

Staden Lane, Buxton Preliminary Ecological Appraisal Report

Prepared for Fisher German

December 2025

Revision 02

Project Number:	TT4040
Project Title:	Staden Lane, Buxton
Document Reference:	R01-Ecology Report-Rev02

Document To:	Issued	Fisher German
Document By:	Issued	Turnstone Ecology Limited

Revision Number	Author(s)	Reviewer(s)	Issuer	Issue Date
REV00	MF Senior Ecologist	MG Director	MF Senior Ecologist	08/11/24
REV01	MF Senior Ecologist	MG Director	YE Ecologist	29/08/2025
REV02 (Minor BNG Amendments)	YE Ecologist			04/12/2025

This report has been prepared by Turnstone Ecology Ltd, with all reasonable skill, care and diligence within the terms of the Contract with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report may contain detailed information about protected species and is confidential to the client. We accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

SURVEY AND REPORT VALIDITY

It is important that planning decisions are based on up-to-date ecological reports and survey data. However, it is difficult to set a specific timeframe over which reports or survey data should be considered valid, as this will vary in different circumstances. In some cases there will be specific guidance on this (such as for the age of data which may be used to support a protected species licence application) but in circumstances where such advice does not already exist, the Chartered Institute of Ecology and Environmental Management (CIEEM) has provided the general advice set out below.

<i>Age of Data / Survey / Report</i>	<i>Validity</i>
Less than 12 months	Likely to be valid in most cases.
12-18 months	Likely to be valid in most cases with the following exceptions: • Where a site may offer existing or new features which could be utilised by a mobile species within a short timeframe; • Where a mobile species is present on site or in the wider area, and can create new features of relevance to the assessment; • Where country-specific or species-specific guidance dictates otherwise.
18 months to 3 years	A professional ecologist will need to undertake a site visit and then review the validity of the report. Some or all of the other ecological surveys updated.
Protected Species Licensing	Licence applications usually only possible using data less than 2 years old

The likelihood of surveys needing to be updated increases with time and is greater for mobile species or in circumstances where the habitat or its management has changed significantly since the surveys were undertaken. Factors to be considered include (but are not limited to):

- Whether the site supports, or may support, a mobile species which could have moved on to site, or changed its distribution within a site;
- Whether there have been significant changes to the habitats present (and/or the ecological conditions/functions/ecosystem functioning upon which they are dependent) since the surveys were undertaken, including through changes to site management;
- Whether the local distribution of a species in the wider area around a site has changed (or knowledge of it increased), increasing the likelihood of its presence.

Table of Contents

1	Introduction	6
1.1	Purpose of Report	6
1.2	Ecological Context	7
2	Methods.....	9
2.1	Desk-based Study	9
2.2	Baseline Habitat Assessment	9
2.3	Protected Fauna Survey and Assessment.....	9
	[REDACTED]	
2.3.2	Bats.....	10
2.3.3	Nesting birds.....	13
2.3.4	Great Crested Newt.....	13
2.3.5	Reptiles	13
2.4	Criteria for Assessment	14
3	Results.....	16
3.1	Desk Study	16
3.1.1	Designated Sites	16
3.1.2	Protected Species Licence Sites.....	16
3.1.3	Great Crested Newt Survey Returns	16
3.2	Ecological Surveys	16
3.3	Baseline Habitat Assessment.....	17
3.3.1	General	17
3.3.2	Building.....	17
3.3.3	Other Neutral Grassland	17
3.3.4	Modified Grassland	18
3.3.5	Ruderal/Ephemeral	19
3.3.6	Introduced Shrub	20
3.3.7	Line of Trees.....	20
3.3.8	Individual Trees.....	21
3.4	Biodiversity Net Gain Metric: Baseline Data	22
3.5	Protected Fauna	23
	[REDACTED]	

3.5.2	Bats.....	23
3.5.3	Birds	26
3.5.4	Great Crested Newt.....	26
3.5.5	Reptiles	26
4	Evaluation	28
4.1	Summary of Proposals.....	28
4.2	Designated Sites	28
4.2.1	Statutory Sites.....	28
4.3	Habitats, Impacts and Mitigation.....	29
4.3.1	General	29
4.3.2	Habitat Retention.....	29
4.3.3	Habitat Creation.....	30
4.4	Statutory Metric Summary	30
4.5	Protected Fauna	31
4.5.2	Bats.....	31
4.5.3	Birds	33
4.5.4	Great Crested Newt.....	33
4.5.5	Reptiles.....	34
5	Legal Protection	35
5.2	Bats	35
5.3	Nesting Birds.....	36
5.4	Great Crested Newt	36
5.5	Common Reptile Species.....	37
6	Biodiversity Net Gain Plans	38

1 INTRODUCTION

1.1 Purpose of Report

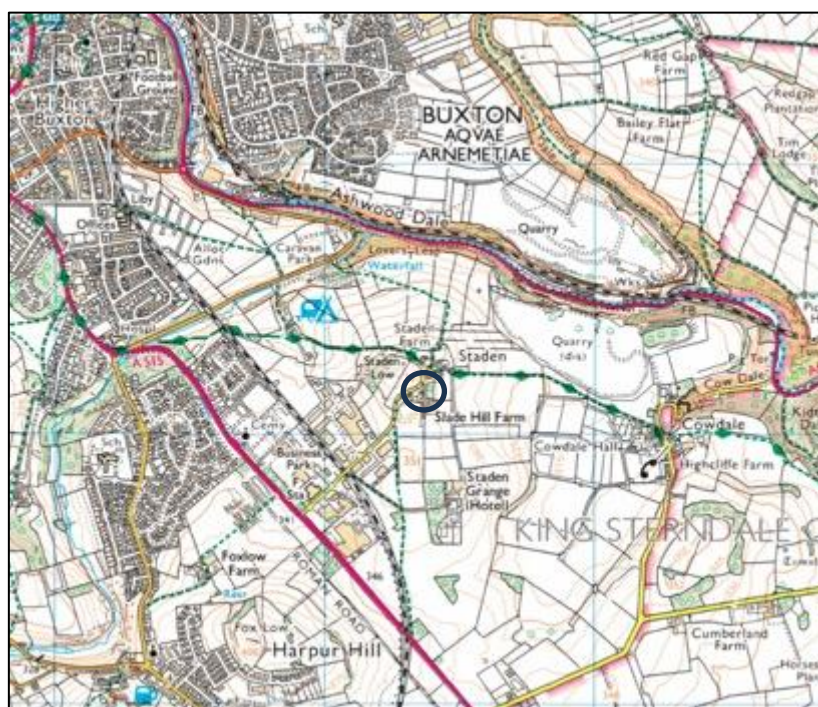
This report has been completed in connection with a proposed development on land at Staden Lane, Buxton (Grid Reference: SK 07394 72210). This report is to support an application for the conversion of the existing agricultural building on site and construction of an extension on the western aspect. The location of the Site is shown in *Figure 1*.

A site survey was carried out on 28th August 2024 by Senior Ecologist Anastasia Reeves and Ecologist Yasmin Evans, both of Turnstone Ecology. Acoustic / hibernation bat surveys were completed between October 2024 and March 2025 and Bat Activity Surveys were completed in June and July 2025, also by Turnstone Ecology.

In 2025, the site plans were altered to include a larger extension and driveway, therefore an updated survey was undertaken on the 19th of August 2025 by Senior Ecologist Molly Foulds of Turnstone Ecology. The surveys consisted of a UKHabs Habitat Survey, Preliminary Roost Assessment, condition assessments and protected species habitat suitability assessment.

This report details survey and assessment methodology and the results of a desk-based study and on-site surveys. It also provides an assessment of potential ecological impacts and appropriate mitigation to offset any ecological impacts associated with the proposal and to satisfy national and local planning policies.

Figure 1. Location of proposed development (black circle; © Microsoft Bing Maps 2024)



1.2 Ecological Context

The Site comprises a single farm building within grassland, with modified grassland to the south of the building and other neutral grassland to the north. The site is bounded by a line of trees along its western boundary and dry-stone walls line the other boundaries. Areas of ruderal vegetation, introduced shrub and scattered trees are also present throughout the site.

Other habitats surrounding the site include farm properties to the north and east, and agricultural fields to the south and west (*Figure 2*).

The wider area includes Staden Business Park to south-west of the site and areas of farmland to the north, south and east. The town of Buxton lies 2 km to the west (*Figure 3*).

Figure 2. Overview of the proposed development site (© Google Maps 2024).



Figure 3. Overview of the proposed development site and surrounding area (© Bing Maps 2024).



2 METHODS

2.1 Desk-based Study

Information relating to designated sites, sites where Protected Species Licences have been granted between 2012 and 2022 and historic records of protected species within 2 km of the proposed development site were updated for this report and obtained from Magic (www.magic.gov.uk) and other freely available information on the internet, such as planning portals.

A data request through the local environmental records centre was not undertaken as the site is small, the habitats that will be impacted are limited and it is very unlikely that the records obtained would impact the site assessment and mitigation proposed.

Any species-specific historic records are detailed within the relevant species accounts in the *Results* section.

2.2 Baseline Habitat Assessment

The survey methods were based on the UK Habitat Classification approach (<https://ukhab.org>, updated January 2021), which is a standardised method to survey main habitat types in the UK. Plant nomenclature in this report follows Rose (*Revised Edition 2006*) for native, naturalised and garden varieties of vascular plant. Introduced species and garden varieties are not always identified. UK Habitat Classification is the industry standard survey method used when determining baseline conditions for Biodiversity Net Gain Assessments using the Statutory Biodiversity Metric (<https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>).

The Statutory Biodiversity Metric calculation tool has been used to determine the baseline biodiversity units for this site and how the proposed development will impact biodiversity by calculating the lost, retained, enhanced and created habitats using a quantitative approach.

2.3 Protected Fauna Survey and Assessment

The habitats on site were assessed for suitability for protected fauna that occur in the region and obvious signs and incidental sightings of protected species were noted where present. Taking into consideration the geographical region and habitat types on and adjacent to site, the protected species and species groups that could be encountered are listed below.

- [REDACTED]
- Bats
- Nesting birds
- Great Crested Newts
- Reptiles

Details of initial survey methods for each relevant species are given below.

2.3.2 Bats

Habitats within and immediately adjacent to site were assessed for their suitability for use by foraging or commuting bats. Areas of particular interest vary between species, but generally include sheltered areas and those habitats with good numbers of insects, such as woodland, scrub, hedges, watercourses, ponds, lakes and more species-rich or rough grassland.

Preliminary Roost Assessment

A Preliminary Roost Assessment was conducted on the existing barn as proposals involve the conversion of this building. The Preliminary Roost Assessment was carried out on the 28th of August 2024 by Anastasia Reeves who is a licenced Senior Ecologist at Turnstone Ecology (2021-10045-CL20-BAT) and Yasmin Evans. The licence covers the disturbance of Bats in all counties in England.

The buildings were assessed for potential to support bat roosts, and this involved a consideration of various factors including;

- Light levels;
- Temperature regime and protection from weather;
- Access to the interior of the building or to other suitable roost sites;
- Potential roost sites;
- Building construction;
- Tree structure; and
- Habitat context.

Based on these factors, an assessment was made of whether the building affected by the proposals might support bats and the type and number of roosts that might be present.

A detailed inspection was made of the exterior and interior of any buildings within the proposed development boundary for any evidence of bat use, such as live or dead bats, droppings, scratch marks, staining and prey remains, and in some cases the absence of cobwebs. Large quantities of cobwebs in roof voids or at access points tend to be suggestive of no bat use, although this evidence is not conclusive. Features identified as possible bat access points or potential roosting locations were thoroughly searched where possible, using powerful torches and binoculars to facilitate the process. An endoscope and ladders were also used to enable more detailed inspection of cracks and crevices as far as access allowed.

The survey was undertaken in good light conditions and access to all areas of the building was possible. This type of survey can be completed at any time of year though the optimal time period for completion

is at times when bats are most likely to be present in buildings (April-October). That said evidence of bats, if present in sheltered locations, is likely to persist well beyond this time period.

Buildings and trees are categorised according to their suitability for roosting bats as follows (taken from Bat Survey Guidelines, 4th Edition):

Negligible – Negligible or no roosting features within the tree or building that could be used by roosting bats.

Low – A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e., unlikely to be suitable for maternity or hibernation).

Moderate – A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only).

High – A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. They could be suitable for maternity roosts or hibernation sites.

Confirmed – Roosting bats confirmed as being present, either by the discovery of live or dead bats, droppings, prey remains, scratching or fur-staining.

Habitats were also assessed for their suitability for use by foraging or commuting bats. Areas of particular interest vary between species, but generally include sheltered areas and those habitats with good numbers of insects, such as woodland, scrub, hedges, watercourses, ponds, lakes and more species-rich or rough grassland.

Activity Surveys

Dusk Emergence and Dawn Re-entry surveys are the primary methods for locating roosts in buildings or built structures, as bats are not always found by internal and external inspection surveys (*e.g.* if the bats roost in areas that cannot be searched and/or leave little or no visible trace). Dusk Emergence and Dawn Re-entry surveys can also give a reasonable estimate of the number of bats present and help understand how bats are using a site for foraging and commuting.

Due to the high potential of the building, three activity surveys were carried out by two experienced ecologists from Turnstone Ecology (*Figure 4*). Full survey details including the dates of surveys and weather conditions are shown in *Table 1* below.

The surveyors used Wildlife Acoustics EchoMeter Touch 2 Pro detectors, Canon XA11 and XA30 infrared cameras, Nightfox infrared cameras and infrared floodlighting. Surveyors were positioned so that all potential exit/re-entry points could be viewed. During the surveys, bat activity was recorded on survey forms including information on time, species recorded and behaviour. Continual recording was undertaken for the duration of each survey to ensure all bat activity was recorded. Audio tracks were downloaded and assessed using the Kaleidoscope software package to confirm the identity of bats recorded during the surveys.

The surveys at the proposed development site were undertaken in accordance with Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn, BCT, 2023) and covered the appropriate timings (up to 0.5 hours before sunset until at least 1.5 hours after sunset). The surveys were carried out during appropriate weather conditions (details presented in *Table 1*).

Table 1. Bat survey timings and weather conditions

	Dusk Survey 05/06/2025		Dusk Survey 08/07/2025		Dusk Survey 29/07/2025	
Time	Start 21:15	End 23:00	Start 21:19	End 23:04	Start 20:53	End 22:38
Sunset/rise	21:30		21:34		21:08	
Temp (°C)	21	19	21	20	14	13
Wind (Beaufort)	0	0	0	0	0	1
Cloud (Octas)	7	8	1	0	3	2
Precipitation	None		None		None	

Figure 4: Surveyor and Camera Locations



Hibernation Surveys

Automated/Static bat detectors were deployed to record potential bat hibernation activity on site from October 2024 to March 2025, to establish if the building was being used as a hibernation roost. One Wildlife Acoustic Song Meter Mini static detector was deployed within the interior of the building.

Recordings were scheduled to be constant (i.e., 24hrs a day, 7 days a week) within the building. Once completed calls were manually analysed using Wildlife Acoustics Kaleidoscope software and note was taken of all other species utilising the site.

Activity levels were analysed following species analysis to determine whether bats were regularly using the building as a hibernation roost.

2.3.3 Nesting birds

Habitat that might be used by nesting birds was identified and actively nesting birds or evidence of nesting birds noted where present.

Different bird species use buildings, trees and shrubs, undergrowth or even open fields for nesting and suitability of the site for use by a range of nesting bird species was considered.

2.3.4 Great Crested Newt

The suitability of any aquatic and terrestrial habitat on the site, and in the immediate vicinity, was assessed for suitability for use by Great Crested Newts (*Triturus cristatus*). Great Crested Newts are known to travel up to 500m between breeding ponds and suitable terrestrial habitat, however, are only likely to travel up to 250m away from a breeding pond if there is suitable terrestrial habitat within that distance. Therefore, a desk-based search was undertaken for any ponds up to 250m from the site using OS maps and aerial imagery. The terrestrial habitat between the site and these ponds, and therefore connectivity to the site, was also considered.

2.3.5 Reptiles

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

- Common Lizards (*Zootoca vivipara*) use a variety of habitats from woodland glades to walls and pastures, although one habitat they use is brownfield sites;
- Slow-worms (*Anguis fragilis*) use similar habitats to Common Lizards, and are often found in rank grassland, gardens and derelict land;

- Grass Snakes (*Natrix natrix*) have broadly similar requirements to Common Lizards but with a greater reliance on ponds and wetlands, where they prey on amphibians;
- Adder (*Vipera berus*) use a range of fairly open habitats with some cover but are most often found in dry heath.

2.4 Criteria for Assessment

The scientific value of habitats for nature conservation is assessed according to widely accepted criteria of which the most important are naturalness, extent, rarity, and diversity.

The assessment of impacts is based on the principles within Chartered Institute of Ecology and Environmental Management (CIEEM) Environmental Impact Assessment (EIA) Guidance (2022) which assesses the impacts of the proposal on ecological receptors taking into consideration extent, duration, reversibility, timing, frequency, and certainty.

Mitigation and enhancement are designed to reduce the level of impact upon receptors and provide ecological enhancement in order to meet current legislation and planning policy. The information below has therefore been considered during assessment.

- Criteria that have been developed to assist in the identification of statutory Sites of Special Scientific Interest (SSSIs) (JNCC 2013)
- Habitats and species of Principal Importance included under Section 41 (England) and Section 42 (Wales) of the Natural Environment and Rural Communities (NERC) Act 2006
- The legal status of habitats and species according to the EU ‘Habitats’ Directive 1992
- CIEEM Guidelines (2022) for assessing the value of ecological receptors within a defined geographical context using the following categories: international (*i.e.* Europe); UK and national (England); regional; county; Unitary Authority; local or parish; and zone of influence. Receptors are identified as ‘important’ at these levels, or as ‘not important’
- Species protected by the Habitats and Species Regulations 2017 and the *Wildlife and Countryside Act 1981* (as amended)
- Other species listed as scarce or notable in literature issued by conservation organisations or learned societies *e.g.* vascular plant species listed in Stewart *et al.* (1994) and Red and Amber List Birds of Conservation Concern (Stanbury *et al.* 2021)
- Local Wildlife Site selection criteria
- National Policy Planning Framework (NPPF), 2023
- BS42020:2013 – Biodiversity Code of practice for planning and development
- Protected species handbooks and best practice guidelines
- Peak District Biodiversity Action Plan (LBAP), which identifies and prioritises national biodiversity targets in the local context¹.

¹ <https://reports.peakdistrict.gov.uk/naturerecovery/>

Biodiversity net gain is required in England under a statutory framework introduced by Schedule 7A of the Town and Country Planning Act 1990 (inserted by the Environment Act 2021). This statutory framework is referred to as biodiversity net gain in Planning Practice Guidance. Under the statutory framework for biodiversity net gain, subject to some exceptions, every grant of planning permission is deemed to have been granted subject to the condition that the biodiversity gain objective is met. This objective is for development to deliver at least a 10% increase in biodiversity value relative to the pre development biodiversity value of the onsite habitat. This increase can be achieved through onsite biodiversity gains, registered offsite biodiversity gains or statutory biodiversity credits.

The biodiversity gain condition is a pre-commencement condition: once planning permission has been granted, a Biodiversity Gain Plan must be submitted and approved by the planning authority before commencement of the development. There are exemptions and transitional arrangements which disapply the condition from certain planning permissions, as well as special modifications for planning permissions for phased development and the treatment of irreplaceable habitats.

The statutory framework for biodiversity net gain also includes provisions about information requirements for planning applications and the treatment of the condition on decision notices on the grant of planning permission.

3 RESULTS

3.1 Desk Study

3.1.1 Designated Sites

There are four statutory designated sites within a 2 km radius of the site boundary including one Special Conservation Area (SAC), two Sites of Special Scientific Interest (SSSI) and one Local Nature Reserve (LNR):

- The Peak District Dales SAC lies 0.9 km to the north of the Site and is designated for both its semi-natural dry grasslands, its population of important orchids and its Tilio-Acerion forests off slopes, screes, and ravines. It is also designated for its population of White Clawed Crayfish (*Austropotamobius pallipes*).
- The Wye Valley SSSI lies approximately 0.9 km north of the Site and is designated for its important carboniferous limestone and dale side grasslands.
- Poole's Cavern and Grin Low Wood SSSI lies approximately 1.5 km west of the Site and is designated for its geological interest, as well as the surrounding woodland and grassland. Poole's Cavern itself is used as both a summer and winter roost by several species of *Myotis* bat.
- Ferneydale Grassland LNR lies approximately 1.31 km south-west of the Site and is designated for its mosaic of limestone grassland, small stream and associated areas of wet grassland;

3.1.2 Protected Species Licence Sites

There is one protected species license within 2 km of the site boundary:

- 2019-40669-EPS-MIT lies approximately 1.68 km north-west and was issued in 2019 for the damage and destruction of a resting place of Brown Long-Eared Bat (*Plecotus auratus*) and Common Pipistrelle (*Pipistrellus pipistrellus*).

3.1.3 Great Crested Newt Survey Returns

No Great Crested Newt survey returns were recorded within 2 km of the site boundary.

3.2 Ecological Surveys

UK Habitats Classification was used to record habitat types within and immediately adjacent to the proposed development site. These habitats are listed below:

- Building
- Other Neutral Grassland
- Modified Grassland
- Ruderal/Ephemeral Vegetation
- Introduced Shrub
- Line of Trees
- Individual Trees

The site or immediately adjacent areas contain habitat suitable for the protected species and species groups listed below:

- 
- Bats
 - Nesting birds
 - Great Crested Newt
 - Reptile species

3.3 Baseline Habitat Assessment

3.3.1 General

The Site is comprised of a single farm building set within grassland. The north of the site is Other Neutral Grassland with scattered trees. The south of the site is modified grassland with areas of ruderal vegetation and a small area of Introduced Shrub to the east of the building. There is a line of trees along the western boundary of the site, and the remainder of the property boundaries are dry-stone walls.

Habitats surrounding the site include properties to the north and east and agricultural land to the north and west. Staden Business Park lies south-west of the site.

3.3.2 Building

There was a single farm building present on site, which is discussed further in the 'Bats' section.

3.3.3 Other Neutral Grassland

Unmanaged Other Neutral Grassland was present to the north of the building (*Plate 1*). The sward was approximately 80cm and uniform across the site. The grassland was composed of abundant Yorkshire Fog (*Holcus lanatus*), frequent Cock's Foot (*Dactylis glomerata*), occasional Ribwort Plantain (*Plantago lanceolata*), Broadleaved Dock (*Rumex obtusifolius*), White Clover (*Trifolium repens*), Common Couch (*Elymus repens*), Creeping Bent (*Agrostis stolonifera*) and Peppermint (*Mentha × piperita*). Rare species included Creeping Soft-Grass (*Holcus mollis*), Cleavers (*Galium aparine*), Herb Robert (*Geranium robertianum*), Wood Avens (*Geum urbanum*) Hemlock (*Conium maculatum*), Red Clover (*Trifolium pratense*), Timothy (*Phleum pratense*) and Sweet Vernal Grass (*Anthoxanthum odoratum*). Common Nettle (*Urtica dioica*) and Great Willowherb (*Epilobium hirsutum*) were locally dominant.

This other neutral grassland was assessed as **Poor** condition, only passing criteria A and B.

Plate 1. Area of Other Neutral Grassland, as seen from the north of the site



3.3.4 Modified Grassland

To the northwest of the farm building, the grassland is modified, with tall forbs present (*Plate 2*). The sward was unmanaged and stood at approximately 70cm. False Oat Grass (*Arrhenatherum elatius*) was abundant, while Coltsfoot (*Tussilago farfara*) and Common Nettle are frequent. Occasional species include Cock's Foot, Yorkshire Fog, Hedge Woundwort (*Stachys sylvatica*) and Ground Elder (*Aegopodium podagraria*).

This other modified grassland was assessed as **Poor** condition, passing criteria B and C.

Plate 2. Modified grassland as seen from the north.



3.3.5 Ruderal/Ephemeral

Patches of ruderal vegetation were present to the north of the farm building (*Plate 3*). These areas were dominated by Common Nettle, with abundant Field Bindweed (*Convolvulus arvensis*) and occasional Broadleaved Dock

The ruderal/ephemeral passed only Criteria C and was therefore categorised as **Poor** condition.

Plate 3. Ruderal vegetation on site as seen from the north-east.



3.3.6 Introduced Shrub

A stand of Cherry Laurel (*Prunus laurocerasus*) is present to the east of the farm building (*Plate 4*). It was not applicable to complete a condition assessment for this habitat.

Plate 4. Stand of Cherry Laurel, as seen from the south.



3.3.7 Line of Trees

A line of trees made up the western boundary of the site (*Plate 5*). Species included Sycamore (*Acer pseudoplatanus*), Ash (*Fraxinus excelsior*), Wild Cherry (*Prunus avium*) and Dogwood (*Cornus sanguinea*).

Passed conditions A, B and E and therefore this Line of Trees has been assessed as **Moderate** condition.

Plate 5. Line of trees along western boundary as viewed from the east.



3.3.8 Individual Trees

There were some individual trees scattered throughout the site. Three small Wild Cherry trees, a small Turkey Oak (*Quercus cerris*) and three small Ash trees. Each tree was assessed individually.

- Wild Cherry: passed conditions A, D and F. Condition **Moderate**.
- Turkey Oak: passed conditions B, D and F. Condition **Moderate**.
- Ash: passed conditions A, D and F. Condition **Moderate**.

Plate 6. Individual scattered trees throughout the site.



3.4 Biodiversity Net Gain Metric: Baseline Data

The red line development area totals 0.14 Ha with 0.05 km of hedgerows. Individual area sizes per habitat were measured during the 2024 survey when habitat borders were defined and mapped. Where condition scores differed across the site for the same habitats these have been separated out to ensure proposed management prescriptions can be targeted per habitat and are based upon the current baseline habitat conditions.

A summary of the habitats present on site, current habitat condition scores and their total area size (per habitat) in hectares can be seen in *Table 1* with the same for hedgerows shown in *Table 2*. Habitat/hedgerow unit values, as calculated using the Statutory Biodiversity Metric Tool have also been included within the tables below.

Table 1. Area sizes and condition scores for all baseline habitats present on site

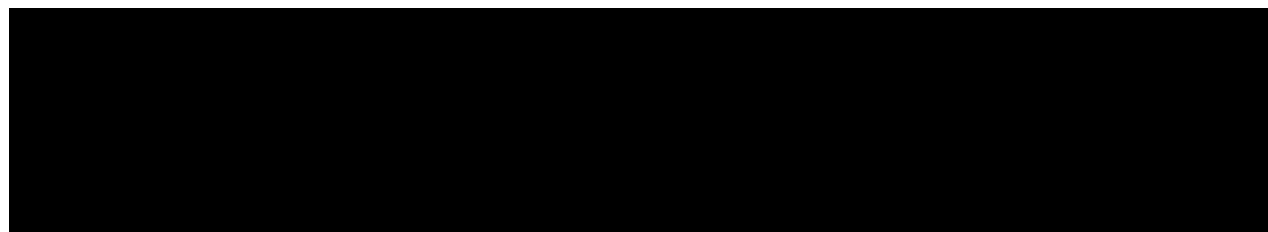
Habitat Type	Condition	Area Size (Ha)	Habitat Units
Other Neutral Grassland	Poor	0.0187	0.07
Modified Grassland	Poor	0.0221	0.04

Habitat Type	Condition	Area (Ha)	Size	Habitat Units
Tall Forbs	Moderate	0.0765		0.31
Ruderal/Ephemeral	Poor	0.0085		0.02
Developed land; sealed surface	N/A - Other	0.0083		0
Introduced Shrub	Condition Assessment N/A	0.0057		0.01
Individual Tree	Moderate	0.0285		0.23
Total: (Not including individual trees)		0.1398		0.68

Table 2. Length and condition scores for all baseline hedgerows present on site

Hedgerow Ref	Hedgerow Type	Condition	Length (km)	Hedgerow Units
H1	Line of Trees	Moderate	0.047	0.19

3.5 Protected Fauna



3.5.2 Bats

There are nine records of bat within 2 km of the Site including Common Pipistrelle, Soprano Pipistrelle (*Pipistrellus pygmaeus*), Brandt's Bat (*Myotis brandtii*) and Daubenton's Bat (*Myotis daubentonii*).

The site offers suitable foraging and commuting habitat for bats in the form of its grassland, ruderal/ephemeral vegetation and line of trees, with nearby woodland located to the west of the site.

Preliminary Roost Assessment

Barn B1

B1 is a single-storey stone built barn with a pitched tile roof (*Plate 7*). The roof was in moderate condition with occasional slipped tiles. Stone ridge tiles were present and were also in moderate condition, with gaps present under several tiles and vented ridge tiles. Large wooden barn doors were present on the northern aspect, with large gaps and crevices present around the door frame and the door lintel. Ventilation slit windows were present at the top of the walls on all aspects. Windows were present on the southern aspect with stone window lintels (*Plate 8*). Overall, the stonework was in poor condition with numerous gaps and cracks across all aspects, a large crack was present on the south

eastern aspect where the building has started to subside. These gaps in the stonework lead to complex crevice features offering a range of roosting opportunities with a range of microclimates.

Internally, the roof was unlined with timber ridge board, rafters, purlins and king post truss (*Plate 9*). The ceilings were high, with the building open from ground level to the top of the pitch roof, and a mezzanine level to the west. The windows allowed some light in, but it was still generally dark along the ridgeline to the west. The stonework was in poor condition, with numerous gaps and holes present, some of these gaps extended into large internal cavities with small crevice features present between the pieces of stone (*Plate 10*). A small concentration of likely bat droppings were present on the floor in the centre of the mezzanine level beneath the ridge alongside a small number of moth wings (*Plate 11*).

Potential roost features present within B1 included: gaps under slipped tiles, gaps under the stone ridge, gaps between the door frame and lintel and stonework, gaps at wall tops and large cavities and small crevice features within internal and external stone wall. Evidence of roosting bats was present in the form of a concentration of probable Brown Long-eared Bat (*Plecotus auritus*) droppings and feeding remains.

B1 was categorised as a *Confirmed Roost* and offering *High* potential suitability for roosting bats, with the crevice and cavity features in the stone walls offering suitable hibernation features.



Plate 7. Northern aspect of B1



Plate 8. Southern aspect of B1



Plate 9. Internal of B1



Plate 10. Example of cavity stonework



Plate 11. Bat droppings and moth wings in B1

Bat Activity Surveys

Following the results of the preliminary roost assessment, bat activity surveys were undertaken to record the use of the building by bats and to categorise any roosts which may be present.



Small numbers of Common Pipistrelle, Soprano Pipistrelle (*Pipistrellus pygmaeus*) Brown Long-eared, *Myotis* species and Noctule (*Nyctalus noctula*) were recorded commuting through the site and foraging around the garden. The activity was generally low with individual passes recorded occasionally throughout the surveys.

Hibernation Surveys

The static detector registered small numbers of registrations during the night throughout the survey period. Species recorded on site by the static detector included only Common Pipistrelle and Soprano Pipistrelle.

The above demonstrates that bats are not utilising the site as a hibernation roost as activity levels were low, with no consistent calls within the building.

3.5.3 Birds

During the survey visit nesting Barn Swallow (*Hirundo rustica*) were present inside the barn and the building also provides suitable habitat for roosting and nesting Barn Owl (*Tyto alba*), although there was no evidence of Barn Owl within the building. There is also suitable habitat on site for other nesting birds including the line of trees, individual trees, taller grassland and ruderal and introduced shrub. The dry-stone wall also provides some habitat for nesting species such as Wren (*Troglodytes troglodytes*).

The site does not provide suitable habitat for species of open-grassland (e.g. Lapwing (*Vanellus vanellus*) or Skylark (*Alauda arvensis*)) either during the breeding season or wintering due to its small size and the habitats available on site.

3.5.4 Great Crested Newt

No records of Great Crested Newt were found within 2 km of the site.

On OS Mapping, it was noted that one pond was located 100m south of the site. However, following aerial inspection this pond was no longer present and was instead a residential garden with a large polytunnel.

The application site supports habitats (grassland and ruderal vegetation) that are suitable for terrestrial phase Great Crested Newt moving across the site. The dry-stone walls and building on site offers hibernation potential for Great Crested Newts, although given the lack of local records and absence of suitable breeding habitat this species is considered to be absent from the site.

3.5.5 Reptiles

There is one record of a lizard species (presumed Common Lizard) located within 2 km of the site boundary. No evidence of reptiles was recorded during the survey.

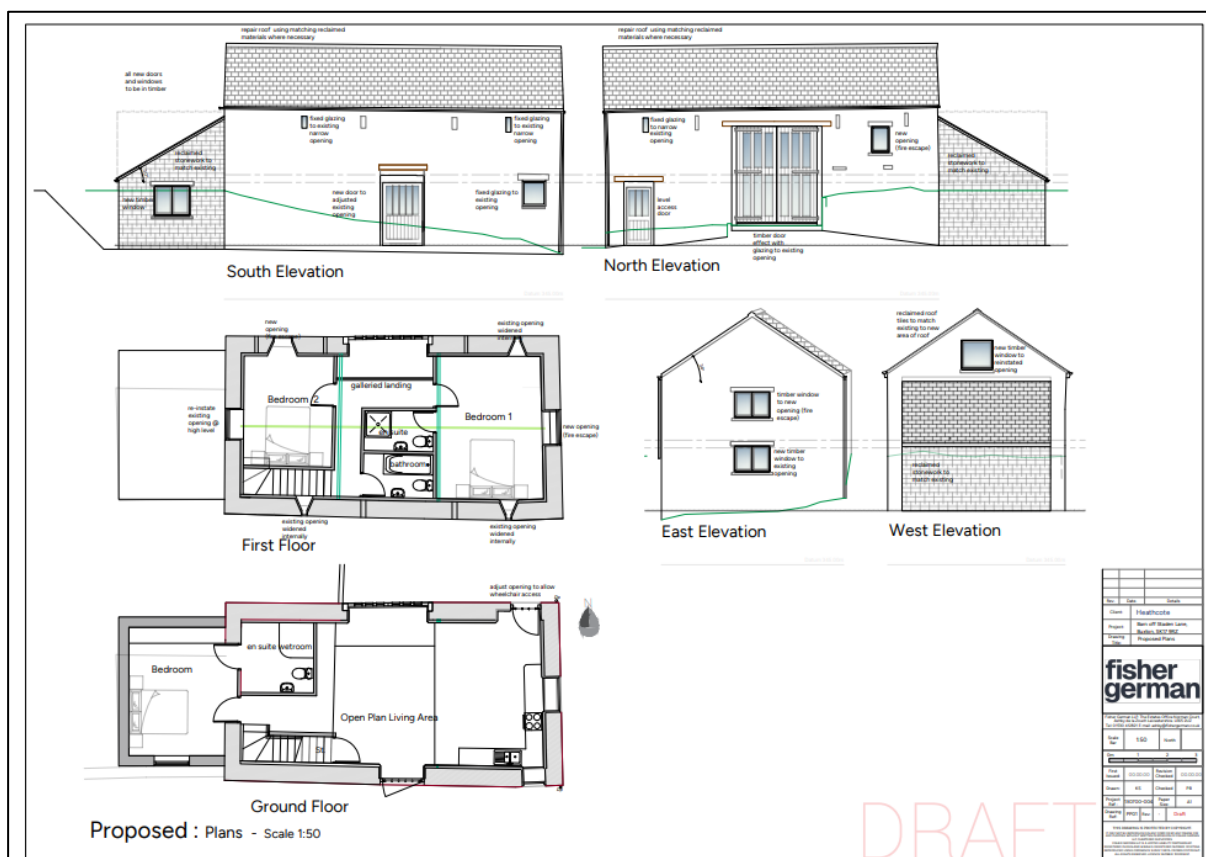
The habitats present on the Site provide some suitable foraging habitat for reptiles including grassland and ruderal vegetation. A dry-stone wall made up the eastern boundary of the site, which provides optimal shelter for reptiles.

4 EVALUATION

4.1 Summary of Proposals

The proposals include the renovation of the existing farm building on site and the construction of an extension on the properties western aspect as well as works to create a driveway and improve access to the site. Site proposals can be seen in *Figure 5*.

Figure 5. Site proposals including building elevations



4.2 Designated Sites

4.2.1 Statutory Sites

- Peak District SAC approximately 0.9 km north;
- Wye Valley SSSI approximately 0.9 km north;
- Poole's Cavern and Grin Low Wood SSSI approximately 1.5 km west; and
- Ferneydale Grassland LNR approximately 1.13 km south west.

The conversion and extension of an existing agricultural building in to an individual residential dwelling approximately 0.9 km away from component parts of the Peak District SAC is unlikely to result in significant negative impacts on the designated site either during construction or occupation of the dwelling. It is recommended that best practise measures are used to ensure no emissions or pollution

reach the SAC or any other designated sites. As the site is only 0.2 km from an active business park, and lies downhill from the SAC, it is unlikely that any construction related vehicle emissions or pollution (e.g. noise, dust) will affect these component parts of the wider SAC, due to the small scale of the project and the pollution control measures that will be put into place.

Again given the scale of the proposals it is also unlikely that any construction related emissions, or pollution will adversely impact any of the Local Nature Reserves or SSSIs that are within 5 km of the application site.

The proposed dwelling will be of modern construction and will therefore be energy efficient and well-insulated. The property is likely to be occupied by an individual family / couple and as such it is near-certain that this will not result in significant increases in either visitor pressures on designated sites, including the SAC or component parts of the SAC, or daily vehicle movements within any zone of influence of the designated site(s).

It is therefore recommended that a Habitat Regulations Assessment should be screened out mainly as a result of the size and scale of the proposed development and the absence of significant negative impacts or pressures on the Peak District SAC or its component parts or on other designated sites (e.g. LNRs) within 5 km of the application site.

4.3 Habitats, Impacts and Mitigation

4.3.1 General

The proposed development will directly affect an area of other neutral grassland and modified grassland to facilitate the construction of an extension and driveway. Other vegetative habitats within the site will become vegetative garden as they will be managed by the new homeowner. The line of trees and individual trees are to be retained and protected. The proposed areas of groundworks will be confined to areas that will not impact on the root systems of these features.

4.3.2 Habitat Retention

The proposed development will result in the retention of the following habitats:

Table 3. Retained and enhanced on-site habitat areas

Habitat Type	Area to be retained (Ha)	Area to be enhanced (Ha)
Developed land; sealed surface	0.0083	0
Individual Trees	0.0285	0

Table 4. Retained and enhanced onsite hedgerow lengths

Hedgerow Type	Length to be retained (km)	Length to be enhanced (km)
Line of trees	0.047	0

4.3.3 Habitat Creation

The proposed development will result in the creation of an extension to the existing building and a private driveway in the north of the site. The surrounding habitat of the existing building is to become vegetated garden. The areas of proposed habitats are displayed in *Table 5*.

Table 5. Proposed on-site habitat creation (red line development area only)

Proposed development	Habitat Type	Condition Score	Area (Ha)	Habitat Units
Extension and Driveway	Developed land; sealed surface	N/A - Other	0.0089	0
Privately managed garden	Vegetated Garden	Condition Assessment N/A	0.1226	0.24
Total:			0.1315	0.24

4.4 Statutory Metric Summary

The proposed development will result in a net loss of 0.22 habitat area units which equates to a **-31.81% net loss on habitats**. There is no change in hedgerow linear units as all hedgerows are to be retained, and no new hedges created within proposals. Approximately, **0.28 habitat area units and 0.02 hedgerow linear units** are needed to achieve at least 10% net gain. As all habitat within the site is to be managed by the future homeowner, a net gain is unlikely to be achieved onsite. As such, offsite habitat units will be brought.

Based on current proposals and in absence of agreement of purchase of off-site units trading rules have not been met for habitat area units. Trading rules would however be met through the purchase of off-site habitat units.

Biodiversity Net Gain habitat plans and full habitat trading rules tables can be seen in Appendix 6 and 7.

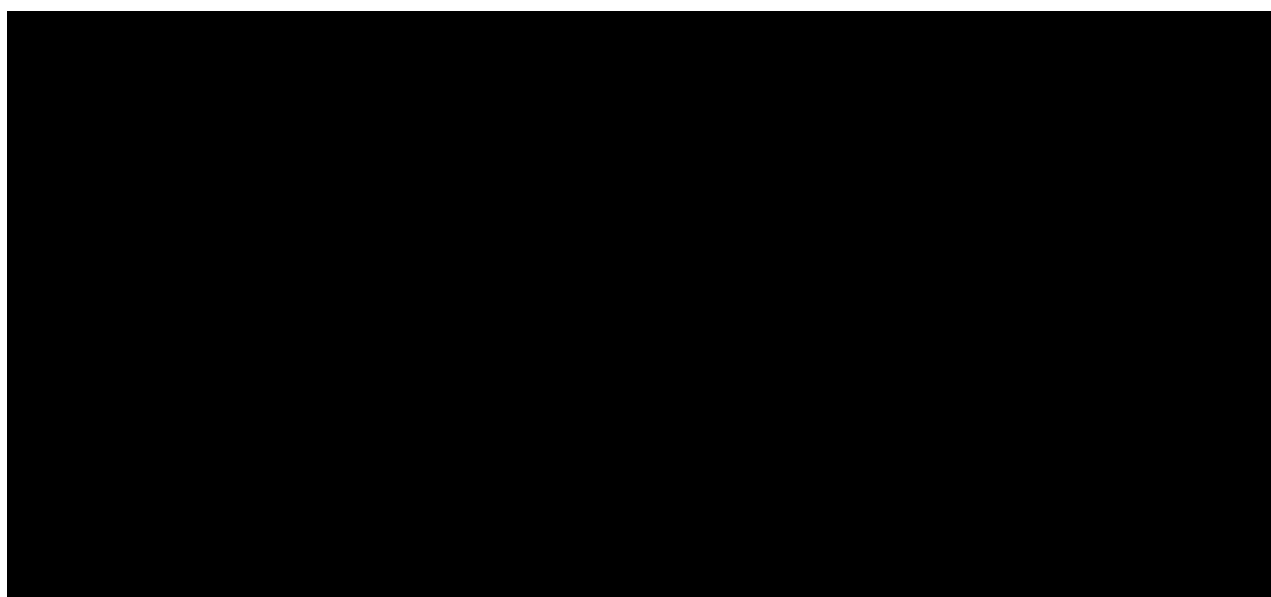
Figure 6. Statutory Metric Summary

On-site baseline	Habitat units	0.68
	Hedgerow units	0.19
	Watercourse units	0.00
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.46
	Hedgerow units	0.19
	Watercourse units	0.00
On-site net change (units & percentage)	Habitat units	-0.22
	Hedgerow units	0.00
	Watercourse units	0.00
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.22
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-31.81%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.68	0.75	0.28
Hedgerow units	10.00%	0.19	0.21	0.02
Watercourse units	10.00%	0.00	0.00	0.00

4.5 Protected Fauna

To protect species of note and maintain and increase biodiversity of the site, the following mitigation measures and safe working methods will need to be incorporated into the proposals.



4.5.2 Bats

Impacts

There are several records of bat within 2 km of the site, and the site offers suitable foraging and commuting habitat for bats in the form of its grassland, and trees both on site, and in the local area. Suitable habitats with the wider site and adjacent to the site will not be impacted by the proposed development.

Based on the results of the Preliminary Roost Assessment the building was assessed being a *Confirmed* bat roost as well as having *High* potential suitability to support roosting bats (*e.g.* larger colonies, hibernation roosts). No bats were recorded emerging from the building during the activity surveys, therefore it is likely that the roost within the building will be categorised as a feeding perch however, this will be confirmed following the return of DNA results from the droppings.

Mitigation

Full details of the mitigation strategy will be agreed following the DNA results, but provisional working methods to be followed by site staff is detailed below. The safe working methods and mitigation measures are likely to include:

- Works are not to commence until a protected species licence from Natural England has been received which covers works affecting the existing known roost. The site will be registered on the Bat Low Impact Class Licence (BLICL) scheme.
- Works will take place during the active bat season and under supervision of a licenced bat worker in accordance with the licence application. Works to the building will not be completed in the core winter / hibernation period (November to February).
- Prior to the start of works, a suitably qualified ecologist will deliver a toolbox talk to contractors and staff on site, informing them of the likelihood of encountering bats, what to do if they find a bat or bats, and will include a brief overview of the licence documents. The placement of any scaffolding will also be confirmed during this meeting.
- Works affecting roosting locations will be undertaken when overnight temperatures are consistently above 9°C.
- A pre-works check will be conducted by a licenced ecologist of all known and potential roosting locations around the working areas, both internally and externally where impacts are to take place. Any potential roosting locations will be checked, and if the entirety of a feature can be searched and found to be empty, the feature will be blocked using newspaper. If the feature cannot be fully searched it will be excluded using folded acetate or a similar material to allow bats to leave the feature but not re-enter. If exclusions are used, they will be left in place for a minimum of five nights in suitable weather conditions. Following this, they will be filled using the same methods as stated above.
- If bats are found during works, they will be caught by a licensed ecologist wearing suitable gloves. The bat will be placed into a cloth bag and carefully placed into a bat box previously erected on a tree or building on-site.
- No breathable membranes or dry ridge methods will be used in the works.

Enhancements for roosting bats (in line with NPPF) will include the provision of a small number of bat boxes (up to two) on the building to provide new roosting and feeding opportunities. The specification and location of these boxes will be confirmed once the DNA results on the droppings have been returned. Any enhancements will be included in the BLICL application sent to Natural England.

The results of the hibernation survey confirmed that the building does not contain a hibernation roost, therefore no additional mitigation and or enhancement for hibernating bats is required.

No additional external lighting is proposed at this stage, but any new lighting will reflect the Bat Conservation Trust Bats and Lighting in the UK guidance (2023) and will include directing lighting away from all existing or new roost locations on the site and the use of downlighting to ensure that suitable foraging and commuting habitats remain unlit.

4.5.3 Birds

There was some suitable habitat for nesting birds within the site boundary, including the trees, grassland and ruderal vegetation. The building also provided suitable habitat for species such as Barn Owl and Barn Swallow, although no evidence of Barn Owls was not present.

The site does not provide suitable habitat for species of open-grassland (e.g. Lapwing (*Vanellus vanellus*) or Skylark (*Alauda arvensis*) either during the breeding season or wintering due to its small size and the habitats available on site.

Vegetation should be cleared outside of the breeding bird season which is between March-August. If breeding bird season cannot be avoided, then a suitably qualified ecologist will conduct a nesting bird check prior to clearance. Vegetation will need to be cleared within 24 hours of a nesting bird check, or an additional check will be needed.

A pole mounted owl box will be positioned in the south of the site, backing onto arable land to provide new habitat for owls and Barn Swallow cups should be installed onto the renovated building to mitigate the loss of Barn Swallow habitat.

Any enhancement of onsite habitats would increase foraging and nesting opportunities for breeding birds. This planting could include native, fruit bearing species which will create an overall benefit for the local breeding bird population.

4.5.4 Great Crested Newt

The scrub and grassland, provide some limited suitability for use by terrestrial Great Crested Newt however there are no known records within 2 km of the site. A small area of grassland is proposed for removal to provide space for the extension, and the building itself is to be renovated. As habitats on site such as dry-stone walls and trees are expected to be largely retained, and the lack of records within 2km of the site, there is not expected to be a significant impact on Great Crested Newts.

There were no ponds within 250m of the site and therefore Great Crested Newt using the site is unlikely. However, due to the habitat suitability for terrestrial Great Crested Newt, precautionary safe working methods and mitigation measures should always be used:

- Pre and during construction, building materials should be stored raised up off the ground (i.e. on pallets) and away from the site boundaries.
- Any excavated earth should be removed off-site the same day it is excavated where possible however if it is to be stored on site temporarily it should be stored in bulk bags or a skip away from the site boundaries to reduce the risk of amphibians using it for cover.
- If a Great Crested Newt is found at any stage of the works, then works will cease and an appropriate course of action agreed with Natural England (likely to be obtaining a mitigation licence before works can re-start).

4.5.5 Reptiles

Habitat on site provides some foraging habitat for reptiles including grassland and ruderal vegetation. The dry-stone wall at the east of the property provides optimal habitat for reptiles. One record of an unknown lizard was recorded within 2 km of the site boundary. No evidence of reptiles was recorded during the survey.

The scope of the project means that the majority of suitable habitats, including the dry-stone walls, on site are to be retained, meaning there should not be a significant loss of habitat for reptiles. A small loss of habitat will occur through the renovation of the house and proposed extension and therefore appropriate safe working methods should always be used to ensure no commuting reptiles are harmed. These methods and measures will be the same as for Great Crested Newt detailed above.

5 LEGAL PROTECTION

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

5.2 Bats

All species of British bat are protected by *The Wildlife and Countryside Act 1981* (as amended) extended by the *Countryside and Rights of Way Act 2000*. This legislation makes it an offence to:

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

Bats are also listed on *Schedule 2* of the *Conservation of Habitats and Species Regulations 2017* under *Regulation 41*. This legislation makes it an offence to:

- deliberately capture, injure or kill a bat;
- deliberately disturb bats in such a way as to be likely to (a) impair their ability to: (i) to survive, to breed or reproduce, or to rear or nurture their young, or (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or b), to affect significantly the local distribution or abundance of the species to which they belong; and
- damage or destroy a breeding site or resting place of a bat; and
- possess, control, transport, sell, exchange a bat, or offer a bat for sale or exchange.

Where it is necessary to carry out an action that could result in an offence under the *Conservation of Habitats and Species Regulations 2010* (SI 2010/490) it is possible to apply for a Protected Species Mitigation Licence from Natural England (NE). Three tests must be satisfied before this licence (to permit otherwise prohibited acts) can be issued:

- Regulation 53(2)(e) states that licences may be granted to “preserve public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.”
- Regulation 53(9)(a) states that a licence may not be granted unless “there is no satisfactory alternative”.
- Regulation 53(9) (b) states that a licence cannot be issued unless the action proposed “will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range”.

5.3 Nesting Birds

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

The legislation makes it an offence to intentionally:

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

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

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

5.4 Great Crested Newt

Great Crested Newt is listed on *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), and receive full protection under *Section 9*. This species is listed on *Schedule 2* of the *Conservation of Habitats and Species Regulations 2017* which gives them full protection under *Regulation 41*. Protection was extended by the *Countryside and Rights of Way Act 2000* (the CRow Act).

Under the above legislation, it is an offence to:

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

- sell or attempt to sell any such species.

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

5.5 Common Reptile Species

Common Lizard, Grass Snake, Slow-worm and Adder are listed under *Schedule 5* of the *Wildlife and Countryside Act 1981* (as amended), in respect of *Section 9(5)* and part of *Section 9(1)*. This protection was extended by the CRow Act.

Under the above legislation, it is an offence to:

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

6 BIODIVERSITY NET GAIN PLANS

Figure 7. Baseline Habitat Plan



Figure 8. Proposal Habitat Plan



Figure 9. Retention Plan

