Applegarth Eco Pods, Headley Road, Grayshott, Hampshire, GU26 6JL

Ecological Appraisal Report

February 2021

Hampshire Ecological Services Ltd

Consultant Ecologists

E: enquiries@hantsecology.co.uk

W: www.hantsecology.co.uk

T: 0771 456 8361

Registered in England Company No. 7316076.

Registered office: 87 Redwing Road, Waterlooville, Hampshire, PO8 0LX

Ecological Appraisal Report
Applegarth Eco Pods, Headley Road, Grayshott, Hampshire, GU26 6JL
for
Mr Benson

Reference: Applegarth Eco Pods, Grayshott	
Revision	**Issue date:**
0	**26/02/21**

Prepared by:	**Rev 0**
 **CALUM COOPER** Ecologist	**18/02/21**
First review & Technical QA by:	
 **VICTORIA RUSSELL** Principal Ecologist	**12/02/21**
Second review & Technical QA by:	
 **JOHN POLAND** Principal Ecologist	**19/02/21**

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.

The author disclaims any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and the author accepts no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

Contents

1 EXECUTIVE SUMMARY 5

2 INTRODUCTION 8

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

3 METHODS 10

3.1 DESK STUDY 10
3.2 FIELD SURVEY 10
3.2.1 General 10
3.2.2 Dates, times and weather 10
3.2.3 Personnel 11
3.2.4 Botanical surveys - Phase 1 Habitat Survey 11
3.2.5 Animal surveys 12
General 12
Bats 12
Badger 12
Birds 13
Dormice 13
Widespread species of reptile 13

4 RESULTS 14

4.1 DESK STUDY 14
4.1.1 Designated sites 14
4.1.2 European Protected Species 14
4.2 HABITATS AND PLANT SPECIES 16
4.2.1 Habitats 16
4.2.2 Plant species 16
4.3 PROTECTED VERTEBRATES 17
4.3.1 Bats 17
Commuting and foraging habitat 17
4.3.2 Dormice 17
4.3.3 Great crested newt 17
4.3.4 Badger 17
4.3.5 Birds 17
4.3.6 Widespread species of reptile 18

5 INTERPRETATION AND EVALUATION 19

5.1 CONSTRAINTS ON THE SURVEYS 19
5.1.1 Constraints on the survey data 19
5.1.2 Constraints on the mitigation, compensation and enhancement measures 19
5.2 SURVEY REPORT EXPIRY 19
5.3 LEGAL CONTEXT 19
5.4 POTENTIAL IMPACTS OF THE PROPOSED DEVELOPMENT 19
5.4.1 Desk study 19

5.4.2 Habitats and plants *20*
5.4.3 Bats *20*
Trees 20
Foraging and commuting habitat 20
5.4.4 Dormice *21*
5.4.5 Great crested newt *21*
5.4.6 Badger *21*
5.4.7 Birds *21*
5.4.8 Widespread species of reptile *21*
Farm shop site 21
Proposed Eco Pods Field 22
5.5 FURTHER SURVEY 22
5.6 OUTLINE MITIGATION & ENHANCEMENT MEASURES 22
5.6.1 General *22*
5.6.2 Habitats *23*
5.6.3 Bats *23*
Lighting 23
5.6.4 Birds *24*
Mitigation 24
5.6.5 Widespread species of reptile *24*
5.6.6 Invertebrates *25*
5.6.7 Amphibians & hedgehogs *26*
5.6.8 Planting *26*
5.7 REQUIREMENT FOR NATURAL ENGLAND LICENCES 29
5.7.1 Habitat Regulation licences *29*
5.7.2 Protection of Badgers Act (1992) licences *30*

6 FIGURES 31

7 PHOTOGRAPHS 36

8 REFERENCES 37

9 APPENDIX A: PROTECTED SPECIES LEGISLATION 39

9.1 GENERAL 39
9.2 BATS 39
9.3 DORMICE 39
9.4 GREAT CRESTED NEWT 40
9.5 BADGER 40
9.6 BIRDS 41
9.6.1 Birds - general protection *41*
9.6.2 Birds - specially protected species *41*
9.7 WIDESPREAD SPECIES OF REPTILE 41
9.8 NATURAL ENGLAND LICENCES 41
9.9 NATIONAL PLANNING CONTEXT 42
9.9.1 General *42*
9.9.2 National Planning Policy Framework (NPPF) *42*

10 APPENDIX B: PLANT SPECIES LISTS OF THE PROPOSED ECO PODS SITE 44

11 APPENDIX C: SEED MIX COMPOSITION 45

1 EXECUTIVE SUMMARY

1. This report provides information from reports and surveys carried out by Hampshire Ecological Services Ltd produced for Mr Benson, in connection with a proposal to create Eco Pods at Applegarth Farm, Headley Road, Grayshott, Hampshire, GU26 6JL (approximate Ordnance Survey Grid Reference SU858360). 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 Hampshire Ecological Services Ltd in 2019 and 2020.

3. The Eco Pods site consists of a field of rough grassland that was previously part of a golf driving range. There are hedgerows on the north-west and south-east boundaries. The habitats are shown in the Phase 1 Habitat Survey map given in *Figure 4* (see *Section 6*) with vascular plant species list is given in *Appendix B.*

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. The mature trees, 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.

7. 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.

8. No badger setts were found during any of the surveys, some minor evidence of foraging activity was observed on the proposed Eco Pods site.

9. 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).

10. Suitable habitat for reptiles is present on the proposed Eco Pods site areas of the 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/ Eco Pods. 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).

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

12. 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 enhancements are proposed:
    - 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*).

13. 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.

14. 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.

15. As a result of its proximity to these designated sites, the impacts of any works on the SPAs and SACs must be considered. The Eco Pods site 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.

16. 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 create an Eco Pods site at Applegarth Farm, Headley Road, Grayshott, Hampshire, GU26 6JL (approximate Ordnance Survey Grid Reference SU858360). 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 redevelop the Farm Shop buildings, immediately south of the Eco Pods 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)

Hampshire Ecological Services Ltd were commissioned to carry out an ecological appraisal of the proposed Eco Pods site in 2019 (Hampshire Ecological Services Ltd). 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 nearby earth bank (driving range bund) on the northern part of the wider site.

2.2 Site description

The proposed Eco Pods site consists of a field of rough grassland that was previously part of a golf driving range. There are hedgerows on the north-west and south-east boundaries. Plans and aerial photos area 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 south-west; and the Applegarth Farm Shop site to the south. 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 create an Eco Pods site in the field to the north of the Farm Shop site.

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 over the wider site.
- *Section 7* gives photographs of the site;
- *Section 8* lists the references;
- *Appendix A* lists key legislation and regulations;
- *Appendix B* lists vascular plant species recorded on the proposed Eco Pods site; and
- *Appendix C* 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.

An ecological appraisal of the Eco Pods field area was undertaken by Hampshire Ecological Services Ltd, was carried out during the daytime on the 24th September 2019. The weather was warm (20ºC) and dry with 50% cloud cover and a light breeze (Beaufort scale 1).

3.2.3 Personnel

The ecological appraisal of the proposed Eco Pods field was carried out by Nicola Pyle MCIEEM, who is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). She has over 14 years of experience in ecological consultancy and is a highly competent ecologist trained in Phase 1 Habitat Survey and protected species surveys. She was assisted by Calum Cooper BSc (Hons) GradCIEEM) who has over six years of experience in ecological consultancy and is experienced in carrying out preliminary ecological appraisals and surveys for protected species.

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 species lists were compiled for the various habitat types on the site. Subjective estimates of the relative abundance of species were added to the plant species list using a DAFOR scale. The DAFOR scale ranks species according to their relative abundance in a given parcel of land as follows: d – dominant, a – abundant, f – frequent, o – occasional, r – rare. The terms 'abundant' and 'rare' are used by convention and apply only to relative-abundance within the recorded area. It does not mean that species are 'rare' in the general sense.

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*

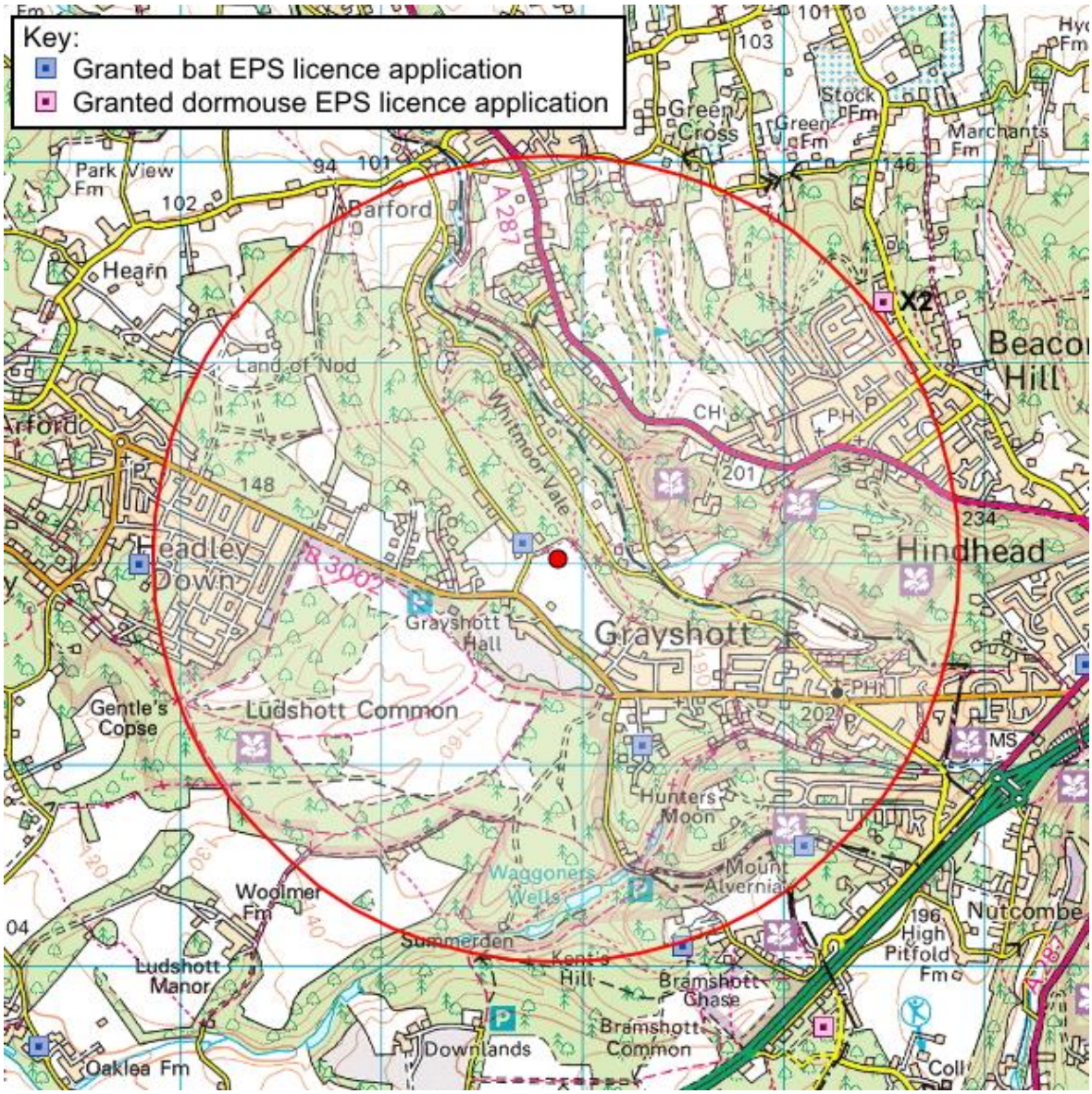
According to the *Multi-Agency Geographic Information for the Countryside* website (www.magic.gov.uk), there have been three granted European Protected Species (EPS) licences for bats within 2km of the site. These are listed in *Table 4.1.2.1.* and their locations are shown in *Figure 4.1.2.1.*

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.



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

4.2 Habitats and plant species

4.2.1 Habitats

The site consists of a field of semi-improved grassland (previously part of the adjacent derelict golf driving range), with hedgerows on the north-west and south-east boundaries.

The semi-improved grassland (usually grazed short by horses and/ or cut for silage production) has a tall, tussocky sward dominated by *Dactylis glomerata* (Cock's-foot) with the grass *Agrostis capillaris* (Common Bent) and the common forbs *Achillea millefolium* (Yarrow) and *Ranunculus repens* (Creeping Buttercup) abundant throughout. There are also smaller amounts of the grasses *Arrhenatherum elatius* (False Oat-grass) and *Holcus lanatus* (Yorkshire-fog), and the common forbs *Plantago lanceolata* (Ribwort Plantain), *Taraxacum officinale* agg. (Dandelion) and *Trifolium repens* (White Clover).

The south-east hedgerow is dominated by *Alnus glutinosa* (Alder) with smaller amounts of *Acer pseudoplatanus* (Sycamore) and *Corylus avellana* (Hazel). There are also a small number of *Acer campestre* (Field Maple) and *Crataegus monogyna* (Hawthorn) bushes scattered along its length. The field-layer is dominated by *Hedera helix* (Ivy), *Rubus fruticosus* agg. (Bramble) and *Urtica dioica* (Common Nettle).

The north-west boundary hedgerow is dominated by dense *Corylus avellana* (Hazel) hedge with small amounts of other species scattered throughout including *Crataegus monogyna* (Hawthorn), *Fagus sylvatica* (Beech) and *Quercus robur* (Pedunculate Oak). The evergreen climber *Hedera helix* (Ivy) is growing through the hedge. The inner (south-eastern) side of the hedgerow is dominated by a strip of dense low-growing *Rubus fruticosus* agg. (Bramble) scrub and dense *Pteridium aquilinum* (Bracken), with occasional tree saplings including *Betula pendula* (Silver Birch), *Crataegus monogyna* (Hawthorn), *Fraxinus excelsior* (Ash) and *Quercus robur* (Pedunculate Oak). The outer (north-western) side of the hedgerow borders an access track and here the field-layer is dominated by a *Hedera helix* (Ivy) with *Fagus sylvatica* (Beech) and *Quercus robur* (Oak) trees over- hanging from an adjacent woodland.

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

Commuting and foraging habitat

The mature trees, 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 site, a former golf driving range, 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 badger setts were found during the survey of the field. However, a small number of snuffle holes and scrapes were observed, suggesting that badgers occasionally forage on the site.

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

At the time of the survey (2019) the grassland on the proposed Eco Pods site had a tall tussocky sward with moderate suitability for reptiles such as slow-worms and grass snake, particularly at the edges and on the nearby earth bank. However, further information on the management of the field revealed that the grassland is usually short due to horse-grazing and the production of silage. Therefore it is unlikely to support a large population of reptiles (if any) due to the variability of cover and risk of predation.

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 the recent 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 recent 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*

No significant constraints to this survey were noted

5.1.2 *Constraints on the mitigation, compensation and enhancement measures*

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

5.2 Survey report expiry

This survey data is usually valid for a maximum of 12 months. 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.

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 Eco Pods site 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.

5.4.3 Bats

Trees

The trees on site were identified as having negligible bat roost suitability and it is understood that they will be unaffected by the works.

Any retained trees should be protected (where appropriate) during construction (see *Section 5.6*).

Foraging and commuting habitat

There is good quality foraging habitat for bats on and adjacent to the proposed Eco Pods field. 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.

Common pipistrelles, soprano pipistrelle, noctule and serotine bats were recorded commuting and foraging on and around the farm Shop site immediately to the south.

The 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.

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

Farm shop site

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.

Proposed Eco Pods Field

The grassland is usually short due to horse-grazing and/ or the production of silage. Therefore it is unlikely to support a large population of reptiles (if any) due to the variability of cover and risk of predation. However, as a precautionary measure, a pre-works check of the grassland (using artificial reptile refugia) will be carried out to prior to works commencing. Surveys will be carried out between March/ April and September in suitable weather conditions (temperatures above 10ºC with little rain). Standard methods involve placing 1m x 0.5m sheets of heavy-duty roofing felt (artificial refugia) in areas where they are most likely to be used by reptiles (*e.g.* at the edges of bramble scrub, in tussocky grassland, *etc.*). So far as possible, the artificial refugia should be placed on slightly uneven ground so as not to lie completely flat (to create a varied microclimate). The refugia will be left for a period of two weeks to allow any reptiles present to find and start using them, after which seven separate checks will be carried out. If reptiles are confirmed on site, they will need to be translocated to suitable habitat within the receptor site, but within the boundaries of the site (*i.e*. an on-site translocation programme). If this is not possible or a larger population is present (which requires more habitat to be retained) an off-site translocation programme will be necessary. The location and extent of any translocation area will be informed by the results of the survey.

If required, the translocation of the reptiles will terminate when no reptiles are found in the search area on five consecutive suitable-weather days. A destructive search will then be undertaken under strict ecological supervision.

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. Based on the 2020 survey results (and available suitable habitat) a low population of common lizard is present on the Farm Shop site immediately to the south. 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.

The vegetation on the nearby earth bank provides permanent suitable habitat for widespread reptile species and grass snake and slow-worm were previously recorded here.

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 lighting restrictions (for bats and other wildlife), 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 the 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

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).

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 wider 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 licence Natural England is not necessary before work commences on the Eco Pods field. In the unlikely event that protected species are found during the work, work will stop and a licence will

be applied for. This permits activities that may otherwise be offences under the *Conservation of Habitats & Species Regulations 2017.*

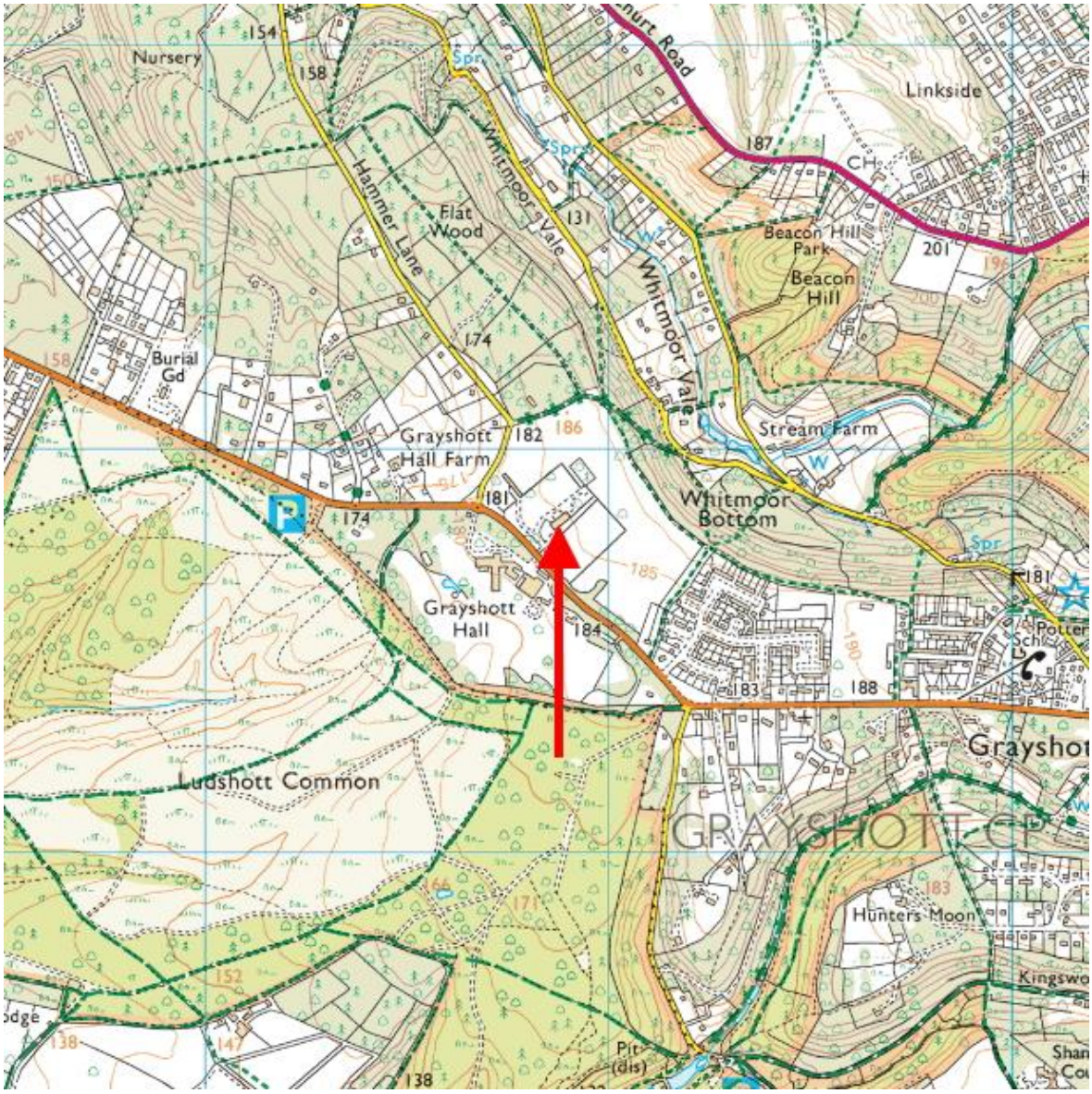
5.7.2 Protection of Badgers Act (1992) licences

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.

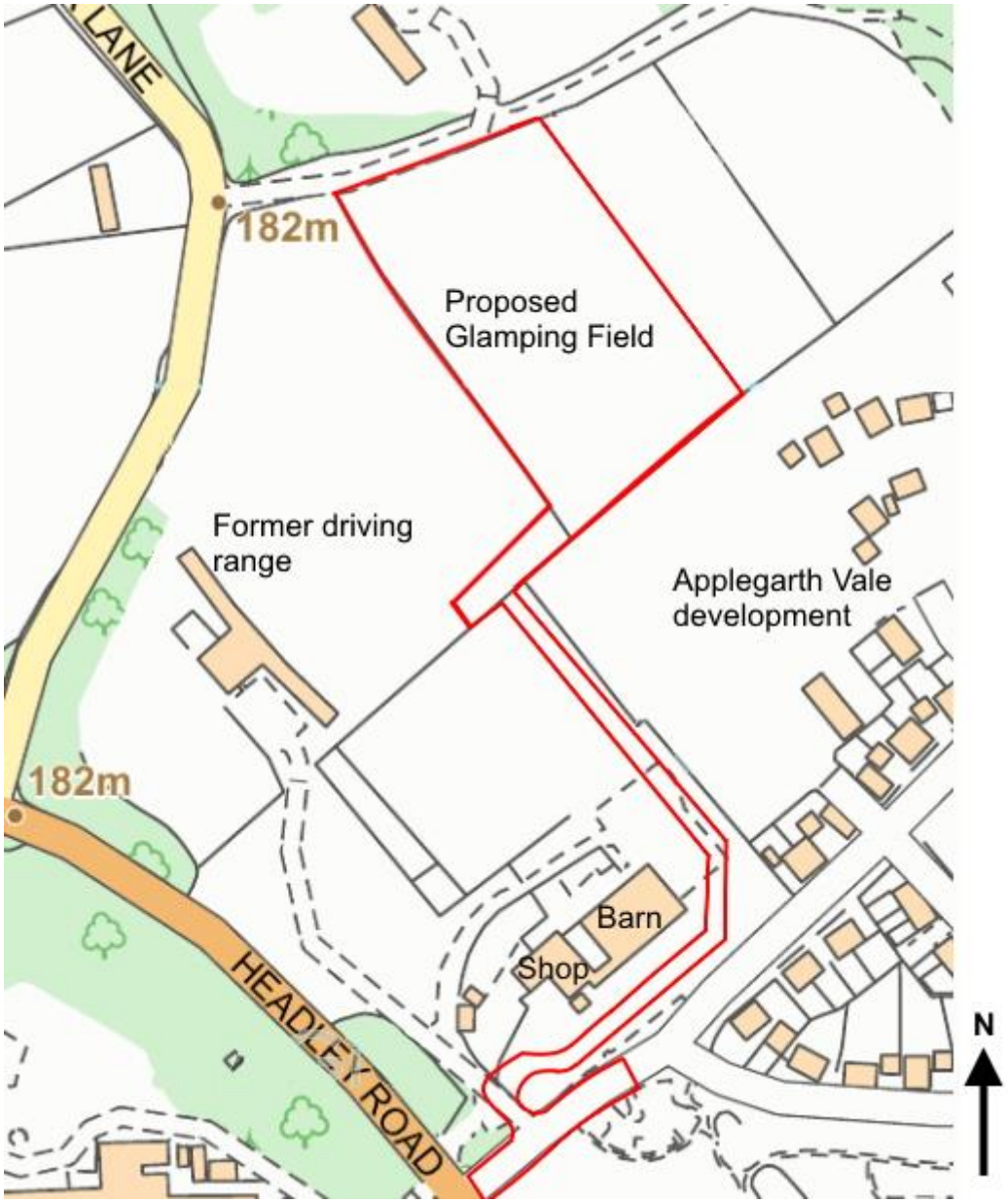


Figure 4. Phase 1 Habitat Survey map of the Applegarth Farm site

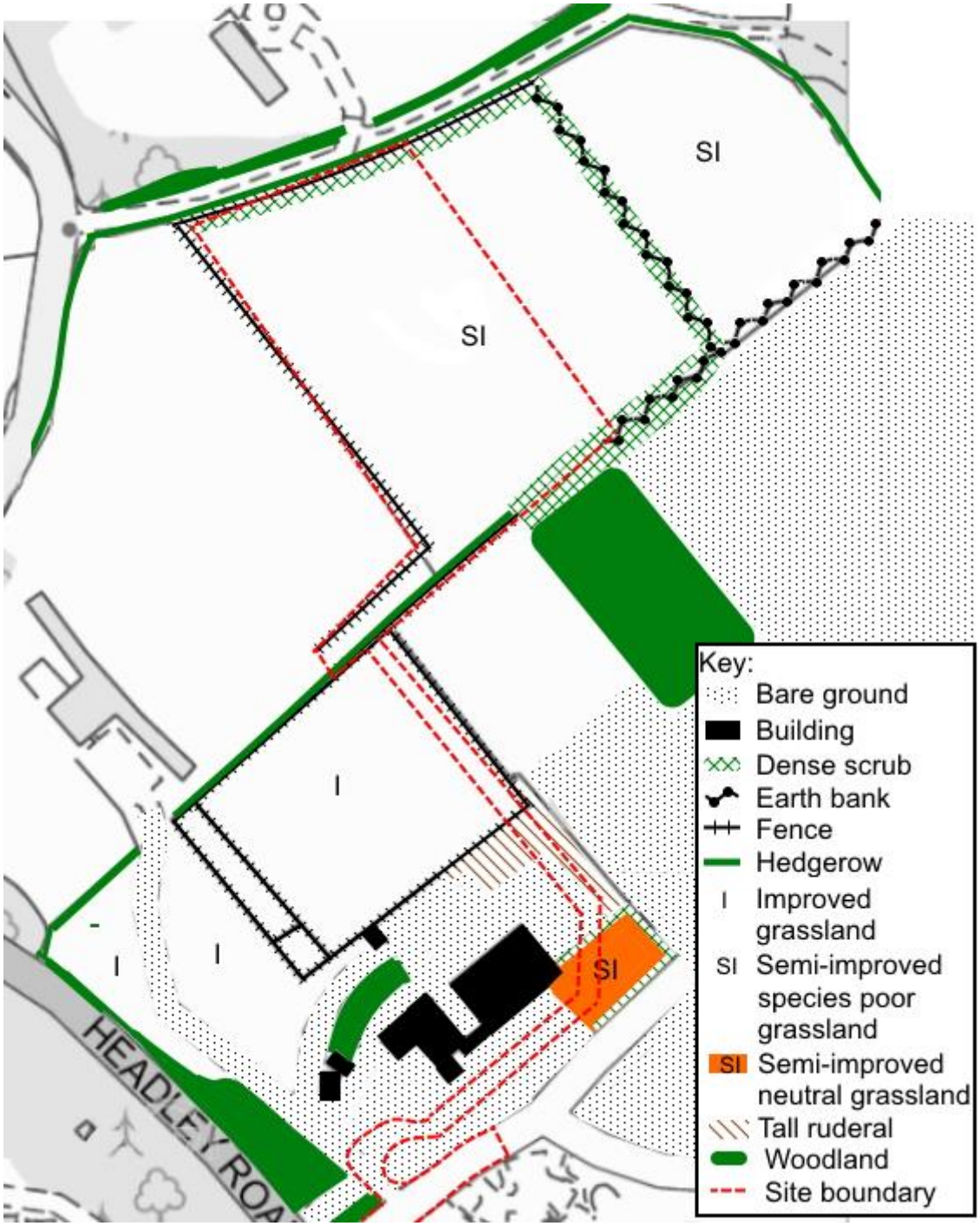
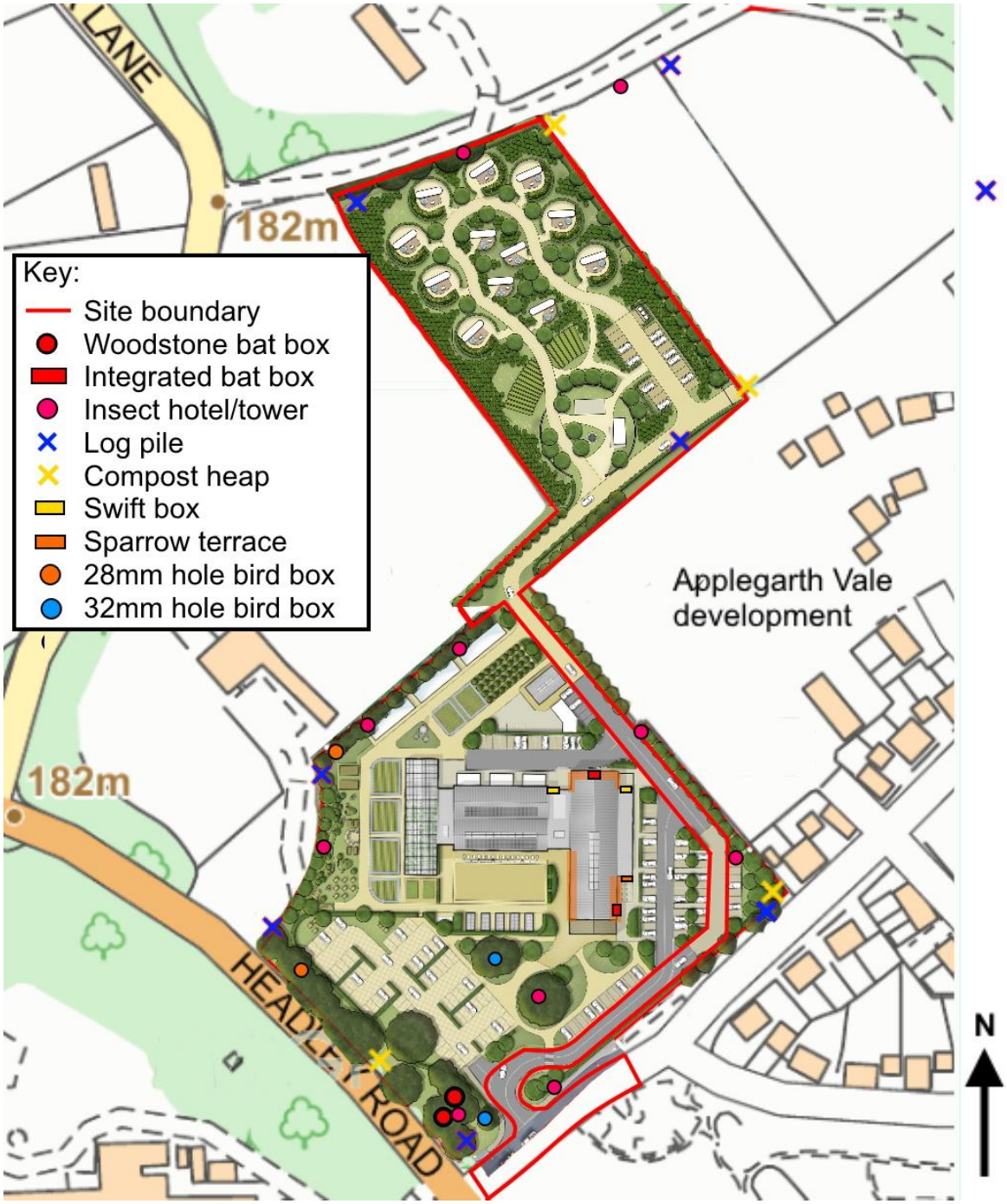


Figure 5. Plan showing the proposed mitigation and enhancement measures on the eco pod and farm shop sites (whole site).



7 PHOTOGRAPHS

Photo 1. Track between the proposed Eco Pods field and farm shop site (taken 24/09/2019).

Photo 2. Semi-improved grassland of the proposed Eco Pods site (taken 24/09/2019).

8 REFERENCES

Beebee, T. and Griffiths, R. (2000). *Amphibians and Reptiles*. New Naturalist Series 87. Harper Collins, London.

Cherrill, A. & McClean, C. (1999). *Between-observer variation in the application of a standard method of habitat mapping by environmental consultants in the UK*. Journal of Applied Ecology, **36**, 989-1000.

Collins, J. (ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd edition.* The Bat Conservation Trust, London.

English Nature (2006). *The Dormouse Conservation Handbook, 2nd edition.* English Nature, Peterborough.

Hampshire Ecological Services Ltd (2021). *Applegarth Farm, Headley Road, Grayshott, Hampshire, GU26 6JL*. Reptile Survey & Mitigation Strategy Report.

Hampshire Ecological Services Ltd (2021). *Applegarth Farm, Headley Road, Grayshott, Hampshire, GU26 6JL*. Bat survey Report.

Hampshire Ecological Services Ltd (2021). *Applegarth Farm Shop, Headley Road, Grayshott, Hampshire, GU26 6JL*. Ecological Appraisal Report.

Hampshire Ecological Services Ltd (2019). *Applegarth Field, Headley Road, Grayshott, Hampshire, GU26 6JL*. Ecological Appraisal Report.

HMSO (1981). *Wildlife and Countryside Act 1981*. HMSO, London.

HMSO (1992). *The Protection of Badgers Act*. HMSO, London.

HMSO (1996). *Wild Mammals (Protection) Act 1996*. HMSO, London.

HMSO (2000). *Countryside and Rights of Way Act*. HMSO, London.

HMSO (2006). *Natural Environment and Rural Communities Act*. HMSO, London.

HMSO (2017). *The Conservation of Habitats and Species Regulations 2017*. HMSO, London.

Institute of Lighting Professionals (2018). *Bats and artificial lighting in the UK*. Institute of Lighting Professionals, Warwickshire.

Joint Nature Conservation Committee (2003). *Handbook for Phase 1 Habitat Survey - a Technique for Environmental Audit* (revised reprint). Joint Nature Conservation Committee, Peterborough.

Jonathan Cox Associates (2014). *Applegarth Vale Breeding Bird Survey. Land off Headley Road, Grayshott, Hampshire.* (Unpublished)

Jonathan Cox Associates (2015). *Applegarth Vale Ecological Impact Assessment. Land off Headley Road, Grayshott, Hampshire.* (Unpublished)

Multi-Agency Geographic Information for the Countryside (2008). www.magic.gov.uk. Accessed 05/10/2019.

Natural England (2011). *Standing Advice for Protected Species*. Natural England, Peterborough. http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/advice.aspx

New Leaf Ecology (2014). *Applegarth Vale. Dormouse Survey Report*. (Unpublished)

Poland, J. and Clement, E. J. (2009). *The Vegetative Key to the British Flora*. John Poland in association with the Botanical Society of the British Isles, Southampton.

The Ecology Co-operation Ltd (2019). *Applegarth Farm. Preliminary Ecological Appraisal.* (Unpublished).

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: PLANT SPECIES LISTS OF THE PROPOSED ECO PODS SITE

Species	**Semi-improved grassland**	**South-east hedge**	**Nearby Earth bank**	**North-west hedge**
a) Woody				
Acer campestre (Field Maple)	-	O	-	-
Acer pseudoplatanus (Sycamore)	-	F	-	-
Alnus glutinosa (Alder)	-	A	-	-
Betula pendula (Silver Birch)	-	-	-	R
Corylus avellana (Hazel)	-	F	-	D
Crataegus monogyna (Hawthorn)	-	O	-	R
Fagus sylvatica (Beech)	-	-	-	O
Fraxinus excelsior (Ash)	-	-	-	R
Hedera helix (Ivy)	-	D	-	O
Ilex aquifolium (Holly)	-	-	-	O
Quercus robur (Pedunculate Oak)	-	-	-	R
Rubus fruticosus agg. (Bramble)	-	D	D	D
b) Herbs				
Achillea millefolium (Yarrow)	F	-	-	-
Arrhenatherum elatius (False Oat-grass)	O	-	-	-
Agrostis capillaris (Common Bent)	A	-	-	-
Cerastium fontanum (Common Mouse-ear)	R	-	-	-
Cirsium vulgare (Spear Thistle)	-	-	O	-
Dactylis glomerata (Cock's-foot)	D	-	-	-
Dryopteris filix-mas (Male-fern)	-	-	R	R
Holcus lanatus (Yorkshire-fog)	O	-	-	-
Hypericum perforatum (Perforate St John's-wort)	R	-	-	-
Phleum pratense (Timothy)	R	-	-	-
Plantago lanceolata (Ribwort Plantain)	O	-	-	-
Pteridium aquilinum (Bracken)				F
Ranunculus repens (Creeping Buttercup)	F	-	-	-
Rumex obtusifolius (Broad-leaved Dock)	R	F	F	-
Senecio jacobaea (Common Ragwort)	R	-	-	-
Stellaria graminea (Lesser Stitchwort)	R	-	-	-
Taraxacum officinale agg. (Dandelion)	O	-	-	-
Trifolium pratense (Red Clover)	R	-	-	-
Trifolium repens (White Clover)	O	-	-	-
Urtica dioica (Common Nettle)	-	D	D	-
Veronica chamaedrys (Germander Speedwell)	R	-	-	-
DAFOR: D – dominant, A – abundant, F – frequent, O – occasional, R - rare				

11 APPENDIX C: 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