



**Brindle
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Preliminary Ecological Appraisal

Cockshutts Farm, Simonstone, Lancashire

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October 2024



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Grid reference: SD 77626 34538
W3W: package.meaty.warthog

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1 Summary

- 1.1.1 Brindle & Green Ltd were commissioned by Blue Willow Heritage to undertake a Preliminary Ecological Appraisal incorporating a Phase 1 Habitat Survey and Protected Species Assessment at Cockshutts Farm, Simonstone, Lancashire. This report summarises the potential ecological constraints to the full planning application for the renovation of the residential property (Building 1) and repairs to the outbuilding on site (Building 2). Design plans are provided within Appendix 6 of this report. The survey was carried out on the 19th September 2024.
- 1.1.2 The red line boundary is approximately 0.06ha in extent and comprises a residential building, with one outbuilding, and areas of amenity grassland, bare ground, scattered trees, and dense scrub. The site was bound to the west and south by native species poor hedgerows. The site was evaluated to support local value on a regional scale.
- 1.1.3 The habitats described within this report have the potential to support protected and/or notable species. As such, this report outlines important measures to protect species during site clearance, and recommendations to improve the biodiversity status of the site post development.
- 1.1.4 A full description of the recommendations can be found within Chapter 7. Table 1 is a summary of the ecological issues recommended for further consideration as a result of our initial investigations.
- 1.1.5 Results and recommendations contained within this report have been prepared by an experienced ecologist and are therefore the view of Brindle & Green Limited. The survey is based on information provided by our client, the development proposals, results of the desk study and our survey of the site. This report pertains to this information only.

Table 1: Ecological recommendations

Ecological Consideration	Recommendations (e.g. further survey, mitigation)	Timing
Breeding Birds	Works should be sympathetic to this group of species, with vegetation clearance undertaken following Reasonable Avoidance Measures (RAMS) outlined in chapter 7.	During Site Clearance (Optimal timing between October -March outside of breeding bird season)

Ecological Consideration	Recommendations (e.g. further survey, mitigation)	Timing
Roosting Bats	Building 1 assessed to hold 'High' suitability for roosting bats, which will require a total of three nocturnal surveys to determine presence/likely absence of roosting bats. Building 2 was assessed to hold 'Moderate' suitability to support roosting bats. A minimum of two further nocturnal surveys will be required for this building. If evidence of roosting bats is found, then survey results will be increased to three visits, to allow for roost characterisation and to inform a license from Natural England. Recommendations are further detailed in chapter 7.	'High' suitability buildings: Three nocturnal surveys between May – September, at least two surveys between May – August 'Moderate' suitability buildings: Two nocturnal surveys between May – September, at least one survey between May – August
Foraging and Commuting Bats	Works should be sympathetic to this group of species through sensitive lighting, detailed in chapter 7.	During and post construction
Reptiles	Reasonable Avoidance Measures are recommended during site clearance and construction, as detailed in Chapter 7.	During development
Mammal Species of Principle Importance	Reasonable Avoidance Measures are recommended during site clearance and construction, as detailed in Chapter 7.	During development
Invasive Species	Removal of horsetail on site and suitable disposal by a suitably qualified contractor, detailed in chapter 7.	Year round

2 Introduction

- 2.1.1 The purpose of this assessment was to provide a Preliminary Ecological Appraisal of the site incorporating a Phase 1 Habitat Survey and Protected Species Assessment to establish the likelihood of the site supporting protected species. The survey provides detail on the need for any additional, more detailed protected species surveys, likely mitigation, and any opportunities for enhancement.
- 2.1.2 The red line boundary is approximately 0.06ha in extent and comprises a large residential building, with one outbuilding, and areas of amenity grassland, bare ground, scattered trees, and dense scrub. The site was bound to the west and south by native species poor hedgerows. The site is located on the northeastern outskirts of Simonstone, a village located in the Ribble Valley district of Lancashire. Residential properties border the site to the east and west, with the land to the north and south dominated by arable and pastoral land.
- 2.1.3 The site is the subject of a full planning application for proposed renovations on the residential property (Building 1) and repairs to the outbuilding (Building 2) on site. Design plans are provided within Appendix 6 of this report.
- 2.1.4 The legislation relevant to protected species within the United Kingdom is summarised within Appendix 4.
- 2.1.5 Results and recommendations contained within this report have been prepared by an experienced ecologist and are therefore the view of Brindle & Green Limited. The survey is based on information provided by our client, the development proposals, results of the desk study and our survey of the site. This report pertains to this information only.

3 Methodology

3.1 Desk Study

- 3.1.1 Table 2 lists organisations and/or resources used as part of the desk study process. Data regarding any known statutory or non-statutory sites, in addition to any records for protected species, were requested from the following sources:

Table 2: Ecological Data Resources

Consultant	Requested data	Search radius	Date requested
Local Ecological Record Centre (Lancashire Environmental Records Network (LERN))	- Protected and Notable Species Records - Local, National and International Site Designations	2km	30/09/2024
Multi Agency Geographic Information for the Countryside (MAGIC)	- National and International site Designations - Granted European protected species Development (EPS) Licenses - Priority Habitat Inventory	2km	30/09/2024

3.2 Surveyors

- 3.2.1 The survey was carried out by Emily Murchison BSc (Hons) MSc, Assistant Ecologist.
- 3.2.2 The survey was overseen by Lucinda Sweet PhD, MCIEEM, Natural England Bat Licence Class 2 (2019-39122-CLS-CLS), Great Crested Newt licence (2016-22852-CLS-CLS), Director.

3.3 Survey Conditions

- 3.3.1 The survey was undertaken at 11:30am on the 19th of September 2024. The outside temperature was recorded as 18°C, with dry conditions, and 6/8 cloud cover.

3.4 Extended Phase 1 Habitat Survey

- 3.4.1 A Phase 1 habitat survey was undertaken following survey guidance (JNCC 2007) to establish the presence and distribution of habitat types within the site and potential ecological constraints to development. A Phase 1 Habitat Map was produced (Appendix 1) and where additional details were required Target Notes have been provided (Appendix 2). A plant species list (Appendix 2) summarising all plants identified on site was produced during the survey and all scientific nomenclature was produced according to Stace (2010).

3.4.2 This survey was extended to note the potential for habitats on site to support protected and/or notable species and for evidence of any such species. The habitats on site were assessed for their suitability to support protected species in relation to the habitat type found at the site. Any incidental sightings or field signs were noted at the time of survey. Where evidence of, or the confirmed presence of a protected species was identified, further species-specific surveys may be recommended to ensure that the presence or otherwise of a legally protected species is fully considered prior to the determination of any planning approval or to guide an EPS development licence.

3.4.3 Legislation, guidance and methodology for species relevant to this site are presented in full within Appendices 4 and 5 of this report.

3.5 Site Evaluation

3.5.1 Following the ecological appraisal, the site was classified into one of six groups (Table 3), to indicate whether the site is considered to hold ecological value on a local, national or international scale. This evaluation is intended as a guide and only targeted survey work can establish the significance of protected species populations onsite.

Table 3: Definitions of each of the six evaluation brackets, indicating the importance of each habitat type and an example of their possible habitat status. (Table constructed following The CIEEM EcIA Guidelines, Terrestrial, Freshwater and Coastal (2016) pages 16 -17)

Ecological Value	Comparable Example
International	An internationally designated site or candidate site, including habitat or species included within Special Protection Areas (SPA) / Special Areas of Conservation (SAC), Ramsar Sites, listed under Annex 1 of the Habitats Directive
National	Sites designated at UK level, e.g. Sites of Special Scientific Interest (SSSI), supporting species considered nationally threatened or rare
Regional	A regularly occurring regionally or county significant population/number of any nationally important species
County	A feature identified as of critical importance within Section 41 of the NERC Act (2006)
District	Key Habitat type included within the National Biodiversity Action Plan (BAP) /NERC Habitat of Principle Importance (HPI). A regularly occurring, locally significant number of a regionally important species

Ecological Value	Comparable Example
Local/Site	Designated sites, such as Sites of Biological Importance (SBIs) or viable habitat / species populations of value at a county level (LBAP)

3.6 Limitations

- 3.6.1 It should be noted that whilst every effort has been made to provide a comprehensive description of the site, no investigation could ensure the complete characterisation and prediction of the natural environment. The protected and notable species assessment provides a preliminary view of the likelihood of these species occurring on site, based upon the suitability of the habitats, known distribution of the species in the local area and any direct evidence on site. It should not be taken as providing a full and definitive survey of any protected species group.

3.7 Report Lifespan

- 3.7.1 Given the transient nature of the subject we would consider the survey results contained to be accurate for 2 years.

4 Site Context

4.1 Site Description

- 4.1.1 The application site can be found at SD 77626 34538, positioned on the northeastern outskirts of Simonstone, a village located in the Ribble Valley district of Lancashire.
- 4.1.2 The site comprises a residential property (Building 1), with one outbuilding (Building 2), and areas of hardstanding, amenity grassland, dense scrub, bare ground, and scattered trees. The site was bound to the south and west by native species-poor hedgerows. No ponds or watercourses were noted on or immediately adjacent to the site.
- 4.1.3 Residential properties border the site to the east and west, with connectivity for birds and bats provided by a network of residential gardens, and linear features such as hedgerows and lines of trees.
- 4.1.4 The land to the north and south is dominated by arable and pastoral farmland interspersed by mature hedgerows, tree lines and frequent pockets of woodland such as Pump House Dean Wood, a deciduous woodland with mature trees positioned 13m to the east of the site and extending to the northeast. The site is well connected to the surrounding landscape in all directions via hedgerows, lines of trees, scattered trees and woodland recorded 13m to the east of the site at Pump House Dean Wood. However, barriers to terrestrial species dispersal are present within the locality, namely the A671 carriageway located 106m south from the site.

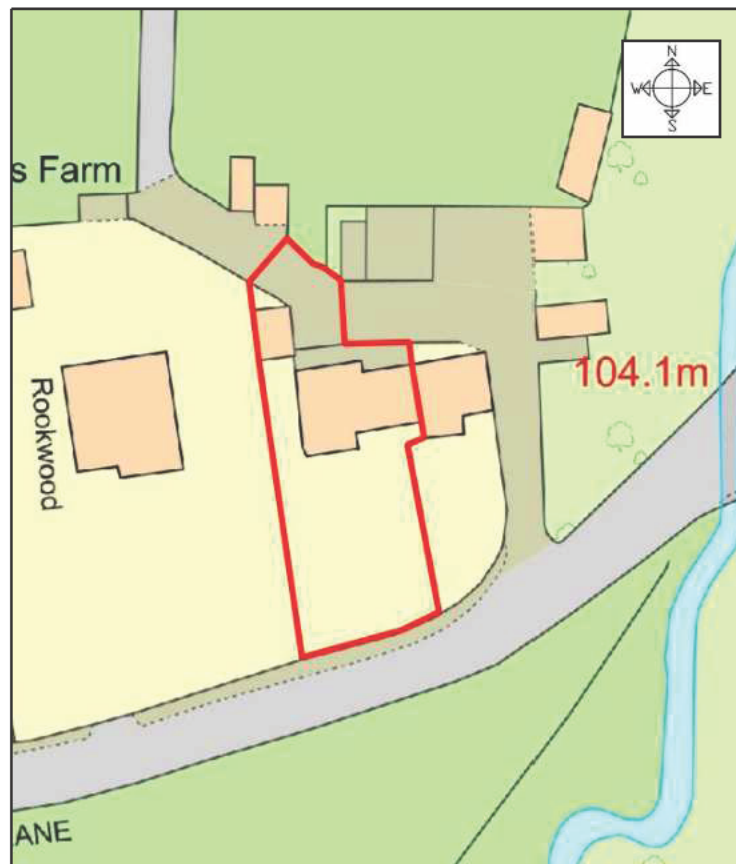


Figure 1: OS map of the project site and surrounding area. Red line boundary depicts the application site.

4.2 Zone of Influence

- 4.2.1 The zone of influence describes the geographic extent of potential impacts of a proposed development. The small scale of the proposed development reduces the likelihood of impact to the surrounding area, however suitable connective vegetation could influence the presence of protected species within the application boundary. The zone of influence was considered to be 250 metres from the application boundary for amphibians and reptiles, 30 metres for terrestrial mammals such as badgers, and within the area of impact for breeding birds and bats.

5 Results

5.1 Desk Study

Designated Sites

- 5.1.1 The site was subjected to a search for designated sites within a 2km radius of the site using data supplied by the Local Records Centre (Lancashire Environmental Records Network (LERN)) and the online desk-based resource MAGIC.
- 5.1.2 The data supplied by LERN was received on the 18/10/2024 and is summarised within Table 4. The search revealed no statutory and 6 non-statutory sites within a 2km radius of the site.
- 5.1.3 A search of the online resource Magic Maps found no additional sites with Statutory designations within the 2km radius search.

Table 4: Summary of Non-Statutory Designated Sites within a 2km radius of the application site

Site Name	Grid Ref.	Status	Reason for Designation	Distance from site
Huntroyde Demesne	SD784346	Biological Heritage Site	The site comprises an estate with a high proportion of broad-leaved woodland.	18m east
Lower Dean Pasture	SD781340	Biological Heritage Site	The site comprises of an area of semi-improved neutral and acidic pasture adjoining the west bank of Dean Brook below Dean Bridge, Simonstone.	620m southeast
Lower Dean Wood	SD781337	Biological Heritage Site	The site comprises plantation woodland on an ancient woodland site occupying a steeply sloping clough above Dean Brook.	689m southeast
Read Heights Pasture	SD767357	Biological Heritage Site	The site consists of a large species-rich, semi-natural, neutral grassland field, with a flattish plateau and a wide, dry ditch.	1.29km northwest
Bridge Hey Wood	SD757342	Biological Heritage Site	The site comprises woodland which is ancient semi-natural in character.	1.7km southwest

Site Name	Grid Ref.	Status	Reason for Designation	Distance from site
Shorten Brook	SD778322	District Wildlife Site	Clough woodland with very steep wooded banks over its northern stretch and with some clearings of semi-improved acid and neutral grassland along its southern length.	1.83km

Protected Species Assessment

5.1.4 Data supplied by LERN also included records of protected species. Maps are presented within Appendix 8 of this report. A summary of the closest or most relevant records can be seen in Table 5.

Table 5: Summary of relevant protected and priority species records

Species	Grid Ref.	Date	Description
Birds			
Goldfinch (<i>Carduelis carduelis</i>)	SD7834	1998	1 record within 2km, located 874m southeast from the site.
Greenfinch (<i>Chloris chloris</i>)	SD7834	1998	2 records within 2km, closest record located 874m southeast from the site.
Blue Tit (<i>Cyanistes caeruleus</i>)	SD7834	1998	3 records within 2km, closest record located 874m southeast from the site.
House Martin (<i>Delichon urbicum</i>)	SD77183478	01/06/2013	1 record within 2km, located 505m northwest from the site.
Robin (<i>Erithacus rubecula</i>)	SD7834	1998	8 records within 2km, closest record located 874m southeast from the site.
Swallow (<i>Hirundo rustica</i>)	SD7834	1998	2 records within 2km, closest record located 874m southeast from the site.
Great Tit (<i>Parus major</i>)	SD77183478	01/06/2013	3 records within 2km, closest record located 505m northwest from the site.
House Sparrow (<i>Passer domesticus</i>)	SD7834	1998	1 record within 2km, located 874m southeast from the site.

Species	Grid Ref.	Date	Description
Dunnock (<i>Prunella modularis</i>)	SD7834	1998	2 records within 2km, closest record located 874m southeast from the site.
Starling (<i>Sturnus vulgaris</i>)	SD77183478	02/06/2013	4 records within 2km, closest record located 505m northwest from the site.
Wren (<i>Troglodytes troglodytes</i>)	SD7821534181	25/07/2016	6 records within 2km, closest record located 688m east from the site.
Redwing (<i>Turdus illacus</i>)	SD7834	1998	1 record within 2km, located 874m southeast from the site.
Song Thrush (<i>Turdus philomelos</i>)	SD7834	1998	1 record within 2km, located 874m southeast from the site.
Mammals			
Daubenton's Bat (<i>Myotis daubentonii</i>)	SD790335	21/07/2005	1 record within 2km, located 1.73km southeast from the site.
Pipistrelle Bat Species (<i>Pipistrellus sp.</i>)	SD789337	03/07/2004	3 records returned within 2km, closest record located 1.54km southeast from the site.
Common pipistrelle (<i>Pipistrellus pipistrellus</i>)	SD782334	13/07/2005	4 records returned within 2km, closest record located 1.25km southeast from the site.
Soprano pipistrelle (<i>Pipistrellus pygmaeus</i>)	SD770348	09/03/2017	1 record within 2km, located 655m northwest from the site.
Noctule bat (<i>Nyctalus noctula</i>)	SD77213261	21/05/2020	1 record within 2km, located 1.96km south from the site.
Western European Hedgehog	SD773346	01/10/2020	5 records within 2km, closest record located 297m west from the site.
Herpetofauna			
Common toad (<i>Bufo bufo</i>)	SD7833	25/07/2016	5 records within 2km, closest record located 705m southeast from the site.

Species	Grid Ref.	Date	Description
Invasive Species			
Wall Cotoneaster (<i>Cotoneaster horizontalis</i>)	SD7648734781	11/08/2018	2 records within 2km, closest record located 1.16km west from the site.
Entire-leaved Cotoneaster (<i>Cotoneaster integrifolius</i>)	SD7780033569	07/07/2009	1 record within 2km, located 984m southeast from the site
New Zealand Pigmyweed (<i>Crassula helmsii</i>)	SD7761134413	25/07/2016	1 record within 2km, located 125m south from the site.
Montbretia (<i>Crocasmia pottsii</i> x <i>aurea</i> = <i>C. x crocosmiiflora</i>)	SD7778734380	25/07/2016	4 records within 2km, closest record located 225m southeast from the site.
Japanese Knotweed (<i>Fallopia japonica</i>)	SD7734	09/06/2008	15 records within 2km, closest record located 131m southwest from the site.
Giant Knotweed (<i>Fallopia sachalinensis</i>)	SD7868435128	15/03/2013	1 record within 2km, located 1.21km northeast from the site.
Giant hogweed (<i>Heracleum mantegazzianum</i>)	SD7827734359	15/03/2013	38 records within 2km, closest record located 675m east from the site.
Himalayan Balsam (<i>Impatiens glandulifera</i>)	SD7820234214	25/07/2016	27 records within 2km, closest record located 660m southeast from the site.
Variegated Yellow Archangel (<i>Lamium galeobdolon</i> subsp. <i>Argentatum</i>)	SD7735	14/02/2012	5 records within 2km, closest record located 970m northwest from the site.
Rhododendron (<i>Rhododendron ponticum</i>)	SD782346	12/05/2016	33 records within 2km, closest record located 633m east from the site.
Japanese rose (<i>Rosa rugosa</i>)	SD7752133625	05/11/2008	4 records within 2km, closest record located 919m south from the site.

5.1.5 Magic Maps revealed a single granted EPS licence within 2km of the site:

- For the destruction of a resting place for common pipistrelle (*Pipistrellus pipistrellus*) and whiskered bat (*Myotis mystacinus*), which expired in 2016, located 1.36km west from the site (Licence number: 2015-10582-EPS-MIT).

Priority Habitats

5.1.6 Data supplied by MAGIC includes an Ancient Woodland Inventory (AWI) and a UKBAP priority habitat inventory. No ancient woodland was recorded within 2km of the site. MAGIC returned no priority habitat within the application site. However, 'deciduous woodland' priority habitat was recorded 13m east from the site.

5.1.7 Records of 'traditional orchards', 'Woodpasture and Parkland BAP habitat', 'lowland dry acid grassland', and 'good quality semi-improved grassland' were recorded within 2km of the site.

5.2 Habitats

5.2.1 The habitat types recorded on site are summarised below, and the frequency and distribution of habitat types is displayed within a Phase 1 Habitat Survey Map (Appendix 1 and 2).

5.2.2 Table 6 provides a list of habitat types present on site along with their inclusion (or otherwise) as a National and / or Local Habitat of Principal Importance (HPI) (Previously referred to as Biodiversity Action Plan (BAP)) (It should be noted that additional information is included within the text where a classification under Phase 1 survey methodology does not mirror habitat types considered to be conservation priorities).

Table 6: JNCC Habitat Types found on site and inclusion within UK BAP/HPI habitats

Habitat Type	N HPI	L HPI	N/A
Buildings			✓
Hardstanding			✓
Amenity grassland			✓
Bare ground			✓
Dense scrub			✓
Scattered trees			✓
Native, intact species-poor hedgerows	✓		
Wall			✓

Amenity Grassland

- 5.2.3 A large area of amenity grassland was found to the south of the site and covered approximately 0.02ha of the site (



- 5.2.4 Figure 2). The grassland was found to be recently mown, to a sward height of <5cm, and formed the garden of the residential property. Species included abundant Yorkshire fog (*Holcus lanatus*), red fescue (*Festuca rubra*), perennial ryegrass (*Lolium perenne*), and cock's foot (*Dactylis glomerata*), with locally frequent field buttercup (*Ranunculus arvensis*), and common sorrel (*Rumex acetosa*), alongside occasional dandelion sp. (*Taraxacum* sp.), ribwort plantain (*Plantago lanceolata*), sweet vernal grass (*Anthoxanthum odoratum*), and common ragwort (*Jacobaea vulgaris*). Wild strawberry (*Fragaria vesca*) and wall barley (*Hordeum murinum*) were recorded rarely.



Figure 2: Area of Amenity grassland positioned centrally within the site

Native Hedgerows

- 5.2.5 Two intact, native, species-poor hedgerows (fewer than five species in any given 30m section) were recorded, bordering the southern and western boundaries of the site. Dominant species included garden privet (*Ligustrum ovalifolium*) along hedgerow 2, alongside abundant holly (*Ilex aquifolium*) and hawthorn (*Crataegus monogyna*) along hedgerow 1. A small number of semi-mature sycamore (*Acer pseudoplatanus*) were also noted along Hedgerow 1 but were found to be well pruned to match the hedgerow. Bramble (*Rubus fruticosus*) was recorded occasionally along Hedgerow 1. The understorey comprised dominant to abundant ivy (*Hedera helix*) along both hedgerows. The locations of the hedgerows in Table 7 below can be viewed in the Phase 1 Habitat Plan in Appendix 1.

Table 7: Description of hedgerows on site

Hedge Number	Type	Dimensions (Approx.) H x W x L	Description	Likely to Qualify*
H1	Native intact	3m x 2m x 34m	Heavily pruned, intact species-poor hedgerow. Formed boundary between	No

Hedge Number	Type	Dimensions (Approx.) H x W x L	Description	Likely to Qualify*
	species poor		site and adjacent residential property. Hedgerow consisted of abundant holly and hawthorn, with the ground flora comprised of dominant common ivy. A small number of sycamore trees were noted along the hedgerow, but each were found to be pruned to be in the hedgerow.	
H2	Non-native intact species poor	2m x 1.2m x 13m	Heavily pruned, intact species-poor hedgerow. Formed boundary between site and School Lane to the south of the site. Hedgerow consisted of dominant garden privet, with occasional holly. Ground flora was comprised of abundant ivy with large areas of bare ground.	No

*Likely to qualify as important under Hedgerow Regulations (1997)



Figure 3: Hedgerow 1 located on the southern boundary of the site



Figure 4: Hedgerow 2 located on the western boundary of the site

Scattered Trees

5.2.6 One semi-mature rowan tree was recorded in the southwestern corner of the site (Tree 1;



5.2.7 Figure 5) (*Sorbus subg. Sorbus*). Tree 1 was found to be heavily pruned.



Figure 5: Scattered Trees located in the southwestern corner of the site.

Dense Scrub

- 5.2.8 Dense scrub was recorded in two small areas across the site; to the north of Building 2, and to the south of Building 1. The scrub was found to consist of dominant bramble, with occasional great willowherb (*Epilobium hirsutum*) and English honeysuckle (*Lonicera periclymenum*).

Bare ground

- 5.2.9 Two areas of bare ground were found within the site. One area, located to the north of the site, was found to consist of gravel, alongside abundant great willowherb and bent sp. (*Agrostis sp.*), frequent dandelion sp., common columbine (*Aquilegia vulgaris*), and bramble, and occasional annual meadow grass (*Poa annua*).
- 5.2.10 The second area, located along the western boundary of the site was found to consist of occasional broadleaved dock (*Rumex obtusifolius*), crab apple (*Malus sylvestris*) saplings, and wild strawberry (Figure 6). A small rubble pile was also noted adjacent to the southwestern corner of Building 1 (TN2, Appendix 1 and 2).



Figure 6: Area of bare ground located along the western boundary of the site.

Buildings and Hard standing

- 5.2.11 Two buildings were noted within the site. Building 1, which comprised a large residential property was present in the centre of the site (Figure 7). Building 2, which consisted of a disused outbuilding was present along the western boundary of the site (Figure 8). Both buildings were found to be disused at the time of survey, and full building descriptions can be found within section 5.3.



Figure 7: Building 1 located within the centre of the site.



Figure 8: Building 2 located within the northwestern section of the site.

Invasive Weeds Assessment

- 5.2.12 An assessment of the site was made to establish the presence of invasive weeds included on schedule 9 of the Wildlife and Countryside Act 1981 (as amended).
- 5.2.13 No recordings of schedule 9 invasive weed species were found within, or adjacent to the application area. However, a small stand of Horsetail (*Equisetum arvense*) was noted along the eastern boundary of the site (Target Note (TN) 1, Appendix 1 and 2). Although not listed on Schedule 9 of the UK Wildlife Countryside Act, horsetail is invasive in nature with the potential to damage hard landscaping features and outcompete desirable plant assemblages.

5.3 Fauna

Breeding Birds

- 5.3.1 The assessment was undertaken within the breeding bird season. Three species of bird were recorded on site during the survey including blackbird (*Turdus merula*), robin (*Erithacus rubecula*), and carrion crow (*Corvus corone*).
- 5.3.2 The scattered trees, hedgerows, and scrub on site provide suitable nesting habitat for birds, including birds identified within 2km of the site during the desk study such as house sparrow (*Passer domesticus*), and song thrush (*Turdus philomelos*).
- 5.3.3 Buildings 1 and 2 onsite were considered suitable for breeding birds such as swift (*Apus apus*) and house sparrow. Suitable access points for bird species were recorded through the open sides of the buildings.
- 5.3.4 Based on a review of the habitat types on site and the list of bird species recorded within the data search, the site is considered to support an assemblage of common bird species.

Bats

- 5.3.5 The data search returned 2 records of bat foraging and commuting activity, with the closest record 1.25km southeast from the site pertaining to common pipistrelle (*Pipistrellus pipistrellus*). Four bat roosts were recorded within 2km of the site, with the closest roost pertaining to soprano pipistrelle (*Pipistrellus pygmaeus*) recorded 655m northwest from the site.

Roosting Bats

- 5.3.6 Scattered trees were present within the site. Visible trees were assessed and categorised based upon Bat Conservation Trust guidance (see Appendix 5), with all scattered trees within the site boundary assessed to have negligible suitability to support roosting bats. Tree 1 was found to be semi-mature and heavily pruned.
- 5.3.7 Building 1 was assessed to have 'High' suitability to support roosting bats. The extent of the suitability pertained to missing and/or lifted roof tiles, and open and broken windows on the northern and western aspects of the building. Building 2 was assessed to have 'Moderate' suitability to support roosting bats. The extent of the suitability pertained to cracks/gaps in the brickwork and missing and/or lifted roof tiles.
- 5.3.8 The main structural features of the buildings, and their suitability for supporting roosting bats are summarised below (Table 8), and associated figures can be found within Table 15 in Appendix 9. A potential roosting features plan has also been included in Appendix 9.

Table 8: Summary of bat roost suitability and evidence found within each of the buildings / structures on site (Supporting Figures within Appendix 9)

High	Moderate	Low	Negligible	None
Building Number	Description	Bat Evidence / potential Roosting Features (PRFs)	Roost Suitability	
B1	External: Two storey semi-detached stone, disused residential building with a series of pitched roof sections supporting a slate roof. The building featured two gable ends on the northern and southern elevations (Photograph 1). The eastern elevation was attached to an adjacent residential building. External windows and doors were constructed of timber within mortar frames which were flush at the time of survey. Three chimney stacks were noted on the eastern, western and northern elevations of the building, with one shared chimney stack noted on the eastern elevation.	External: – Roof tiles lifted and missing on southern elevation (PRF 1, Photograph 2). – Roof tiles lifted and missing on northeastern elevation building (PRF 2, Photograph 3). – Roof tiles lifted and missing on northern elevation (PRF 3, Photograph 4). – Open window noted on the northern elevation (PRF 4, Photograph 5).	High	

Building Number	Description	Bat Evidence / potential Roosting Features (PRFs)	Roost Suitability
		Broken window noted on the western elevation (PRF 5, Photograph 6).	
	Internal: The entire roof space of Building 1 was accessed by an existing ladder and was found to be lined with plastic lining and insulation with no visible signs of damage or access points to the exterior of the building (Photograph 7). The roof was supported by wooden beams.	Internal: The broken and open windows could provide suitable access points into the interior of Building 1 for roosting bats. No evidence of previous bat activity was recorded during the assessment within the building.	
B2	External: Red brick, single storey outbuilding with cement formed roof tiles (Photograph 6). The windows and doors of the building consisted of timber. Building was found to be disused, showing signs of previous use for storage.	External: - Roof tiles lifted and missing on eastern elevation of building (PRF 1, Photograph 8). - Missing roof tiles noted on the northeastern corner of the building (PRF 2, Photograph 9). - Gap in the brickwork on the northern elevation (PRF 3, Photograph 10). - Gap in the brickwork on the southern elevation (PRF 4, Photograph 11). - Open window on the eastern elevation (PRF 5, Photograph 12).	Moderate
	Internal: The roof was found to consist of timber frames and lining, with small amounts of bitumen chipboard noted on the southern end of the roof space (Photograph 13). Steel and timber supports and beams were also noted within the interior of the structure. Missing roof tiles and the open window on the eastern elevation of the building provide suitable access points into the interior of the structure for roosting bats.	Internal: - Timber lining found to be rotten in several sections at the time of survey (PRF 6, Photograph 14). - Small hole noted in the bitumen chipboard (PRF7, Photograph 15).	

Foraging and Commuting Bats

- 5.3.9 The site supported a number of features considered suitable to support commuting and foraging bats. The hedgerows, scrub and grassland on site provide valuable resources for foraging bats. Linear features such as the hedgerows provide connective habitat across the site, providing possible commuting pathways to the adjacent residential properties and wider environment which to the north and south is predominantly rural. The site is therefore considered to provide 'Moderate' suitability habitat for foraging and commuting bats.

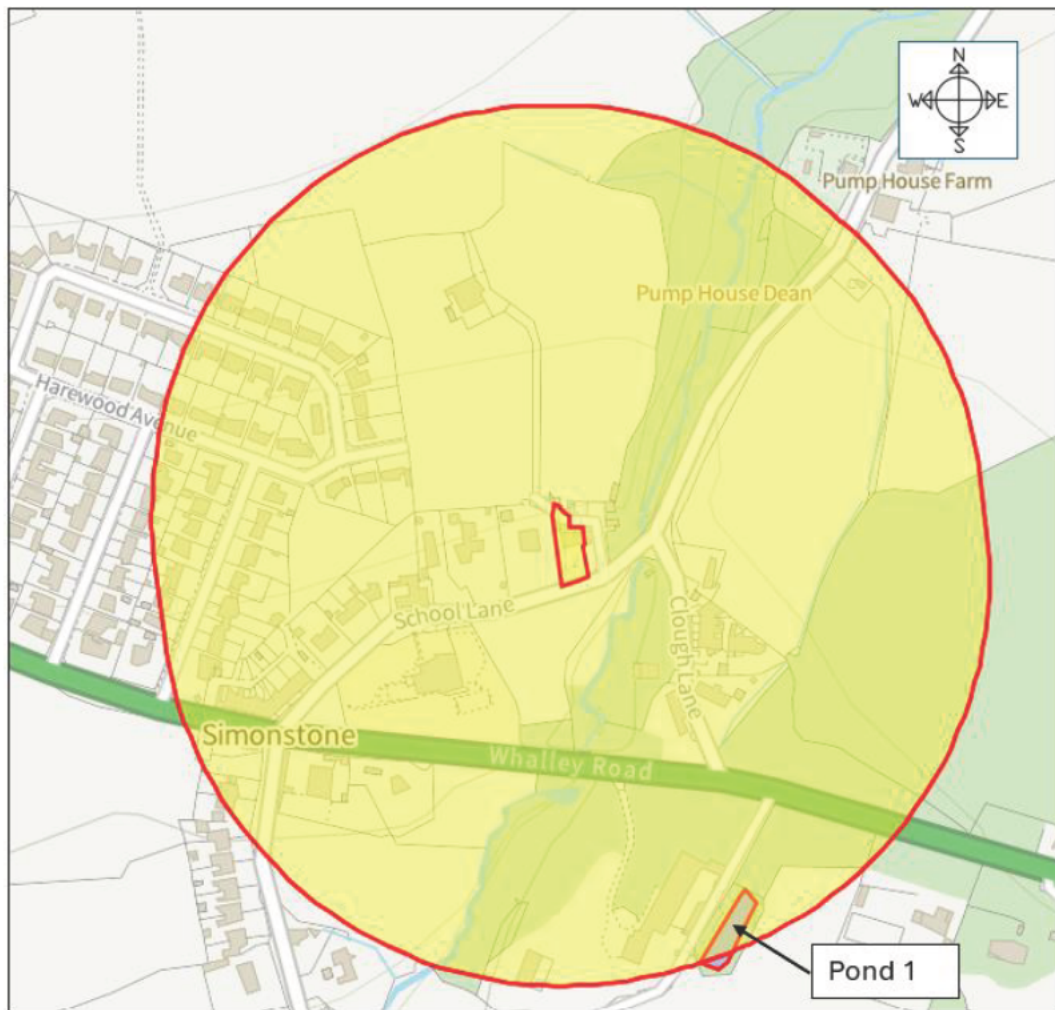
Badgers

- 5.3.10 The data search returned no records of badgers within 2km of the site. No evidence of badger setts, or activity such as mammal runs, snuffle holes and latrines were found during the ecological appraisal of the site. Whilst the site supported habitats such as small areas of dense scrub and hedgerows, which are conducive to supporting badger populations, it was considered that these habitats were too small and well-managed to support sett-building activity. However, the site's location within an agricultural dominated landscape suggest that this transient species could forage or commute within the surrounding environment and could use the habitats on site on an episodic basis.

Great Crested Newts

- 5.3.11 The data search returned no records of great crested newts (*Triturus cristatus*) within 2km of the site.
- 5.3.12 The site supported hedgerows, amenity and roots of scattered trees that were all considered suitable to support the terrestrial phase for this species. The amenity grassland on site was found to be managed, so was therefore considered to provide sub-optimal habitat for great crested newts, and other amphibians. No water bodies were identified within or immediately

adjacent to the application site. One pond was identified within 250m of the site (



5.3.13 Figure 9 and Table 9).

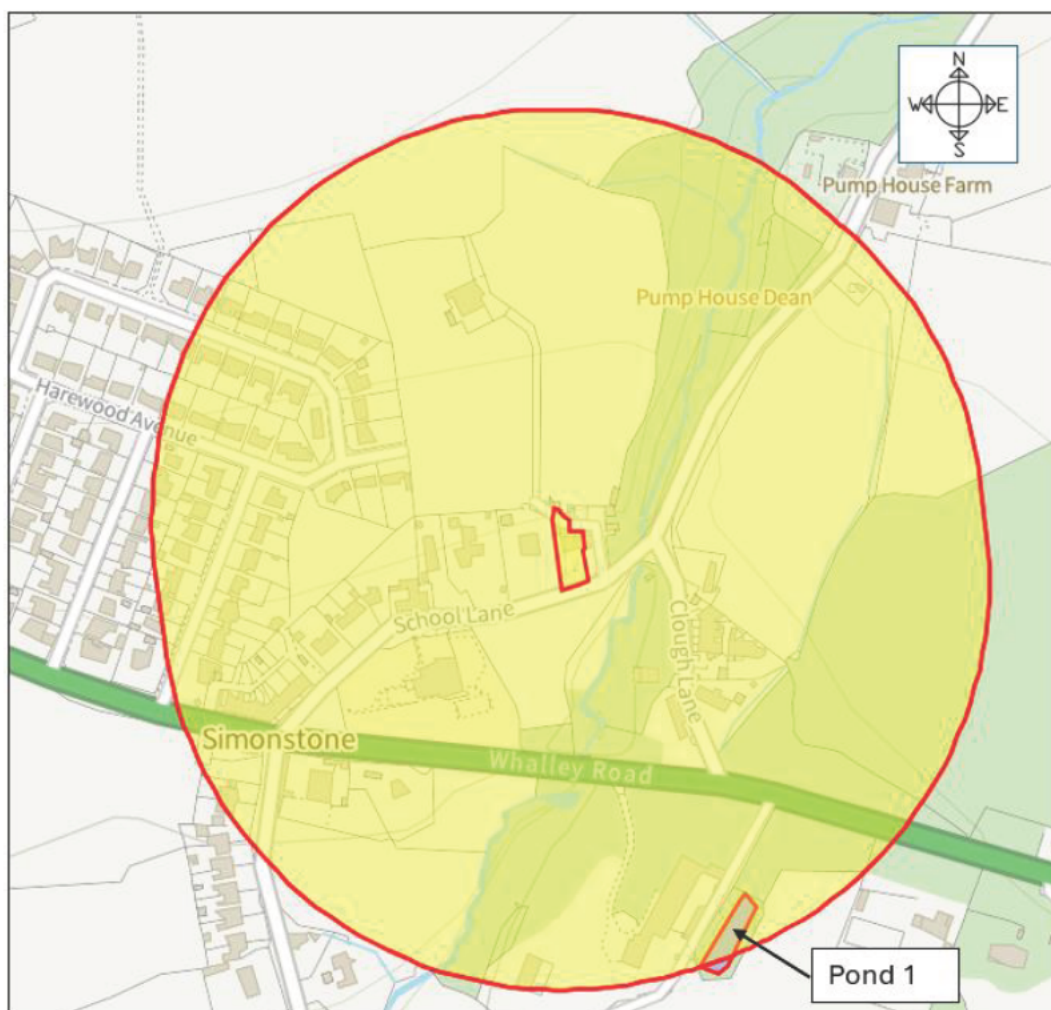


Figure 9: OS Map showing pond locations within a 250-metre radius of the site. Grid references and further detail on their suitability for GCN are evaluated in Table 9.

Table 9: Pond Locations and Suitability for Great Crested Newts

Pond Number	Grid Ref.	HSI Score	Distance from site
Pond 1	SD 77723 34295	Not accessed during preliminary appraisal – situated on private land	237m SE - disconnected from the site as the A671 carriageway forms a major barrier to dispersal.

Reptiles

5.3.14 The data search returned no records of reptiles within 2km of the site.

- 5.3.15 The habitats on site were considered sub-optimal to support a resident population of reptiles due to the small extent of the site, and the well-managed nature of the site (i.e. well mown amenity grassland). However, the small areas of dense scrub, and area of amenity grassland on site may provide habitat for foraging and commuting individuals on an episodic basis, during the times of year that the grassland is not disturbed by mowing.

Mammal Species of Principal Importance

- 5.3.16 The NERC Act 2006, Section 41 highlights 17 species of principal importance within England.

Western European Hedgehog (*Erinaceus europaeus*)

- 5.3.17 Scrub, hedgerows, ruderals and grassland within the application boundary were considered suitable for supporting foraging and commuting Western European hedgehog.

Brown Hare (*Lepus europaeus*)

- 5.3.18 No evidence of this species was recorded on site during the preliminary assessment, and the habitats on site were not considered to be conducive to support populations of brown hare.

6 Evaluation

6.1 Development Proposals

- 6.1.1 The site is the subject of a full planning application to facilitate the proposed renovation of Building 1 and proposed repairs to Building 2 on site. Design plans are provided within Appendix 6 of this report.

6.2 Desk Study Impacts

- 6.2.1 Six non-statutory sites were recorded within 2km of the application site, one of which (Huntroyde Demesne Biological Heritage Site) was found 18m east from the site. Whilst the initial proposals set out for the site (Appendix 6) show that the extent of the development proposals are contained within the site boundary, there is the potential for indirect (pollution/surface water run-off, dust) impacts from the proposed works. In the absence of appropriate mitigation and compensation, it is therefore possible that habitats and species within this non-statutory designated site could be negatively impacted by the proposals. Chapter 7 outlines recommendations relating to measures to minimise indirect impacts on Huntroyde Demesne Biological Heritage Site which can be achieved through the incorporation of a Construction and Environmental Management Plan (CEMP - Biodiversity).
- 6.2.2 The site lies within an Impact Risk Zone (IRZ) for Cock Wood Gorge SSSI, however, the proposed development does not meet the criteria for the IRZ, as such no further action is required.
- 6.2.3 All remaining non-statutory designated sites present within 2km of the site are designated for their flora assemblage and although linear habitat features could connect to these sites, it is difficult to substantiate an effect from the development.

6.3 Habitats

- 6.3.1 The habitats on site have been evaluated as having local value in relation to the immediate surroundings and a regional context.
- 6.3.2 The site was dominated by amenity grassland, bare ground, two buildings, hardstanding and a small area of dense scrub, and was bound by two native species-poor hedgerows on its southern and western boundaries. No priority habitats were recorded within or immediately adjacent to the site.

- 6.3.3 As the proposed development is small scale, and will only result in renovations to the existing residential buildings and small areas of scrub clearance on site (less than 25m²), it was therefore concluded that the proposed works were exempt from a Biodiversity Net Gain (BNG) assessment.

6.4 Breeding Birds

- 6.4.1 All wild birds, their eggs and nests are protected under the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure, or take any wild bird whilst nesting, or take, damage or destroy the nest of any such bird while in use or being built. In addition, species listed on Schedule 1 of the Wildlife and Countryside Act 1981, or their dependant young are afforded additional protection from disturbance whilst they are at their nests.
- 6.4.2 The vegetation and buildings on site was considered to provide suitable nesting habitat for common bird species. In the absence of mitigation direct or indirect impacts on individual birds, their young, eggs and habitats could occur during site clearance.
- 6.4.3 Chapter 7 provides recommendations relating to the need for working methods; aimed at clarifying the value of the habitats for birds on site before assessing impact.

6.5 Bats

- 6.5.1 All bats in the United Kingdom and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2017 (as amended). It is an offence to damage or destroy any bat roost, intentionally or recklessly obstruct a bat roost, deliberately, intentionally or recklessly disturb a bat or intentionally kill, injure or take any bat.

Roosting Bats

- 6.5.2 Tree 1 on site were not considered suitable to support roosting bats, as Tree 1 was well managed, with no visible features were identified at the time of survey.
- 6.5.3 Both Building 1 and Building 2 were considered to have suitability to support roosting bats. Building 1 was identified as having 'High' suitability to support roosting bats due to the presence of PRFs including missing and lifted roof tiles, an open window on the northern elevation, and a broken window on the western elevation of the building. No internal features were noted within

Building 1 (except for the roof void), as the interior was found to be well-maintained with no visible signs of cracks/holes in the interior walls. Building 2 was identified as having 'Moderate' suitability to support roosting bats due to the presence of missing and lifted roof tiles, and gaps in the external brickwork.

- 6.5.4 The proposed plans show the renovation of Building 1, which will see the refurbishment of the roof structure. Additionally, the proposed plans also show repairs to Building 2, which will also see the refurbishment of the roof structure and repairs to the external brickwork. If the development was to continue as planned, it may lead to the destruction of a roosting site of a protected species, and increased disturbance, injury or harm to individual bats and/or their young.
- 6.5.5 The recommendations section of this report (Chapter 7) sets out important guidance on further survey work as well as measures to avoid impacts on this species and measures to support its conservation status through ecological enhancement.

Foraging and Commuting Bats

- 6.5.6 The linear features provided by the hedgerows could act as important commuting lines for bat species and are considered to hold 'Moderate' suitability. The proposed plans show that the proposed works will be largely contained to the existing buildings on site and will not result in the removal of Hedgerows 1 and 2, or the grassland on site. A small area of dense scrub to the north of Building 2 is proposed for clearance, to facilitate repairs to the building.
- 6.5.7 As such, considering the small extent of the proposed works, no further surveys are recommended for commuting and foraging bats. Although only small areas of commuting and foraging habitat are proposed for removal as part of the development, mitigation of impacts on retained habitats would be desirable for the continued success of any bats in the surrounding area.

6.6 Badgers

- 6.6.1 Under the Protection of Badgers Act 1992, in England and Wales it is an offence to wilfully kill, injure, disturb or take any badger, or intentionally or recklessly damage, destroy, or obstruct access to any part of a badger sett.

6.6.2 There was no evidence of badger activity within zone of influence, however the rural location of the site suggests that badgers may be present in the wider environment and could forage and commute through the red line boundary on an intermittent basis. The habitats on site were considered to be sub-optimal to support badgers as they were found to be well-maintained and only small areas of suitable foraging habitat (i.e. scrub) were noted within the application boundary.

6.6.3 Therefore, given the small scale of the proposed works and the small amounts of scrub clearance proposed, it is considered that the development will not have a major effect on badgers. As such, badgers were assessed to not be a constraint and are not considered further in this report.

6.7 Great Crested Newts

6.7.1 Great crested newts and their eggs, breeding sites and resting places are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2017 (as amended).

6.7.2 It is considered unlikely that GCN would present a constraint to the planning application. No records of GCN were returned as part of the desk study, and whilst Pond 1 was found to be located 237m southeast from the application boundary, major barriers to the dispersal of amphibians (i.e. the A671 carriageway) are present between the pond and the site. Additionally, as the proposed development will only result in small areas of scrub clearance, it was considered that GCN were unlikely to be present within the redline boundary, and as such are not considered further within this report. If any evidence of GCN presence is uncovered during development works, then works should cease and the advice of an ecologist sought.

6.8 Reptiles

6.8.1 Reptiles are protected under the Wildlife and Countryside Act 1981 (as amended) making it illegal to intentionally kill or injure reptiles.

6.8.2 No evidence of reptiles was recorded during the survey. The habitats on site were also considered sub-optimal to support a resident population of reptiles, areas the habitats were found to be well-maintained and offered limited structural variation. However, the small areas of dense scrub, and area of amenity grassland on site may provide habitat for foraging and commuting individuals on an episodic basis, during the times of year that the grassland is not

disturbed by mowing. Given the small scale of the proposed development, and the small amounts of scrub clearance required to facilitate the works, it was therefore recommended that Reasonable Avoidance Measures (RAMs) should be implemented to avoid the risk of harm and/or injury to individual reptiles that may be present within the site.

- 6.8.3 Chapter 7 sets out important guidance on measures to avoid impacts on this species and measures to support its conservation status.

6.9 Mammal Species of Principal Importance

- 6.9.1 The NERC Act 2006, Section 41 highlights 17 species of principal importance within England. This includes several species of bat; however, these have been addressed in section 6.5.

Western European Hedgehog

- 6.9.2 The habitats on site were considered conducive to supporting Western European hedgehog. Habitats including the hedgerows, amenity grassland, and dense scrub provide suitable foraging, refuge and commuting habitats for this species, and may also be suitable for hibernating hedgehogs. As the proposed development will result in small areas of scrub clearance within the site, it is therefore recommended that Reasonable Avoidance Measures (RAMs) are implemented to avoid the risk of harm and/or injury to individual hedgehogs.
- 6.9.3 Chapter 7 provides recommendations aimed at safeguarding this species during construction, and measures to facilitate their use of the site post-development.

6.10 Invasive Species

- 6.10.1 At the time of survey, no schedule 9 invasive weed species were found within, or adjacent to the application area. However, a small stand of Horsetail (*Equisetum arvense*) was noted along the eastern boundary of the site (TN1, Appendix 1 and 2). Although not listed on Schedule 9 of the UK Wildlife and Countryside Act, horsetail is invasive in nature with the potential to damage hard landscaping features and outcompete desirable plant assemblages.
- 6.10.2 As such, it is therefore recommended that care should be taken to prevent its spread, and that this species is removed from the site for the benefit of biodiversity.

7 Recommendations

- 7.1.1 The site should be the subject of further ecological survey works, where the following indices will be assessed and evaluated further to establish the extent of impact to the ecological receptors recorded within the zone of influence of the site.
- 7.1.2 This survey can be used to guide the Master Plan layout to ensure that mitigation is employed to retain and enhance local biodiversity where possible.

7.2 Designated sites

Designated Sites	Timing
Recommendations	
Huntroyde Demesne Biological Heritage Site is located 18m east from the application boundary. It is currently understood that the initial proposals for the site (Appendix 6) are contained within the site boundary, there is the potential for indirect (pollution/surface water run-off, dust) impacts from the proposed works. Precautionary working measures (i.e. pollution control, dust control) to be implemented during construction to minimise indirect impacts through incorporation of a Construction and Environmental Management Plan (CEMP - Biodiversity).	During construction phase

7.3 Habitats

Habitats	Timing
Recommendations	
Whilst it was considered that the proposed works would not require a Biodiversity impact Assessment, due to their small extent, a statement detailing why the site is exempt from Biodiversity Net Gain would be required.	Prior to determination

7.4 Breeding Birds

Breeding Birds	Timing
Recommendations	
Scattered trees, buildings, hedgerows, and dense scrub provide suitable habitat for breeding birds. Given their protection, development must be sympathetic to the value of this habitat and potential impacts on breeding birds, their eggs, nests and young. The breeding bird season is generally accepted as being between March and September. Consideration and implementation must be given to the following options most appropriate to the scheme. a) Undertake vegetation clearance and works on the buildings between the months of October and February where possible. b) Clearance between the months of March and September should be subjected to a search for active birds' nests 24 hours prior to commencement of works.	Works outside of the breeding season (Oct-Feb) If unachievable, follow steps in recommendation.
Enhancement Prescriptions	
Four bird boxes (comprising of two 1SP Schwegler Sparrow Terraces, and two No. 17A Triple Cavity swift boxes) should be integrated into the integrated onto north or north-easterly elevations of Building 1. The Bird boxes should be positioned at a height of between 4 and 5 metres with an unobstructed flight line to and from the boxes during the Autumn.	During design stage

7.5 Roosting Bats

Roosting Bats	Timing
Recommendations	
Building 1 was assessed to hold 'High' suitability for roosting bats and three further presence/likely absence surveys are recommended. Building 2 was assessed to hold 'Moderate' suitability for roosting bats and two further presence/likely absence surveys are recommended. If evidence of roosting bats is found, then survey results will (be increased to three visits) inform a license from Natural England.	High suitability Buildings / Three surveys between May – September (at least two surveys May – August) spaced 3 weeks apart Moderate suitability Buildings: Two surveys between May – September (at least one survey May – August) spaced 3 weeks apart Surveys to be carried out in suitable weather conditions and required prior to determination of application.
If lighting is required, a scheme should be devised and positioned to have minimal disturbance following the guidance of an ecologist. Any lighting used during the development should be directed away from the north-western boundary with overspill less than 1lux (ideally 0) onto suitable habitats.	During and post development
Enhancement Prescriptions	
Design proposals may require amendment following the results of further survey work.	During construction

7.6 Foraging and Commuting Bats

Foraging and Commuting Bats	Timing
Recommendations	
The extent of disturbance to foraging and commuting bats within the area should be reduced where possible by employing a sensitive lighting scheme during construction works, and artificial security lighting should not be installed post construction in a way which directs lighting towards the hedge boundaries and mature trees If lighting is required, a scheme should be devised and positioned to have minimal disturbance following the guidance of an ecologist. Any lighting used during the development should be directed away from the western and southern boundaries with overspill less than 1lux (ideally 0) onto suitable habitats.	During and post development

7.7 Reptiles

Reptiles	Timing
Recommendations	
The following reasonable avoidance measures should be followed during the construction phase to prevent reptiles colonising any potential habitat incidentally created by spoil, open trenches or arisings. - Any tall grass/ruderal vegetation to be directionally strimmed in a two-phase process during the active season (March – October) to allow for any potential herptiles to disperse, the first cut to reduce the height to 30cm, then the second cut to 10-15cm. - Any rubble piles should be cleared by hand. - All materials to be stored off the ground (for example on pallets) to minimise the likelihood of herptiles accessing them for refugia. - All spoil/waste materials to be removed from site at the end of each working day (or stored in a skip). If any evidence of reptiles are uncovered during development works, then works should cease and the advice of an ecologist sought.	During active reptile season between March – September in conditions where reptiles are most active.

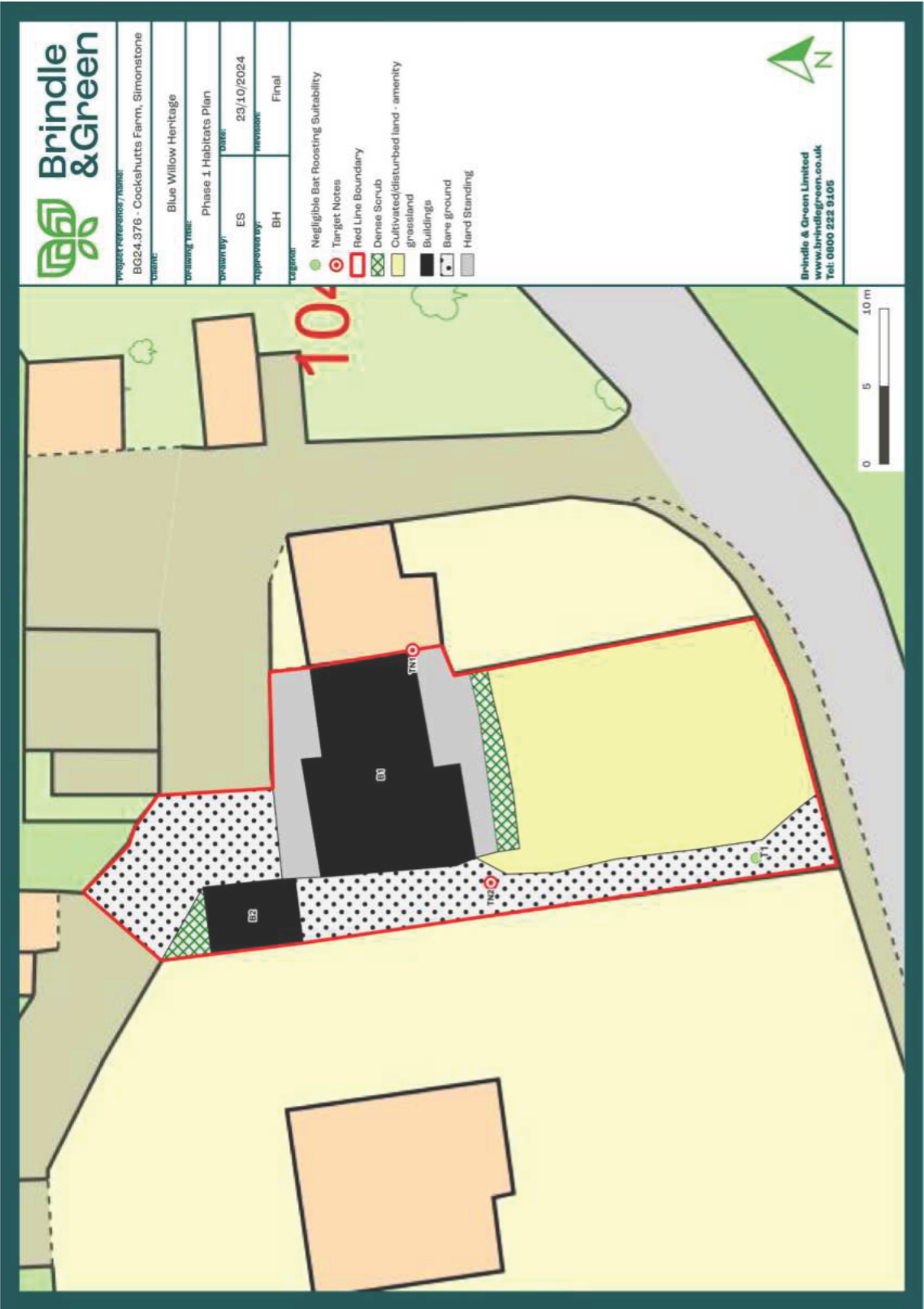
7.8 Mammal Species of Principal Importance

Mammal Species of Principal Importance	Timing
Recommendations	
Hedgehogs may use the site for foraging or commuting purposes. The recommended reasonable avoidance measures should be followed: a) Any temporarily exposed open pipes are to be capped to prevent hedgehogs gaining access. b) Undertake works during daylight hours. c) The vegetation should be checked prior to removal. d) Search areas of deadwood, brash, and discarded items by hand before removing. e) If burning any cleared vegetation, carry out immediately after piling to prevent hedgehogs moving in prior to burning. f) Any exposed excavations to be left overnight are to be covered at the end of each working day or include a means of escape for any fallen animals (e.g., a scaffolding plank).	During clearance and development

7.9 Invasive Species

Other Species	Timing
Recommendations	
Horsetail was found along the eastern boundary of the site, (TN1, Appendix 1). Although not listed on Schedule 9 of the UK Wildlife Countryside Act, horsetail is invasive in nature with the potential to damage hard landscaping features and outcompete desirable plant assemblages. Therefore, care should be taken to prevent its spread, and to reduce cover onsite.	During clearance and development

Appendix 1 - Phase 1 Habitat Plan



Appendix 2 - Phase 1 Target Notes

Table 10: Phase 1 target notes

Target note number	Description	Photograph
TN1	Horsetail noted along the eastern boundary of the site.	
TN2	Small rubble pile noted within an area of bare ground along the western boundary of the site.	

Table 11: Plant Species List with DAFOR Scale

Scientific nomenclature follows Stace (2010) for vascular plant species and common names follow BSBI List of British & Irish Vascular Plants and Stoneworts.

Please note that this plant species list was generated as part of a Phase 1 Habitat survey and does not constitute a full botanical survey.

Abundance was estimated using the DAFOR scale as follows:

D = dominant, A = abundant, F = frequent, O = occasional, R = rare, LF = locally frequent

Common Name	Scientific Name	Estimated Abundance (DAFOR)
Annual meadow grass	<i>Poa annua</i>	O
Bent sp.	<i>Agrostis sp.</i>	A
Bramble	<i>Rubus fruticosus</i>	D, F, O
Broadleaved dock	<i>Rumex obtusifolius</i>	O
Cock's foot	<i>Dactylis glomerata</i>	A
Common columbine	<i>Aquilegia vulgaris</i>	F
Common ivy	<i>Hedera helix</i>	A
Common ragwort	<i>Jacobaea vulgaris</i>	O
Common sorrel	<i>Rumex acetosa</i>	Locally F
Crab apple	<i>Malus sylvestris</i>	O
Dandelion sp.	<i>Taraxacum sp.</i>	O
English honeysuckle	<i>Lonicera periclymenum</i>	O
Field buttercup	<i>Ranunculus arvensis</i>	Locally F
Garden privet	<i>Ligustrum ovalifolium</i>	D
Great willowherb	<i>Epilobium hirsutum</i>	A, O
Hawthorn	<i>Crataegus monogyna</i>	A
Holly	<i>Ilex aquifolium</i>	A
Perennial ryegrass	<i>Lolium perenne</i>	A
Red fescue	<i>Festuca rubra</i>	A
Ribwort plantain	<i>Plantago lanceolata</i>	O
Rowan	<i>Sorbus subg. Sorbus</i>	O
Sweet vernal grass	<i>Anthoxanthum odoratum</i>	O
Sycamore	<i>Acer pseudoplatanus</i>	O
Wall barley	<i>Hordeum murinum</i>	R
Wild strawberry	<i>Fragaria vesca</i>	O, R
Yorkshire fog	<i>Holcus lanatus</i>	A

Appendix 3 – General References

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Appendix 4 – Legislation, Policy and Guidance

Articles of British wildlife and countryside legislation, policy guidance and both Local and National Biodiversity Action Plans (BAPs) are referred to. The articles of legislation are:

- The Wildlife and Countryside Act 1981 (as amended)
- The Conservation of Habitats and Species Regulations 2017 (as amended)
- Department for Communities and Local Government. National Planning Policy Framework. (2023)
- EC Council Directive on the Conservation of Wild Birds 79/409/EEC
- The Protection of Badgers Act 1992
- The Natural Environment and Rural Communities Act 2006 (Including National and Local Biodiversity Action Plan (LBAP / HPI))
- Hedgerow Regulations 1997
- The Environment Act 2021
- Town and Country Planning Act 1990

Appendix 5 – Legislation, Guidance and Methodology

Breeding Birds

All nesting birds are protected under the Wildlife and Countryside Act 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition, for species listed on Schedule 1 of the Wildlife and Countryside Act 1981 it is an offence to intentionally or recklessly cause disturbance at, on or near an 'active' nest.

The bird breeding season is typically accepted to start in February/March and continue through until September/October, however breeding birds can be found all year round depending on the given species and climatic conditions.

A site's habitat composition, locality, association to designated sites as well as current usage and management are all considered in the decision as to whether further bird related surveys are required. In addition, surveys may be recommended based on incidental bird records collected during a Preliminary Ecological Appraisal, species identified within an ecological data search or target species listed within a local biodiversity action plan.

Bird surveys are carried out in accordance with:

- Gilbert G, Gibbons DW, Evans J. (1998) Bird Monitoring Methods. RSPB.

Bats

Roosting Bats

All bats in the United Kingdom and their habitats are fully protected under the Wildlife and Countryside Act 1981 (as amended), and the Conservation of Habitats and Species Regulations 2017 (as amended). It is an offence to damage or destroy any bat roost, intentionally or recklessly obstruct a bat roost, deliberately, intentionally or recklessly disturb a bat or intentionally kill, injure or take any bat.

Areas of concern; can be encountered in many types of structure and care should therefore be taken when undertaking maintenance or demolition of suitable structures and trees.

Site assessments of buildings, commuting and foraging habitat and trees are undertaken in accordance with:

- Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines, (4th edition). Bat Conservation Trust, London. ISBN-978-1-7395126-0-6 (Table 12, Table 13 and Table 14).

Preliminary Ecological Surveys look for evidence of bat presence such as feeding remains, bat droppings, roosting individuals and staining around potential access points. The suitability of site features are also assessed because absence of bat evidence, is not confirmation of a negative result.

Within trees, features searched for include; natural holes, woodpecker holes, cracks/splits in major limbs, loose bark, hollows, and dense cover of ivy over the tree. If evidence is found, or a building supports features conducive to supporting roosting bats then further presence / absence bat surveys and/or roost characterisation surveys will be recommended.

Foraging and Commuting bats

Habitat features on site are assessed for their suitability to support foraging and commuting bat populations. This assessment is independent from the suitability of the site to support roosting bats, and provides information on the likeliness of bat foraging activity within the local environment, and the dependence of individuals on these features for commuting to alternative roosting sites, foraging and migration.

Table 12: Guideline for assessing the suitability of a structure to support roosting habitat amended from Collins, J (2023)

Category	Description of Roosting Habitat	Number of additional presence / absence surveys required
None	No habitat features on site likely to be used by roosting bats at any time of year (complete absence of potential roosting features).	None
Negligible Suitability	Suitable cavities may exist, but these are less than ideal. Uncertainty remains as bats can use these features on occasion.	None
Low Suitability	A structure with one or more potential roost sites that could be used by individual bats opportunistically. The feature and surrounding habitat do not provide enough shelter, conditions* space for larger roost types such as a maternity or hibernation roost.	One survey between May and August

Category	Description of Roosting Habitat	Number of additional presence / absence surveys required
Moderate Suitability	A structure considered to have one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions* and surrounding habitat but are unlikely to support a roost of high conservation status (With regard to roost type only – assessments are made irrespective of species conservation status, which is established after presence is confirmed).	Two surveys between May and September (with at least one survey undertaken between May and August). Surveys should be spaced at least 3 weeks apart.
High Suitability	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions* and surrounding habitat.	Three surveys between May and September (with at least two surveys undertaken between May and August). Surveys should be spaced at least 3 weeks apart.
Confirmed	This category is where positive evidence of bats has been recorded. For example, bats are found; bat droppings may be present at a suitable location for roosting bats; existing bat records may be associated with the structure.	

* In this context conditions refers to the level of disturbance, light, height above ground, temperature, and humidity etc

Table 13: Guideline for assessing the suitability of a tree to support roosting habitat amended from Collins, J (2023)

INITIAL STAGE (Site scoping/PEA/PRA)		
Category	Description	Survey effort to establish the presence/absence of bats
NONE	Either no PRFS in the tree or unlikely to be any	None
FAR	Further assessment required to establish if PRFs are present in the tree	Ground Level Tree Assessment (GLTA) to further assess suitability
PRF	A tree with at least one PRF present	Ground Level Tree Assessment (GLTA) to further assess suitability
DETAILED STAGE (PEA/PRA/GLTA)		
PRF - I	PRF only suitable for individual bats or small numbers of bats due to size or lack of suitable surrounding habitats	None – precautionary method of works for removal and provision of roosting compensation

INITIAL STAGE (Site scoping/PEA/PRA)		
Category	Description	Survey effort to establish the presence/absence of bats
PRF - M	PRF suitable for multiple bats and may therefore be used by a maternity colony	Three Climbing inspection surveys for features to be undertaken May to September with at least 2 May to August. Surveys should be 3 weeks apart. If climbing and inspection not possible, 3 dusk emergence surveys with NVAs (Night Vision Aids) to be undertaken May to September with at least 2 May to August. Surveys should be 3 weeks apart. Should a maternity colony be confirmed less invasive methods, such as dusk emergence survey with NVAs should employed.
Known roost	Known roost present through local records, evidence, sightings, etc	Three Climbing inspection surveys for features to be undertaken May to September with at least 2 May to August. Surveys should be 3 weeks apart. If climbing and inspection not possible, 3 dusk emergence surveys with NVAs (Night Vision Aids) to be undertaken May to September with at least 2 May to August. Surveys should be 3 weeks apart. Should a maternity colony be confirmed less invasive methods, such as dusk emergence survey with NVAs should employed.

Table 14: Potential suitability of foraging and commuting habitat within an application boundary. Features should be assessed following this guide and professional judgement. Adapted from Collins, J (2023)

Category	Description of commuting and foraging habitat	Survey effort to establish the value of commuting and foraging habitat**
Negligible Suitability	Negligible habitat features on site likely to be used by commuting or foraging bats.	None

Category	Description of commuting and foraging habitat	Survey effort to establish the value of commuting and foraging habitat**
Low Suitability	Habitat which could be used by low numbers of commuting bats such as an isolated gappy hedgerow, or an unvegetated stream unconnected to suitable habitat in the wider environment. Suitable, yet isolated habitat that could be used by foraging bats such as individual trees, or a patch of scrub.	Nighttime bat walk (NBW) survey: One survey visit per active season (Spring – April/May, Summer (June/July/August) – autumn – September/October). AND Static automated surveys: Data to be collected over a five-night period, per season. (Spring – April/May, Summer (June/July/August) – autumn – September/October).
Moderate Suitability	Continuous habitat connected to the wider landscape that could be used by commuting bats, notably tree lines, hedgerows or linked back gardens. Habitat that is connected to the wider landscape which could be used by bats for foraging such as trees, open water, scrub or grassland.	Nighttime bat walk (NBW) survey: One survey visit per active season (Spring – April/May, Summer (June/July/August) – autumn – September/October). AND Static automated surveys: Data to be collected over a five-night period, per month (April to October)
High Suitability	Continuous, High-quality habitat that is well connected to the wider landscape which is considered to be highly conducive to commuting bats including river valleys, stream, hedgerows, and woodland edge. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourses, and grazed parkland. Site is close to and connected to known roosts.	Nighttime bat walk (NBW) survey: One survey visit per active season (Spring – April/May, Summer (June/July/August) – autumn – September/October). AND Static automated surveys: Data to be collected over a five-night period, per month (April to October)

** This is only a guide for survey effort required, the complexity of the site and the proposed disturbance / loss of features will determine the extent of works required on a site by site basis

Badgers (*Meles meles*)

Badgers are protected under the Protection of Badgers Act 1992. It is illegal to wilfully kill, injure, disturb or take any badger, or attempt to do so and it is an offence to intentionally or recklessly damage, destroy, or obstruct access to any part of a badger sett.

Site assessments are undertaken in accordance with:

- Harris S, Cresswell P and Jefferies D (1989). Surveying Badgers.

During the PEA, the site and the 30-metre zone of Influence considered for this species are searched for evidence of badger activity. The surveyor will identify evidence of activity, or habitat suitability for this

protected species. Even if no evidence of badger activity is found, if local conditions suggest that the habitat may be suitable for badger, further surveys will be recommended.

Reptiles

Two species of reptile, the sand lizard and smooth snake, and their habitats are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981. All other native British reptiles are protected against intentional killing and injury.

British reptiles are found in exposed, undisturbed areas, such as areas without cultivation with differing areas of grassland sward length. Suitable areas include abandoned sand quarries, fallow farmland land, heathland, post-industrial land, railway corridors etc. If these types of suitable features are found then further reptile surveys are recommended.

- Edgar P, Foster J and Baker J (2010) Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth.
- Gent T and Gibson S (2003) Herpetofauna Workers Manual. JNCC, Peterborough.

Ecological Enhancement

In March 2023 the Department for Communities and Local Government published the National Planning Policy Framework. This sets out planning policies on protection of biodiversity through the planning system. The document states - opportunities to incorporate biodiversity in and around developments should be encouraged.

For new buildings guidance such as in the following will be used:

- Williams, C. (2010) Biodiversity for Low and Zero Carbon Buildings, A Technical Guide for New Build. Riba Publishing.

Designated Sites

Designated areas are Sites of Special Scientific Interest (SSSI) while others have been designated as having European protection status. Local authorities can also designate areas for nature conservation and in doing so may impose local authority byelaws to support local nature conservation objectives.

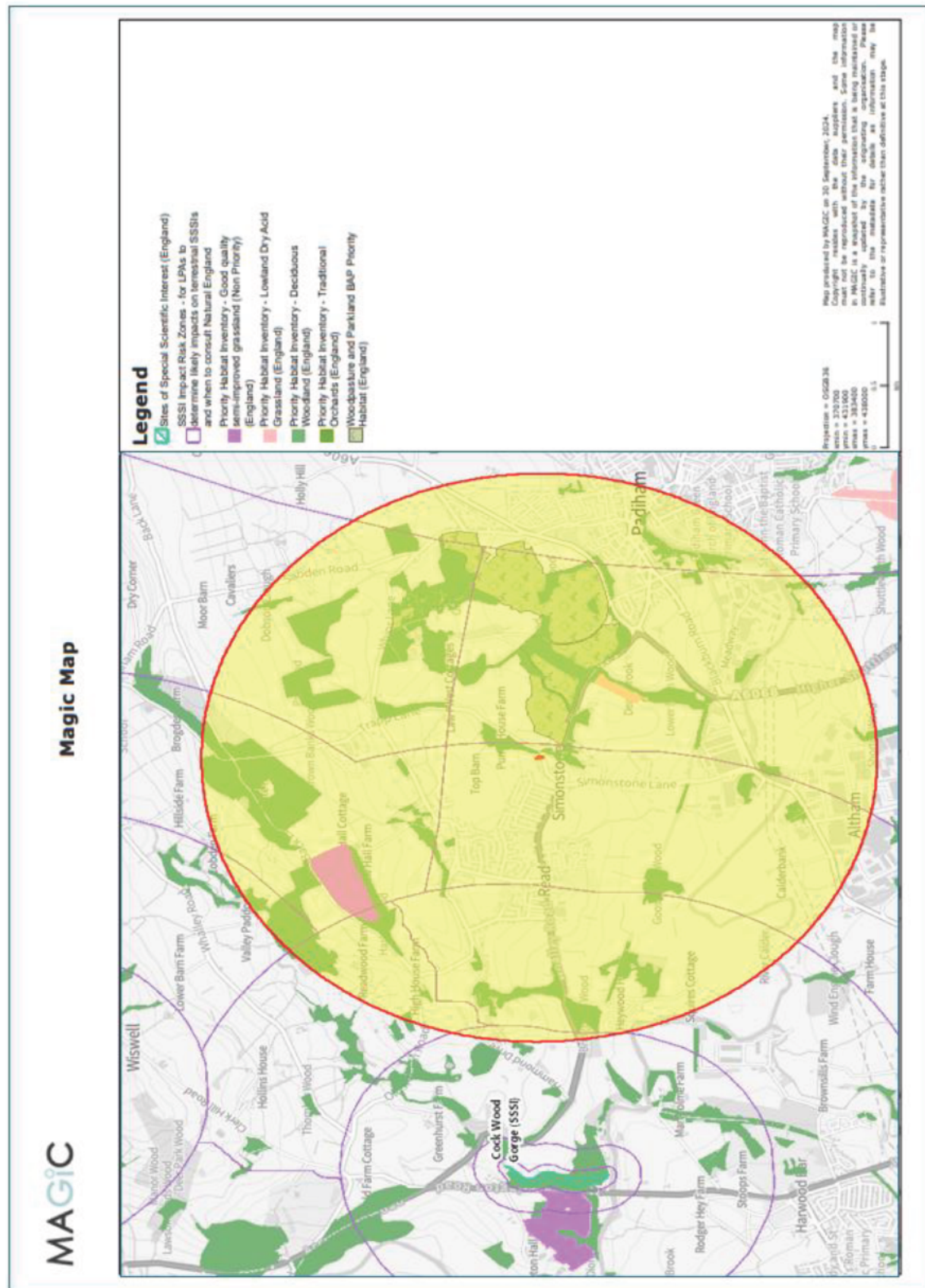
European designated status includes Special Protection Areas (SPAs) that preserve areas for birds and Special Areas of Conservation (SACs) which provides protection for habitats and the species which these habitats support.

Information of Designated Protected Areas is received through Ecological Data Searches and Magic Map searches.

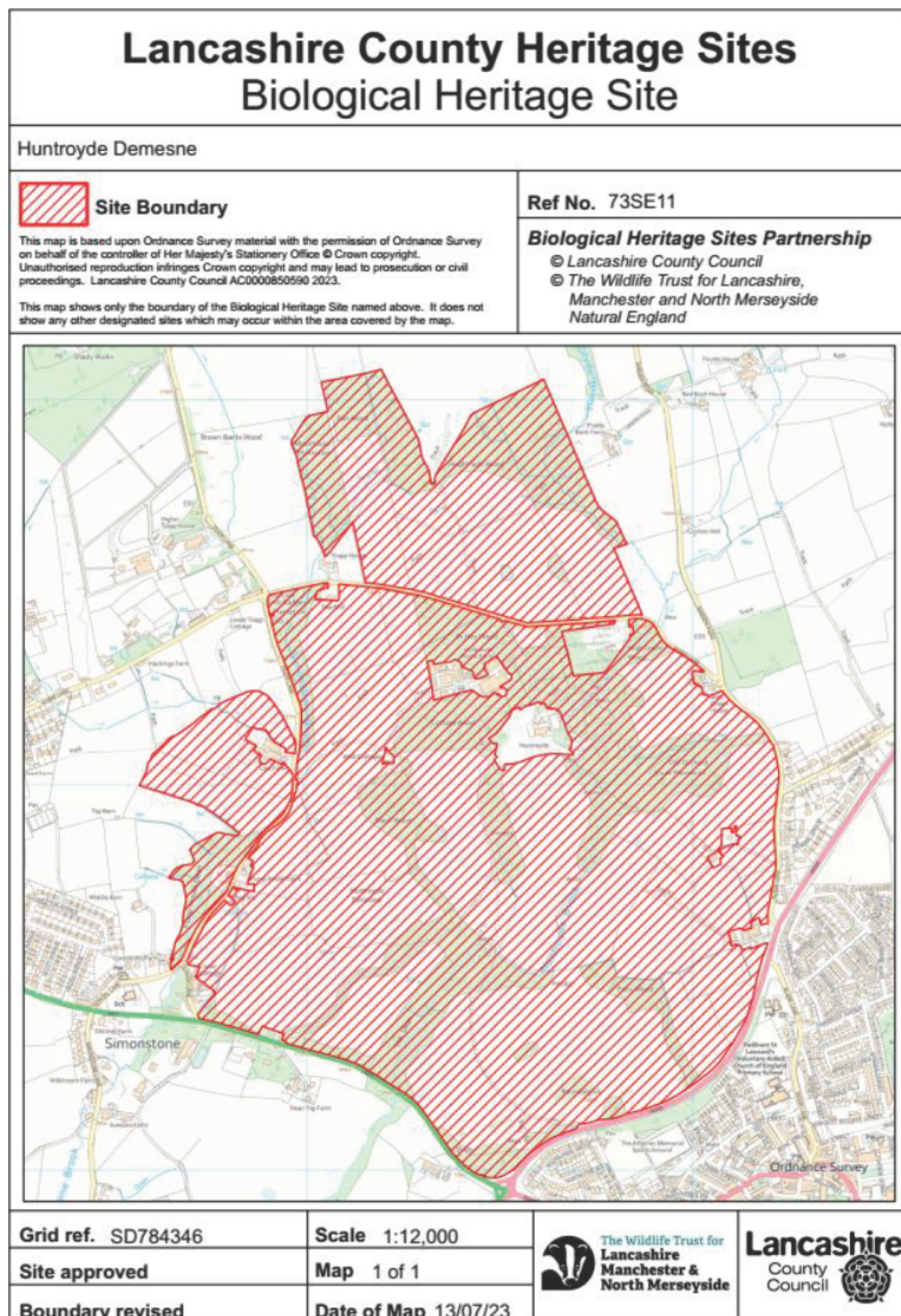
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Appendix 7 – MAGIC data



Appendix 8 – Ecological Data Search Information





Lancashire County Heritage Sites

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Site Name: Huntroyde Demesne

Site Ref: 73SE11

Approved: 01 September 1993

Area (ha): 206.3

Date written/last updated: 01 August 1998

Grid Ref: SD785346

Owner/Occupier: Private

Districts:

Burnley
Ribble Valley

Parishes:

Padiham
Simonstone

Description:

The site comprises an estate with a high proportion of broad-leaved woodland. Scattered parkland trees are also present and some of these are estimated to be over 200 years old. Such trees are a rare and threatened habitat in Lancashire. They include pedunculate and hybrid oaks, beech and ash. The white-letter hairstreak butterfly has been recorded at the site.

In the south of the site The Dean consists of a mature beech plantation with sycamore and pedunculate oak occupying a moderately steep-sloping clough above Dean Brook. Small areas of the wood are dominated by pine and larch. The understorey comprises rhododendron with hazel, hawthorn, holly and rowan. The field layer includes ramsons, opposite-leaved golden-saxifrage, bluebell, enchanter's-nightshade, wood horsetail, dog's mercury, wood-sorrel, wood sage and remote sedge. Giant hogweed is present.

In the south-east Fiery Wood comprises broad-leaved and mixed plantation. Sycamore and beech dominate with ash, pedunculate oak, wych elm, rowan and Scot's pine. There is a patchy understorey of hawthorn and holly and locally dominant rhododendron. Species present in the ground flora include bluebell, wood-sorrel, raspberry, foxglove, red campion, hedge woundwort and broad buckler-fern. A dried-up pond is being encroached by crack willow.

In the north Ox-Hey Wood and Badger Plantation are dominated by beech and/or sycamore with occasional pedunculate and hybrid oaks.

The site provides important habitats for breeding and wintering birds. Breeding birds include grey heron, sparrowhawk, woodcock, curlew, tawny owl, great spotted woodpecker, lesser spotted woodpecker, meadow pipit, pied wagtail, lesser whitethroat, willow warbler and nuthatch. Wintering birds include fieldfare, redwing, brambling and siskin.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd2)

Parkland and Scattered (Pk1)

Trees

Butterflies and Moths (Le4)?

Other Information/Comments:

Lancashire County Heritage Sites

Biological Heritage Site

Lower Dean Pasture



Site Boundary

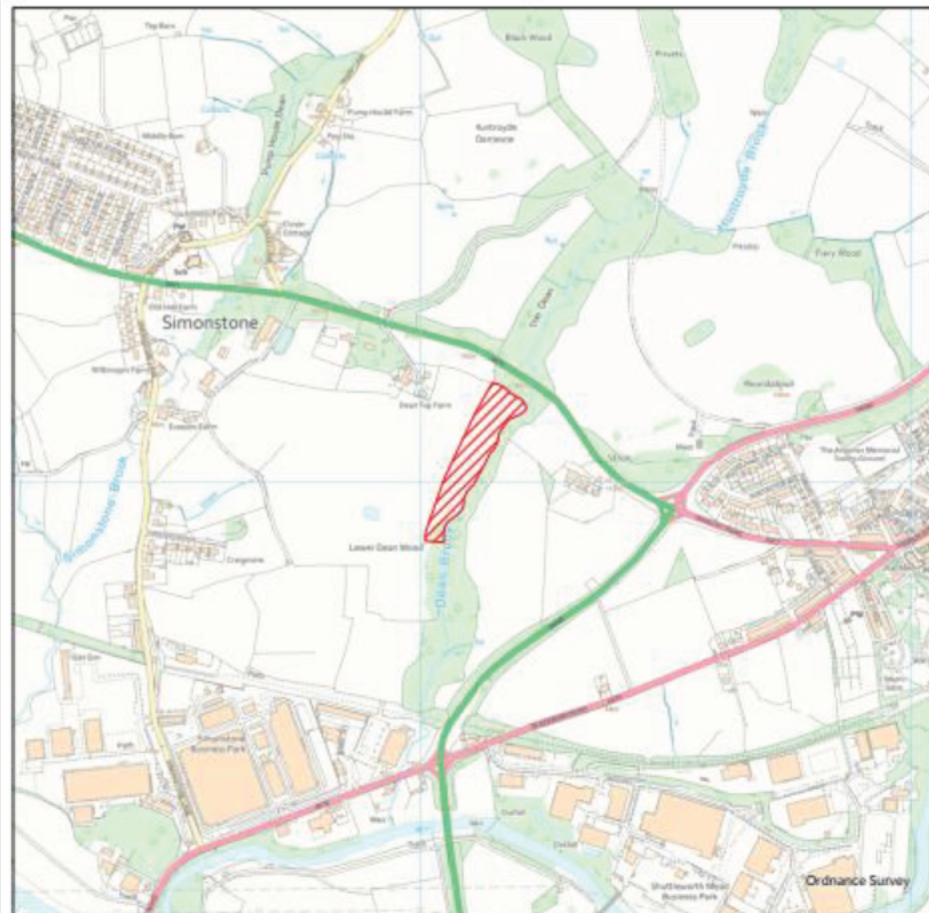
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Scale 1:10,000

Site approved

Map 1 of 1

Boundary revised

Date of Map 13/07/23



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Lancashire
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Site Name: Lower Dean Pasture

Site Ref: 73SE10

Approved: 08 September 1993

Area (ha): 2

Date written/last updated: 02 June 2014

Grid Ref: SD781340

Owner/Occupier:

Districts:

Ribble Valley

Parishes:

Simonstone

Description:

The site comprises of an area of semi-improved neutral and acidic pasture adjoining the west bank of Dean Brook below Dean Bridge, Simonstone.

The steep slopes are exceptional species-rich and comprise of a mosaic of neutral flushes and dry banks. Species present include frequent Large Bird's-Foot-Trefoil, Meadow Vetchling, Common Knapweed, Mat-Grass, Heath Bedstraw and Cat's-Ear with occasional Downy Oat-Grass, Burnet-Saxifrage, Yellow Oat-Grass, Great Burnet, Fairy Flax, Heath-Grass, Carnation Sedge, Glaucous Sedge, Mouse-Ear-Hawkweed, Lesser Stitchwort, Zigzag Clover, Field Wood-Rush, Common Bird's-Foot-Trefoil, Meadowsweet, Sneezewort, Selfheal, Common Dog-Violet and Autumnal Hawkbit. Also present are Bugle, Quaking-Grass, Betony, Common Fleabane, Ragged Robin, Yellow Pimpernel, Water Mint, and Marsh Marigold.

Guideline(s) for Site Selection:

Grassland (Gr3)

Other Information/Comments:

Lancashire County Heritage Sites

Biological Heritage Site

Lower Dean Wood



Site Boundary

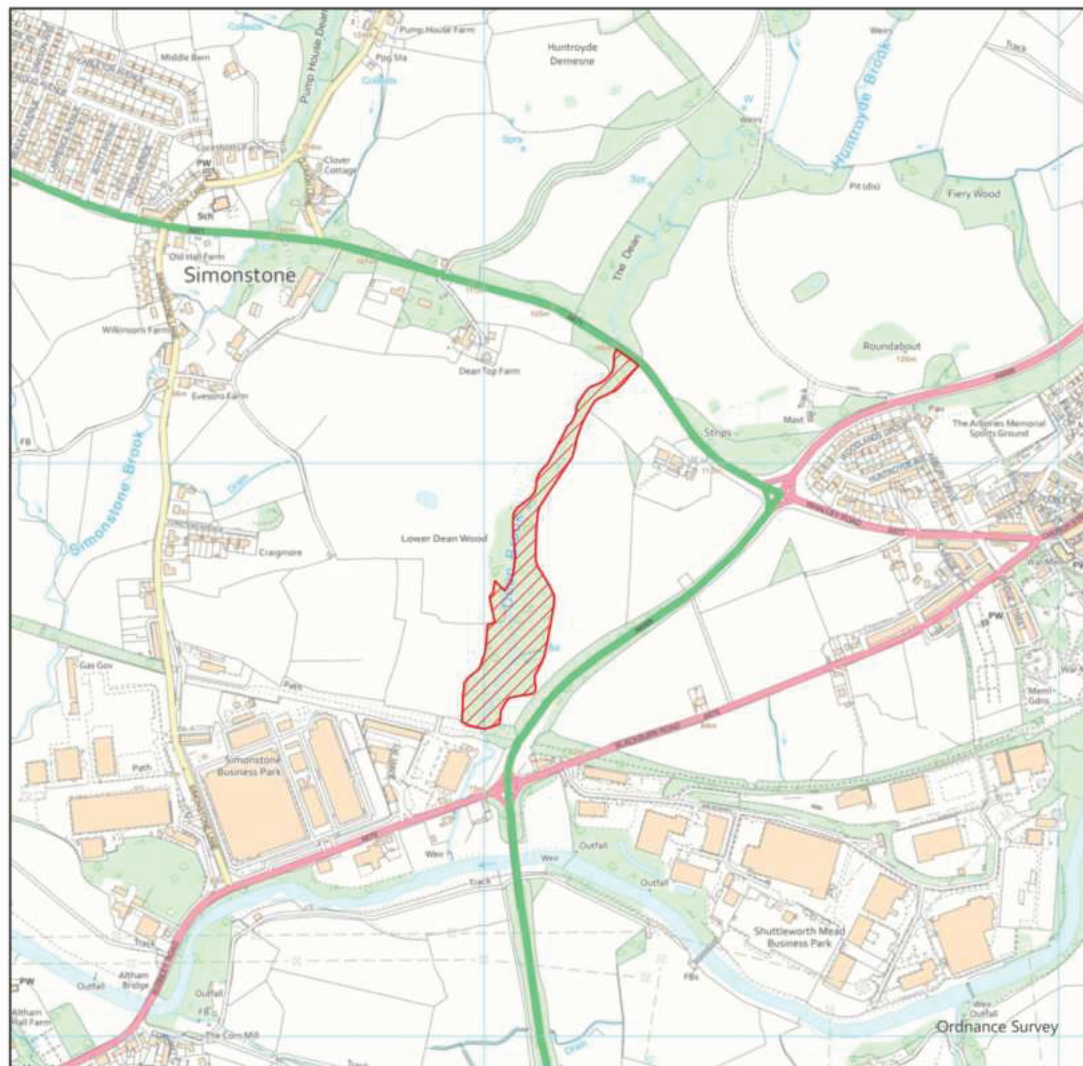
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Site Name: Lower Dean Wood

Site Ref: 73SE09

Approved: 01 September 1993

Area (ha): 3.92

Date written/last updated: 01 June 1998

Grid Ref: SD781338

Owner/Occupier: Private

Districts:

Burnley
Ribble Valley

Parishes:

Padiham
Simonstone

Description:

The site comprises plantation woodland on an ancient woodland site occupying a steeply sloping clough above Dean Brook.

The wood is dominated by sycamore and beech with occasional horse-chestnut and some, probably natural, wych elm, ash, pedunculate oak, alder, hawthorn, hazel and bird cherry. Rhododendron occurs frequently in the southern half of the wood, with occasional snowberry. The ground flora is dominated by creeping soft-grass, with abundant bluebell. Other species present include frequent dog's mercury, enchanter's nightshade, ivy, bracken and lady-fern and occasional common bistort and ramsons. A number of other species characteristic of ancient woodland are present on the lower slopes near the brook. These include wood anemone, opposite-leaved golden-saxifrage, wood avens, hairy woodrush, yellow pimpernel and wood sorrel. The upper slopes are species-poor.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd2)

Other Information/Comments:

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Biological Heritage Site

Bridge Hey Wood



Site Boundary

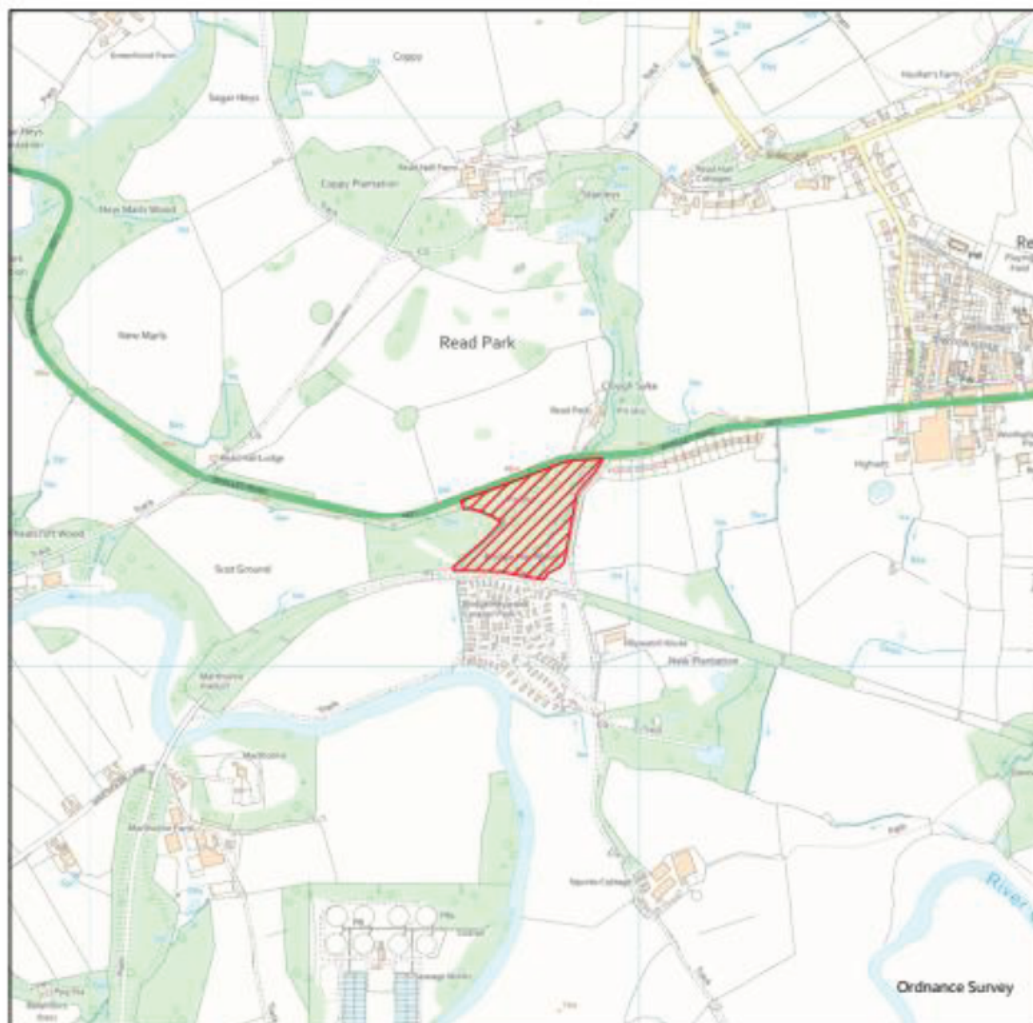
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Site approved

Map 1 of 1

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Site Name: Bridge Hey Wood

Site Ref: 73SE03

Approved:

Area (ha): 3.19

Date written/last updated:

Grid Ref: SD758342

Owner/Occupier:

Districts:
Ribble Valley

Parishes:
Read

Description:

The site comprises woodland which is ancient semi-natural in character.

Guideline(s) for Site Selection:

Woodland and Scrub (Wd2)

Other Information/Comments:



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Site Name: Read Heights Pasture

Site Ref: 73NE02

Approved: 08 September 1993

Area (ha): 11.6

Date written/last updated: 15 July 2011

Grid Ref: SD767357

Owner/Occupier: Private

Districts:

Ribble Valley

Parishes:

Read

Description:

The site consists of a large species-rich, semi-natural, neutral grassland field, with a flattish plateau on the brow of the hill and a steepish slope on the north side extending down to Back Lane. A wide, dry ditch runs roughly east-west across the field between the plateau and the northern slope. The slope is the most species-rich area, but most of the species are present throughout the field.

The sward is dominated by sweet vernal-grass and crested dog's-tail. Frequently occurring species include pignut, zigzag clover and field wood-rush whilst self-heal, common bird's-foot-trefoil, rough hawkbit, cat's-ear, autumn hawkbit, quaking grass, lady's mantle, common knapweed, eyebright and harebell all occur occasionally. Wood anemone occurs rarely.

The ditch provides additional interest and diversity to the site as its dry banks support a more acidic grassland/heathland community. Species include frequent wavy hair-grass, heath bedstraw, mouse-ear hawkweed and young heather, with occasional bilberry and mat-grass. Gorse occurs occasionally along the ditch and in the north-west corner of the field.

Guideline(s) for Site Selection:

Grassland (Gr3)

Other Information/Comments:

Lowland Meadows is a Priority Habitat in the UK Biodiversity Action Plan.

1.2.19 Shorten Brook

Address	
Area (sq m)	31644.305
East	377880
North	432219
Survey Date	21/10/19
Brief description and Key ecological features	Clough woodland with very steep wooded banks over its northern stretch and with some clearings of semi-improved acid and neutral grassland along its southern length.
Principal Habitats – present	Lowland mixed deciduous woodland (c 2.1 ha).
Irreplaceable habitat - present	
Principal Species – present or likely	
Protected Species – present or likely	Occasional bluebell (1981 W&C Act sch 8)
other species	Nothing recorded
Invasive non-native species present	Occasional Himalayan balsam
DM17 - Trees, Woodlands and Hedgerows: Initial assessment of habitat value and constraints of the site	High potential. Good area of semi-natural broadleaved clough woodland. Likely to provide habitat for a variety of notable woodland bird species. Occasional bluebell recorded in late October suggests that this species may be frequent in the spring.
DM18/19 - Natural Environment and Protected Species: Initial assessment of habitat value and constraints of the site	Medium potential. Open areas of semi-improved acid and neutral grassland in mosaic with the woodland add to its biodiversity potential.
Summary comment on whether the habitat value identified may represent a constraint on any development considerations	Locally valuable habitat that should be retained in full.
DWS assessment	Wd10 possible ancient woodland: Only 1 Table 1a species present but site is recognised as ancient woodland. Wd11 woodland: semi natural broad-leaved woodland 2.1 ha > required 0.5 ha, mostly mature so at least parts of wood are likely to match NVC communities. Wd12 woodland: 7 Table 1b species present (= required 7). Wd15 upland oak woodland: Likely to be present (oak F, birch O) but NVC community not fully assessed. Con1 connectivity: Adjacent to Leeds Liverpool Canal. DWS status should be considered under Wd10 ancient woodland, Wd11 woodland, Wd12 woodland, Wd15 upland oak wood and Con1 connectivity.
BHS assessment	Wd1 site of ancient woodland , but most of ancient features lost, hence DWS.
Recommendations for enhancement, expansion and reconnection	Semi-natural woodland should be managed by minimum intervention, including leaving standing and fallen deadwood for their biodiversity value. Ideally, non-native trees should be thinned (though old trees may be left to grow to over-maturity) and natural regeneration of native species encouraged.
Further survey	
Connectivity to other important sites	Adjacent to Leeds Liverpool Canal
Other issues	Shorten Brook is an Ancient Woodland site.

Appendix 9 – Building Photographs and Potential Roost Features Plan

Table 15: Building Photographs showing Potential Roost Features

Image	Description
Building 1	
	Photograph 1 – Building 1 was found to be a two storey semi-detached stone, residential building with a series of pitched roof sections supporting a slate roof.
	Photograph 2 – PRF 1: Missing and lifted tiles on the southern elevation of the building.

Image	Description
	Photograph 3 – PRF 2: Missing and lifted tiles on the northeastern elevation of the building.
	Photograph 4 – PRF 3: Missing and lifted tiles on the northern elevation of the building.
	Photograph 5 – PRF 4: Open window on the northern elevation of the building.

Image	Description
	Photograph 6 – PRF 5: Broken window on the western elevation of the building.
	Photograph 7 – The roof void of Building 1 was found to be lined with insulation and plastic lining.
Building 2	
	Photograph 8 - Building 2 was found to be a disused outbuilding previously used for storage. The building was found to consist of a red-brick structure with cement formed roof tiles.

Image	Description
	Photograph 9 – PRF1: Lifted roof tiles noted along the eastern aspect of the building.
	Photograph 10 – PRF 2: Missing roof tiles noted on the northeastern corner of the building.
	Photograph 11 – PRF3: Gap in the external brickwork on the northern aspect of the building which extended into the interior of the structure.

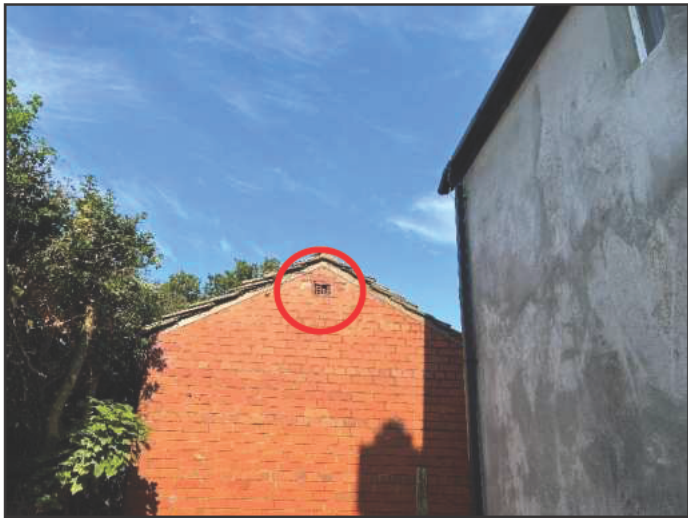
Image	Description
	Photograph 12 – PRF 4: Gap in the external brickwork on the southern aspect of the building which extended into the interior of the structure.
	Photograph 13 – PRF 5: Open window on the eastern elevation of the building.
	Photograph 14 – The interior of Building 2 was found to consist of timber frames and lining, with small amounts of bitumen chipboard noted on the southern end of the roof space.

Image	Description
	Photograph 15 – PRF 6: Rotten timber lining within the interior of the building.
	Photograph 16 – PRF 7: Hole within the bitumen chipboard lining in the southern section of the interior of the building.

Figure 10: Plan showing Potential Roost Features

