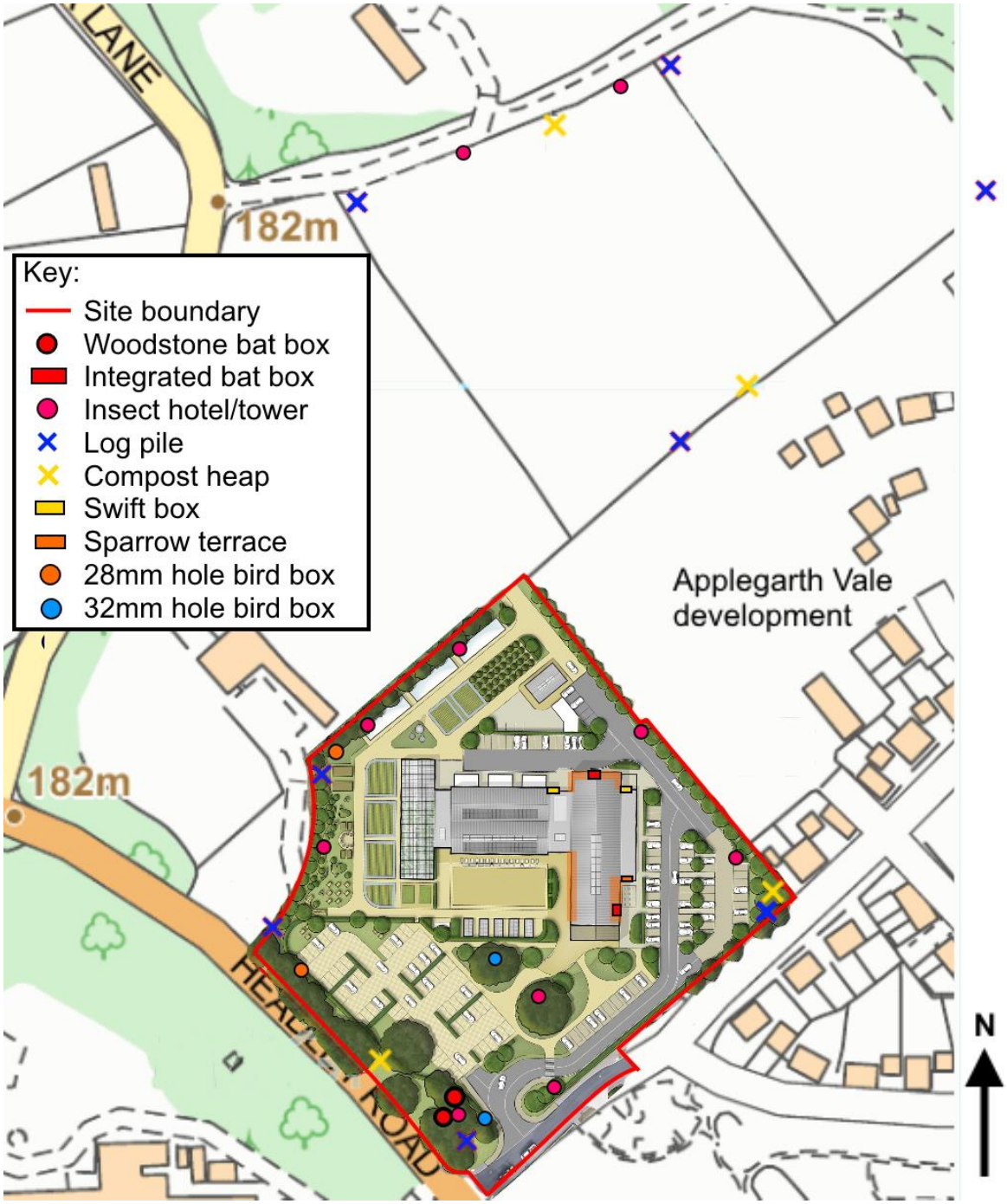


Figure 5. Plan showing the proposed mitigation and enhancement measures over the Farm Shop and wider site.



7 PHOTOGRAPHS

Photo 1. Rough grassland in the east corner of the site (taken 21/08/2019).

Photo 2. Entrance to the site showing the farm shop buildings (taken 21/08/2019).

Photo 3. Public open areas around the farm shop site (taken 21/08/2019).

Photo 4. Fields of grassland to the west of the farm shop (taken 21/08/2019).

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9 APPENDIX A: PROTECTED SPECIES LEGISLATION

9.1 General

This section briefly describes the legal protection afforded to the protected species identified in this report. It is for information only and is not intended to be comprehensive or to replace specialised legal advice. It is not intended to replace the text of the legislation, but summarises the salient points.

9.2 Bats

All species of British bat are listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRoW Act). This legislation makes it an offence to:

- intentionally kill, injure or take a bat;
- possess or control a bat;
- intentionally or recklessly damage, destroy or obstruct access to a bat roost; and
- intentionally or recklessly disturb a bat whilst it occupies a bat roost.

Bats are also European protected species listed on *Schedule 2* of the *Conservation of Habitats & Species Regulations 2017* which gives them full protection under *Regulation 43*. This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb a bat (in such a way as to be likely to significantly affect: (i) the ability of a significant group of bats to survive, breed or rear/nurture their young; or (ii) the local distribution or abundance of the species concerned);
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

All bat roosting sites receive legal protection even when bats are not present (bats tend to reuse the same roost).

Several species of bat are included as a Priority Species in the UK Biodiversity Action Plan (UKBAP - JNCC (2003)) and also as species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRoW Act.

All species of British bat are also protected under *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended). This protection relates specifically to trapping and direct pursuit of the species.

9.3 Dormice

Dormouse (*Muscardinus avellanarius*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receives full protection under *Section 9*. This species is also listed as a

European Protected Species on *Schedule 2* of the *Conservation of Habitats & Species Regulations 2017*, which gives it full protection under *Regulation 43*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRoW Act).

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

9.4 Great crested newt

Great crested newt (*Triturus cristatus*) is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receives full protection under *Section 9*. This species is also listed as a European Protected Species on *Schedule 2* of the *Conservation of Habitats & Species Regulations 2017*, which gives it full protection under *Regulation 43*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRoW Act).

Under the above legislation it is an offence to:

- kill, injure or take an individual of such a species;
- possess any part of such species either alive or dead;
- intentionally or recklessly damage, destroy or obstruct access to any place or structure used by such species for shelter, rest, protection or breeding;
- intentionally or recklessly disturb such a species whilst using any place of shelter or protection; or
- sell or attempt to sell any such species.

The great crested newt is included as a Priority Species in the UK Biodiversity Action Plan (UKBAP) and also as a species of principal importance for the conservation of biological diversity in England under *Section 74* of the CRoW Act.

9.5 Badger

Badger (*Meles meles*) is protected in Britain under the *Protection of Badgers Act 1992* (as amended) and *Schedule 6* of the *Wildlife and Countryside Act 1981* (as amended).

The legislation affords protection to badgers and badger setts, and makes it a criminal offence to:

- wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so;
- interfere with a sett by damaging or destroying it;
- to obstruct access to, or any entrance of, a badger sett; or
- to disturb a badger when it is occupying a sett.

Guidance to what may be classed as disturbance to a badger (when occupying a sett) can be found at: https://www.gov.uk/guidance/badgers-protection-surveys-and-licences

9.6 Birds

9.6.1 Birds - general protection

All species of bird are protected under *Section 1* of the *Wildlife and Countryside Act 1981* (as amended). The protection was extended by the CRoW Act.

The legislation makes it an offence to intentionally:

- kill, injure or take any wild bird;
- take, damage or destroy the nest of any wild bird while that nest is in use or being built; or
- take or destroy an egg of any wild bird.

9.6.2 Birds - specially protected species

Certain species of bird are listed on *Schedule 1* of the *Wildlife and Countryside Act 1981* (as amended) and receive protection under *Sections 1(4)* and *1(5)* of the Act. The protection was extended by the CRoW Act. The legislation confers special penalties where the above mentioned offences are committed for any such bird and also make it an offence to intentionally or recklessly:

- disturb any such bird, whilst building its nest or it is in or near a nest containing dependant young; or
- disturb the dependant young of such a bird.

9.7 Widespread species of reptile

Common lizard (*Zootoca vivipara*), grass snake (*Natrix natrix*), slow-worm (*Anguis fragilis*), and adder (*Vipera berus*) are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the CRoW Act.

Under the above legislation it is an offence to:

- intentionally or deliberately kill or injure any individual of such a species; or
- sell or attempt to sell any part of the species alive or dead.

9.8 Natural England Licences

Where it is necessary to carry out an action that could result in an offence under the *Conservation of Habitats & Species Regulations 2017* it is possible to apply for a licence from Natural England. Licences are only issued where Natural England are satisfied that three derogation tests are met. These are that the activity is for **imperative reasons of overriding public interest**, that there must be **no satisfactory alternative** and that **favourable conservation status of the species must be maintained**.

Consideration of these three derogation tests was previously left to Natural England as part of their deliberations on whether to grant a licence for the development activity after a planning consent has been issued. However, the regulations now require that **all** public bodies, *i.e.* **Local Planning Authorities** (LPAs), have regard to the requirements of the European Habitats Directive when carrying out their functions. As a result, LPAs **must** address the three derogation tests when considering a planning application that could impact upon any Protected Species.

9.9 National planning context

9.9.1 General

Surveys should be completed in line with Natural England's *Standing Advice for Local Authorities* (http://www.naturalengland.org.uk/ourwork/planningdevelopment/spatialplanning/standingadvice/default.aspx), which states:

- Natural England will not comment on applications that are submitted without the relevant protected species surveys if there are no other issues (*i.e.* in relation to SSSIs or landscape).
- Natural England will not comment on scoping surveys that recommend further surveys where these have not been undertaken and submitted with the scoping reports.

In addition to the above, *Section 40* of the *Natural Environment and Rural Communities Act* (2006) imposes a new duty on all public authorities to have regard for biodiversity.

9.9.2 National Planning Policy Framework (NPPF)

From the 19th February 2019, the Government published the revised National Planning Policy Framework. The document sets out the government's planning policies for England and how these are expected to be applied. This replaces a previous version which was published in March 2012. It states: "*at the heart of the Framework is a presumption in favour of sustainable development (paragraph 11).*"

Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):

- an economic objective;
- a social objective; and
- an environmental objective.

The environmental objective is to "*contribute to protecting and enhancing our natural, built and historic environment*; *including making effective use of land, helping to improve biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy"*.

Planning policies and decisions should contribute to and enhance the natural and local environment by "*protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development*

plan)" and "*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*".

If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted.

Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

It states that "*development whose primary objective is to conserve or enhance biodiversity should be supported*; *while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity*".

It should be noted that the "*presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site*".

The NPPF also encourages "*minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures*" and aims to "*promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species*; *and identify and pursue opportunities for securing measurable net gains for biodiversity*". This applies to non-statutory designated sites including Sites of Importance for Nature Conservation (SINCs) and equivalent county wildlife sites.

Early engagement with all necessary stakeholders, including expert bodies, is encouraged by the NPPF.

10 APPENDIX B: SEED MIX COMPOSITION

EH1	
Species	**Common Name**
Wild Flowers	
Alliaria petiolate	Garlic Mustard
Arctium minus	Lesser Burdock
Cntaurea nigra	Common Knapweed
Chaerophyllum temulum	Rough Chervil
Galium album	Hedge Bedstraw
Geum urbanum	Wood Avens
Lathyrus sylvestris	Narrow-leaved Everlasting-pea
Leucanthemum vulgare	Oxeye Daisy
Primula veris	Cowslip
Prunella vulgaris	Selfheal
Saponaria officinalis	Soapwort
Silene dioica	Red Campion
Silene latifolia	White Campion
Silene vulgaris	Bladder Campion
Torilis japonica	Upright Hedge-parsley
Grasses	
Agrostis capillaris	Common Bent
Anthoxanthum odoratum	Sweet Vernal-grass
Brachypodium sylvaticum	False Brome
Cynosurus cristatus	Crested Dogtail
Deschampsia cespitosa	Tufted Hair-grass
Festuca rubra	Slender-creeping Red-fescue
Poa nemoralis	Wood Meadow-grass
EL1	
Species	**Common Name**
Flowering Species	
Galium verum	Lady's Bedstraw
Leontodon hispidus	Rough Hawkbit
Leucanthemum vulgare	Oxeye Daisy
Lotus corniculatus	Birdsfoot Trefoil
Primula veris	Cowslip
Prunella vulgaris	Selfheal
Ranunculus acris	Meadow Buttercup
Trifolium pratense	Wild Red Clover
Grasses	
Agrostis capillaris	Common Bent

Cynosurus cristatus	Crested Dogtail
Festuca rubra	Slender-creeping Red-fescue
Phleum bertolonii	Smaller Cat's-tail
EG1	
Species	**Common Name**
Agrostis capillaris	Common Bent
Cynosurus cristatus	Crested Dogtail
Festuca rubra	Slender-creeping Red-fescue
Phleum bertolonii	Smaller Cat's-tail
Poa pratensis	Smooth-stalked Meadow-grass