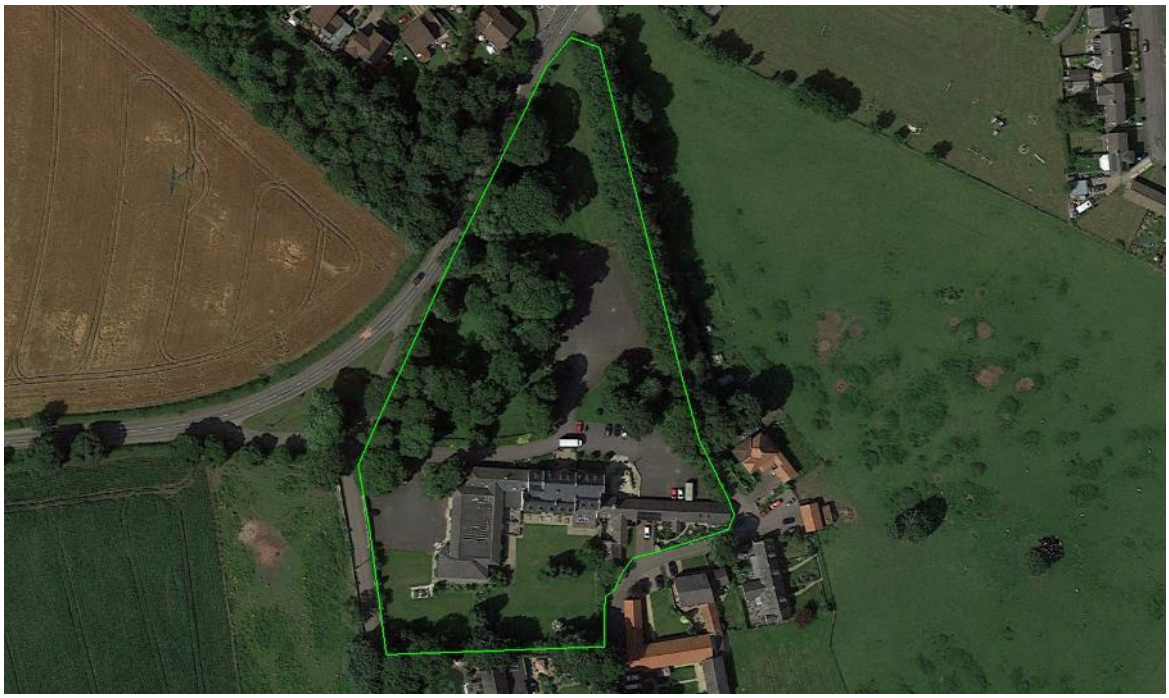
ECOLOGICAL IMPACT ASSESSMENT & BAT RISK ASSESSMENT

HALLGARTH MANOR HOTEL



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A. SUMMARY

E3 Ecology Ltd was commissioned to undertake an ecological impact assessment (EcIA) at Hallgarth Manor Hotel, where it is proposed to build eight holiday lodges within the grounds, convert an outbuilding to provide two bedrooms and extend a section of the main hotel building to provide nine bedrooms. A desk study was completed, including consultation with DEFRA's MAGIC website and the Environmental Records Information Centre North East (ERIC NE), and an ecological walkover and bat risk assessment survey was undertaken on 3rd March 2023 in order to inform this assessment. Bat presence/absence surveys were undertaken in May, June and July 2023.

The results of the desk study indicate that there are four statutorily protected sites within 2km of the proposed development site. The closest of these is Pittington Hill Site of Special Scientific Interest (SSSI) 580m to the north of the site. No direct development impacts are envisaged on this or any other nearby protected sites. The site does not lie within a SSSI Impact Risk Zone (IRZ) for this type of development.

There are four non-statutory protected sites within 2km during the desk study and priority habitat broadleaved woodland was identified adjacent to the site to the north and south.

No granted European Protected Species (EPS) mitigation licences for work affecting bats were shown within 2km.

One granted EPS mitigation licence for work affecting great crested newts (GCN) was highlighted within 2km, located approximately 1.7km to the west of site.

The proposed development site measures approximately 1.6ha and is dominated by plantation broadleaved woodland, amenity grassland, scattered broadleaved trees and hard standing. Overall, the habitats on site are considered to be of local value.

With regard to foraging and commuting bats, the habitats in the local area are of moderate suitability.

There are two buildings on site which were subjected to detailed external and internal inspections: Building 1 is a stone and brick built outbuilding currently used for storage and building 2 is a section of the main hotel building. Overall, the section of hotel to be impacted is considered to be of low to moderate suitability to support roosting bats, and the outbuilding is considered of moderate suitability.

Bat presence/absence survey recorded two roosts within building 1 used by up to 6 common pipistrelle and an individual soprano pipistrelle bat. No roosts were recorded within building 2. A roost in an ash tree used by at least three common pipistrelle bats, currently no trees are scheduled to be removed to facilitate development in this location. A high level of bat foraging activity with up to five individuals recorded at once within the woodland to the north of site where holiday lodges are proposed.

Further ground based tree assessments are required to assess the value of the trees on site for roosting bats if any trees are to be removed to facilitate development (see below).

The site is considered of up to local value for birds, badgers, common toad, hedgehog, and red squirrel, if still present in the area, with other protected and priority species likely to be absent. A small garden pond is present within housing to the south of the hotel. Habitat within 100m of this pond that will be affected by proposals is largely limited to a small area of mown amenity grassland and hard standing. The Natural England rapid risk assessment calculator was used

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to assess potential impacts should great crested newt be present within this pond, with the result indicating the risk of harm as 'highly unlikely'.

The results of the site survey combined with the desk study have highlighted the following further ecological survey, mitigation or compensation requirements. Further work required prior to submission of a planning application is listed in **bold text**, and it should be noted that this requirement may restrict a full assessment of ecological impacts until those works are completed.

Ecological Receptor	Impact	Mitigation
Protected Sites		
Pittington Hill, Sherburn Hill, High Moorsley and Moorsley Banks SSSI	No impact anticipated	None required
Habitats		
Trees	Loss and damage to retained trees, including those immediately adjacent to development areas.	No trees are planned to be removed however this is subject to results of an arboricultural survey. Any tree removal will be compensated for through planting of new trees with a 2:1 replacement ratio. Only native species will be planted. Any trees dues for removal will be subject to a ground based tree assessment to assess the risk for roosting bats. Works will be undertaken in accordance with BS5837-2012 'Trees in relation to construction' and retained hedgerows and trees will be protected, including protection of roots.
Woodland	Loss and damage/disturbance.	Trees within woodland will be retained within the development proposals and pruning kept to a minimum. Any trees dues for removal or pruning will be subject to a ground based tree assessment to assess the risk for roosting bats. Retained woodland will be protected from disturbance during construction by heras fencing.
Grassland	Loss and degradation during construction and operational phase.	Wildflower grasslands, wildflower bulb planting including species rich planting on green roofs proposed on holiday lodges will be incorporated into the landscape proposals.
Biodiversity (general)	Loss of biodiversity as a result of development of the site.	Retention of as much higher value habitat as possible. Habitat losses are to be balanced on site through habitat enhancement and creation if possible, or if not possible then off-site opportunities will need to be explored so that the development provides a net gain in biodiversity.
Species		

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Bats	Harm/disturbance to bats	A Natural England development licence will be required prior to works commencing which may impact on bat roosts in building 1. All works will follow the approved Natural England method statement, which will include: • Pre-commencement site induction / toolbox talk for key contractors on site carrying out work which may affect bats • A concrete-type bat box will be erected on a suitably mature tree prior to the commencement of works to act as interim roosting habitat during construction and will be retained in situ following completion of the development. The box will be used as a receptor for translocated bats (see below). • Pre-commencement inspection of confirmed and potential roosting areas by the ecologist, such as gaps under slates, ridge tiles, coping stones and in stone/brickwork. • Sensitive dismantling of these roosting areas under ecological supervision, taking care not to harm bats in the process. If bats are found, the ecologist will capture the bat(s) by hand, check the health of the bat and transport it to the aforementioned bat box. • If bats cannot be safely captured, they will be excluded from the roost using standard exclusion devices. These will be fitted by, or under supervision of, the ecologist and will remain in place for a minimum of five consecutive nights of suitable weather, in accordance with the most up to date edition of the Bat Workers Manual[1]. No exclusion will take place during the hibernation period (November to end Feb inclusive). • In the event that bats are found during works, works will stop in that area and the ecological consultant will be contacted immediately. If it is necessary to move the bats for their safety, this will be undertaken by a licensed bat handler. • Timber treatments that are toxic to mammals will be avoided. If required, timber treatment will be carried out in the spring or autumn. Both pre-treated timbers and timber treatments will use chemicals classed as safe for use where bats may be present (see https://data.jncc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf - Chapter 10).

[1] At the time of issue of this report, the latest version is: Mitchell-Jones, A.J. & McLeish, A.P. (2012) The Bat Workers' Manual (3rd Edition). Pelagic Publishing, Exeter.

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		Works to building 2 will be undertaken to a precautionary bat method statement as good working practice
	Loss of common pipistrelle day roosts.	At least 4 roosting opportunities will be provided in building 1. These will be built-in to the structure in the form of: • 20mm diameter gaps in the wall pointing, leading to internal cavities retained/recreated • Gaps under ridge tiles • No breathable roofing membrane will be used in locations where bats may come into access with it.
	Loss of potential bat roosting opportunities in trees on site. Risk of harm/disturbance if bats are present during the works.	**Further ground level and if required aerial tree assessments are required of trees to be affected by the proposals, once required arboricultural works are known.** **Should the tree identified as supporting a potential roost be affected, further bat presence/absence surveys will be required specifically focussed on that tree.** Further mitigation measures may be required based on the results, which may include the need for a Natural England mitigation licence and timing restrictions to certain activities.
	Increased lighting affecting foraging/commuting areas potentially used by bats (and other nocturnal wildlife).	Light levels around newly installed roost locations, foraging/commuting areas and within the woodland will be low level, below 2m in height, and low lux (below 1 lux 5m from the light source). Light spillage to areas used by foraging or commuting bats, e.g. within the trees and the surrounding woodland, must be less than 2 lux. Warm-light LEDs with very low UV will be used, with cowls designed to accurately target which areas are lit. Any lighting required for access to the holiday lodges will be low bollard type with cowls, so lighting is focussed on the pathway. External lighting associated with the holiday lodges will be focussed downwards towards any decked area, ensuring minimal light spill within the surrounding tree cover. Where security lights are required, these will be of minimum practicable brightness, be set on a short timer and will be motion sensitive only to larger objects. No security lighting will be used around the holiday lodges.

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	Small loss of bat foraging/commuting habitat.	Landscape planting to include native plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for bats and wildlife generally.
Amphibians	Harm/disturbance to common amphibians, including common toad	Works will be undertaken to a precautionary amphibian method statement.
Birds	Harm/disturbance to nesting birds if vegetation clearance is carried out during the bird breeding season	A pre-commencement check for nesting birds will be undertaken by a suitably experienced ornithologist if vegetation clearance is undertaken between March and August inclusive.
	Loss of bird foraging opportunities of up to local value	Landscape planting to include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for birds and wildlife generally
	Loss of bird nesting opportunities of up to local value	Installation of two bird nest boxes such as hole, open fronted or sparrow terrace box types. Boxes should be min 2m high and ideally north to east facing, near foraging habitat and with direct flight access.
Red squirrel	Potential for dreys to be created within 30m of working area and harm/disturbance to red squirrel.	A checking survey will be undertaken within 3 months prior to works commencing to confirm red squirrel dreys remain absent. Works will be undertaken to a precautionary red squirrel method statement.
Hedgehog	Loss of hedgehog foraging habitat of local value	Landscape planting will include areas of dense shrubs to provide cover for hedgehogs and berry bearing species to provide a foraging resource.
	Harm/disturbance to hedgehog	Works will be undertaken to a precautionary hedgehog method statement including a hand search of suitable refugia prior to removal.
Wildlife (general)	Entrapment of wildlife during construction if trenches are left open overnight	Any excavations left open overnight will have a means of escape for wildlife that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.

The development presents an opportunity for ecological benefit within the site and it is a planning requirement to provide a net gain in biodiversity as part of the development. This is covered in greater detail in a separate report, but in brief the following are recommended:

- Provision of six integrated bird nesting features in the new buildings on site. To include two nest features for swift, two for starling and/or house sparrow and two open fronted. Bird nesting opportunities should ideally be north to east facing and a minimum of 2m high (swift 4m+).
- Provision of four integrated bat roosting features in the new buildings on site. Bat roosting features should be a minimum of 3-4m high, on gable ends or at eaves height.

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- Landscape planting is to be designed to enhance structural diversity and will include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain food resources for wildlife in general.
- Species rich green roofs will be created on the holiday lodges.
- Planting of native, species-rich mixtures of scrub and trees.
- Creation of hedgehog/reptile/amphibian hibernacula or habitat piles.
- Installation of two additional bird nest boxes and three bat boxes in the trees on site.

The local planning authority is likely to require the means of delivery of the mitigation to be identified. It is recommended that mitigation, compensation and enhancement proposals are incorporated into the planning documents.

The proposed development has the potential to have significant adverse effects on a number of notable species and/or habitats. Further survey is required to establish the potential use of the site by roosting bats. Once surveys are completed and development proposals finalised, a full ecological impact assessment can be completed and mitigation proposals finalised along with any requirement for further compensation. Proposals provide an opportunity for ecological benefit through enhancements of the grassland, green roofs and provision of bat and bird boxes, contributing to local and national conservation targets.

If you are assessing this report for a local planning authority and have any difficulties interpreting plans and figures from a scanned version of the report, E3 Ecology Ltd would be happy to email a PDF copy to you. Please contact us on 01434 230982.

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B. INTRODUCTION

E3 Ecology Ltd was commissioned by GW Architectural in February 2023 to undertake an EcIA and bat survey of a proposed development site at Hallgarth Manor Hotel in High Pittington, County Durham.

This assessment has been prepared taking account of the Chartered Institute of Ecology and Environmental Management's (CIEEM) "Guidelines for Ecological Impact Assessment in the UK and Ireland" (2022).

B.1 AUTHOR, SURVEYORS & QUALIFICATIONS

The author's professional qualifications and survey licences are detailed in the table below, as well as those of additional lead surveyors who completed survey work at the proposed development site:

TABLE 1: LEAD SURVEYORS

Name	Position	Professional Qualifications
Lizzie Collins	Graduate Ecologist	BSc

Further details of experience and qualifications are available at www.e3ecology.co.uk.

All surveyors have the knowledge, skills and experience identified within the relevant CIEEM Competencies for Species Survey guidance, or were under the supervision of a surveyor with the required competencies.

B.2 OBJECTIVES

The objectives of the assessment are to:

- Establish baseline ecological conditions and determine the importance of ecological features present or potentially present within the survey area;
- Complete comprehensive building inspections to search for evidence of bat use;
- Establish the bat roosting suitability of any buildings which may be present on site and at risk of impact by the development;
- Identify and describe potentially significant ecological constraints and effects associated with the proposed development;
- Make recommendations for design options to avoid significant effects on important ecological resources at an early stage of development planning where possible;
- Identify the potential requirement for further surveys on protected species and habitats which may be present on site;
- Set out the mitigation, compensation and enhancement measures required to ensure compliance with nature conservation legislation and to address any potentially significant ecological effects;
- Identify how these measures could be secured; and
- Identify any requirements for post-construction monitoring of the site.

B.3 PROPOSED DEVELOPMENT SITE

The site is located in High Pittington, County Durham, at an approximate central grid reference of NZ 32815 43755.

The figures below illustrate firstly the survey boundary and secondly the broad habitats present on site and within an approximate 500m buffer zone.

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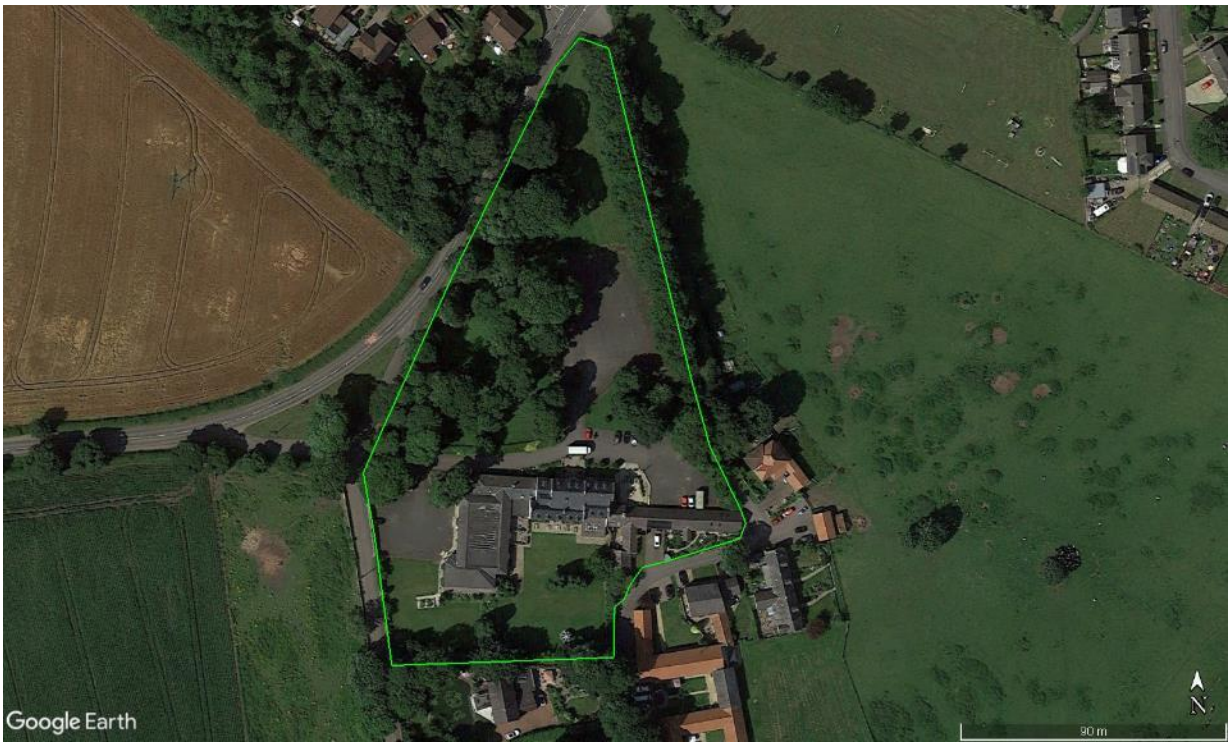

FIGURE 1: SITE BOUNDARY
(Reproduced under licence from Google Earth Pro.)

FIGURE 2: SITE AND 500M SETTING
(Reproduced under licence from Google Earth Pro.)

B.4 DEVELOPMENT PROPOSALS

The proposed project/development includes construction of eight holiday lodges, conversion of an existing disused building to provide two bedrooms and conversion of an existing section of

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main hotel building to provide nine bedrooms. Development proposals are shown in the figure below.

FIGURE 3: DEVELOPMENT PROPOSALS

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C. METHODOLOGY

C.1 SCOPE OF STUDY

The scope of the study, in terms of the survey area and the desk study area, is based on professional judgement. The likely zone of influence of the proposal has been considered, including both potential direct effects, such as habitat loss, and potential indirect effects, such as disturbance. Consideration has been given to potential effects both during the construction and operational phases of the development.

For this site the survey area comprised the green line boundary as defined within the figures in section B.

In some circumstances field signs and habitat suitability may indicate the potential presence of nearby protected species and/or habitats immediately adjacent to the site which may fall within the zone of influence. In this scenario, if access was available the survey boundary was extended to include these areas. If access was not possible at the time of initial survey, the ecological impact assessment and required mitigation measures have been prepared taking this limitation into account.

The desk study included an assessment of land-use in the surrounding area and a data search covering a 2km buffer zone (see below for further detail).

The following types of ecological receptors have been considered:

- Statutorily designated sites for nature conservation;
- Non-statutorily designated sites for nature conservation;
- Species protected by law;
- Species and/or habitats listed under the NERC Act (2009) as being of principal importance for conservation of biodiversity; and
- Species and/or habitats listed in relevant local biodiversity action plans.

Further details on planning and legislative context are provided in the appendices of this report.

C.2 DESK STUDY

Initially, the site was assessed from aerial photographs and 1:25,000 Ordnance Survey maps.

Following this, a data search was submitted to the Local Records Centre in February 2023, requesting data relating to protected or otherwise notable species and non-statutory sites for nature conservation within 2km of the survey area.

In addition, a search was made of the MAGIC website[2] for all statutorily protected sites for nature conservation within 2km of the survey area, as well as notable habitats or species records.

C.3 FIELD SURVEY

An ecological walkover survey of the site was completed, comprising a phase 1 habitat survey and a preliminary appraisal for protected and otherwise notable species.

[2] MAGIC Website: www.magic.gov.uk

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C.3.1 PHASE 1 HABITAT SURVEY & PROTECTED SPECIES APPRAISAL

C.3.1.1 PHASE 1 HABITAT SURVEY METHODOLOGY

The field survey of the proposed site was conducted using the methodology of the Joint Nature Conservation Committee's Phase 1 Habitat Survey, as outlined in their habitat-mapping manual[3]. Each parcel of land was assessed by a trained surveyor and classified as one of ninety habitat types. These were then mapped and the habitat information supplemented by dominant and indicator species codes and target notes where appropriate. Where areas within the study area do not fall into the Phase 1 Habitat Survey classification, alternative methods of classification have been used.

C.3.1.2 PRELIMINARY PROTECTED/NOTABLE SPECIES APPRAISAL METHODOLOGY

A preliminary appraisal of the site was completed to search for field signs or evidence of protected or notable[4] species and to assess the suitability of habitats to support such species.

When conducting the survey, particular focus was concentrated on, but not restricted to, the following taxa:

- Amphibians, including great crested newt (GCN)
- Badger
- Bats
- Birds
- Brown hare
- Fish
- Hedgehog
- Notable butterfly species
- Non-native invasive species
- Otter
- Red squirrel
- Reptiles
- Water vole
- White-clawed crayfish

Assessment of habitat suitability to support such species was based on professional judgement and experience, species-specific habitat preferences, knowledge of local and broad geographical species distribution and connectivity to other areas of suitable habitat.

Where it is considered likely that there is a significant risk of protected or otherwise notable species being affected, or where habitats are of particularly high value, additional specialist survey work has been recommended. Further survey work may also be recommended where development proposals have the potential to affect statutorily designated sites in the vicinity.

BATS

The potential suitability of the habitats within the survey area and surrounding landscape in relation to commuting and foraging bats was classified as negligible, low, moderate or high, based on BCT guidelines and using the surveyor's professional judgement.

A daytime assessment was made of all structures affected by the proposed development, in order to evaluate their suitability to support bat roosts, and, where present, to record field signs of use by bats.

Buildings/structures were inspected both externally and internally where access was available. Binoculars and extendable ladders were used to assist with the inspection for potential roosting

[3] Handbook for Phase 1 habitat survey, A Technique For Environmental Audit, JNCC, 2010
[4] To include national priority species as listed in Section 41 of the NERC Act (2006) and local or regional priority species as listed within the relevant Biodiversity Action Plan

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features and bat field signs, such as droppings, feeding remains, grease/urine staining, corpses/skeletons or bats themselves.

Where possible, species identification was either confirmed visually, through DNA analysis of droppings or acoustically through further survey work at dusk or dawn. If endoscope use or handling of bats were required to identify particularly cryptic species or to assess roost type, this was completed by appropriately licensed individuals and minimised where possible to reduce disturbance.

Structures were categorised as having negligible, low, moderate or high suitability to be used by roosting bats, based on guidelines provided by the Bat Conservation Trust[5] and detailed within the table below.

TABLE 2: ASSESSMENT OF BAT ROOSTING SUITABILITY OF BUILDINGS/STRUCTURES & TREES *(TO BE APPLIED USING PROFESSIONAL JUDGEMENT, TAKEN FROM TABLE 4.1 OF BCT'S BAT SURVEY GUIDELINES)*	
Suitability	**Roosting Habitats**
Negligible	Negligible habitat features 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 by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A building/structure or tree 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 building/structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

Note that any comments within this report on the state or condition of buildings/structures relate solely to their potential use by bats and must not be taken as a professional assessment of the structural integrity or safety of the structures.

C.3.1.3 SURVEY EQUIPMENT

- High-powered torch
- Binoculars
- Camera
- Extendable ladders

C.3.1.4 SURVEY DATES & ENVIRONMENTAL CONDITIONS

The table below details the environmental conditions during the survey.

TABLE 3: SURVEY CONDITIONS				
Date	**Temperature (^{0}C)**	**Cloud Cover (%)**	**Precipitation**	**Wind Conditions (Beaufort scale)**
3/3/23	5	100	Dry	F1

[5] Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

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C.4 SURVEY CONSTRAINTS

Certain plant species may not be identifiable throughout the year. However, it is considered that sufficient botanical identification was possible to facilitate a robust assessment of habitats for the purposes of this report.

Trees were only assessed from ground level and from within the site. Furthermore, tree assessments may sometimes need to be undertaken in summer, while in full leaf, which may obscure potential roosting features during the assessment of bat roosting potential. However, the trees were assessed from various angles on site using good quality binoculars and professional judgement was used based on the tree characteristics to supplement the assessment. Where trees could not be confidently assessed, further survey has been recommended.

The survey completed at the site will provide reasonably typical data for the season in which it was undertaken, and internal field signs are likely to reflect activity over the preceding active season. Assessment of the bat use of the site at other times of year and the potential impacts of the proposed development is based on professional judgement. This is an approach supported by the Bat Conservation Trust Good Practice Guidelines[6].

The attic of building 2 could not be fully assessed as the roof void was too cluttered with trusses for access to entire loft void, therefore a precautionary assessment has been made of the suitability for roosting bats. Presence/absence surveys have been undertaken and it is considered a robust assessment has been possible.

C.5 ASSESSMENT METHODOLOGY

The relative value of the ecological receptors (habitats, species and designated sites) was assessed using a geographical frame of reference. For designated sites this is generally a straightforward process with the assigned designation generally being indicative of a particular value, e.g. Sites of Special Scientific Interest are designated under national legislation and are therefore generally considered to be receptors of national value. The assignment of value to non-designated receptors is less straightforward and as recognised by the Guidelines for Ecological Impact Assessment produced by CIEEM[7], is a complex and subjective process and requires the application of professional judgement.

When assessing the value of species and habitats, relevant documents and legislation are considered including the lists of species and habitats of principal importance annexed to the NERC Act (2006) and those provided within relevant local Biodiversity Action Plans. Data provided through consultation is also considered. These data sources can provide context at a local, regional and national scale.

The table below provides examples of receptors of value at different geographical scales.

TABLE 4: ECOLOGICAL RECEPTOR VALUATION

Level of Value	Examples
International	An internationally designated site or candidate site.
	A site meeting criteria for international designation.
	A substantial* area of a habitat listed on Annex I of the EC Habitats Directive or smaller areas of such habitat, which are considered likely to be essential to maintain the functionality of a larger whole.

6 Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

7 Chartered Institute for Ecology and Environmental Management (2019) Guidelines for Ecological Impact Assessment in the UK and Ireland - Terrestrial, Freshwater and Coastal

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TABLE 4: ECOLOGICAL RECEPTOR VALUATION	
Level of Value	**Examples**
	The site is of functional importance** to a species population with internationally important numbers (i.e. >1% of the biogeographic population)
National	A nationally designated site.
	A substantial* area of a habitat listed as a Habitat of Principal Importance within Section 41 of the NERC Act (2006) or smaller areas of such habitat, which are considered likely to be essential to maintain the functionality of a larger whole.
	The site is of functional importance** to a species population with nationally important numbers (i.e. >1% of the national population)
Regional	An area of habitat that falls slightly below the criteria necessary for designation as a SSSI but is considered of greater than county value.
	The site is of functional importance** to a species population with regionally important numbers (i.e. >1% of the regional population)
County	A Local Wildlife Site (LWS) or equivalent, designated at a County level
	A substantial* area of a habitat listed within the relevant County Biodiversity Action plan or smaller areas of such habitat, which are considered likely to be essential to maintain the functionality of a larger whole.
	The site is of functional importance** to a species population of county value (i.e. >1% of the county population)
District	A Local Wildlife Site (LWS) or equivalent, designated at a District level
	A substantial* area of a habitat listed within the relevant District Biodiversity Action plan or smaller areas of such habitat, which are considered likely to be essential to maintain the functionality of a larger whole.
	The site is of functional importance** to a species population of district value (i.e. >1% of the district population)
Parish	Area of habitat or species population considered to appreciably enrich the habitat resource within the context of the parish.
	Local Nature Reserves
Local	Habitats and species that contribute to local biodiversity but are not exceptional in the context of the parish.
Low	Habitats that are unexceptional and common to the local area.
Substantial defined as 'of considerable size or value within that area based on professional judgement, rather than a small, inconsequential area'* * Functional importance defined as 'a feature which, based on professional judgement, is of importance to the day to day functioning of the population, the loss of which would have a detectable adverse effect on that population',*	

The site lies within Pittington Civil Parish which covers approximately 825ha and is mainly scattered villages within arable land and some woodland corridors.

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D. RESULTS

D.1 DESK STUDY

D.1.1 PRE-EXISTING INFORMATION

D.1.1.1 ORDNANCE SURVEY MAPPING AND AERIAL PHOTOGRAPHY

The figures in Section B show that the general land use in the surrounding area is the village of High Pittington to the north and arable fields to the east, south and west.

The most recent aerial photograph of the site (2022) indicates that habitats on site are dominated by amenity grassland, mature trees/woodland, hardstanding car parks and buildings.

Historic imagery suggests that the site has remained largely unchanged since the earliest aerial image (2001) with only minor landscaping changes occurring within the vegetated garden.

D.1.1.2 MAGIC WEBSITE[8]

PROTECTED SITES

The table below details the internationally and nationally statutorily designated sites within 2km of the survey area.

TABLE 5: DESIGNATED SITES

Designation	Site Name	Brief Reason for Designation	Distance from Survey Area
Site of Special Scientific Interest	Pittington Hill	This area supports one of the largest areas of Magnesium Limestone grasslands in County Durham, containing blue moor-grass *Sesleria albicans* and other limestone grassland plants. Within an area formally quarried, quarry margins scrub has developed with further magnesium limestone grasslands developing on the spoil heaps.	540m north east
Site of Special Scientific Interest	Sherburn Hill	Supports an area of magnesium limestone grassland with species including: including glaucous sedge *Carex flacca*, quaking grass *Briza media*, meadow oat-grass *Avenula pratensis*, rockrose *Helianthemum nummularium*, wild thyme *Thymus praecox*, fragrant orchid *Gymnadenia conopsea*, and sea plantain *Plantago maritima*	1200m south
Site of Special Scientific Interest	High Moorsley	Geological designation along with areas of magnesium limestone grassland.	1240m north east
Site of Special Scientific Interest	Moorsley Banks	Slopes are grazed and are of interest due to herb rich magnesium limestone grassland with rock outcrops which merges into neutral grassland.	1820m north east

The site does not fall within a SSSI impact risk zone for this type of development.

[8] Multi Agency Geographic Information for the Countryside (MAGIC) www.magic.gov.uk

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HABITATS
Priority broadleaved woodland is mapped immediately adjacent to the north and south of the site boundary.

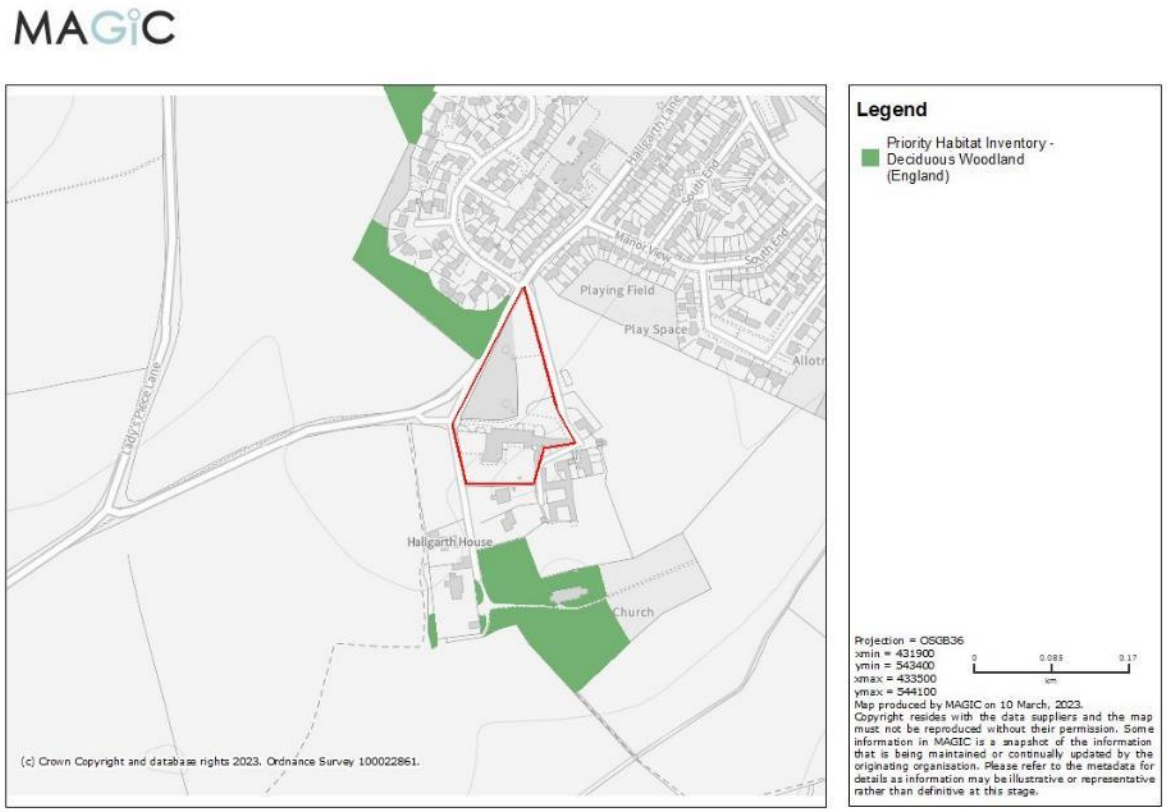

FIGURE 4: PRIORITY HABITATS
(MAGIC)

SPECIES
There is one record of a granted European Protected Species (EPS) mitigation licence affecting GCN within 2km, located approximately 1.7km north west of the site. Two locations are highlighted where GCN survey licence returns have indicated GCN presence, the nearest approximately 1.8km from the site.

No records of granted European Protected Species (EPS) mitigation licence affecting bats were shown within 2km of the site.

D.1.2 CONSULTATION

LOCAL RECORD CENTRE
The table below summarises the records provided by the local records centre. The full data search results can be provided on request.

TABLE 6: CONSULTATION RECORDS			
Species	**No. of Records**	**Closest distance (m – if sufficient record resolution provided)**	**Most recent date**

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Amphibian			
Common Frog	1	1786	1983
Common Toad	4	1341	23/03/2011
Great Crested Newt	17	906	01/05/2021
Smooth Newt	1	1786	1983
Insect - Butterfly			
Castle Eden Argus	22	671	01/07/2019
Dark Green Fritillary	58	798	07/07/2022
Dingy Skipper	34	768	21/05/2019
Green Hairstreak	1	~2000	17/04/2011
Northern Brown Argus	45	766	23/06/2022
Small Heath	133	798	03/08/2022
Wall	175	768	19/08/2022
White-letter Hairstreak	4	1088	05/08/2022
Terrestrial Mammal			
American Mink	1	487	29/10/2006
Bats	1	~2000	30/08/2008
Brown Hare	4	1585	18/07/2018
Brown Long-eared Bat	4	1120	01/05/2022
Common Pipistrelle	46	259	01/05/2022
Eastern Grey Squirrel	58	1511	28/09/2018
Eurasian Badger	6	~1400	20/03/2020
Eurasian Common Shrew	1	1106	26/04/2015
Eurasian Otter	8	487	20/10/2018
Eurasian Red Squirrel	2	259	04/10/2008
European Water Vole	7	531	16/06/2009
Myotis Bat species	4	1120	01/05/2022
Noctule Bat	6	1120	01/05/2022
Pipistrelle Bat species	64	1803	01/05/2021
Soprano Pipistrelle	4	1803	01/05/2021
West European Hedgehog	122	273	21/11/2021

The records centre also provided 5897 records of birds, including sixteen species listed on Schedule 1 of the wildlife and Countryside Act 1981 (as amended).

In addition, the records centre provided information relating to the non-statutory designated sites shown in the below figure, which lie within the search area:

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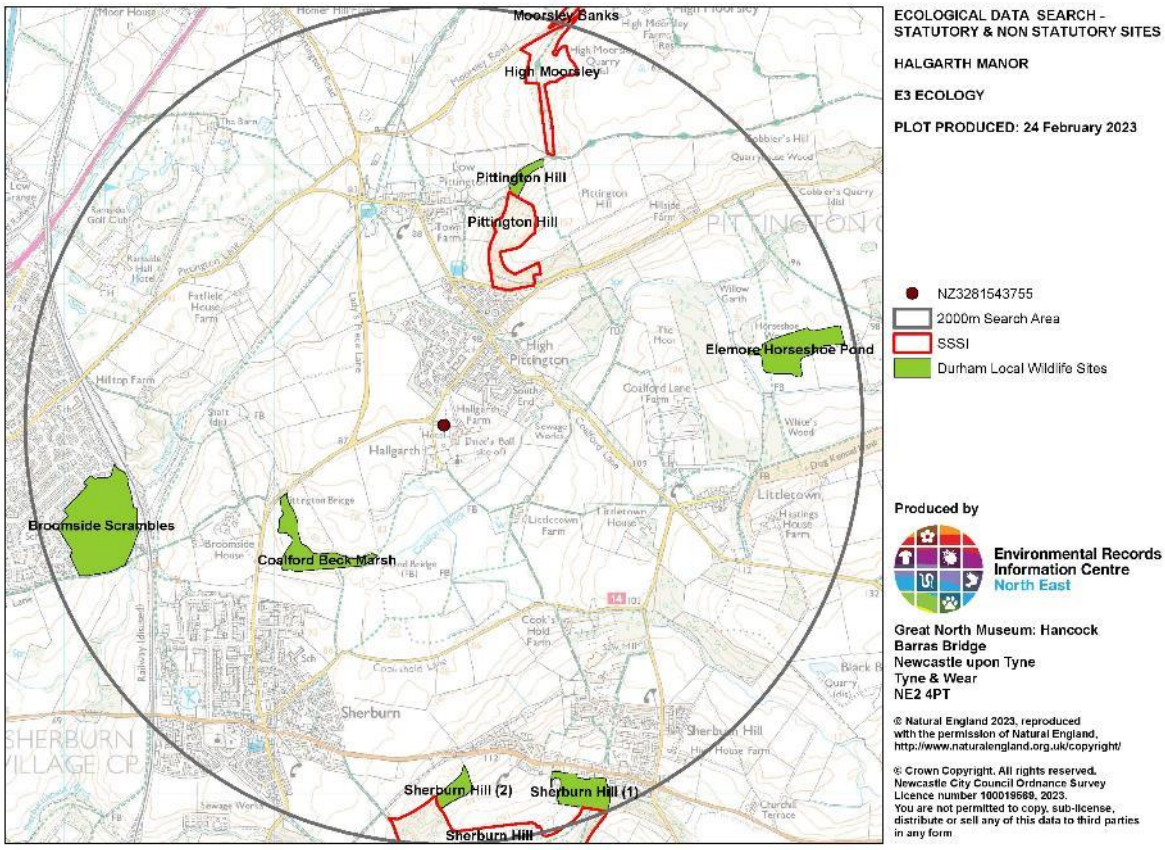

FIGURE 5: NON-STATUTORY DESIGNATED SITES WITHIN 2KM (ERIC NE)

D.2 FIELD SURVEY

D.2.1 HABITATS

The proposed development site covers approximately 1.6ha and is dominated by plantation broadleaved woodland, amenity grassland, scattered trees, buildings and hard standing associated with the hotel and ornamental planting.

D.2.1.1 PHASE 1 HABITAT MAP

The habitats present within the survey area are illustrated within the figure below and described in more detail below.

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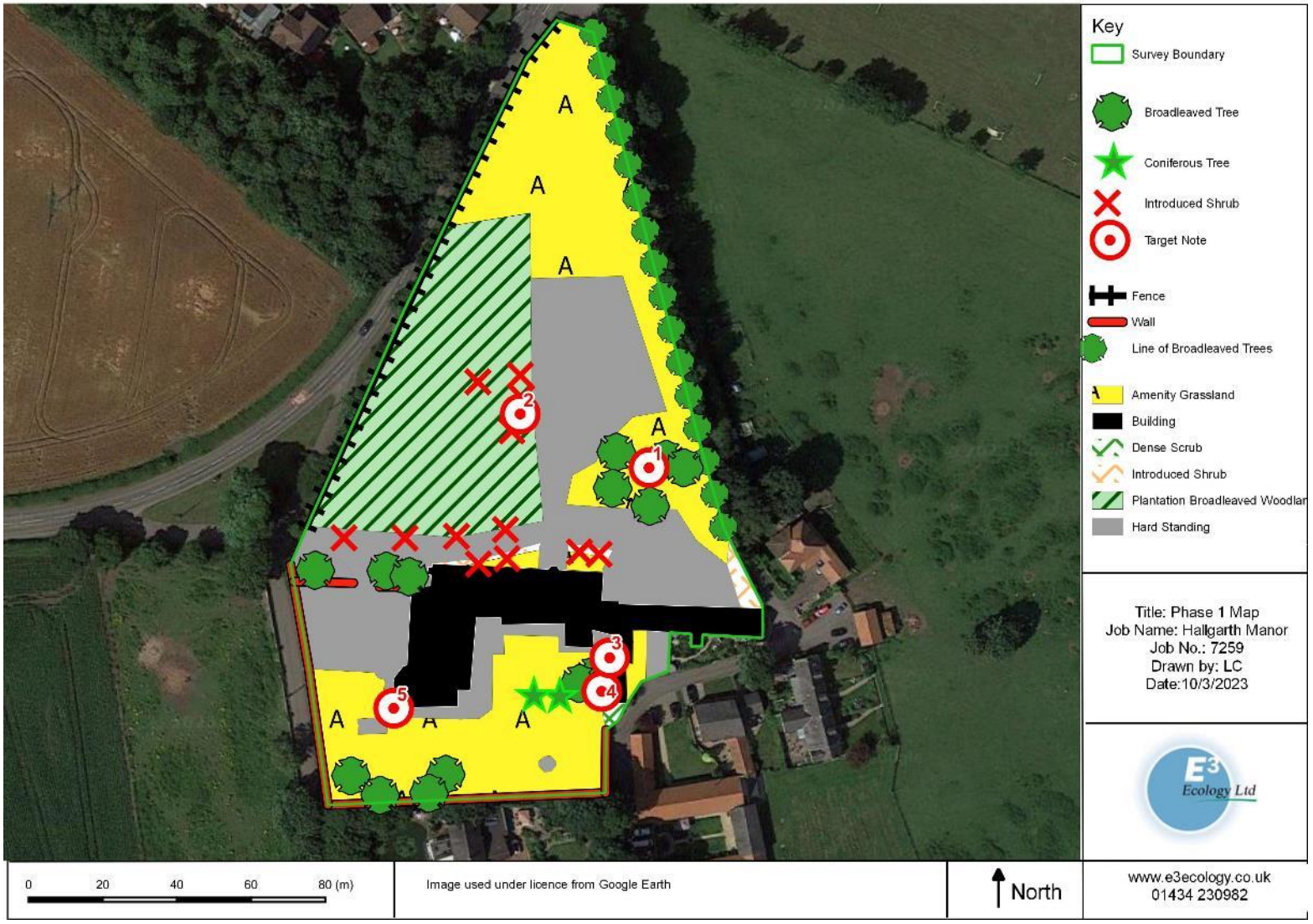

FIGURE 6: HABITAT MAP

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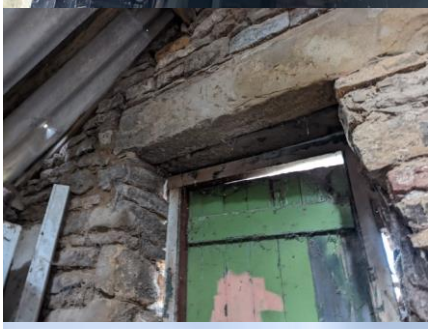
D.2.1.2 TARGET NOTES

TARGET NOTE 1
Discarded vegetation - possible refugia for amphibians and hedgehog

TARGET NOTE 2
Lighting on trees within woodland directed towards carpark

TARGET NOTE 3+4
Doorways within outbuilding with gaps at lintels providing bat roost potential



TARGET NOTE 5
Gaps at wall tops on building 2

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D.2.1.3 HABITAT DESCRIPTIONS

PLANTATION WOODLAND

An area of plantation broadleaved woodland is present adjacent to the car park area. The canopy is dominated by semi-mature to mature sycamore *Acer pseudoplatanus* trees with additional ash *Fraxinus excelsior*, elm *Ulmus sp.* and beech *Fagus sylvatica.* Several contain rot features that may be suitable for roosting bats. The woodland is relatively open with a sparse understorey limited to occasional cherry laurel *Prunus laurocerasus* and box honey suckle *Lonicera nitida*.

The ground flora is around 5cm in height with around 2% bare ground. There are limited grass species and forb species dominate the cover. Species include fescue *Festuca* sp., red dead nettle *Lamium purpureum*, cow parsley *Anthriscus sylvestris*, dandelion *Taraxacum officinale*, daisy *Bellis perennis*, lesser celandine *Ficaria verna*, creeping buttercup *Trifolium repens*, broad leaved dock *Rumex obtusifolius*, creeping thistle *Cirsium arvense*, cleavers *Galium aparine*, daffodil *Narcissus sp.*, snowdrops *Galanthus nivalis* and spring crocuses *Crocus vernus*.

SCATTERED AND LINES OF TREES

Amenity trees are scattered within the hotel grounds. Species include sycamore, ash, silver birch *Betula pendula* and Cypress *Cupressus sp.*

A line of trees runs along the eastern boundary of the site, species include sycamore, ash and silver birch.

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POOR SEMI-IMPROVED GRASSLAND

Two areas of mown poor semi-improved grassland are present within the hotel grounds, one forms part of the lawn to south of the hotel and one surrounds the car park in the north of the site.

The lawn to the south of the hotel was mown short (~5cm) at the time of survey with large areas of moss dominating the sward. Typical lawn grass species are present in small numbers such as meadow grasses *Poa sp.,* fescues, white clover *Trifolium repens*, daisy *Bellis perennis*, dandelion, ragwort *Jacobaea vulgaris*, spear thistle *Cirsium vulgare*, chickweed *Stellaria media* and cleavers.

The grassland surrounding the car park shows similar species to the ground flora of the woodland area with a limited cover of grasses. Species include fescues, perennial rye grass and meadow grasses. Forbs dominate the sward with cow parsley and creeping buttercup abundant along with occasional dandelion, creeping thistle, lesser celadine and broad leaved dock. As within the woodland, snowdrops, spring crocuses and daffodils are present and are assumed to be ornamental bulb planting.

INTRODUCED SHRUB

Scattered introduced shrubs are located around the edges of the hardstanding areas, with species present including cypress sp., box honeysuckle and cherry laurel.

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BUILDINGS & HARDSTANDING

Hard standing areas within the site consist of the car park, paths and decking around buildings. Buildings on site comprise the main hotel building and associated outbuildings. The areas of the building affected by the development works are described in more detail in section D.2.3 below.

FENCES AND WALLS

Stone walls and wooden fences demarcate the site boundaries to the west and south of the site

SURROUNDING HABITATS

The areas surrounding the proposed development site comprise further habitats within the hotel grounds such as further amenity trees, amenity grassland, vegetated garden, buildings and hardstanding and beyond that residential housing and arable land. Areas of priority broadleaved woodland lie directly north and south of the site.

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POND OFF SITE

There are no ponds within the hotel grounds however there was one pond in the garden to the south of the hotel. Access was not available at the time of survey but from within the hotel grounds it was observed that the area around the pond consisted of amenity type grassland with smaller patches of rushes. From aerial images the pond was created between 2001 and 2006 and appears to hold water throughout the year.

D.2.1.4 HABITAT ASSESSMENT

The development site is considered to be of up to local value for the habitats it supports.

D.2.2 SPECIES

BATS

See following section of report.

GREAT CRESTED NEWT

Although not present on OS maps, there is one pond within a private garden to the south of the hotel grounds. This pond is located approximately 40m south of the nearest part of the development area. It could not be accessed during the survey due to third party land access restrictions however it was observed from within the hotel grounds. No records of GCN presence within this pond was returned through the records search.

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The habitats present on the proposed development site suitable for GCN are limited as the area nearest to the pond consists of regularly mown grassland and hard standing. However, the woodland to the north of site may offer some sheltered foraging opportunities for GCN in their terrestrial phase.

FIGURE 7:POND AND 100M BUFFER
(Google Earth Pro)

Natural England's Rapid Risk Assessment tool was used to assess the likelihood of an offence occurring during the development (see below).

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability
Great crested newt breeding pond(s)	No effect	0
Land within 100m of any breeding pond(s)	0.001 - 0.01 ha lost or damaged	0.05
Land 100-250m from any breeding pond(s)	0.01 - 0.1 ha lost or damaged	0.01
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
	Maximum:	0.05
Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY	

The tool gives an outcome of "Green: Offence Highly Unlikely" due to the size of the development site and distance between it and the nearby pond.

Common amphibians, including common toad, may be present on occasion. If present, the site is likely to be of up to local value to these common amphibian species.

BIRDS

The following bird species were recorded on site, in adjacent habitats or flying over the site: mistle thrush (red listed on The Birds of Conservation Concern), rook (amber listed), blue tit, coal tit, great spotted woodpecker, robin and chaffinch.

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The introduced scrub, trees and walls on site provide nesting and foraging opportunities to an assemblage of locally common bird species. All areas of the site are regularly disturbed and this is considered likely to deter ground-nesting species.

Overall, the site is considered to be of local value to birds.

BADGER

The site contains suitable foraging opportunities for badger. There are no sett excavation opportunities within the site however the surrounding arable land and broadleaved woodland to the south and north of the site may provide suitable sett excavation opportunities. No field signs directly attributable to badger were found during the survey.

Badger setts are considered to be absent from the site and badger presence on the site is likely to be limited to occasional foraging and commuting.

The site is therefore considered to be of local value to badger.

REPTILES

Suitable reptile habitat on site is limited and overall, the site is considered to lack the typical mosaic of habitat types and vegetation structures used by reptiles. Furthermore, there are no records of reptiles within 2km of site and reptiles or field signs were seen during the survey. They are therefore considered likely to be absent from the site.

RED SQUIRREL

The most recent red squirrel records within 2km of the site are from 2008 and more recent records of grey squirrel are present within 2km. No dreys or other field signs were found during the survey. If they remain present in the wider area, they may occasionally use the site.

INVERTEBRATES

The site generally lacks significant amounts of key larval food-plants for priority butterfly species and also lacks typically favoured habitat mosaics. Dingy Skipper and Wall butterfly have been recorded within 1km with the closest record 768m from the site. The site contains a number of flowering plants that may provide a food source for butterflies. Although bird's-foot-trefoil, the key larval food plant for dingy skipper, would not have been recorded during this survey due to the time of year, the grassland is regularly mown which will limit its potential benefit and suitability to support butterflies. Generally the site lacks typically favoured habitat mosaics and areas of bare ground that dingy skipper require for basking.

Notable populations of priority butterfly species are considered likely to be absent.

OTTER, WATER VOLE & WHITE-CLAWED CRAYFISH

There are no aquatic habitats on or within the vicinity of the site with suitability to support these species and they are considered likely to be absent from the site. A garden pond is present within the garden to the south of the hotel however, this is not considered suitable to support any of these species.

OTHER NATIONAL PRIORITY AND LOCAL BAP SPECIES

The site contains some suitable habitat for hedgehog and common toad and is considered to be of local value for these species.

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D.2.3 BAT PRELIMINARY ROOST ASSESSMENT

D.2.3.1 HABITATS

FORAGING HABITATS & COMMUTING ROUTES

Within the site there are several areas of foraging habitat such as within the woodland and amenity trees. The woodland on site may constitute a commuting route from an area of priority broadleaved woodland in the south to an area in the north.

SHELTERED FLIGHT AREAS

The woodland on site forms a continuous canopy and therefore may be used as a sheltered flight area

ALTERNATIVE ROOST LOCATIONS

The houses and buildings in the immediate area may offer alternative roosting locations.

D.2.3.2 BUILDINGS/STRUCTURES

The location of each structure referenced is illustrated within the figure below, with descriptions detailed below.

Where recorded, field signs that confirm bat use are in bold.

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FIGURE 8: BUILDING LOCATIONS
(Reproduced under licence from Google Earth Pro.)

BUILDING 1: OUTBUILDING

- One storey brick and stone-built building with profiled asbestos sheet roof and asbestos roof tiles. Currently used for storage. A large ivy shrub is growing through the roof on the southern elevation potentially obscuring access points. The current development plans include the conversion of this building to two bedrooms however, this may be altered to demolition of the building and construction of a building with the same footprint depending on its structural condition.

External

- Holes within roof and missing ridge tiles allow internal access
- Several gaps within the stone work large enough for roosting bats
- Gaps at wall tops
- Gaps present in stone work where building joins main hotel building
- Eastern elevation is formed by brick columns and wooden gates leaving gaps and internal access.
- Some access points may have been obscured by ivy shrub growing on roof.
- No external field signs of bats recorded

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Internal

- Internally open to roof and not weathertight
- Gaps in lintels of two doors (target notes 3+4) with gaps large enough for roosting bats
- Internal access through holes in roof and wooden gates
- Roof is unlined and supported by timber joists
- No internal field signs of bats recorded however some areas were inaccessible as shed was used for storage

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Overall the building is considered to be of moderate suitability

BUILDING 2

Single storey section of main hotel building with multilevel roof and separate loft void, in regular use. Development proposals are for converting this section to contain nine bedrooms.

External

- Well sealed rendered walls
- Slate roof tiles and concrete ridge tiles with no visible access points
- One section of roof is formed of Perspex sheeting with bird mesh preventing internal access to this section
- Gaps at wall tops allowing internal access to loft void
- No external field signs of bats recorded

Internal

- Void cluttered with trusses and bright internal lighting. Roof height 3-4m at highest point
- Fan trusses and thick insulation. Void is interconnected to rest of hotel building
- Warm due to hot water pipes running throughout void
- Hessian backed felt underlay with no visible tears
- No internal field signs of bats recorded
- Internally the roof void was too cluttered with trusses for access to entire loft void

Overall building considered to be of low-moderate suitability

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D.2.3.3 TREES

Several trees within the woodland in the north west of the site contain some features that may be suitable for roosting bats. No trees are to be removed during development however pruning and increased lighting are required during construction of the lodges. Further ground based tree assessments are recommended once details of which trees are to be affected by pruning and increased lighting are provided.

D.2.3.4 **OVERVIEW OF BAT SUITABILITY**

TABLE 7: OVERVIEW OF HABITATS AND SETTING[9]

	NEGLIGIBLE	LOW	MODERATE	HIGH
HABITATS AND COVER WITHIN 200M	City Centre	Open, exposed arable or pasture with no hedges, amenity grassland, or relatively built up	Hedges and trees linking site to wider countryside, mature linked gardens	Excellent cover with mature trees/ woodland and/or good hedges
HABITATS WITHIN 1KM	City Centre	Little tree cover, few hedges, arable dominated, scattered green spaces	Semi-natural habitats e.g. trees, hedgerows	Good network of woods, wetland and hedges
ALTERNATIVE ROOSTS WITHIN 1KM	City centre	Numerous alternative roosting opportunities of a similar nature	A number of similar buildings in the local area	Few alternative buildings and site of good quality for roosts
SETTING	Inner city	Urban with little green space	Built development with green-space, wetland, trees	Rural Lowland with woodland and trees.
DISTANCE TO WATER/ MARSH	>1km	500m-1000m	200m-500m	<200m
DISTANCE TO WOODLAND/ SCRUB	>1km	500m-1000m	200m-500m	<200m
COMMUTING ROUTES	Isolated by development, major roads, large scale agriculture	No direct potential flyways linking site to wider countryside	Some potential commuting routes to and from site	Site is well connected to surrounding area with multiple flyways

TABLE 8: OVERVIEW OF BUILDING/STRUCTURES[2]

	NEGLIGIBLE	LOW	MODERATE	HIGH
AGE (APPROX.)	Modern	Post 1940's	1900-1940	Pre 20th C
BUILDING/ COMPLEX TYPE	Industrial complex of modern design	Single, small building	Several smaller buildings, larger single structures	Traditional farm buildings, large country house, large hospital/school
BUILDING - STOREYS	N/A	Single storey	Multiple storeys	Multiple storeys with large roof voids

[9] Building and habitat risk assessment technique audited in a research project with York University which compared the risk assessment scoring with the results of detailed field assessment for over 100 sites. Statistically significant associations were found between habitat setting and building features and the presence of absence of different bat species. For example habitat connections and nearby woodland were significant for brown long-eared bats and the presence of species-rich grassland is important for many species.

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STONE/BRICK WORK	No detectable crevices	Well pointed, limited or superficial gaps	Some cracks and crevices	Poor condition, many deep crevices, thick walls
FRAMEWORK – TIMBERS/STEEL	Modern metal frame with sheet cladding	Timber purlins, sheet asbestos, modern trusses	Timbers kingpost or similar	Large timbers traditional joints
ROOF VOID	Fully sealed or flat roof	Small, cluttered void	Medium, relatively open	Large, open, interconnected
ROOF COVERING	Modern sheet materials, tightly sealed, very well sealed roof tiles	Building 2: Good condition or very open, generally well sealed roof tiles	Building 1: Some potential access routes e.g. raised, slipped or missing slates or tiles, low number of gaps in bedding/end mortar	Numerous gaps, not too open, e.g. uneven stone slates, many gaps in mortar
ADDITIONAL FEATURES	None	Very limited features with potential access	Some features with low number of potential access points	Numerous or good quality gaps in features such as hanging tiles, cladding, barge boards, soffits
EXTERNAL LIGHTING	Extensive security lights covering much of the site	Widespread areas above 2 lux at night	Intermittent lights of low intensity	Minimal
BUILDING USE	Very noisy, dusty	Regular use	Intermittent use	Disused

Overall, the site is situated in an area of moderate suitability for bats.

Based on the assessment table, the buildings are considered of low-moderate or moderate suitability for roosting bats.

D.2.4 BAT PRESENCE/ABSENCE SURVEY

D.2.4.1 DUSK SURVEY SURVEYORS, TIMINGS & CONDITIONS

Date	Start	End	Sunset	Sunset Temp (°C)	End Temp (°C)	Cloud %	Precipitation	Wind (Force)
31.05.23	21:16	23:01	21:31	15	12	50	Dry	F1
20.06.23	21:33	23:18	21:48	18	15	100	Dry	F0
19.07.23	21:15	23:00	21:30	18	12	60	Dry	F0

Date	Lead Surveyor	Assistant surveyors
31.07.23	L Collins	P Jones, S Renyard, G Griffiths, G Armstrong
20.06.23	L Collins	K Roberts, S Renyard, A Attle, A Gamble, G Armstrong
19.07.23	L Collins	G Armstrong

D.2.4.2 31ST MAY 2023 DUSK SURVEY RESULTS

The survey was undertaken in mild (15ºC), dry weather; although the wind picked up during the middle of the survey (F2) this did not appear to deter bat activity. One roost was identified in building 1 with a single soprano pipistrelle bat emerging from a gap between the wall tops and roof. No roosts were identified in building 2.

Common and soprano pipistrelle bats were recorded on site with regular foraging associated with the trees and shrubs to the south of site and the adjoining gardens. Regular foraging of bats were recorded commuting to and from the wooded area in the north of site and the gardens to the south. Noctule bats were recorded throughout the survey but did not commute across site therefore they were assumed to be flying within the fields surrounding the site.

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A tawny owl was recorded calling in fields around the site towards the end of the survey.

The figure below provides a summary of the results of dusk emergence survey. More detailed data is available on request.

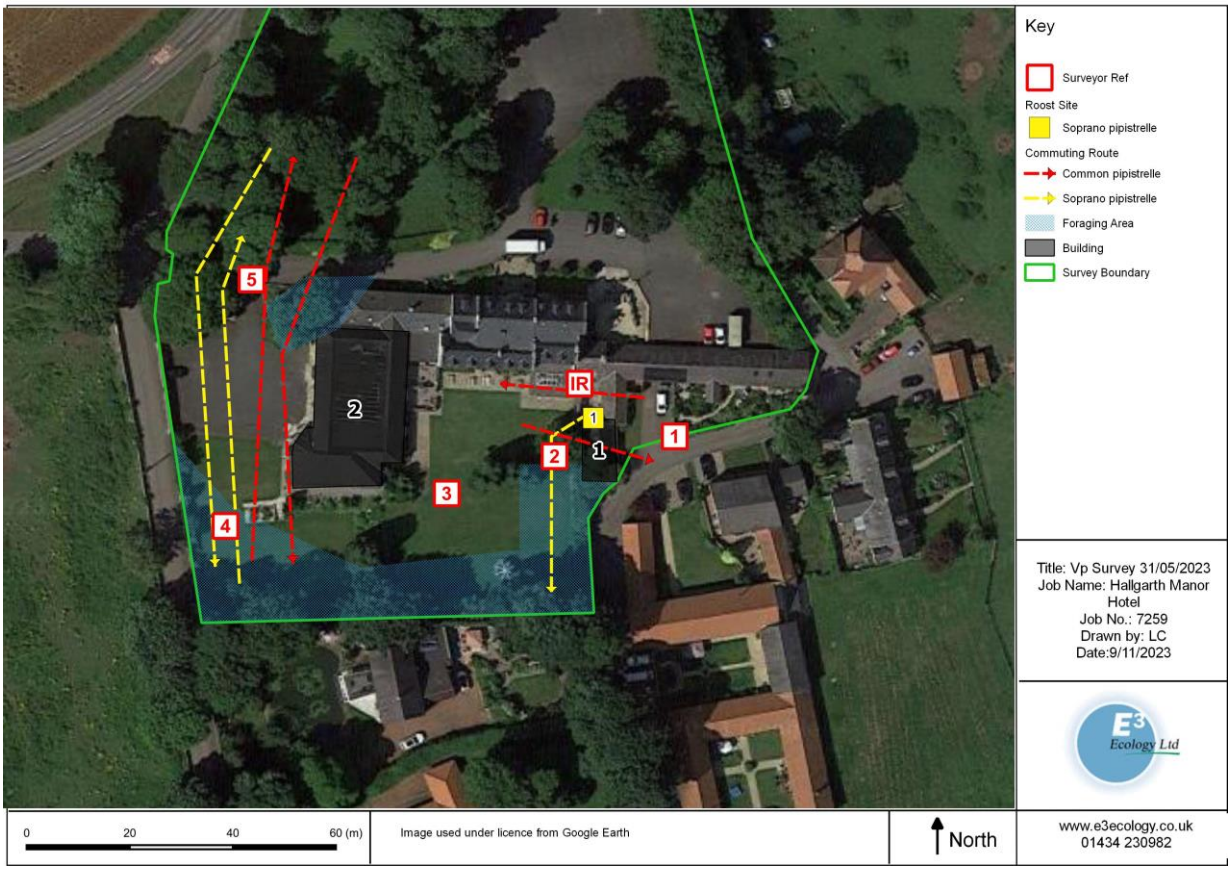

FIGURE 9: SUMMARY OF DUSK SURVEY RESULTS
(Reproduced under licence from Google Earth Pro.)

D.2.4.3 20TH JUNE 2023 DUSK SURVEY RESULTS

The survey was undertaken in mild (16ºC), dry weather with no wind (F0). Two roosts were recorded within the outbuilding (building 1). A single common pipistrelle emerged from the lintel of the door on the northern elevation at 22:06 (18 minutes after sunset) at 20 lux. Five common pipistrelles emerged from the roof of building 1 however exact gap could not be verified due to thick ivy covering the building. The first bat emerged from this location at 22:19 (31 minutes after sunset) at 6 lux. Foraging activity within the site was focussed on the vegetation to the south with bats commuting north to south to and from the woodland.

The figure below provides a summary of the results of dusk survey. More detailed data is available on request.

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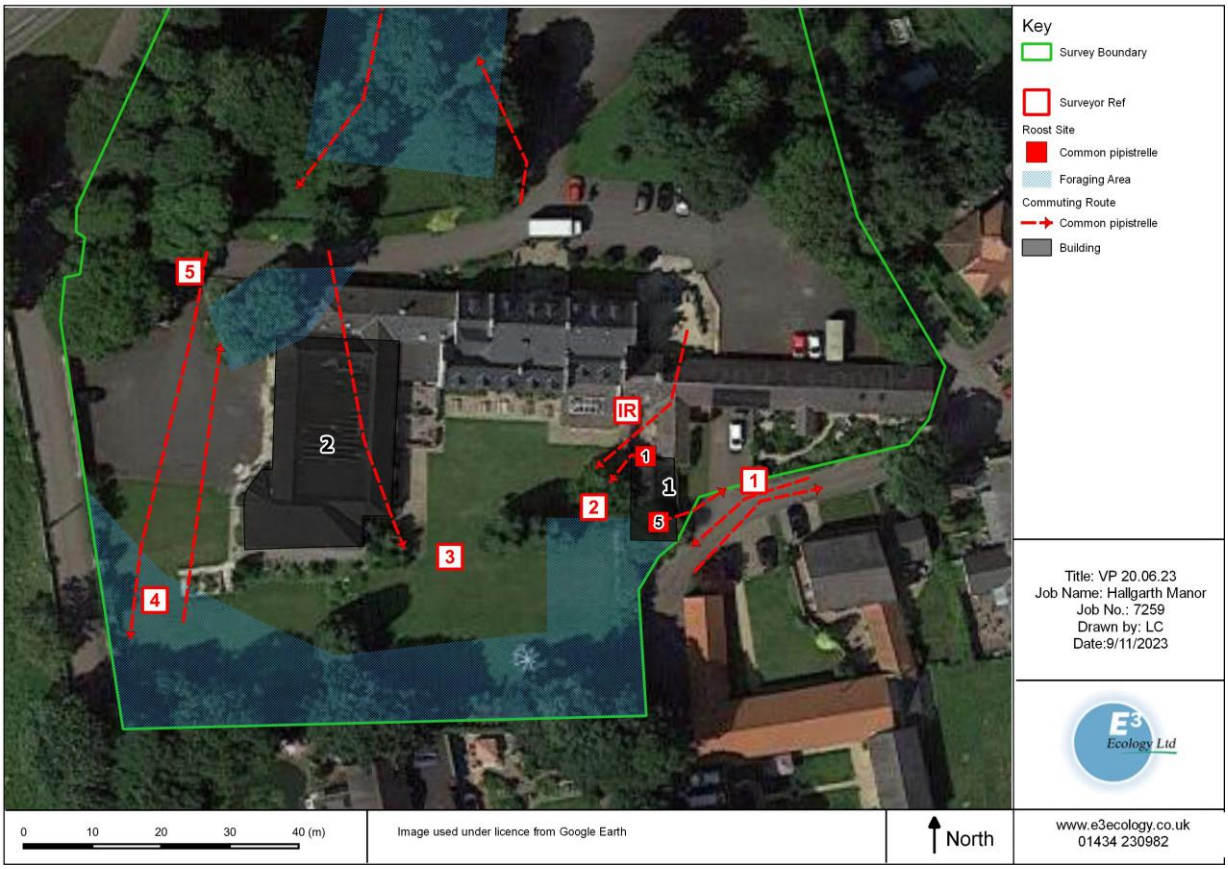

FIGURE 10: SUMMARY OF DUSK SURVEY RESULTS
(Reproduced under licence from Google Earth Pro.)

A surveyor transecting within the woodland to the north of the site where holiday lodges are proposed recorded bat activity throughout the survey. Three common pipistrelle bats were recorded emerged from a large ash tree beginning to emerge at 21:53 (5 minutes after sunset) at 59 lux. Foraging activity was recorded throughout the survey with bats entering the site from the north and south. Only common pipistrelle bats were recorded.

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FIGURE 11: SUMMARY OF DUSK TRANSECT SURVEY RESULTS
(Reproduced under licence from Google Earth Pro.)

D.2.4.4 19TH JULY 2023 DUSK SURVEY RESULTS

The third survey cover the outbuilding only from which a total of six bats had been observed emerging during the previous survey.

The survey was undertaken in warm (18ºC) dry weather with no wind. Four common pipistrelle emerged from within the roof of building 1, exact location could not be determined due to presence of large amounts of ivy.

Bat activity was high throughout the survey with bats recorded commuting along the lane to the east of the building as well as within the hotel gardens to the west and over the main hotel building to the north. High levels of foraging were associated with trees within the lane and shrubs and trees within the hotel gardens

The figure below provides a summary of the results of this survey. More detailed data is available on request.

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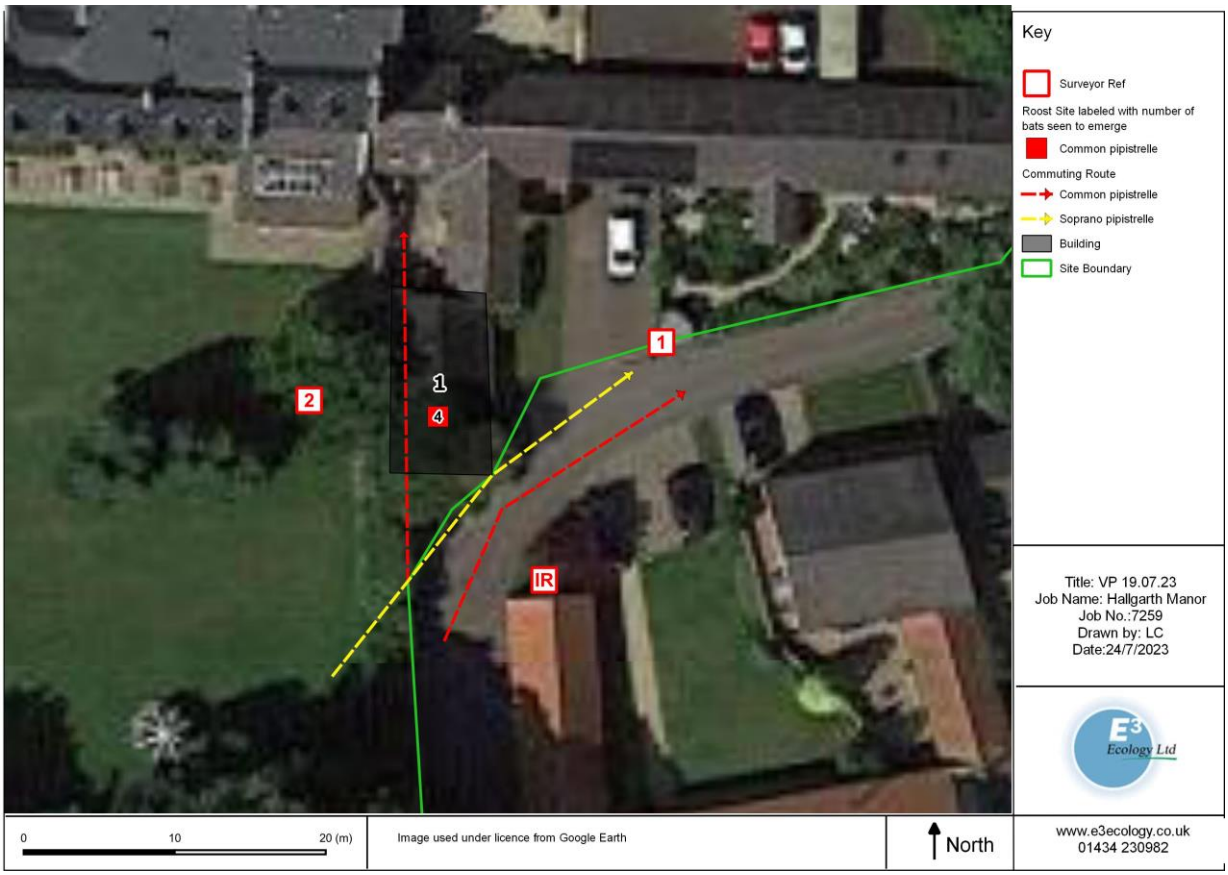

FIGURE 12: SUMMARY OF DUSK SURVEY RESULTS
(Reproduced under licence from Google Earth Pro.)

D.2.5 BAT SURVEY ASSESSMENT

The habitats on site are considered to be of local value to foraging and commuting bats.

Building 1 is considered to be of moderate suitability for roosting bats, building 2 is considered to be of low-moderate suitability for roosting bats.

Day roosts used by up to six common and a single soprano pipistrelle bat were identified in building 1. No evidence of a maternity roost was recorded and no roosts were identified in building 2.

Mature trees within the woodland are likely to support potential roosting features and a common pipistrelle roost used by three bats was identified within an ash tree in this location however no trees will be removed to facilitate development.

Building 1 contains a low number of features which could be used by bats throughout the year, including during winter, such as the cracks in thick stone walls

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E. IMPACT ASSESSMENT & RECOMMENDATIONS

E.1 POTENTIAL IMPACTS, MITIGATION, COMPENSATION & FURTHER SURVEY

The likely impacts of the proposed development, without appropriate targeted mitigation and/or compensation, are detailed in the table below.

Further survey, avoidance, mitigation and compensation measures are also provided to address these impacts, which are based upon information available to date and may change if development proposals are altered to affect trees or following further survey work, if required.

Further work required prior to submission of a planning application is listed in **bold text**, and it should be noted that this requirement will restrict a full assessment of ecological impacts until those works are completed.

It should be noted that if development does not happen within 12 months of the last survey, an updating survey will be required, ideally to be undertaken between May and August. A Natural England licence will be required for building 1 and this will require an updating site visit 3 months prior to the application submission. If this is after April 2024, this will be in the form of a dusk emergence survey.

Ecological Receptor	Impact	Mitigation
Protected Sites		
Pittington Hill, Sherburn Hill, High Moorsley and Moorsley Banks SSSI	No impact anticipated	None required
Habitats		
Trees	Loss and damage to retained trees, including those immediately adjacent to development areas.	No trees are planned to be removed however this is subject to results of an arboricultural survey. Any tree removal will be compensated for through planting of new trees with a 2:1 replacement ratio. Only native species will be planted. Any trees dues for removal will be subject to a ground based tree assessment to assess the risk for roosting bats. Works will be undertaken in accordance with BS5837-2012 'Trees in relation to construction' and retained hedgerows and trees will be protected, including protection of roots.
Woodland	Loss and damage/disturbance.	Trees within woodland will be retained within the development proposals and pruning kept to a minimum. Any trees dues for removal or pruning will be subject to a ground based tree assessment to assess the risk for roosting bats. Retained woodland will be protected from disturbance during construction by heras fencing.

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Grassland	Loss and degradation during construction and operational phase.	Wildflower grasslands, wildflower bulb planting including species rich planting on green roofs proposed on holiday lodges will be incorporated into the landscape proposals.
Biodiversity (general)	Loss of biodiversity as a result of development of the site.	Retention of as much higher value habitat as possible. Habitat losses are to be balanced on site through habitat enhancement and creation if possible, or if not possible then off-site opportunities will need to be explored so that the development provides a net gain in biodiversity.
Species		
Bats	Harm/disturbance to bats	A Natural England development licence will be required prior to works commencing which may impact on bat roosts in building 1. All works will follow the approved Natural England method statement, which will include: • Pre-commencement site induction / toolbox talk for key contractors on site carrying out work which may affect bats • A concrete-type bat box will be erected on a suitably mature tree prior to the commencement of works to act as interim roosting habitat during construction and will be retained in situ following completion of the development. The box will be used as a receptor for translocated bats (see below). • Pre-commencement inspection of confirmed and potential roosting areas by the ecologist, such as gaps under slates, ridge tiles, coping stones and in stone/brickwork. • Sensitive dismantling of these roosting areas under ecological supervision, taking care not to harm bats in the process. If bats are found, the ecologist will capture the bat(s) by hand, check the health of the bat and transport it to the aforementioned bat box. • If bats cannot be safely captured, they will be excluded from the roost using standard exclusion devices. These will be fitted by, or under supervision of, the ecologist and will remain in place for a minimum of five consecutive nights of suitable weather, in accordance with the most up to date edition of the Bat Workers Manual[10]. No exclusion will take place during the hibernation period (November to end Feb inclusive). • In the event that bats are found during works, works will stop in that area and the ecological consultant will be contacted immediately. If it is necessary to move the

[10] At the time of issue of this report, the latest version is: Mitchell-Jones, A.J. & McLeish, A.P. (2012) The Bat Workers' Manual (3rd Edition). Pelagic Publishing, Exeter.

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		bats for their safety, this will be undertaken by a licensed bat handler. • Timber treatments that are toxic to mammals will be avoided. If required, timber treatment will be carried out in the spring or autumn. Both pre-treated timbers and timber treatments will use chemicals classed as safe for use where bats may be present (see https://data.jncc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf - Chapter 10). Works to building 2 will be undertaken to a precautionary bat method statement as good working practice
	Loss of common pipistrelle day roosts.	At least 4 roosting opportunities will be provided in building 1. These will be built-in to the structure in the form of: • 20mm diameter gaps in the wall pointing, leading to internal cavities retained/recreated • Gaps under ridge tiles • No breathable roofing membrane will be used in locations where bats may come into access with it.
	Loss of potential bat roosting opportunities in trees on site. Risk of harm/disturbance if bats are present during the works.	**Further ground level and if required aerial tree assessments are required of trees to be affected by the proposals, once required arboricultural works are known.** **Should the tree identified as supporting a potential roost be affected, further bat presence/absence surveys will be required specifically focussed on that tree.** Further mitigation measures may be required based on the results, which may include the need for a Natural England mitigation licence and timing restrictions to certain activities.
	Increased lighting affecting foraging/commuting areas potentially used by bats (and other nocturnal wildlife).	Light levels around newly installed roost locations, foraging/commuting areas and within the woodland will be low level, below 2m in height, and low lux (below 1 lux 5m from the light source). Light spillage to areas used by foraging or commuting bats, e.g. within the trees and the surrounding woodland, must be less than 2 lux. Warm-light LEDs with very low UV will be used, with cowls designed to accurately target which areas are lit. Any lighting required for access to the holiday lodges will be low bollard type with cowls, so lighting is focussed on the pathway. External lighting associated with the holiday lodges will be focussed downwards towards any decked area, ensuring minimal light spill within the surrounding tree cover.

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		Where security lights are required, these will be of minimum practicable brightness, be set on a short timer and will be motion sensitive only to larger objects. No security lighting will be used around the holiday lodges.
	Small loss of bat foraging/commuting habitat.	Landscape planting to include native plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for bats and wildlife generally.
Amphibians	Harm/disturbance to common amphibians, including common toad	Works will be undertaken to a precautionary amphibian method statement.
Birds	Harm/disturbance to nesting birds if vegetation clearance is carried out during the bird breeding season	A pre-commencement check for nesting birds will be undertaken by a suitably experienced ornithologist if vegetation clearance is undertaken between March and August inclusive.
	Loss of bird foraging opportunities of up to local value	Landscape planting to include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain the food resource for birds and wildlife generally
	Loss of bird nesting opportunities of up to local value	Installation of two bird nest boxes such as hole, open fronted or sparrow terrace box types. Boxes should be min 2m high and ideally north to east facing, near foraging habitat and with direct flight access.
Red squirrel	Potential for dreys to be created within 30m of working area and harm/disturbance to red squirrel.	A checking survey will be undertaken within 3 months prior to works commencing to confirm red squirrel dreys remain absent. Works will be undertaken to a precautionary red squirrel method statement.
Hedgehog	Loss of hedgehog foraging habitat of local value	Landscape planting will include areas of dense shrubs to provide cover for hedgehogs and berry bearing species to provide a foraging resource.
	Harm/disturbance to hedgehog	Works will be undertaken to a precautionary hedgehog method statement including a hand search of suitable refugia prior to removal.
Wildlife (general)	Entrapment of wildlife during construction if trenches are left open overnight	Any excavations left open overnight will have a means of escape for wildlife that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.

E.2 RESIDUAL & CUMULATIVE IMPACTS

Provided that the measures detailed in the above table are implemented, no significant residual adverse impacts are envisaged.

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No cumulative impacts have been identified during the impact assessment.

E.3 MONITORING

Based on potential that bat roosts may be impacted by the proposed development, monitoring surveys may be required but this is to be determined after further bat presence/absence surveys.

E.4 ADDITIONAL ENHANCEMENT RECOMMENDATIONS

The development presents an opportunity to ecologically enhance the site and it is a planning requirement to provide a net gain in biodiversity as part of the development. The following enhancements are recommended:

- Provision of six integrated bird nesting features in the new buildings on site. To include two nest features for swift, two for starling and/or house sparrow and two open fronted. Bird nesting opportunities should ideally be north to east facing and a minimum of 2m high (swift 4m+).
- Provision of four integrated bat roosting features in the new buildings on site. Bat roosting features should be a minimum of 3-4m high, on gable ends or at eaves height.
- Landscape planting is to be designed to enhance structural diversity and will include plants bearing flowers, nectar and fruits which are attractive to invertebrates, thereby helping to maintain food resources for wildlife in general.
- Species rich green roofs will be created on the holiday lodges.
- Planting of native, species-rich mixtures of scrub and trees.
- Creation of hedgehog/reptile/amphibian hibernacula or habitat piles.
- Installation of two additional bird nest boxes and three bat boxes in the trees on site.

Good working practice

- Timber treatments that are toxic to mammals will be avoided. If required, timber treatment will be carried out in the spring or autumn. Both pre-treated timbers and timber treatments will use chemicals classed as safe for use where bats may be present (see https://data.jncc.gov.uk/data/e5888ae1-3306-4f17-9441-51a5f4dc416a/Batwork-manual-3rd-edn.pdf - Chapter 10).

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F. CONCLUSIONS

Provided that the licence requirements, compensation measures and recommendations in this report are met and implemented, it is anticipated that proposals may proceed with no significant impacts with regard to bats. The proposals provide an opportunity for ecological benefit through landscaping and bat and bird nest box provision, contributing to local and national conservation targets.

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APPENDICES

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APPENDIX 2 - PLANNING POLICY AND LEGISLATIVE CONTEXT

NATIONAL PLANNING POLICY

The table below details the key paragraphs from the National Planning Policy Framework (NPPF)[11] relating to the natural environment:

TABLE 9: NATIONAL PLANNING POLICY FRAMEWORK: CONSERVING AND ENHANCING THE NATURAL ENVIRONMENT	
Statement	**Paragraph**
Planning policies and decisions should contribute to and enhance the natural and local 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	*174*
Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework[12]; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.	*175*
Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads[13]. The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.	*176*
When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development[14] other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of: a) the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy; b) the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and c) any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated	*177*
Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 176), planning policies and decisions should be consistent with the	*178*

[11] National Planning Policy Framework (July 2021), Department for Communities and Local Government,
[12] Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.
[13] English National Parks and the Broads: UK Government Vision and Circular 2010 provides further guidance and information about their statutory purposes, management and other matters.
[14] For the purposes of paragraphs 177 and 178, whether a proposal is 'major development' is a matter for the decision maker, taking into account its nature, scale and setting, and whether it could have a significant adverse impact on the purposes for which the area has been designated or defined.

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TABLE 9: NATIONAL PLANNING POLICY FRAMEWORK: CONSERVING AND ENHANCING THE NATURAL ENVIRONMENT	
Statement	**Paragraph**
special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.	
To protect and enhance biodiversity and geodiversity, plans should: a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity[15]; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation[16]; and b) 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.	*179*
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 reasons63 and a suitable compensation strategy exists; and d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.	*180*
The following should be given the same protection as habitats sites: a) potential Special Protection Areas and possible Special Areas of Conservation; b) listed or proposed Ramsar sites[17]; and c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.	*181*
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.	*182*

Section 40 of the Natural Environment and Rural Communities Act 2006, places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity.

Planning Practice Guidance[18] states:

[15] Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system.
[16] Where areas that are part of the Nature Recovery Network are identified in plans, it may be appropriate to specify the types of development that may be suitable within them.
[17] Potential Special Protection Areas, possible Special Areas of Conservation and proposed Ramsar sites are sites on which Government has initiated public consultation on the scientific case for designation as a Special Protection Area, candidate Special Area of Conservation or Ramsar site.
[18] Planning Practice Guidance: Natural Environment (www.planningguidance.communities.gov) Updated July 2019

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- Planning authorities need to consider the potential impacts of development on protected and priority species, and the scope to avoid or mitigate any impacts when considering site allocations or planning applications. (para. 016)
- Information on biodiversity and geodiversity impacts and opportunities needs to inform all stages of development (including site selection and design, pre-application consultation and the application itself). An ecological survey will be necessary in advance of a planning application if the type and location of development could have a significant impact on biodiversity and existing information is lacking or inadequate. (para. 018)
- Even where an Environmental Impact Assessment is not needed, it might still be appropriate to undertake an ecological survey, for example, where protected species may be present or where biodiverse habitats may be lost. (para. 018)
- As with other supporting information, local planning authorities should require ecological surveys only where clearly justified. Assessments should be proportionate to the nature and scale of development proposed and the likely impact on biodiversity. (para. 018)
- The National Planning Policy Framework encourages net gains for biodiversity to be sought through planning policies and decisions. Biodiversity net gain delivers measurable improvements for biodiversity by creating or enhancing habitats in association with development. Biodiversity net gain can be achieved on-site, off-site or through a combination of on-site and off-site measures. (para. 022)

PROTECTED SPECIES LEGISLATION

The table below details the relevant legislation for the protected species covered within the scope of the survey.

TABLE 10: SUMMARISED SPECIES LEGISLATION

Species	Relevant Legislation	Level of Protection
Bats (All species)	• Protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Classified as protected species under The Conservation of Habitats and Species Regulations 2017 (as amended) • Bats are also protected by the Wild Mammals (Protection) Act 1996	The WCA (1981) and The Conservation of Habitats and Species Regulations 2017 (as amended) make it an offence to: • Intentionally kill, injure, or take any species of bat • Intentionally or recklessly disturb bats • Intentionally or recklessly damage destroy or obstruct access to bat roosts
Otter	• Protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Classified as protected species under The Conservation of Habitats and Species Regulations 2017 (as amended) • Otters are also protected by the Wild Mammals (Protection) Act 1996	The WCA (1981) and The Conservation of Habitats and Species Regulations 2017 (as amended) make it an offence to: • intentionally kill, injure, or take otters • intentionally or recklessly disturb otters • intentionally or recklessly amage destroy or obstruct access to otter holts or any place used by the animal for shelter or protection
Great Crested Newt	• Protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Classified as protected species under The Conservation of Habitats and Species Regulations 2017 (as amended)	The WCA (1981) and The Conservation of Habitats and Species Regulations 2017 (as amended) make it an offence to: • intentionally kill, injure, or take great crested newts • intentionally or recklessly disturb great crested newts • intentionally or recklessly damage destroy or obstruct access to any place used by the animal for shelter or protection

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TABLE 10: SUMMARISED SPECIES LEGISLATION		
Species	**Relevant Legislation**	**Level of Protection**
Red Squirrel	• Full protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Red squirrels are also protected by the Wild Mammals (Protection) Act 1996	The WCA (1981) makes it an offence to: • intentionally kill, injure, or take red squirrels • intentionally or recklessly damage destroy or obstruct access to any place used by the animal for shelter or protection or disturb red squirrels whilst they are using such a place.
Birds	• Protection under the Wildlife and Countryside Act (1981) as amended with the exception of some species listed in Schedule 2 of the Act	The WCA (1981) makes it an offence to (with exceptions for certain species): • Intentionally kill, injure or take any wild bird • Intentionally take, damage or destroy nests in use or being built (including ground nesting birds) • Intentionally take, damage or destroy eggs • Species listed on Schedule 1 of the WCA or their dependant young are afforded additional protection from disturbance whilst they are at their nests
White-clawed Crayfish	• Partially protected by the Wildlife and Countryside Act (1981)	The WCA (1981) makes it an offence to: • Take a white-clawed crayfish from its habitat • Sell, offer for sale, advertise for sale, possess or transport for the purposes of selling any live or dead white clawed crayfish
Badger	• Protection of Badgers Act 1992 • Badgers are also protected by the Wild Mammals (Protection) Act 1996	The Protection of Badgers Act (1992) makes it an offence to intentionally or recklessly: • Damage a badger sett or any part of it • Destroy a badger sett • Obstruct access to, or any entrance of a badger sett • Disturb a badger whilst it is occupying a badger sett
Water Vole	• Full protection under the Wildlife and Countryside Act (WCA) (1981) (Listed on Schedule 5) - as amended • Water voles are also protected by the Wild Mammals (Protection) Act 1996	The WCA (1981) makes it an offence to: • intentionally kill, injure, or take water voles • intentionally or recklessly damage destroy or obstruct access to any place used by the animal for shelter or protection or disturb water voles whilst they are using such a place
Common reptiles (Slow-worm, Adder, Grass Snake, Common Lizard)	• Partially protected by the Wildlife and Countryside Act	The WCA (1981) makes it an offence to: • intentionally kill or injure these animals • sell, offer for sale, advertise for sale, possess or transport for the purposes of selling any live or dead animals or part of these animals
Under the Countryside and Rights of Way Act 2000 (CROW Act) the offence in section 9(4) of the Wildlife and Countryside Act 1981 of damaging a place of shelter or disturbing those species given full protection under the act is extended to cover reckless damage or disturbance.		

INVASIVE SPECIES LEGISLATION

The table below details the legislation in relation to invasive species and lists those invasive species most likely to be found in this region.

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TABLE 11: SUMMARISED INVASIVE SPECIES LEGISLATION		
Relevant Legislation	**Description of Offence**	**Species** *(Covered by the Legislation and most likely to be found in this Region)*
Listed on Part II of Schedule 9 of the Wildlife and Countryside Act (1981 as amended)	Section 14 of the WCA (1981) states: • if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence.	Himalayan balsam Cotoneaster Montbretia Japanese knotweed Giant hogweed Rhododendron Pirri-pirri bur New Zealand pygmyweed Giant rhubarb Japanese rose

PROTECTED SITE LEGISLATION

CONTEXT IN REGARD TO THE UK'S EXIT FROM THE EUROPEAN UNION

As of 1st January 2021, the UK is no longer bound by the Birds Directive and Habitats Directive. However, the Conservation of Habitats and Species Regulations still applies, which formerly acted to transpose the Birds Directive and the Habitats Directive into English and Welsh law. These are still referred to below for contextual purposes, as designated site citations and conservation objectives may not have been updated following the changes to applicable legislation and may still refer to the Directives.

STATUTORILY DESIGNATED SITES

Ramsar Site

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention recognises wetlands as important ecosystems and includes a range of wetland types from marsh to both fresh and salt water habitats. The wetlands can also include additional areas adjacent to the main water-bodies such as river banks or coastal areas where appropriate.

Special Protection Area (SPA)

SPAs are classified by the UK Government under the EC Birds Directive and comprise areas which are important for both rare and migratory birds.

Special Areas of Conservation (SAC)

SACs are designated under the EC Habitats Directive and are areas which have been identified as best representing the range and variety of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs are designated under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 unless they are offshore.

Sites of Special Scientific Interest (SSSI)

SSSIs are designated as sites which are examples of important flora, fauna, or geological or physiographical features. They are notified under the Wildlife and Countryside Act 1981 with improved provisions introduced by the Countryside and Rights of Way Act 2000.

National Nature Reserve (NNR)

NNRs are designated by Natural England under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981 and support important ecosystems which are managed for conservation. They may also provide important opportunities for recreation and scientific study.

Country Parks

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Country Parks are statutorily designated and managed by local authorities in England and Wales under the Countryside Act 1968. They do not necessarily have any nature conservation importance, but provide opportunities for recreation and leisure near urban areas.

Local Nature Reserves (LNR)
LNRs are designated under the National Parks and Access to the Countryside Act 1949 by local authorities in consultation with Natural England. They are managed for nature conservation and used as a recreational and educational resource.

NON-STATUTORILY DESIGNATED SITES

Non-Governmental Organisation Property
These are sites of biodiversity importance which are managed as reserves by a range of NGOs. Examples include sites owned by the RSPB, the Woodland Trust and the Wildlife Trusts.

Local Wildlife Site (LWS)
These are sites defined within the local plans under the Town and Country Planning system and are material considerations of any planning application determination. They are designated by the local authority although criteria for designation can vary between authorities.

PRIORITY SPECIES

Although not afforded any legal protection, national priority species (species of principal importance, as listed in Section 41 of the NERC Act (2006)), and local and regional priority species, as detailed within the relevant biodiversity action plans, are material considerations in the planning process and as such have been assessed accordingly within this report.

The tables below detail the species/species groups and habitats listed as priorities within the biodiversity action plans of the main Local Planning Authorities' within the north-east of England.

TABLE 12: BIODIVERSITY ACTION PLANS					
Northumberland Biodiversity Action Plan					
Species			**Habitats**		
Barn Owl	Bats	Black Grouse	Blanket Bog	Built Environment	Brownfield Land
Coastal Birds	Common Seal	Dingy Skipper	Calaminarian Grassland	Coastal heathland	Fen, Marsh & Swamp
Dormouse	Farmland Birds	Freshwater Fish	Gardens & Allotments	Heather Moorland	Lowland Heathland
Freshwater Pearl Mussel	Garden Birds	Great Crested Newt	Lowland Meadows & Pastures	Maritime Cliffs & Slopes	Native Woodland
Grey Seal	Hedgehog	Otter	Ponds, Lakes & Reservoirs	Recreational & Amenity Space	Reedbed
Red Squirrel	River Jelly Lichen	Upland Waders	Rivers & Streams	Rocky Shore, Reefs & Islands	Saline Lagoons
Violet Crystalwort	Water Rock-bristle	Water Vole	Saltmarsh & Mudflat	Sand Dunes	Transport Corridors
White-Clawed Crayfish			Trees & Hedgerows	Upland Hay Meadows	Whin Grassland
Durham Biodiversity Action Plan					
Species			**Habitats**		
Barn Owl	Coastal Birds	Farmland Birds	Native Hedgerows	Veteran Trees, Parkland and Wood Pasture	Woodland and Scrub
Nightjar	Spotted Flycatcher	Upland Birds	Ponds, Lakes & Reservoirs	Lowland Fen	Rivers & Streams
Urban and Garden Wildlife	Freshwater Fish	Grass Snake	Blanket Bog and Upland Wet Heath	Calaminarian Grassland	Upland Calcareous Grassland

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TABLE 12: BIODIVERSITY ACTION PLANS					
Great Crested Newt	Reptiles	Chalk Carpet Moth	Upland Dry heath and Acid Grassland	Upland Haymeadows	Upland Screes and Rock Habitats
Cistus Forrester	Dark Green Fritillary	Dingy Skipper	Brownfield Sites	Built Structures	Coastal Habitats
Glow Worm	Grayling	Green Hairstreak	Lowland Heath	Lowland Meadows & Pasture	Magnesian Limestone Grassland
Least Minor Moth	Mud Snail	Northern Brown Argus	Transport Corridors	Waxcap Grassland	
Northern Dart	Round Mouthed Whorl Snail	Small Pearl-bordered Fritillary			
White Clawed Crayfish	White-letter Hairstreak	Badger			
Bats	Brown Hare	Dormouse			
Harvest Mouse	Hedgehog	Otter			
Pine Marten	Polecat	Red Squirrel			
Water Vole	Water Shrew	Black Poplar			
Juniper	Pale Bristle-Moss	Yellow Marsh Saxifrage			
Newcastle and North Tyneside Biodiversity Action Plan					
Habitats			**Species**		
Brownfield Land	Transport Corridors	Open Water & Wetland	Amphibians	Dingy Skipper	Otter
Rivers and Watercourses	Managed Urban Greenspace	Native Woodland	Urban Birds	Water Vole	Red Squirrel
Lowland Grassland	Scrub, Shrub & Hedgerow	Buildings and Structures	Hedgehog	Slow Worm	Bumblebee
Estuary & Coastal			Brown hare	Farmland Birds	Bats
Tees Valley Biodiversity Action Plan					
Species				**Habitats**	
Barn Owl	Ringed Plover	Grey Partridge	Tree Sparrow	Traditional Orchards	Semi-natural Broadleaved Lowland Woodland
Little Tern	Corn Bunting	Shelduck	Wagtail Yellow	Reedbeds	Rivers & Streams
Bittern	Swift	Purple Milk-vetch	Water Violet	Arable field Margins	Roadside Verges
Globeflower	Pepper saxifrage	Tufted Sedge	Knotted hedge-parsley	Lowland Meadows	Sand Dunes
Yellow Star of Bethlehem	Burnt Orchid	Green Winged Orchid	Strawberry Clover	School Grounds	Maritime Cliffs and Slopes
Flat Sedge	Small Leaved Lime	Black Poplar	Lyme Grass	Grazing Marsh	Hedgerows
Scarlet Wax Cap	White-letter Hairstreak	Grayling	Dingy Skipper	Gardens and Allotments	Saline Lagoons
Blomer's Rivulet	Crescent Striped	Forester	Large Red-Belted Clearwing	Marsh and Saltmarsh	Ponds, Lakes & Reservoirs
Fen Wainscot	Shore Wainscot	Eccentric Grass Snail	Moss Chrysalis Snail	Parks and Recreation Grounds	Lowland Heath
Moss Chrysalis Snail	Bats (except common pipistrelle)	Brown Hare	Harvest Mouse	Brownfields	Churchyards and Cemeteries
Harbour Seal	Water Vole	Common Lizard	Slow Worm		
Great Crested Newt	Bullhead	Salmon	Brown Trout		
European Eel	Brook Lamprey	Sea Lamprey	River Lamprey		
Cumbria Biodiversity Action Plan					
Species			**Habitats**		

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TABLE 12: BIODIVERSITY ACTION PLANS					
Red Wood Ant	Wall Mason Bee	a ground beetle *Dyschirius angustatus*	Rivers	Lakes, Ponds and Tarns	Hedgerows
a ground beetle *Bembidion testaceum*	Oxbow Diving Beetle	Barn Owl	Traditional Orchards	Wood-Pasture & Parkland	Semi-natural Woodland
Song Thrush	Pearl Bordered Fritillary	High Brown Fritillary	Lowland Dry Acid Grassland	Calcareous Grassland	Hay Meadows and Pastures
Marsh Fritillary	Netted Carpet	Least Minor	Coastal and Floodplain Grazing Marsh	Heathland	Fen, Marsh and Swamp
a caddisfly *Glossosoma intermedium*	Freshwater Crayfish	Variable Damselfly	Bogs	Montane Habitats	Rock habitats
White-faced Dragonfly	Atlantic Salmon	Schelly	Calaminarian Grasslands	Previously developed land	Coastal Habitats above High Water
Vendace	Southern silver Stiletto-fly	Northern Silver Stiletto-fly	Coastal Intertidal Habitats	Coastal Saline lagoons	Coastal Subtidal Habitats
River Jelly Lichen	a lichen *Lobaria amplissima*	Pink Waxcap			
Medicinal Leech	Whiskered Bat	Brandt's Bat			
Natterer's Bat	Daubenton's Bat	Noctule			
Common Pipistrelle	Soprano Pipistrelle	Brown Long-eared Bat			
Red Squirrel	Water Vole	Hazel Dormouse			
Sandbowl Snail	a whorl snail *Vertigo geyeri*	Slender Green Feather-moss			
Great Crested Newt	Natterjack Toad	Pillwort			
Juniper	Northern Hawksbeard	Small White Orchid			

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