Beech Hill Stores, Headley Down

Ecological Appraisal

Cordage 15 Limited

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The Pavilion, 1st Floor, Botleigh Grange Office Campus, Hedge End, Southampton SO30 2AF

Tel: 02382 022 800

Email: ecology@wyg.com

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Prepared by:		John Simper MCIEEM **Senior Ecologist**
Checked By:		Jonathan Jackson CEnv MCIEEM **Principal Ecologist**
Verified By:		David West CEnv MCIEEM **Associate Ecologist**

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Executive Summary

Contents	Summary
Site Location	The site is located within the of the village of Headley Down, Hampshire and is centred at Ordnance Survey National Grid Reference SU 83776 36469, as shown in Figure 1. The site comprises buildings and an overgrown garden associated with a retail premises and former dwellings. The site is surrounded on all sides by residential streets, houses and gardens.
Proposals	The development proposals comprise the demolition of existing buildings and construction of nine houses.
Scope of this Survey(s)	The scope of the survey for the site was to conduct an Ecological Appraisal comprising a desk-based study and an extended Phase 1 Habitat Survey. The desk-based study used online resources and information sourced from the Local Environmental Records Centre.
Results	The site is 0.83 km from the Wealden Heaths Phase II SPA. Habitats on site are common and widespread in the wider environment. Evidence of roosting brown long-eared bats was found in the loft void of Building B1 and the five other buildings were assessed as having moderate potential to be suitable for roosting bats. Habitats were also identified with the potential to support reptiles, nesting birds, commuting and foraging bats and invertebrates, including stag beetles.
Recommendations	**Further assessment and surveys:** • It is recommended that an HRA is completed to establish whether the development proposals have the potential to result in LSE on any qualifying features of any Internationally designated site for nature conservation. • Further surveys are required to characterise the bat roost present in Building B1 and to determine if remaining buildings are used by roosting bats. **Mitigation for effects on protected / notable species:** • Retention of greenspace where possible. • A precautionary approach should be taken when clearing vegetation to avoid the possibility of harm to reptiles. • Measures will need to be in place to protect nesting birds if trees or shrubs are removed in the nesting season (March to September). • The possible fox earth should be excavated carefully to prevent entombment of any animals present. **Potential enhancements could include:** • Planting of native species incorporated into the landscaping of the site. • Installing bat roosting boxes. • Installing bird nesting boxes. • Instilling log piles for stag beetles.

Glossary

Badger Act	Protection of Badgers Act 1992
BAP	Biodiversity Action Plan
BCT	Bat Conservation Trust
BoCC	Bird(s) of Conservation Concern
BSI	British Standard Institute
BTO	British Trust for Ornithology
CEnv	Chartered Environmentalist
CIEEM	Chartered Institute of Ecology & Environmental Management
CRoW Act	Countryside and Rights of Way Act 2000
DEFRA	Department for the Environment, Food and Rural Affairs
EcIA	Ecological Impact Assessment
EPS	European Protected Species
EPSL	European Protected Species Licence
GCN	Great Crested Newt
Habitat Regulations	Conservation of Habitats and Species Regulations 2017 (as amended)
HAP	Habitat Action Plan
HBIC	Hampshire Biological Information Centre
Hedgerow Regulations	Hedgerow Regulations 1997
HPI	Habitat(s) of Principal Importance
HRA	Habitats Regulations Assessment
JNCC	Joint Nature Conservation Committee
LERC	Local Environmental Record Centre
LNR	Local Nature Reserve
LPA	Local Planning Authority
LWS	Local Wildlife Site
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
Natura 2000 site	A European site designated for its nature conservation value
NERC Act	Natural Environment and Rural Communities Act 2006
NNR	National Nature Reserve
NPPF	National Planning Policy Framework
PTES	Peoples Trust for Endangered Species
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SINC	Site of Importance for Nature Conservation
SAP	Species Action Plan
SPA	Special Protection Area
SPI	Species of Principal Importance
SSSI	Site(s) of Special Scientific Interest
W&CA	Wildlife & Countryside Act 1981 (as amended)

1.0 Introduction

1.1 Background

WYG was commissioned by the Cordage 15 Limited in January 2020 to undertake an Ecological Appraisal of the site known as Beech Hill Stores, Headley Down.

This report has been prepared by WYG Senior Ecologist John Simper and the conditions pertinent to it are provided in Appendix A.

1.2 Site Location

The site is located in the centre of Headley Down in Hampshire at National Grid Reference SU 83755 36480. The site comprises buildings and rear gardens associated with retail premises and former dwellings. The site is surrounded on all sides by residential streets, houses and gardens.

1.3 Development Proposals

The proposed development comprises of the demolition of existing buildings and construction of nine houses.

1.4 Purpose of the Report

The purpose of this report is to complete:

- A desk study to obtain existing information on statutory and non-statutory sites of nature conservation interest and relevant records of protected / notable species within the site and its zone of influence;
- An extended Phase 1 Habitat Survey, involving a walkover of the site to record habitat types and dominant vegetation, including any invasive species, and a reconnaissance survey for evidence of protected fauna or habitats capable of supporting such species; and
- An assessment of the potential ecological receptors present on site, identify any constraints they pose to future development and (if possible) any recommendations for any further surveys, avoidance, mitigation or enhancement measures that are needed (as appropriate).

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

A summary of the key legislation is provided in Appendix B.

2.0 Methodology

2.1 Desk Study

2.1.1 Local Ecological Records Centre

Information was requested from Hampshire Biological Information Centre (HBIC) for information on any nature conservation designations and protected or notable species records within 2 km of the site.

The data search covered:

- Statutory designated sites for nature conservation, namely SACs, SPAs, Ramsar sites, SSSIs, NNRs and LNRs;
- Non-statutory designated sites for nature conservation, namely LWS;
- Legally protected species, such as great crested newts *Triturus cristatus* (GCN), badger *Meles meles* and bats;
- Notable habitats and species, such as those listed as Habitats or Species of Principal Importance (HPIs or SPIs); and,
- Priority habitats or species within the Hampshire Biodiversity Action Plan (BAP) (Hampshire Biodiversity Partnership, 2000).

The data search did not cover:

- Tree Preservation Orders (TPOs); or
- Conservation Areas designated for their special architectural and historic interest.

Relevant extracts from the desk study are provided in Appendix C.

2.1.2 Online Resources

A search for relevant information was also undertaken using the MAGIC website of the area within 2 km of the boundary of the site. This is DEFRA's interactive, web-based database of statutory designations and European Protected Species Licences (EPSL) applications that have been granted since 2010.

2.2 Field Surveys

The following methodologies were used to identify the ecological receptors present on or near the site, which are relevant to the proposed development.

2.2.1 Habitats

An extended Phase 1 habitat survey was undertaken on the site on 20th February 2020 by WYG Senior Ecologist John Simper MCIEEM. The weather conditions were overcast and mild with little wind.

The vegetation and broad habitat types within the site were noted during the survey in accordance with the categories specified for a Phase 1 Vegetation and Habitat Survey (Joint Nature Conservation Committee (JNCC), 2010). Dominant plant species were recorded for each habitat present using nomenclature according to Stace (2019). The site was also appraised for its suitability to support notable flora, with regard to the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017).

2.2.2 Protected & Notable Species

The site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Schedule 2 of the Habitat Regulations, Schedule 5 of the W&CA, the CRoW Act, those given extra protection under the NERC Act, and species included in the Hampshire BAP.

Great Crested Newt

The site was appraised for its suitability to support GCN. The assessment was based on Guidance outlined in the *Herpetofauna Workers' Manual* (Gent & Gibson, 2003) and the *Great Crested Newt Conservation Handbook* (Langton, Becket & Foster, 2001).

Bats

Roosting Bats – Buildings and Structures

Any suitable buildings or structures on site were assessed from the ground for their suitability to support breeding, resting and hibernating bats using survey methods based on the BCT *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (Collins, 2016) – hereafter referred to as the 'BCT Guidelines'. The categories used to classify the bat roost suitability of any features found, are explained in Table 1.

Table 1: Categories of Bat Roost Suitability

Suitability	Typical Roosting Features
Negligible	Negligible habitat feature on site likely to be used by roosting bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation).
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis & potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Foraging / Commuting Bats

The BCT Guidelines use the criteria in Table 2 To categorise the potential value of habitats and features for use by foraging and commuting bats and these have been used to characterise the value of this site.

Table 2: Categories of Habitat Suitability

Suitability	Typical Foraging & Commuting Features
Negligible	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat.

Suitability	Typical Foraging & Commuting Features
	Suitable, but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.
Moderate	Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

Reptiles

The site was appraised for its suitability to support reptiles. The assessment was based on guidance outlined in the *Herpetofauna Workers' Manual* (Gent and Gibson, 2003).

Badgers

The site was surveyed for evidence of badger setts or other badger activity such as paths, latrines or signs of foraging. Methodologies used and any setts recorded were classified according to published criteria (Harris, Cresswell and Jefferies, 1989).

Hazel Dormice

The site was surveyed for its suitability to support hazel dormice. The assessment was based on guidance outlined in Bright, Morris and Mitchell-Jones (2006).

Other Species

The site was also appraised for its suitability to support other protected or notable fauna including mammals, amphibians, birds and invertebrates with regard to the *Guidelines for Preliminary Ecological Appraisal* (CIEEM, 2017) and *BS42020:2013 Biodiversity – Code of Practice for Planning and Development* (BSI, 2013). Evidence of any current or historical presence of such species was recorded.

2.2.3 Invasive Species

The site was searched for evidence of invasive plant species, such as Japanese knotweed *Reynoutria japonica* (formerly *Fallopia japonica*), Indian (Himalayan) balsam *Impatiens glandulifera*, giant hogweed *Heracleum mantegazzianum*, wall cotoneaster *Cotoneaster horizontalis* and rhododendron *Rhododendron ponticum × Rhododendron maximum.* A full list of all invasive plant species is provided in Appendix B.

2.3 Limitations

The optimal period to undertake an extended Phase 1 habitat survey is April-September. The survey was completed in February which is outside the optimal survey window. This not considered to be a

significant limitation as the dominant species could be recorded during the survey and this led to an accurate assessment of habitat present.

To determine presence or likely absence of protected species usually requires multiple visits at suitable times of the year. As a result, this survey focuses on assessing the potential of the site to support species of note, which are considered to be of principal importance for the conservation of biodiversity with reference to those given protection under UK or European wildlife legislation. This report cannot therefore be considered a comprehensive assessment of the ecological interest of the site. However, it does provide an assessment of the ecological interest present on the day the site was visited and highlights areas where further survey work may be recommended.

Due to the vegetation being very dense in the area of woodland in the south of the corner of the site, it could not be accessed during the survey. Access into this area is therefore required to assess the potential for protected and / or notable species to be present.

The details of this report will remain valid for a period of **two years** from the date of the survey, after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

3.0 Baseline Conditions

3.1 Designated Sites

The designated site in Table 3 were identified within 2 km of the site.

Table 3: Designated Sites within 2 km of the site

Site Name	Distance from site	Summary of features
Wealden Heaths Phase II SPA	0.83 km	Wealden Heaths Phase II SPA is located within Hampshire, Surrey and West Sussex. It comprises areas of wet and dry heathland, valley bogs, broad-leaved and coniferous woodland, permanent grassland and open water. Some of these habitats are themselves of European significance and support nationally important assemblages of wetland plants, invertebrates and reptiles. The site has three heathland-breeding bird species in numbers of European importance: nightjar *Caprimulgus europaeus* and woodlark *Lullula arborea*, and Dartford warbler *Sylvia undata* which nest and feed in gorse *Ulex* sp.
Bramshott and Ludshott Commons SSSI	0.83 km	Despite extensive colonisation by birch *Betula* and Scot's pine *Pinus sylvestris*, Bramshott and Ludshott Commons support extensive tracts of mature heathland vegetation dominated by heather *Calluna vulgaris*, bell heather *Erica cinerea*, dwarf gorse *Ulex minor* and common gorse *U. europaeus*. Despite birch and pine encroachment, the site as a whole represents

Site Name	Distance from site	Summary of features
		one of the best remaining examples of open heathland in the western Weald and supports populations of a number of specialised heathland vertebrates, including the smooth snake *Coronella austriaca*, Dartford warbler *Sylvia undata*, woodlark *Lullula arborea*, stonechat *Saxicola torquata*, nightjar *Caprimulgus europaeus* and hobby *Falco Subbuteo*.
Arford Common / Beech Hill Common LWS / SINC	0.33 km	Woodland and heathlands.
Little Hearn Copse LWS / SINC	0.93 km	Ancient semi-natural woodland.
Hearn Copse LWS / SINC	1.03 km	Ancient semi-natural woodland.
Longgut Copse LWS / SINC	1.08 km	Woodland where there is a significant element of ancient semi-natural woodland surviving.
Lane Near Arford, Headley LWS / SINC	1.16 km	Site which supports one or more notable species.
Dalen Copse LWS/SINC	1.23 km	Ancient Woodland.
High Street, Headley LWS / SINC	1.44 km	Site which supports one or more notable species.
River Wey & adjacent Wood on Headley Wood Estate LWS / SINC	1.75 km	Semi-natural woodland comprising community type with restricted distribution. Areas of open freshwater which support outstanding assemblages of floating / submerged / emergent plant species, invertebrates, birds or amphibians. Fens, flushes, seepages, springs, inundation grasslands etc. that support a flora and fauna characteristic of unimproved and waterlogged (seasonal or permanent) conditions.
Wishanger Valley LWS / SINC	1.76 km	Semi-natural woodland comprising community type with restricted distribution. Areas of open freshwater which support outstanding assemblages of floating / submerged / emergent plant species, invertebrates, birds or amphibians.
Whitmoor Hanger LWS / SINC	1.78 km	Ancient Woodland.
The Frith & Coachroad Plantation LWS / SINC	1.97 km	Woodland where there is a significant element of ancient semi-natural woodland surviving.

3.2 Habitats

Eight habitats were identified through our assessment, with detailed Target Notes (TNs) included in Appendix C.

3.2.1 Introduced Shrub

The southern portion of the site consisted of introduced shrub dominated by cherry laurel *Prunus laurocerasus* occasional holly *Illex aquifolium* and goat willow *Salix caprea* (TN1). Due to the dense nature of the canopy, the ground flora was poorly developed with occasional brambles *Rubus fruticosus* recorded. Parts of this area had been recently felled, including some scattered trees.

There was also cherry laurel hedgerow adjacent to the front of the former residential buildings (B1) which had become overgrown (TN3). Associated with the cherry laurel were specimens of box *Buxus sempervirens*, holly and magnolia *Magnolia* spp.

3.2.2 Hardstanding

Areas of hardstanding were present to the north of the buildings adjacent to the Eddeys Lane and to the south of the property (TN4). A portion of the south east of site was separated from the rest of the site by a wall of corrugated metal sheeting although sections of this were missing and it was in poor condition. Within this area were a number of lorries and vehicles in storage and various items of scrap and vehicles (TN5). Due to the derelict nature of the site, occasional saplings of goat willow, bramble scrub and buddleja *Buddleja davidii* were becoming established in places.

3.2.3 Scattered Scrub

There was scattered scrub dominated by bramble in parts of the site, particularly in the vicinity of buildings (TN6).

3.2.4 Semi-improved Neutral Grassland

A very small area of semi-improved grassland was recorded to the south of the hardstanding to the south of the buildings (TN7). This was dominated by cock's-foot *Dactylis glomerata*, Yorkshire fog *Holcus lanatus* and some sparse bramble growth.

3.2.5 Ephemeral / Short Perennial

There were areas of hard standing that had been colonised by a sparse growth of mosses and species such as annual meadow grass *Poa annua*, ribwort plantain *Plantago lanceolata* and occasional buddleja (TN8).

3.2.6 Buildings

There were seven buildings on site. These comprised:

- A vacant semi-detached dwelling (B1);
- A single dwelling that is partially occupied with a vacant shop on the ground floor (B2);
- A vacant former shop (B3a / B3b); and
- A series of outbuildings in a delict condition (B4a / B4b / B5).

These are discussed further in Section 3.3.3 in relation to the suitability for roosting bats.

3.3 Protected & Notable Species

3.3.1 Great Crested Newts

The HBIC data search returned no records of great crested newts (GCN within 2 km of the site) and no water bodies potentially suitable for the species were revealed during the desk study. The site has been assessed as having negligible potential for the species.

3.3.2 Reptiles

The HBIC data search returned 10 records of common lizards *Zootoca vivipara*, 44 records of slow worms *Anguis fragilis* and one record of a grass snake *Natrix helvetica* within 2 km of the site. The majority of these records come from heathland habit approximately 1.2 km to the south east of the site (Ludshott Common SSSI). Two records were from gardens approximately 500 m to the north west of the site.

Areas of semi-improved grassland, scrub, recently felled woodland and semi-natural woodland have low suitability for reptiles due to the structure of the vegetation present. Habitat for common and widespread reptiles such as slow worms is also present in surrounding gardens, therefore the site has been assessed as having some (albeit limited) potential to support reptiles.

3.3.3 Bats

The HBIC data search returned 25 records of bats of at least eight bat species within 2 km of the site. These are summarised in Table 4. None of the records were located within the site.

Table 4: Bat records returned within 2 km of the site

Common Name	No. of Records	Nearest Record to Site
Unidentified bat	2	0.6 km
Brown long-eared bat *Plecotus auritus*	4	0.9 km
Lesser horseshoe bat *Rhinolophus hipposideros*	2	0.5 km
Unidentified long-eared bat sp. *Plecotus* spp.	1	0.5 km
Natter's bat *Myotis nattereri*	2	0.5 km
Noctule *Nyctalus noctula*	2	0.5 km
Pipistrelle bat spp.	2	0.4 km
Common pipistrelle *Pipistrellus pipistrellus*	5	0.3 km
Serotine *Eptesicus serotinus*	1	2 km,
Soprano pipistrelle *Pipistrellus pygmaeus*	4	0.5 km

A search of data on Magic Map identified two EPSL granted for bats within a 2 km radius of the Site. The details of the EPSL are provided in Table 5.

Table 5: EPSL for bats granted within 2 km of the site

Species affected	Distance from site	Licence allowed	Licence validity	Granted application reference
Common pipistrelle	0.4 km S	Destruction of a resting place	2012-2012	EPSM2012-4361
Common pipistrelle Soprano pipistrelle	1.9 km, NE	Destruction of a breeding/resting place	2012-2015	EPSM2012-4980

Roosting Bats – Buildings

Seven buildings were found within the site, these are described along with an assessment of their bat roosting potential in Table 6.

Table 6: Bat Suitability Classification of Buildings on Site

Building, description and suitability	Photograph
Building B1 Vacant semi-detached dwelling Rendered brick built construction with a clay tiled roof. Roof of timber construction with eaves. Loft void un-boarded with tight fitting bitumen felting. Access points likely on east side of building but this was heavily obscured with ivy growth (TN9). Small single storey lean-too storage rooms on southern and eastern aspects. Large number of droppings characteristic of long-eared bats were present throughout loft void. **Confirmed bat roost.**	
Building B2 Partially occupied brick built building with a timber framed roof clad with clay tiles. Ground floor a vacant former shop. Loft void partially boarded and used for storage. Insulation was present throughout and the roof was lined with tight fitting wooden cladding. Gaps providing suitable crevices for bats and / or access into the loft void were present under the eaves (TN10). No evidence of bats was found during the internal inspection of the loft void. **Moderate suitability**	
Building B3a Vacant former shop. Eastern portion consisted of a single story building of brick construction with timber barge boards. The roof was flat and clad with metal sheeting.	

No features were recorded that were suitable for roosting bats. **Negligible Suitability**	
Building B3b Vacant former shop. This section of the building was also of brick construction but two slate tiled loft voids were present with clay ridge tiles and louvred ventilation chimney on the northern-most void. The loft voids were un-boarded and lined with plaster, access into the interior of the loft spaces was present in the form of ventilation hatches (including through the roof vent on within the northern loft space (TN11). No evidence of roosting bats was present within the interior. The apex of the loft voids were clad with overlapping timbers on the western side. Gaps at the base of these timbers and under the barge boards were considered to offer potential roosting crevices for bats (TN12). **Moderate suitability**	
Building B4a Outbuilding. Brick built building with a flat metal / asbestos clad roof. The building was largely open on its eastern aspect. A portion of the exterior wall on the western aspect was clad with timber boarding which is deteriorating in places offering potential roosting places (TN13). The interior of the building was open and used as storage. No evidence of roosting bats was found internally. A portion of the western building was not open and clad with timber boarding in places, further crevices with potential for roosting bats were located within this area (TN14). **Moderate suitability**	

Building B4b This building was of similar construction to B3b although in a considerably more dilapidated condition. It was brick built and has a slate tiled roof with clay ridge tiles. The building was being used for storage internally and the ceiling had partially collapsed leaving the loft void open. The roof was of timber construction but the roof was unlined, unlike B3b. Crevices on within brickwork on eastern aspect of the building and gaps under the ridge tiles (TN15) were considered to offer potential roosting locations for crevice dwelling species of bats. **Moderate suitability**	
Building B5 B5 was a derelict shed of timber and asbestos construction with a shallow pitched roof. Due to the very poor condition of the building and lack of features potential suitable for roosting bats, it has been assessed as having negligible potential for roosting bats. **Negligible suitability**	

Foraging and commuting bats

The site was considered likely to provide habitat for commuting and foraging bats (e.g. the woodland) and is connected through the wider landscape via the surrounding garden habitat.

The site was assessed as providing 'low suitability' for commuting and foraging bats in accordance with BCT Guidelines.

3.3.4 Badger

The HBIC data search returned 23 records of badgers within 2 km of the site, the closest of these was approximately 0.3 km away from the site.

No evidence of badgers was revealed during the survey.

3.3.5 Hazel Dormice

The HBIC Data search returned one record of hazel dormouse within 2 km of the site the closest of these derives from approximately 1.6 km to the north west of the site.

The site is surrounded by urban habitats and is isolated from any potentially suitable dormouse habitat. The site has therefore been assessed as having negligible potential for hazel dormice.

3.3.6 Birds

HBIC returned records of 66 species of birds most of which are typical of woodland and heathland that is found within the search area. Eighteen of these species are Red Listed as species of conservation concern (BoCC) of which the following have potential to be found on site: house sparrow *Passer domesticus,* mistle thrush *Turdus viscivorus*, song thrush *Turdus philomelos* and starling *Sturnus vulgaris*. Eight species are listed within Schedule 1 of the WCA including barn owl *Tyto alba,* Dartford warbler *Sylvia undata* and red kite *Milvus milvus,* although none of these species are likely to occur on site. Eleven species are listed under Section 41 of the NERC Act, those with potential to occur on site include spotted flycatcher *Muscicapa striata*, song thrush, house sparrow and starling.

3.3.7 Invertebrates

HBIC data search returned records of 85 species of invertebrate within 2 km of the site, 35 species are listed within S41 of the NERC Act such as the autumnal rustic *Eugnorisma glareosa,* ear moth *Amphipoea oculea* and stag beetle *Lucanus cervus*. Six species are IUCN Red list species, purple emperor *Apatura iris,* white admiral *Limenitis Camilla,* balsam carpet *Xanthorhoe biriviata,* grayling *Hipparchia Semele, small heath Coenonympha pamphilus* and *silver-studded blue Plebejus argus.* Of these notable species, only stag beetles have the potential to be found on site.

3.3.8 Other Species

A single burrow was identified within this area, this is thought to have been created by a fox *Vulpes vulpes* due to the presence of hairs identified on a piece wire near the entrance (TN2). There was however no evidence that this was in regular use due to a lack of footprints at the entrance and other signs in the vicinity such as prey remains.

3.4 Importance of Ecological Features

In line with the CIEEM PEA Guidelines, and based on the above baseline information, the importance of each ecological feature recorded within the study area is given in Table 7. The categories used are those which are defined in Section 4 of the CIEEM EcIA Guidelines (CIEEM, 2018).

Table 7: Importance of Ecological Features

Feature	Importance	Rationale
Wealden Heaths Phase II SPA	International	A designated Natura 2000 site for breeding birds.
Bramshott and Ludshott Commons SSSI	National	Site designated at a national level.
SINCs x 15	Local	Sites designated at a local level
Introduced shrub	Negligible	This habitat is common, widespread, easily recreated and has limited potential to support protected and notable species.
Hardstanding	Negligible	This habitat has limited potential to support protected or notable species.

Feature	Importance	Rationale
Scattered scrub	Negligible	This habitat is common, widespread, easily recreated and has limited potential to support protected and notable species.
Semi-improved neutral grassland	Negligible	This habitat is common, widespread, easily recreated and has limited potential to support protected and notable species.
Ephemeral / Short perennial	Negligible	This habitat is common, widespread, easily recreated and has limited potential to support protected and notable species.
Buildings	Unknown	Further surveys required.
Reptiles	Unknown	Low potential for habitats on site to support reptiles.
Roosting bats	Unknown	Further surveys required to characterise the known roost and assess the potential for other buildings to support roosting bats.
Foraging and commuting bats	Local	The habitats present were considered to have low suitability to support roosting bats in accordance with the BCT Guidelines. This would translate to being of Local importance in the context of EcIA.
Birds	Unknown	Nesting potential within vegetated habitats on site and within buildings.
Either: International (incl. European) / National / Regional / County / Local / Negligible **Or:** Unknown (i.e. further surveys/information needed)		

The potential for the development proposals to have adverse or beneficial impacts on these features, along with the need for any mitigation or enhancement measures are discussed in detail below.

4.0 Relevant Planning Policy & Legislation

4.1 Revised National Planning Policy Framework

A revised NPPF was issued on 19th February 2019 (Ministry of Housing Communities and Local Government, 2019) and currently supplements government Circular *06/2005, Biodiversity and Geological Conservation: Statutory Obligations and their Impact within the Planning System* (Office of the Deputy Prime Minister (OPDM), 2005).

Circular 06/2005 states that the presence of protected species is a material consideration in the planning process. Paragraph 170 of the NPPF also states that:

"*Planning policies and decisions should contribute to and enhance the natural environment by:*

a) 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)

b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland
c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate
d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures
e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."

The conservation and enhancement of wildlife is also specifically reference re: development within the National Parks or the Broads.

Paragraph 174 then goes on to confirmed that:

"*When determining planning applications, local planning authorities should apply the following principles:*

a) 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;
b) 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. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;
c) 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; and
d) 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."

Regarding EcIAs and HRAs – any sites identified, or required, as compensatory measures for adverse effects on any Natura 2000 / habitats site should also be given the same level as protection as the pSPAs and cSACs themselves. In addition, when an application is being determined, Paragraph 177 clarifies 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."

Paragraph 180 is also relevant as:

"*Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:…*

c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation."

4.2 Biodiversity 2020: A strategy for England's Wildlife & Ecosystem Services

Biodiversity 2020 (DEFRA, 2011) replaces the previous UK Biodiversity Action Plan and sets national targets to be achieved. The intent of Biodiversity 2020, however, is much broader than the protection and enhancement of less common species, and is meant to embrace the wider countryside as a whole.

The priority species and habitats considered under Biodiversity 2020 are the SPI & HPI detailed under NERC Act (see Appendix B for further details).

4.3 Local Biodiversity Action Plan

Local Biodiversity Action Plans (LBAPs) identify habitat and species conservation priorities at a local level (typically County by County) and are usually drawn up by a consortium of local Government organisations and conservation charities. Although they are no-longer managed at a national level many are still reviewed and updated at a local level.

The Hampshire BAP is the relevant document for this site and it contains the HAPs and SAPs, relevant species pertaining to the site are given in Table 8. No habitats on site are likely to qualify as HAPs.

Table 8: Hampshire BAP SAPs

Species Action Plans	
Serotine bat	Butterflies and moths*
Pipistrelle bat*	Bumblebees*
Stag beetle	-

*Group of species.

It should be noted that the existence of a SAP or HAP does not always infer an elevated level importance for those features. These plans may be designed to encourage an increase in these habitats / species, rather than to protect a county-scarce feature (for example).

4.4 Local Plan

The site falls within the area governed by East Hampshire District Local Plan: Joint Core Strategy (East Hampshire District Council, 2014) contains policies relating to new development. Policy CP21 BIODIVERSITY is the councils policy regarding Biodiversity and development this states:

"*Development proposals must maintain, enhance and protect the District's biodiversity and its surrounding environment.*

New development will be required to:

a) maintain, enhance and protect district wide biodiversity, in particular the nature conservation designations.

> *i) Special Protection Areas (SPA), Special Areas of Conservation (SAC) and Ramsar (International);*
>
> *ii) Sites of Special Scientific Interest (SSSI) and National Nature Reserves(National);*
>
> *iii) Sites of Importance for Nature Conservation (SINC) (Hampshire) and Local Nature Reserves (LNR).*

b) extend specific protection to, and encourage enhancement of, other sites and features which are of local value for wildlife, for example important trees, rivers, river corridors and hedgerows, but which are not included in designated sites.

c) contribute towards maintaining a district–wide network of local wildlife sites, wildlife corridors and stepping stones between designated sites and other areas of biodiversity value or natural green space. This will help to prevent the fragmentation of existing habitats and allow species to respond to the impacts of climate change by making provision for habitat adaptation and species migration. This is supported by Policy CP28 (Green Infrastructure) and the District's Green Infrastructure work.

d) ensure wildlife enhancements are incorporated into the design to achieve a net gain in biodiversity by designing in wildlife and by ensuring that any adverse impacts are avoided where possible or, if unavoidable, they are appropriately mitigated for, with compensatory measures only used as a last resort.

e) protect and, where appropriate, strengthen populations of protected species;

f) protect and enhance open spaces in accordance with the District's 'Open Space, Sports and Built Facilities Study', Policy CP17 (Protection of open space, sport &recreation) and Policy CP28 (Green Infrastructure). The provision of open space should be in advance of the relevant new developments being occupied."

4.5 Legislation

Full details of the UK legislation and offences which are relevant to the ecological receptors identified are included in Appendix B. However, based on the findings of our assessment, it is considered that the development proposals will need to consider the following legal provisions:

- Conservation of Habitats and Species Regulations 2017 – Relating to the potential for effects on bats.
- The W&CA 1981 (as amended) – relating to the potential for effects on nesting birds and reptiles.
- The Wild mammals Act 1996 – relating to the potential for the development proposals to affect foxes within an earth.
- The NERC Act 2006 – Relating to the requirement for the LPA to consider impacts on species listed in accordance with Section 41 i.e. stag beetles.

5.0 Recommendations

5.1 Designated Sites

5.1.1 European Designated Sites for Nature Conservation

The site is located 0.83 km west of Wealden Heaths Phase II SPA. None of the qualifying species for the SPA are considered to be likely to occur on the site and there is not expected to be an impact on these species when they are outside of the SPA as a result of the development proposals.

However, due to proximity of the site to the SPA, a report to inform an HRA is likely to be required. This will establish whether the project has an potential to result in Likely Significant Effects (LSE) on the SPA.

Potential pathways to LSE which may require assessment include recreational pressure from new residents and changes in air quality resulting in increased nitrogen, but all potential pathways would need to be considered.

5.1.2 Sites of Special Scientific Interest

The site is located within 0.83 km of Bramshott and Ludshott Commons SSSI. It is anticipated that any adverse effects upon the SSSI will be assessed as part of the Habitats Regulations Assessment as discussed above.

5.1.3 Local wildlife Sites

There are 11 SINCs within a 2 km radius of the site, none of which fall within or adjacent to the boundaries of the proposed development. The closest SINC (Arford Common / Beech Hill Common) is situated 0.33 km west of the site.

As none of the LNRs and SNCIs are located on or adjacent to the site, they are unlikely to be directly affected as a result of the proposed development.

5.2 Habitats

Habitats on site are widespread and common within the surrounding landscape with low ecological importance. Whilst the value of these habitats it limited, it would be recommended that greenspace was retained where possible and incorporated in the deigns of the development proposals.

Where loss of habitat does occur, it is recommended that new areas of native planting (including a range of trees) are included as compensation. This would reduce impacts on a range of species, including invertebrates, birds and bats.

5.3 Protected & Notable Species

5.3.1 Reptiles

It is likely that any population of reptiles on site would be extremely small, if there are any at all. It is therefore recommended that precautionary measures of work are undertaken to protect reptiles, rather than completing surveys. This would comprise of the appropriate timing of work and supervision by an Ecological Clerk of Works (ECoW). Any reptiles found would be caught and released in an area of suitable retained habitat on the boundary of the site.

5.3.2 Bats

Roosting Bats

In accordance with the BTC Guidelines, Building B1 will require three survey visits between May and September. At least two of these should be carried out between May and August. At least one dusk emergence and a separate dawn return survey should be undertaken. The third visit could be either a dusk or dawn survey.

As Building B1 is a confirmed bat roost, demolition should not take place until an EPSL had been obtained from Natural England. This can only be granted after planning permission had been obtained. The EPSL would detail how bats would be protected during works and how the loss of roosts would be compensated for.

Buildings B2, B3a, B3b, B4a and B4b were assessed as having moderate potential for roosting bats. In accordance with the BCT Guidelines, two visits will need to be undertaken between May and September, with at least one of the surveys between May and August. The surveys must comprise of a dusk emergence survey and a separate dawn return survey. This will establish if these buildings support roosting bats, and whether the EPSL for Building B1 would need to include the measures to mitigate for impacts on these roosts.

The site could also be enhanced for roosting bats with the erection of a range of bat boxes.

Foraging and commuting bats

Wooded habitats on site have been assessed as having low potential to be used by foraging and commuting bats. However, due to the small scale of the site, bat activity surveys are not considered necessary.

Whilst gathering survey data is considered to be of limited value, it is recommended that the proposals include mitigation measures for impacts on commuting and foraging bats as they are likely to be present on site. These could include

- retention of greenspace where possible,
- planting of new trees and evening flowering species; and
- the design and implementation of a lighting strategy sensitive to bats.

5.3.3 Birds

Vegetated habitats and building have been assessed as having the potential to be suitable for common and widespread nesting birds.

Trees, scrub, introduced shrubs and buildings have the potential to provide habitat for nesting birds. If any of these habitats require clearance or trimming (or demolition) as a result of the development proposals these works should be undertaken outside of the nesting bird season (March-September inclusive). If the works cannot be scheduled to avoid the bird nesting season it is recommended that the works are supervised by an ecological clerk of works (ECoW).

If active nests are found by the ECoW then work exclusion buffer zones should be put in place until chicks have fledged and the nest has become inactive. The size of the buffer zone would be dependent on the species found, but is typically a minimum of 5 m.

A range of bird boxes should be installed as part of the development proposals to enhance the nesting potential of the site. This should include installation of four swift nest boxes such as the Schwegler 17 Swift Box, to be positioned at least 5 m high and four house sparrow terrace nest box (such as the Schwegler 1SP Sparrow terrace).

5.3.4 Invertebrates

The site is likely to support an assemblage of invertebrates typical of urban gardens. However, this may include stag beetles due to the presence of woodland in the area. Impacts on this species could be reduced with the retention of any deadwood features that are found in the wooded area where possible with the design of the development proposals.

Enhancements for stag beetles could also be included within the development proposals if there are no deadwood habitats currently. This could include the creation of log piles such as those described by the Peoples Trust for Endangered Species (PTES) (2019). These could be positioned in areas of retained boundary habitats or gardens.

5.3.5 Other Species

A fox earth was identified at the site (TN 2), although there was no evidence this was in regular use a precautionary approach should be taken when clearing this feature in order to avoid committing an offence under the Wild Mammals Act 1996. The burrow should be gradually opened up by a small excavator in order to prevent the burrow from collapsing and to allow foxes within to escape.

6.0 Summary

The Ecological Appraisal found that:

- A Habitat Regulations Screening Assessment: Stage 1 Screening Assessment will be required in order to access potential impacts on Natura 2000 sites resulting from the development proposals.
- The habitats present on site were common and widespread and generally of negligible ecological value. However, there were habitats present with the potential to support protected and notable species.
- Precautionary measures will be required to protect against breaches in the legislation protecting reptiles, but further surveys are not considered necessary.
- The fox earth (TN2) should be cleared gradually using a small excavator to avoid collapsing the burrow and to allow any animals within to escape.
- Further surveys are required to establish to classify the status of the bat roost present in Building B1 and to determine if any other buildings are used by roosting bats.

- Measures will need to be in place to protect nesting birds if trees or shrubs are removed in the nesting season (March to September).
- Measures to mitigate for impacts on reptiles, foraging and commuting bats, breeding birds and invertebrates should be included within the design of the development proposals.

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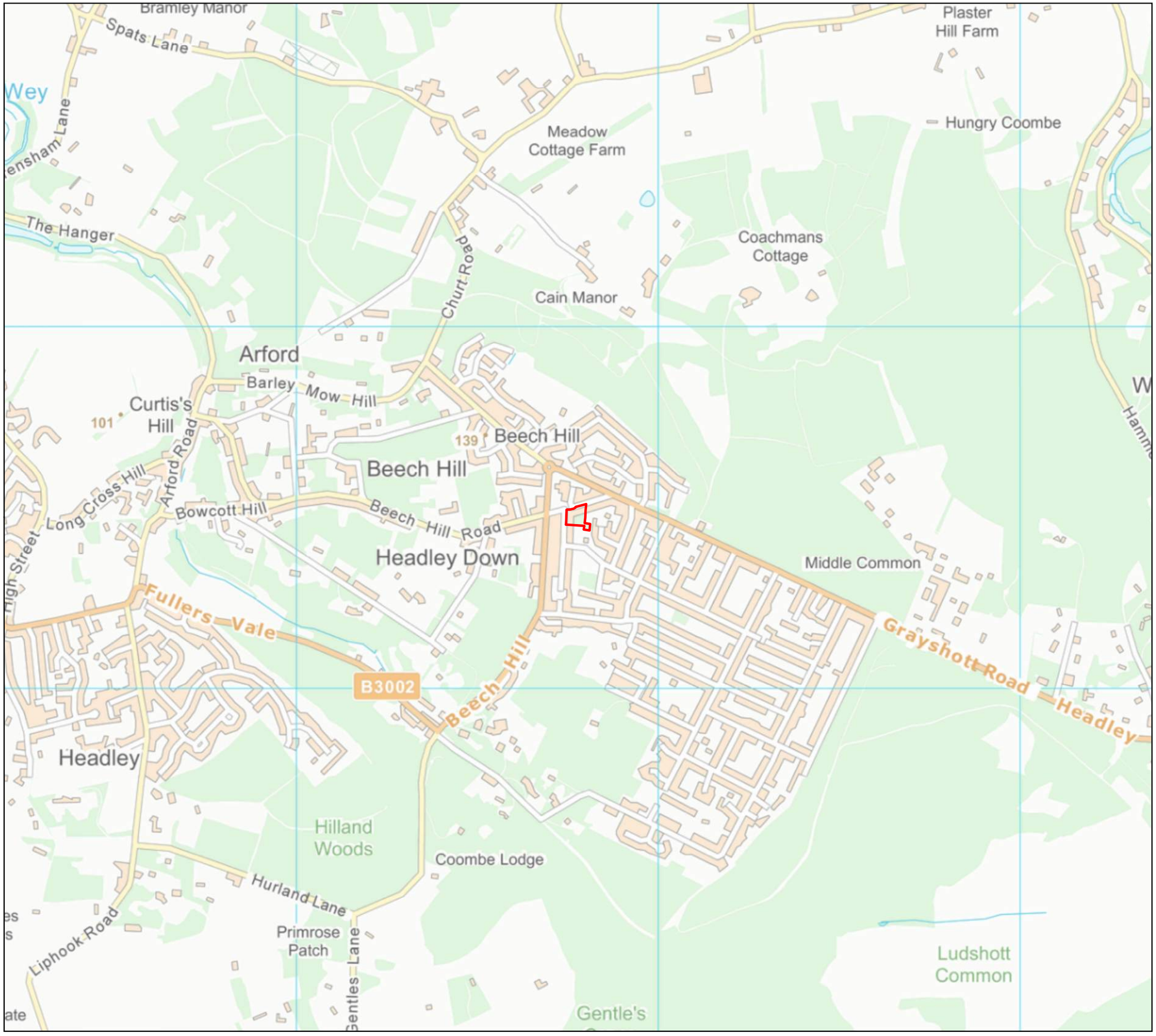
FIGURES

Figure 1 – Site Location Plan
Figure 2 – Phase 1 Habitat Plan



Rev	Date	Notes
A	21/02/20	Initial map production

Legend

Site boundary

0 100 200 400 Metres

N

wyg

Site Location Plan

Beech Hill Stores
Cordage 15 Limited

Scale at A3:	Project No:	Drawing No:	Revision:
1:10,000	A115915	Figure 1	A

Drawn by:	Drawn date:	Approved by:
Maddie Errington	21/02/2020	John Simper

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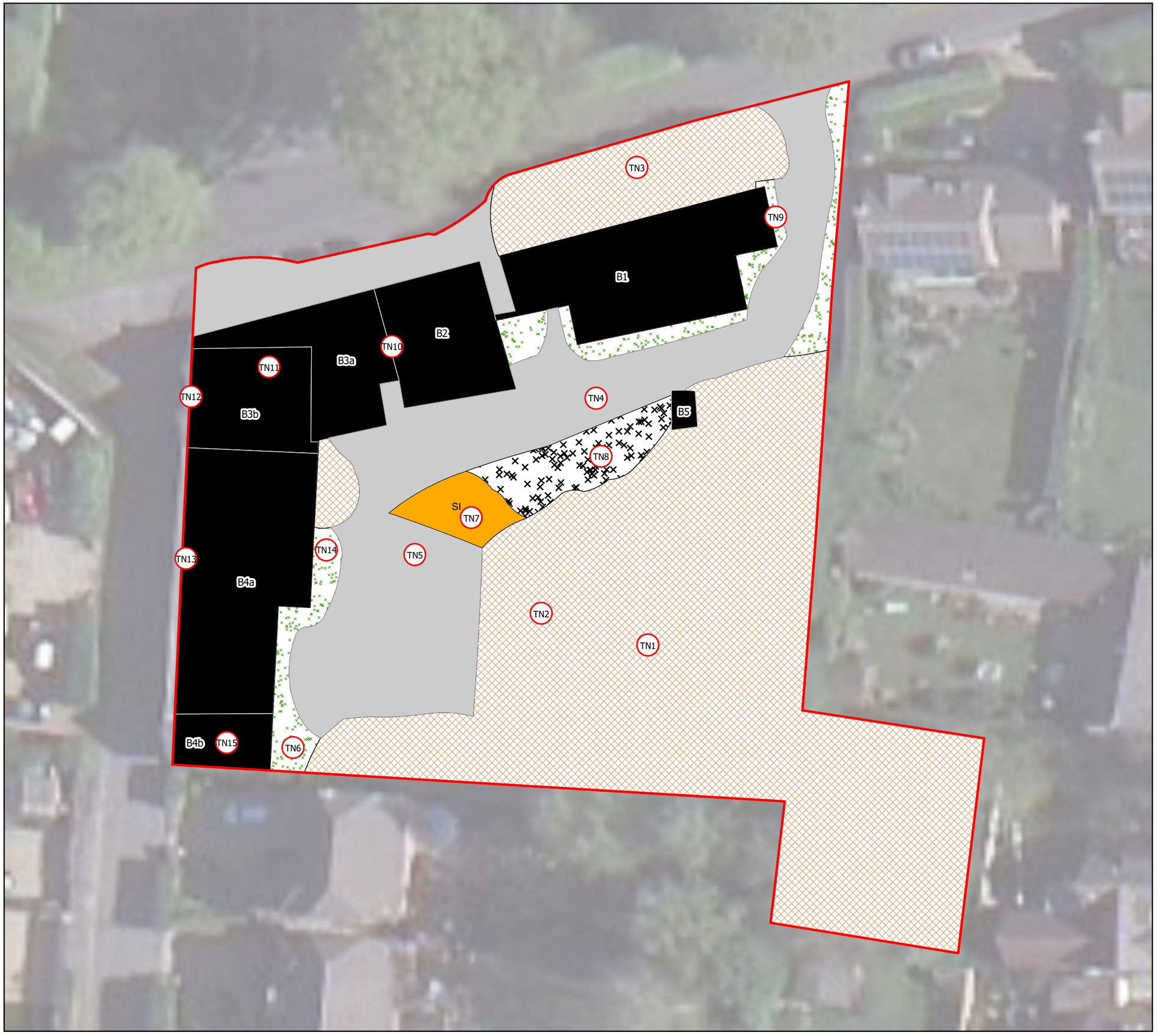

Rev	Date	Notes
A	21/02/20	Initial map production

Legend

- Site boundary
- Scrub - scattered
- SI — Neutral grassland - semi-improved
- F — Ephemeral / short perennial
- Introduced shrub
- Buildings
- Hardstanding
- Target note

0 2.5 5 10 Metres

N

Phase 1 Habitat Plan

Beech Hill Stores
Cordage 15 Limited

Scale at A3:	Project No:	Drawing No:	Revision:
1:300	A115915	Figure 2	A

Drawn by:	Drawn date:	Approved by:
Maddie Errington	21/02/2020	John Simper

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Appendix A – Report Conditions

This Report has been prepared using reasonable skill and care for the sole benefit of Cordage 15 Limited ("the Client") for the proposed uses stated in the report by [WYG Environment Planning Transport Limited] ("WYG"). WYG exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder's permission.

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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The "shelf life" of the Report will be determined by a number of factors including; its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. WYG accept no liability for issues with performance arising from such factors.

Appendix B – Key Legislation

Bern Convention

The *Convention on the Conservation of European Wildlife and Natural Habitats* (the *Bern Convention*) was adopted in Bern, Switzerland in 1979, and was ratified in 1982. Its aims are to protect wild plants and animals and their habitats listed in Appendices 1 and 2 of the Convention, and regulate the exploitation of species listed in Appendix 3. The regulation imposes legal obligations on participating countries to protect over 500 plant species and more than 1000 animals.

To meet its obligations imposed by the Convention, the European Community adopted the *EC Birds Directive* (1979) and the *EC Habitats Directive* (1992 – see below). Since the Lisbon Treaty, in force since 1st December 2009, European legislation has been adopted by the European Union.

Bonn Convention

The Convention on the Conservation of Migratory Species of Wild Animals or 'Bonn Convention' was adopted in Bonn, Germany in 1979 and came into force in 1985. Participating states agree to work together to preserve migratory species and their habitats by providing strict protection to species listed in Appendix I of the Convention. It also establishes agreements for the conservation and management of migratory species listed in Appendix II.

In the UK, the requirements of the convention are implemented via the Wildlife & Countryside Act 1981 (as amended), Wildlife (Northern Ireland) Order 1985 (as amended), Nature Conservation and Amenity Lands (Northern Ireland) Order 1985 and the Countryside and Rights of Way Act 2000 (CRoW).

Habitats Directive

The Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora, or the 'Habitats Directive', is a European Union directive adopted in 1992 in response to the Bern Convention. Its aims are to protect approximately 220 habitats and 1,000 species listed in its several Annexes.

In the UK, the Habitats Directive is transposed into national law via the Conservation of Habitats and Species Regulations 2017 (as amended) in England and Wales, and via the Conservation (Natural Habitats, etc.) Regulations (Northern Ireland) 1995 (as amended) in Northern Ireland.

Birds Directive

The EC Directive on the Conservation of Wild Birds (791409/EEC) or 'Birds Directive' was introduced to achieve favourable conservation status of all wild bird species across their distribution range. In this context, the most important provision is the identification and classification of Special Protection Areas (SPAs) for rare or vulnerable species listed in Annex 1 of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Conservation of Habitats and Species Regulations 2017 (as amended)

Regulations place a duty on the Secretary of State to propose a list of sites which are important for either habitats or species (listed in Annexes I or II of the Habitats Directive respectively) to the European Commission. These sites, if ratified by Ministers, are then designated as Special Protection Areas (SPAs) within six years. Public bodies must also help preserve, maintain and re-establish habitats for wild birds.

The 2018 amendments mainly related to the impact of the *People Over Wind* decision and some implications arising for neighbourhood plan development and a range of other planning tools including Local Development Orders and Permission in Principle – see here for full details:

https://www.legislation.gov.uk/uksi/2018/1307/note/made

The Regulations make it an offence to deliberately capture, kill, disturb or trade in the animals listed in Schedule 2, or pick, uproot, destroy, or trade in the plants listed in Schedule 5 - see below:

Schedule 2 – European Protected Species of Animals	**Schedule 5 – European Protected Species of Plants**
Horseshoe bats *Rhinolophidae* – all species	Shore dock *Rumex rupestris*
Common bats *Vespertilionidae* – all species	Killarney fern *Trichomanes speciosum*
Large Blue Butterfly *Maculinea arion*	Early gentian *Gentianella anglica*
Wild cat *Felis sylvestris*	Lady's-slipper *Cypripedium calceolus*
Dolphins, porpoises and whales *Cetacea* – all sp.	Creeping marsh-wort *Apium repens*
Dormouse *Muscardinus avellanarius*	Slender naiad *Najas flexilis*
Pool frog *Rana lessonae*	Fen orchid *Liparis loeselii*
Sand lizard *Lacerta agilis*	Floating-leaved water plantain *Luronium natans*
Fisher's estuarine moth *Gortyna borelii lunata*	Yellow marsh saxifrage *Saxifraga hirculus*
Great crested newt *Triturus cristatus*	
Otter *Lutra lutra*	
Lesser whirlpool ram's-horn snail *Anisus vorticulus*	
Smooth snake *Coronella austriaca*	
Sturgeon *Acipenser sturio*	
Natterjack toad *Epidalea calamita*	
Marine turtles *Caretta caretta, Chelonia mydas, Lepidochelys kempii, Eretmochelys imbricata, Dermochelys coriacea*	

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. This legislation is the chief means by which the 'Bern Convention' and the Birds Directive are implemented in the UK. Since it was first introduced, the Act has been amended several times.

The Act makes it an offence to (with exception to species listed in Schedule 2) 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
- take or destroy an egg of any wild bird.

Or to intentionally do the following to a wild bird listed in Schedule 1:

- disturbs any wild bird while it is building a nest or is in, on or near a nest containing eggs or young; or
- disturbs dependent young of such a bird.

In addition, the Act makes it an offence (subject to exceptions) to:

- intentionally or recklessly kill, injure or take any wild animal listed on Schedule 5;
- interfere with places used for shelter or protection, or intentionally disturbing animals occupying such places; and
- The Act also prohibits certain methods of killing, injuring, or taking wild animals.

Finally, the Act also makes it an offence (subject to exceptions) to:

- intentionally pick, uproot or destroy any wild plant listed in Schedule 8, or any seed or spore attached to any such wild plant;
- unless an authorised person, intentionally uproot any wild plant not included in Schedule 8; or
- sell, offer or expose for sale, or possess (for the purposes of trade), any live or dead wild plant included in Schedule 8, or any part of, or anything derived from, such a plant.

Following all amendments to the Act, Schedule 5 'Animals which are Protected' contains a total of 154 species of animal, including several mammals, reptiles, amphibians, fish and invertebrates. Schedule 8 'Plants which are Protected' of the Act, contains 185 species, including higher plants, bryophytes and fungi and lichens. A comprehensive and up-to-date list of these species can be obtained from the JNCC website.

Part 14 of the Act makes unlawful to plant or otherwise cause to grow in the wild any plant which is listed in Part II of Schedule 9.

It is recommended that plant material of these species is disposed of as bio-hazardous waste, and these plants should not be used in planting schemes.

Schedule 1 - Birds which are protected by special penalties			
Avocet	*Recurvirostra avosetta*	Osprey	*Pandion haliaetus*
Bee-eater	*Merops apiaster*	Owl, Barn	*Tyto alba*
Bittern	*Botaurus stellaris*	Owl, Snowy	*Nyctea scandiaca*
Bittern, Little	*Ixobrychus minutus*	Peregrine	*Falco peregrinus*
Bluethroat	*Luscinia svecica*	Petrel, Leach's	*Oceanodroma leucorhoa*
Brambling	*Fringilla montifringilla*	Phalarope, Red-necked	*Phalaropus lobatus*
Bunting, Cirl	*Emberiza cirlus*	Plover, Kentish	*Charadrius alexandrinus*
Bunting, Lapland	*Calcarius lapponicus*	Plover, Little Ringed	*Charadrius dubius*
Bunting, Snow	*Plectrophenax nivalis*	Quail, Common	*Coturnix coturnix*
Buzzard, Honey	*Pernis apivorus*	Redstart, Black	*Phoenicurus ochruros*
Capercaillie	*Tetrao urogallus*	Redwing	*Turdus iliacus*
Chough	*Pyrrhocorax pyrrhocorax*	Rosefinch, Scarlet	*Carpodacus erythrinus*
Corncrake	*Crex crex*	Ruff	*Philomachus pugnax*
Crake, Spotted	*Porzana porzana*	Sandpiper, Green	*Tringa ochropus*
Crossbills (all species)	*Loxia*	Sandpiper, Purple	*Calidris maritima*
Curlew, Stone	*Burhinus oedicnemus*	Sandpiper, Wood	*Tringa glareola*
Divers (all species)	*Gavia*	Scaup	*Aythya marila*
Dotterel	*Charadrius morinellus*	Scoter, Common	*Melanitta nigra*
Duck, Long-tailed	*Clangula hyemalis*	Scoter, Velvet	*Melanitta fusca*
Eagle, Golden	*Aquila chrysaetos*	Serin	*Serinus serinus*
Eagle, White-tailed	*Haliaetus albicilla*	Shorelark	*Eremophila alpestris*
Falcon, Gyr	*Falco rusticolus*	Shrike, Red-backed	*Lanius collurio*
Fieldfare	*Turdus pilaris*	Spoonbill	*Platalea leucorodia*
Firecrest	*Regulus ignicapillus*	Stilt, Black-winged	*Himantopus himantopus*
Garganey	*Anas querquedula*	Stint, Temminck's	*Calidris temminckii*

Godwit, Black-tailed	*Limosa limosa*	Swan, Bewick's	*Cygnus bewickii*
Goshawk	*Accipiter gentilis*	Swan, Whooper	*Cygnus cygnus*
Grebe, Black-necked	*Podiceps nigricollis*	Tern, Black	*Chlidonias niger*
Grebe, Slavonian	*Podiceps auritus*	Tern, Little	*Sterna albifrons*
Greenshank	*Tringa nebularia*	Tern, Roseate	*Sterna dougallii*
Gull, Little	*Larus minutus*	Tit, Bearded	*Panurus biarmicus*
Gull, Mediterranean	*Larus melanocephalus*	Tit, Crested	*Parus cristatus*
Harriers (all species)	*Circus*	Tree-creeper, Short-toed	*Certhia brachydactyla*
Heron, Purple	*Ardea purpurea*	Warbler, Cetti's	*Cettia cetti*
Hobby	*Falco subbuteo*	Warbler, Dartford	*Sylvia undata*
Hoopoe	*Upupa epops*	Warbler, Marsh	*Acrocephalus palustris*
Kingfisher	*Alcedo atthis*	Warbler, Savi's	*Locustella luscinioides*
Kite, Red	*Milvus milvus*	Whimbrel	*Numenius phaeopus*
Merlin	*Falco columbarius*	Woodlark	*Lullula arborea*
Oriole, Golden	*Oriolus oriolus*	Wryneck	*Jynx torquilla*
Animal (Vertebrate) Species Listed in Schedule 5 (full legal protection at all times)			
Horseshoe Bats (all species)	*Rhinolophidae*	Newt – Great Crested	*Triturus cristatus*
Typical Bats (all species)	*Vespertilionidae*	Snake – Smooth	*Coronella austriaca*
Dolphin – Bottle-nosed	*Tursiops truncatus (tursio)*	Toad, Natterjack	*Epidalea calamita*
Dolphin – Common	*Delphinus delphis*	Turtles – All Species	*Cheloniidae & Dermochelyidae*
Dormouse – Hazel	*Muscardinus avellanarius*	Basking Shark	*Cetorhinus maximus*
Pine Marten	*Martes martes*	Burbot	*Lota lota*
Porpoise – Harbour	*Phocaena phocaena*	Goby – Giant	*Gobius cobitis*
Otter – Eurasian	*Lutra lutra*	Goby – Couch's	*Gobius couchii*
Squirrel – Red	*Sciurus vulgaris*	Seahorse – Short-snouted[1]	*Hippocampus hippocampus*
Walrus	*Odobenus rosmarus*	Seahorse – Spiny	*Hippocampus guttulatus*
Water Vole	*Arvicola amphibia*	Sturgeon	*Acipenser sturio*
Whales – All Species	*Cetacea*	Vendace	*Coregonus albula*
Wildcat	*Felis sylvestris*	Whitefish	*Coregonus lavaretus*
Lizard – Sand	*Lacerta agilis*		
Animal (Vertebrate) Species Protected under Section 9 (1) part: Killing and Injuring & Section 9 (5) Sale			
Adder	*Vipera berus*	Slow-worm	*Anguis fragilis*
Lizard – Viviparous	*Zootoca vivipara*	Snake – Grass	*Natrix helvetica (natrix)*
Animals (Vertebrate) Species Protected under Section 9 (5) Sale only			
Frog – common	*Rana temporaria*	Newt – Smooth	*Lissotriton vulgaris*
Newt – Palmate	*Lissotriton helvetica*	Toad – Common	*Bufo bufo*
Animals (Vertebrate) Species Protected under Section 9 (1) (4)(a): Killing, Injuring &Taking and Damage / Destruction of place of shelter / protection only			
Allis Shad	*Alosa alosa*	Shark – Angel	*Squatina squatina*
Twaite Shad	*Alosa fallax*		
Butterflies & Moths – Full Protection under Schedule 5[2] at all times			
High brown fritillary	*Argynnis adippe*	Fisher's Estuarine Moth	*Gortyna borelii*
Large Blue	*Maculinea arion*	Barberry Carpet	*Pareulype berberata*

[1] Both sea horse species are protected in England only.

[2] Viper's Bugloss Moth *Hadena irregularis* was removed from Schedule 5 in 1996 as it is believed to be extinct.

Heath Fritillary	*Mellicta athalea*	Black-veined Moth	*Siona lineata*
Marsh Fritillary	*Eurodryas aurinia*	Sussex Emerald	*Thalera fimbrialis*
Swallowtail	*Papilio machaon britannicus*	Essex Emerald	*Thetidia smaragdaris*
Large Copper	*Lycaena dispar*	Fiery Clearwing	*Bembecia chrysidiformis*
Reddish-buff Moth	*Acosmetia caliginosa*	New-Forest Burnet	*Zygaena viciae*
Butterflies – Protected under Section 9 (5) Sale Only			
Purple Emperor	*Apatura iris*	Adonis Blue	*Lysandra bellargus*
Northern Brown Argus	*Aricia artaxerxes*	Chalkhill Blue	*Lysandra coridon*
Pearl-bordered Fritillary	*Boloria euphrosyne*	Glanville Fritillary	*Melitaea cinxia*
Chequered Skipper	*Carterocephalus palaemon*	Large Tortoiseshell	*Nymphalis polychloros*
Large Heath	*Coenonympha tullia*	Silver-studded Blue	*Plebejus argus*
Small Blue	*Cupido minimus*	Black Hairstreak	*Strymonidia pruni*
Mountain Ringlet	*Erebia epiphron*	White-letter Hairstreak	*Strymonidia w-album*
Duke of Burgundy	*Hamearis lucina*	Brown Hairstreak	*Thecla betulae*
Silver-spotted Skipper	*Hesperia comma*	Lulworth Skipper	*Thymelicus acteon*
Wood White	*Leptidea sinapis*		
Other Invertebrates – Full Protection under Schedule 5 at all times			
Rainbow Leaf-beetle	*Chrysolina cerealis*	Tadpole Shrimp	*Triops cancriformis*
Spangled Diving-beetle	*Graphopterus zonatus*	Trembling Sea-mat	*Victorella pavida*
Lesser Silver Water-beetle	*Hydrochara caraboides*	De Folin's Lagoon Snail	*Caecum armoricum*
Moccas Beetle	*Hypebaeus flavipes*	Sandbowl Snail	*Catinella arenaria*
Violet Click-beetle	*Limoniscus violaceus*	Freshwater Pearl Mussel	*Margaritifera margaritifera*
Bembridge Beetle	*Parcymus aeneus*	Glutinous Snail	*Myxas glutinosa*
New Forest Cicada	*Cicadetta montana*	Lagoon Snail	*Paludinella littorina*
Wart-Biter	*Decticus verrucivorus*	Lagoon Sea Slug	*Tenellia adspersa*
Mole-Cricket	*Gryllotalpa gryllotalpa*	Northern Hatchet-shell	*Thyasira gouldi*
Field-Cricket	*Gryllus campestris*	Tentacled Lagoon-worm	*Alkmaria romijni*
Norfolk Hawker Dragonfly	*Aeshna isosceles*	Lagoon Sand-worm	*Armandia cirrhosa*
Southern Damselfly	*Coenagrion mercuriale*	Medicinal Leech	*Hirudo medicinalis*
Fen Raft Spider	*Dolomedes fimbriatus*	Marine Hydroid	*Clavopsella navis*
Ladybird Spider	*Eresus niger (cinaberinus)*	Ivell's Sea Anemone	*Edwardsia ivelli*
Fairy Shrimp	*Chirocephalus diaphanus*	Starlet Sea Anemone	*Nematosella vectensis*
Lagoon Sand Shrimp	*Gammarus insensibilis*	Atlantic Stream (White-clawed) Crayfish	*Austropotamobius pallipes*
Other Invertebrates Protected under Section 9 (1) Possession & 9 (2) (5) Sale only			
Stag Beetle	*Lucanus cervus*	Roman Snail[3]	*Helix pomatia*
Fan Mussel	*Atrina fragilis*	Pink Sea-fan	*Eunicella verrucosa*
Other Invertebrates Protected under Section 9 (4) (a) Damage / Destruction of Place of Shelter / Protection only			
Mire Pill Beetle	*Curimopsis nigrita*		
Vascular Plant Species - Full Protection under Schedule 8 at all times (previous Scientific name in brackets)			
Adder's-tongue Least	*Ophioglossum lusitanicum*	Lily – Snowdon	*Gagea serotina (Lloydia serotina)*
Alison- Small	*Alyssum alyssoides*	Marsh-mallow – Rough	*Malva setigera (Althaea hirsuta)*

[3] England only

Broomrape – Bedstraw	*Orobanche caryophyllacea*	Milk-parsley – Cambridge	*Selinum carvifolia*
Broomrape – Oxtongue	*Orobanche picridis*	Mudwort – Welsh	*Limosella aquatica*
Broomrape – Thistle	*Orobanche reticulata*[4]	Naiad – Holly-leaved	*Najas marina*
Cabbage – Lundy	*Coincya wrightii (Rhynchosinapis wrightii)*	Orache – Stalked	*Atriplex pedunculata (Halimione pedunculata)*
Calamint – Wood	*Clinopodium menthifolium (Calamintha sylvatica)*	Orchid – Early Spider	*Ophrys sphegodes*
Catchfly – Alpine	*Silene suecica (Lychnis alpina)*	Orchid – Ghost	*Epipogium aphyllum*
Centaury – Slender	*Centaurium tenuiflorum*	Orchid – Lapland Marsh	*Dactylorhiza lapponica*
Cinquefoil – Rock	*Potentilla rupestris*	Orchid – Late Spider	*Ophrys fuciflora*
Clary – Meadow	*Salvia pratensis*	Orchid – Lizard	*Himantoglossum hircinum*
Club-rush – Triangular	*Schoenoplectus triqueter (Scirpus triqueter)*	Orchid – Military	*Orchis militaris*
Colt's-foot – Purple	*Homogyne alpina*	Orchid – Monkey	*Orchis simia*
Cotoneaster – Wild	*Cotoneaster cambricus (C. integerrimus)*	Pear – Plymouth	*Pyrus cordata*
Cotton-grass – Slender	*Eriophorum gracile*	Pennycress – Perfoliate	*Microthlaspi perfoliatum (Thlaspi perfoliatum)*
Cow-wheat – Field	*Melampyrum arvense*	Pennyroyal	*Mentha pulegium*
Crocus – Sand	*Romulus columnae*	Pigmyweed	*Crassula aquatica*
Cudweed – Broad-leaved	*Filago pyramidata*	Pine - Ground	*Ajuga chamaepitys*
Cudweed – Jersey	*Gnaphalium luteoalbum*	Pink – Cheddar	*Dianthus gratianopolitanus*
Cudweed – Red-tipped	*Filago lutescens*	Pink – Childing	*Petrorhagia nanteuilii*
Cut-grass	*Leersia oryzoides*	Ragwort – Fen	*Jacobaea paludosa (Senecio paludosa)*
Deptford Pink	*Dianthus armeria*	Ramping-fumitory – Martin's	*Fumaria reuteri (F. martinii)*
Diapensia	*Diapensia lapponica*	Rampion – Spiked	*Phyteuma spicata*
Eryngo – Field	*Eryngium campestre*	Restharrow – Small	*Ononis reclinata*
Fern – Dickie's-bladder	*Cystopteris dickieana*	Rock-cress – Alpine	*Arabis alpina*
Fleabane – Alpine	*Erigeron borealis*	Rock-cress – Bristol	*Arabis scabra*
Fleabane – Small	*Pulicaria vulgaris*	Sandwort – Norwegian	*Arenaria norvegica*[5]
Galingale – Brown	*Cyperus fuscus*	Sandwort – Teesdale	*Minuartia stricta*
Gentian – Alpine	*Gentiana nivalis*	Saxifrage – Drooping	*Saxifraga cernua*
Gentian - Dune	*Gentianella amarella subsp. occidentalis (Gentianella uliginosa)*	Saxifrage – Tufted	*Saxifraga cespitosa*
Gentian – Fringed	*Gentianopsis ciliata (Gentianella ciliata)*	Solomon's-seal – Whorled	*Polygonatum verticillatum*
Gentian - Spring	*Gentiana verna*	Sow-thistle – Alpine	*Cicerbita alpina*
Germander – Cut-leaved	*Teucrium botrys*	Spearwort – Adder's-tongue	*Ranunculus ophioglossifolius*
Germander – Water	*Teucrium scordium*	Speedwell – Fingered	*Veronica triphyllos*
Gladiolus – Wild	*Gladiolus illyricus*	Speedwell – Spiked	*Veronica spicata*[6]
Goosefoot – Stinking	*Chenopodium vulvaria*	Spike-rush – Dwarf	*Eleocharis parvula*

[4] The Weeds Act 1959 does not apply to thistles *Cirsium* & *Carduus* species supporting this broomrape.

[5] All subspecies occurring in the UK

[6] Both subspecies: *spicata* & *hybrida*

Grass-poly	*Lythrum hyssopifolia*	South-stack Fleawort	*Tephroseris integrifolia ssp. maritima*
Hare's-ear – Sickle-leaved	*Bupleurum falcatum*	Star-of-Bethlehem – Early	*Gagea bohemica*
Hare's-ear – Small	*Bupleurum baldense*	Starfruit	*Damasonium alisma*
Hawk's-beard – Stinking	*Crepis foetida*	Strapwort	*Corrigiola littoralis*
Hawkweed – Northroe	*Hieracium northroense*	Violet – Fen	*Viola persicifolia*
Hawkweed – Shetland	*Hieracium zetlandicum*	Viper's-grass	*Scorzonera humilis*
Hawkweed – Weak-leaved	*Hieracium attenuatifolium*	Water-plantain – Ribbon-leaved	*Alisma gramineum*
Heath – Blue	*Phyllodoce caerulea*	Wood-sedge – Starved	*Carex depauperata*
Helleborine – Red	*Cephalanthera rubra*	Woodsia – Alpine	*Woodsia alpina*
Horsetail – Branched	*Equisetum ramosissimum*	Woodsia – Oblong	*Woodsia ilvensis*
Hound's-tongue – Green	*Cynoglossum germanicum*	Wormwood – Field	*Artemisia campestris*
Knawel – Perennial	*Scleranthus perennis*[7]	Woundwort - Downy	*Stachys germanica*
Knot-grass – Sea	*Polygonum maritimum*	Woundwort – Limestone	*Stachys alpina*
Leek – Round-headed	*Allium sphaerocephalon*	Yellow-rattle – Greater	*Rhinanthus angustifolius*
Lettuce – Least	*Lactuca saligna*		
Vascular Plant Species – Partial Protection under Section 13 (2) Protection from commercial exploitation and sale			
Bluebell	*Hyacinthoides non-scripta*		
Bryophytes – Full Protection under Schedule 8 at all times			
Anamodon – Long-leaved	*Anomodon langifolius*	Flamingo Moss	*Desmatodon cernuus*
Blackwort	*Southbya nigrella*	Frostwort	*Gymnomitrion apiculatum*
Crystalwort – Lizard	*Riccia bifurca*	Glaucous Beard Moss	*Barbula glauca*
Earwort – Marsh	*Jamesoniella undulifolia*	Green Shield Moss	*Buxbaumia viridis*
Feathermoss – Polar	*Hygrohypnum polare*	Hair Silk Moss	*Plagiothecium piliferum*
Flapwort – Norfolk	*Leiocolea rutheana*	Knothole Moss	*Zygodon forsteri*
Grimmia – Blunt-leaved	*Grimmia unicolor*	Large Yellow Feather Moss	*Scorpidium turgescens*
Petalwort	*Petalophyllum ralfsii*	Millimetre Moss	*Micromitrium tenerum*
Lindenberg's Leafy-Liverwort	*Adelanthus lindenbergianus*	Multi-fruited River Moss	*Cryphaea lamyana*
Feather-moss Slender Green	*Drepanocladus vernicosus*	Nowell's Limestone Moss	*Zygodon gracilis*
Alpine Copper-Moss	*Mielichoferia meilicoferia*	Rigid Apple Moss	*Bartramia stricta*
Baltic Bog-Moss	*Sphagnum balticum*	Round-leaved feather Moss	*Rhynchostegium rotundifolium*
Blue Dew-Moss	*Saelania glaucescens*	Schleicher's Thread Moss	*Bryum schleicheri*
Blunt-leaved bristle-Moss	*Orthotrichum obtusifolium*	Triangular Pygmy Moss	*Acaulon triquetrum*
Bright-Green Cave-Moss	*Cyclodictyon laetevirens*	Turpswort	*Geocalyx graveolens*
Cordate Beard Moss	*Barbula cordata*	Vaucher's Feather Moss	*Hypnum vaucheri*
Cornish Path Moss	*Ditrichum cornubicum*	Western Rustwort	*Marsupella profunda*
Derbyshire Feather Moss	*Thamnobryum angustifolium*		

[7] Includes both subspecies: *perennis* & *prostratus*

Stoneworts – Full Protection under Schedule 8 at all times			
Bearded Stonewort	*Chara canescens*	Foxtail Stonewort	*Lamprothamnium papullosum*
Lichens – Full Protection under Schedule 8 at all times			
New Forest Beech Lichen	*Enterographa elaborata*	Forked Hair Lichen	*Bryoria furcellata*
Snow Caloplaca	*Caloplaca nivalis*	Golden Hair Lichen	*Teloschistes flavicans*
Tree Catapyrenium	*Catapyrenium psoromoides*	Orange-fruited Elm Lichen	*Caloplaca luteoalba*
Laurer's Catillaria	*Catillaria laurei*	River Jelly Lichen	*Collema dichotomum*
Convoluted Cladonia	*Cladonia convoluta*	Starry Breck Lichen	*Buellia asterella*
Upright Mountain Cladonia	*Cladonia stricta*	Caledonia Pannaria	*Pannaria ignobilis*
Goblin Lights	*Catolechia wahlenbergii*	New Forest Parmelia	*Parmelia minarum*
Elm Gyalecta	*Gyalecta ulmi*	Oil Stain Parmentaria	*Parmentaria chilensis*
Tarn Lecanora	*Lecanora archariana*	Southern Grey Physcia	*Physcia tribacioides*
Copper Lecidea	*Lecidea inops*	Ragged Pseudo-cyphellaria	*Pseudocyphellaria lacerata*
Arctic Kidney Lichen	*Nephroma arcticum*	Rusty Alpine Psora	*Psora rubiformis*
Ciliate Strap Lichen	*Heterodermia leucomelos*	Rock Nail	*Calicium corynellum*
Coralloid Rosette Lichen	*Heterodermia propagulifera*	Serpentine Selanopsora	*Selanopsora liparina*
Ear-lobed Dog Lichen	*Peltigera lepidophora*	Sulphur Tresses	*Alectoria ochroleuca*
Lichens – Partial Protection under Section 13 (2) Commercial Exploitation and Sale Only			
Tree Lungwort	*Lobaria pulmonaria*		
Fungi – Full Protection under Schedule 8 at all times			
Royal Bolete	*Boletus regius*	Oak Polypore	*Buglossosporus pulvinus*
Hedgehog Fungus	*Hericium erinaceum*	Sandy Stilt Ball	*Battaria phalloides*
Invasive plant species listed in Schedule 9			
Australian swamp stonecrop or New Zealand pygmyweed	*Crassula helmsii*	Japanese rose	*Rosa rugosa*
Californian red seaweed	*Pikea californica*	Japanese seaweed	*Sargassum muticum*
Curly waterweed	*Lagarosiphon major*	Laver seaweeds (except native species)	*Porphyra* spp
Duck potato	*Sagittaria latifolia*	Parrot's-feather	*Myriophyllum aquaticum*
Entire-leaved cotoneaster	*Cotoneaster integrifolius*	Perfoliate alexanders	*Smyrnium perfoliatum*
False Virginia creeper	*Parthenocissus inserta*	Pontic rhododendron	*Rhododendron ponticum*
Fanwort or Carolina water-shield	*Cabomba caroliniana*	Purple dewplant	*Disphyma crassifolium*
Few-flowered garlic	*Allium paradoxum*	Red algae	*Grateloupia luxurians*
Floating pennywort	*Hydrocotyle ranunculoides*	Rhododendron	*Rhododendron ponticum* × *Rhododendron maximum*
Floating water primrose	*Ludwigia peploides*	Small-leaved cotoneaster	*Cotoneaster microphyllus*
Giant hogweed	*Heracleum mantegazzianum*	Three-cornered garlic	*Allium triquetrum*
Giant kelp	*Macrocystis* spp.	Variegated yellow archangel	*Lamiastrum galeobdolon* subsp. *argentatum*
Giant knotweed	*Fallopia sachalinensis*	Virginia creeper	*Parthenocissus quinquefolia*
Giant rhubarb	*Gunnera tinctoria*	Wakame	*Undaria pinnatifida*
Giant salvinia	*Salvinia molesta*	Wall cotoneaster	*Cotoneaster horizontalis*
Green seafingers	*Codium fragile*	Water fern	*Azolla filiculoides*

Himalayan cotoneaster	*Cotoneaster simonsii*	Water hyacinth	*Eichhornia crassipes*
Hollyberry cotoneaster	*Cotoneaster bullatus*	Water lettuce	*Pistia stratiotes*
Hooked asparagus seaweed	*Asparagopsis armata*	Water primrose	*Ludwigia grandiflora*
Hottentot fig	*Carpobrotus edulis*	Water primrose	*Ludwigia uruguayensis*
Hybrid knotweed	*Fallopia japonica* × *Fallopia sachalinensis*	Waterweeds	*Elodea* spp.
Indian (Himalayan) balsam	*Impatiens glandulifera*	Yellow azalea	*Rhododendron luteum*
Japanese knotweed	*Reynoutria japonica*		

Protection of Badgers Act 1992

The main legislation protecting badgers in England and Wales is the Protection of Badgers Act 1992 (the 1992 Act). Under the 1992 Act it is an offence to: wilfully kill, injure, take or attempt to kill, injure or take a badger; dig for a badger; interfere with a badger sett by, damaging a sett or any part thereof, destroying a sett, obstructing access to a sett, causing a dog to enter a sett or disturbing a badger while occupying a sett.

The 1992 Act defines a badger sett as: "any structure or place which displays signs indicating current use by a badger"

Natural Environment and Rural Communities Act 2006

Section 41 (S41) of this Act requires the Secretary of State to publish a list (in consultation with Natural England) of Habitats and Species which are of Principal Importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies including local and regional authorities, in implementing their duty under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal (e.g. planning) functions. The S41 list includes 65 Habitats of Principal Importance and 1,150 Species of Principal Importance.

Hedgerow Regulations 1997

The Hedgerow Regulations were made under Section 97 of the Environment Act 1995 and came into force in 1997. They introduced new arrangements for local planning authorities in England and Wales to protect important hedgerows in the countryside, by controlling their removal through a system of notification. Important hedgerows are defined by complex assessment criteria, which draw on biodiversity features, historical context and the landscape value of the hedgerow.

Birds of Conservation Concern

This is a review of the status of all birds occurring regularly in the United Kingdom. It is regularly updated and is prepared by leading bird conservation organisations, including the British Trust for Ornithology (BTO), Joint Nature Conservation Committee (JNCC) and The Royal Society for the Protection of Birds (RSPB).

The latest report was produced in 2015 (Eaton *et al*, 2015) and identified 67 red list species, 96 amber species, and 81 green species. The criteria are complex, but generally:

- **Red list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of more than 50% in the last 25 years.
- **Amber list** species are those that have shown a decline of the breeding population, non-breeding population or breeding range of between 25% and 50% in the last 25 years. Species that have a UK breeding population of less than 300 or a non-breeding population of less than 900 individuals are also included, together with those whose 50% of the population is localised in 10 sites or fewer and those whose 20% of the European population is found in the UK.
- **Green list** species are all regularly occurring species that do not qualify under any of the red or amber criteria are green listed

Global IUCN Red List

The International Union for Conservation of Nature (IUCN) Threatened Species was devised to provide a list of those species that are most at risk of becoming extinct globally. It provides taxonomic, conservation status and distribution information about threatened taxa around the globe.

The system catalogues threatened species into groups of varying levels of threat, which are: Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CE), Endangered (EN), Vulnerable (VU), Near Threatened (NT), Least Concern (LC), Data Deficient (DD), Not Evaluated (NE). Criteria for designation into each of the categories is complex, and consider several principles.

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level), and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAP's may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision making process.

Wild Mammals (Protection) Act 1996

This Act offers protects a form of protection to all wild species of mammals, irrespective of other legislation, and focussed on animal welfare, rather than conservation.

Unless covered by one of the exceptions, a person is guilty of an offence if he mutilates, kicks, beats, nails or otherwise impales, stabs, burns, stones, crushes, drowns, drags or asphyxiates any wild mammal with intent to inflict unnecessary suffering.

It's application is typically restricted to preventing deliberate harm to wildlife (in general) during construction works etc.

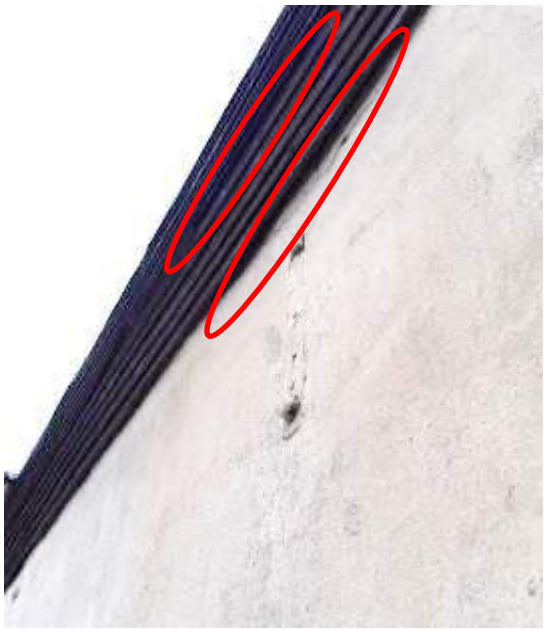
Appendix C – Target Notes

Target Note	Description	Photograph
TN1	Introduced Shrub SU 83795 36447 Holly *Ilex aquifolium* – Occasional Cherry Laurel *Prunus laurocerasus* – Occasional Ivy *Hedera helix* - Occasional Portions of this area had been recently been felled along with scattered trees including English oak *Quercus robur* and silver birch *Betula pendula*. Occasional piles	
TN2	Potential fox earth entrance SU 83782 36466	

Target Note	Description	Photograph
TN3	Introduced shrub Parts of the south of the site and to the north of Building B1 Cherry laurel *Prunus laurocerasus* – Dominant Holly *Ilex aquifolium* – Occasional Magnolia *Magnolia* sp. – Rare Box *Buxus sempervirens* – Rare Hebe sp. – Rare	
TN4	Hardstanding Sparse vegetation consisting of: Annual meadow grass *Poa annua* – Occasional Buddleja *Buddleja davidii* – Occasional Bramble *Rubus fruticosus*. – Occasional Goat willow *Salix caprea* – Occasional	
TN5	Items of scrap / vehicles	

Target Note	Description	Photograph
TN6	Scattered scrub Occasional patches of scattered scrub found across the site. Bramble *Rubus fruticosus* – Dominant Goat willow *Salix caprea* – Occasional Buddleja *Buddleja davidii* – Occasional	
TN7	Semi-improved neutral grassland Cock's-foot *Dactylis glomerata* – Dominant Yorkshire fog *Holcus lanatus* – Occasional Bramble *Rubus fruticosus* – Occasional	
TN8	Ephemeral/Short Perennial Moss spp. – Abundant Annual meadow grass *Poa annua* – Occasional Ribwort plantain *Plantago lanceolata* – Occasional Buddleja *Bulddleja davidii* – Occasional	

Target Note	Description	Photograph
TN9	Ivy growth on Building B1 Possible access points into loft void.	
TN10	Possible access point into loft void of Building B2 or potential bat roost feature.	

Target Note	Description	Photograph
TN11	Potential access point for bats into the loft void of Building B3b.	
TN12	Potential roost features behind timber on the western aspect of Building B3b.	
TN13	Potential bat roost features under timber cladding of western aspect of Building B4a.	

Target Note	Description	Photograph
TN14	Potential bat roost feature on eastern aspect of Building B4a.	
TN15	Potential bat roost features under ridge tiles of Building B4b.	

ecology@wyg.com

WYG Environment Planning Transport Limited.

Registered in England & Wales Number: 3050297
3 Sovereign Square, Sovereign Street, Leeds LS1 4ER