

Outbuilding at 2 Churchill Road, Chipping Norton, Oxfordshire OX7 5HW

Ecological Impact Assessment

September 2023

on behalf of Mr & Mrs Goodway

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Client	Mr & Mrs Goodway	
Job name	Outbuilding at 2 Churchill Road, Chipping Norton, Oxfordshire OX7 5HW	
Survey dates	10 th August 2023, 23 rd August 2023 & 13 th September 2023	
Report date	19 th September 2023	
Report title	tle Ecological Impact Assessment Report	
Reference W5324_rep_Outbuilding at 2 Churchill Road_19-09-23		

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1 Executive Summary

Site Details	2 Churchill Road is located to the north side of Churchill Road, to the southern end of Chipping Norton in Oxfordshire, OX7 5HW. The approximate Ordnance Survey grid reference for the site is SP 311 265.		
Proposals	There is a proposal to convert the outbuilding to create a single dwelling and garaging to serve 2 Churchill Road with the associated works to include formation of a new access.		
Methodology	 The Multi-Agency Geographic Information for the Countryside (www.magic.gov.uk) website was searched for information regarding internationally protected sites (e.g. Special Areas of Conservation) within 5km of the site and statutory sites of nature conservation importance (e.g. Sites of Special Scientific Interest) within 1km of the site. An extended Phase 1 habitat survey was undertaken on 10th August 2023. An initial bat survey/preliminary roost assessment was also undertaken on the same day. This was followed by bat activity (dusk emergence) surveys on the 23rd August 2023 and 13th September 2023. 		
Evaluation	 The site comprises an outbuilding and the gardens of 2 Churchill Road, which includes a driveway with a gravel parking area, patioed areas, lawns and tree, shrub and herbaceous planting. It should be noted that the dwelling will not be impacted by the proposals and therefore does not form part of this study. Boundaries are formed by stone walls. All habitats within the site are considered to have ecological value at the site level only or negligible ecological value in the case of hard standing and artificial unsealed surfaces. Species of moth included under Section 41 of the NERC Act 2006 could use habitats such as the grassland, trees, shrubs and sections of hedges. The site contains habitats, such as trees, shrubs and short hedges that offer potential nesting sites for nesting birds. The bat surveys undertaken at the site found no bat roosts in association with the outbuilding. The site provides potentially suitable habitat for hedgehogs. Given the context of the site and the habitats that are present, protected species such as rare and/or protected plant, amphibians, reptiles, badgers and otters are considered to be absent. 		
Impact Assessment	• The proposals will result in the conversion of the outbuilding and the vast majority of the existing garden habitats will be retained. The proposals will not result in any significant ecological impacts on habitats of 'principal importance'.		

	 Works to remove any woody vegetation may result in the damage or destruction of active birds' nests. 		
	 No significant impacts on bats are predicted under The Conservation of Habitats and Species Regulations 2017 (as amended) a European Protected species (bat) licence will not be required for the proposed works to proceed. 		
	• The proposed development is unlikely to result in any significant impacts on other protected species, including rare or scare plants, invertebrates, reptiles, amphibians, badgers and hedgehogs.		
Recommendations	The retained trees will be protected in accordance with British Standard 5837:2012, with the establishment of an appropriate root protection zones.		
	Wildlife friendly landscape planting will be incorporated into the landscaping		
	of the new cottage garden.		
	It is recommended that woody vegetation should be undertaken outside of the breeding bird period. It is recommended that nesting opportunities for birds are enhanced through the integration of bird boxes.		
	A precautionary approach is recommended for the conversion of the outbuilding with regard to bats. It is recommended that roosting opportunities for bats are maintained through erection of a bat box.		
	A precautionary working method statement has been devised for hedgehogs which may be present within the site in low numbers.		



2 Introduction

2.1 Site Description & Context

2 Churchill Road, referred to as the 'site' for the purposes of this report, is located to the north side of Churchill Road, to the southern end of Chipping Norton in Oxfordshire, OX7 5HW. The approximate Ordnance Survey grid reference for the site is SP 311 265. Location plans for the site are presented in Appendix 1 and photographs in Appendix 2.

The site comprises a detached dwelling and outbuilding, as well as the gardens of the property. The gardens are dominated by amenity grassland (lawn) and areas of hard standing/artificial unsealed surfaces (gravel drive and parking area, as well as patios and paths). Flowerbeds and shrub and tree planting are present to the peripheries of the front and rear gardens. The boundaries are marked by stone walls. The dwelling will not be affected by the proposals and therefore was not included within this study, the focus of the study is the outbuilding and surrounding south-eastern section of the property.

The site is located in a suburban location, being situated to the southern side of the market town of Chipping Norton in the county of Oxfordshire. Other residential properties and their gardens bind the site in all directions; built development dominates the land use surrounding the property. A school playing field is located approximately 65m to the east of the site.

There are pockets of habitats of ecological importance within the locality of the site, as shown on the Multi-Agency Geographic Information for the Countryside (MAGIC) website. These include a series of deciduous woodlands along the eastern edge of Chipping Norton, with the closest woodland being located 180m to the north-west of the site.

2.2 Proposal Plans

There is a proposal to convert the outbuilding to create a single dwelling and garaging to serve 2 Churchill Road with the associated works to include formation of a new access.

Please refer to Appendix 3 for the proposal plans.

2.3 Aims of Study

The aims of this study are to describe and evaluate the habitats present and to assess the potential for the site and outbuilding to support protected and notable species. The report discusses the likely impacts of development on the ecology of the site, on valued habitats and on protected/notable species. The study also makes recommendations for appropriate mitigation measures and habitat enhancement with regard to habitats and species.

One specific aim of this study is to undertake a daytime survey of the outbuilding for bats and/or evidence of bats and undertake two dusk emergence surveys of the outbuilding to ascertain the presence/likely absence of bats. The study assesses the overall potential of the building to support roosting bats and discusses the likely impact of the proposed conversion works on bats and their habitats.

The report makes recommendations for appropriate mitigation, compensation and enhancement measures and the potential impacts are assessed in accordance with the legal protection afforded to bats under The Conservation of Habitats & Species Regulations 2017 (as amended). The need for a European Protected Species (Bat) licence is also discussed in light of the impact assessment.

3 Methodology

3.1 Desk Study

The Multi-Agency Geographic Information for the Countryside (<u>www.magic.gov.uk</u>) website was searched for information regarding internationally protected sites (e.g. Special Areas of



Conservation) within 5km of the site and statutory sites of nature conservation importance (e.g. Sites of Special Scientific Interest) within 1km of the site.

Other Internet resources interrogated as part of the desk study include:

- The Ordnance Survey www.ordnancesurvey.co.uk
- Bing Maps www.bing.com/maps
- Google Earth

In addition, Section 41 of the Natural Environment and Communities (NERC) Act 2006, the Wild Oxfordshire website were also consulted to gather information pertaining to priority habitats and species for conservation action at the national and local level.

3.2 Field Surveys

3.2.1 Weather Conditions

An extended Phase 1 habitat survey and preliminary roost assessment (PRA) were undertaken on the 10th August 2023. The weather on the day was warm (21°C), dry, clear (0% cloud cover) and there was light air to a light breeze (Beaufort Scale 1-2).

3.2.2 Personnel

The field surveys carried out on the 10th August 2023 were undertaken by Tracy Gray *BSc*, an experienced ecologist. Miss Gray holds a licence from Natural England to survey for bats within all counties of England (Natural England Level 2 WML-CL18 Licence 2015-14396-CLS-CLS) and has over twelve years of experience in undertaking bat surveys.

3.2.3 Preliminary Roost Assessment (PRA)

A detailed internal and external survey of the outbuilding was undertaken using a 1 million candlepower torch and close-focusing binoculars in order to look for bats and/or evidence of bats and to assess the potential suitability of the outbuilding to support roosting bats.

The internal spaces and external elevations of the outbuilding were inspected for evidence of bats including, bat droppings, urine stains, feeding remains (such as moth wings) and characteristic fur staining around access points.

Notes were made on the relative freshness, shape and size of bat droppings and the location and quantity of any feeding remains. 'Clean' gaps and crevices within the structure of the buildings were looked for as this can indicate where bats may have gained access the fabric of the buildings. The survey was undertaken according to the best practice guidelines published by the Bat Conservation Trust in 2016 (Collins, 2016).

The study also takes into account the structure and ecological context of the site, including the following factors which may increase the likelihood of roosting bats being present:

- Age of the building (pre-20th Century or early 20th Century construction)
- Nature of construction; traditional brick, stone or timber construction
- Large and complicated roof void with unobstructed flying spaces
- Large (>20 cm) roof timbers with mortise joints, cracks and holes
- Entrances and gaps for bats to fly and crawl through
- Poorly maintained fabric providing ready access points for bats into roofs, walls; but at the same time not being too draughty and cool.
- Roof warmed by the sun, south-facing roofs in particular
- Weatherboarding and/or hanging tiles with gaps
- Undisturbed roof voids



- Buildings and built structures in proximity to each other providing a variety of roosting
 opportunities throughout the year
- Buildings or built structures close to good foraging habitat, in particular mature trees, parkland, woodland or wetland, especially in a rural setting

The following criteria are used for as guidelines for assessing the potential suitability of buildings for bats (Collins, 2016):

Table 1. Criteria for the assessment of	of buildings for roosting	bats (Collins 2016)
	n bullulligs for roosully	bats (0011113, 2010).

Suitability	Description of Roosting Habitats
Negligible	Negligible habitat features likely to be used by roosting bats.
Low	A structure or tree 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 or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after the presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitats.

Presence of roosting bats can be established during a preliminary roost assessment. This is where evidence is found to show that a structure is used by bats, this includes:

- bats seen roosting or observed flying from a roost or freely in the habitat;
- droppings, carcasses, feeding remains etc. found and/or
- bats heard 'chattering' inside a roost on a warm day or at dusk

Where the possibility that bats are present cannot be eliminated or evidence of bats is found during the building inspection survey, then further surveys (such as winter hibernation, presence/absence and/or roost characterisation) are likely to be necessary if impacts on the roosting habitat (or the bats using it) are predicted.

In addition to the bat survey, the buildings were assessed for their suitability to support breeding birds. The survey involved a search for evidence of birds including inactive and active nests, droppings, eggs and feathers.

3.2.4 Bat Activity Survey

Bat activity (emergence) surveys of the outbuilding were conducted at dusk on the 23rd August 2023 and 13th September 2023 in accordance with best practice (Collins, 2016) in order to ascertain presence/likely absence of bat roosts within the outbuilding.

For details of the surveyors during the survey please see Table 2 below and Figure 1 contains a plan of the location of the surveyors during dusk emergence watches.

Table 2. Bat activity survey schedule.

Date	Surveyors	Structure
23.08.23 DUSK	Olly Bevan (Natural England WML-CL17-Level 1 2021-53108-CLS-CLS) Tracy Gray (Natural England Level 2 WML-CL18 2015-14396-CLS-CLS)	Outbuilding
13.08.23 DUSK	Jan-Piet Stuursma (Natural England WML-CL18-Level 2 2018-37063-CLS- CLS) Tracy Gray (Natural England Level 2 WML-CL18 2015-14396-CLS-CLS)	Outbuilding

Please refer to Table 3 for timings and weather conditions during the bat activity survey and Figure 1 for the location of surveyors for the survey.

Table 3. Timings and weather conditions during bat activity survey of the outbuilding.

Date	Timing	Sunset	Temp (Start)	Temp (Finish)	Weather (at start of survey)
23.08.23	20:00-21:45	20:12	21°C	19°C	Overcast (80% cloud cover), dry with light air to a light breeze (Beaufort Scale 1-2)
13.08.23	19:14-20:30	19:29	16°C	12°C	Light cloud (30% cloud cover), dry with light air (Beaufort Scale 1)

The surveyors were equipped with Echometer Touch 2 Pro bat detectors to listen to and record bat calls. The Echometer Touch allows for real-time analysis of sonograms.

Considering the repair of the outbuilding and roosting opportunities that it possesses to offer shelter to roosting bats ('moderate' potential suitability to offer shleter to roosting bats), two bat emergence surveys of the outbuilding are considered appropriate in order to ascertain presence/likely absence of bat roosts in combination with the results of the preliminary roost assessment.



Figure 1. Position of the surveyors during the dusk emergence surveys undertaken of the outbuilding at 2 Churchill Road, Chipping Norton. The yellow dots indicate the location of the surveyors.



3.3 Limitations on Survey Data

As with any survey undertaken on a certain date, the data presented within this report provide information at a particular point in time and presents a 'snap-shot' of the ecological status of the site. Ecosystems and species behaviour/activity are dynamic and can change over time.

Whilst this report presents a characterisation and evaluation of habitat and species status at the time of the study, it should not be taken as an exhaustive representation of the ecological status of the site either at present or into the future.

A very small number of bat droppings (4 bat droppings) that are characteristic in shape and size of the brown long-eared bat *Plecotus auritus* were identified within the far north-western room on the first floor. These droppings appear to date from the start of current season of 2023/end of the 2022 survey season. Two further bat droppings were also observed, one on a stored item in the central room and one on the floor of the south-eastern room. These bat droppings are characteristic in size and shape of the pipistrelle *Pipistrellus* sp. bat. The evidence of bats found in association with the rooms of the first floor does not necessarily indicate that a bat roost is present, given the small number of droppings and their age. Taking into account the evidence, the status of the outbuilding and its context, the building is considered to have 'moderate' potential suitability to offer shelter to roosting bats, and therefore two dusk emergence surveys are considered appropriate in order to ascertain the presence/likely absence of bats within the outbuilding.

It should be noted that the new Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition), published by the Bat Conservation Trust are now available, as of 15th September 2023. The suite of bat surveys undertaken at 2 Churchill Road were designed and undertaken prior to the new best practice guidelines being published. Therefore, the surveys were undertaken according to the 3rd Edition of the best practice guidelines which were current at the time, this is not considered to be a constraint.

3.4 Evaluation Methodology

The evaluation of habitats follows the geographic frame of reference presented within the *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* version 1.1 (CIEEM, 2018).

The Chartered Institute of Ecology and Environmental Management (CIEEM) guidelines recognise that ecological evaluation is a 'complex and subjective process' but provides key considerations to apply when 'applying professional judgement to assign values to ecological features and resources. These include consideration of geographic frame of reference; site designations and features; biodiversity value; large populations or important assemblages of species; potential or supporting value; social value and economic value.

Focusing on assessments of biodiversity value, there are various characteristics that can be used to identify ecological resources or features that are likely to be important in terms of biodiversity. These include:

- Rare or uncommon species in the local, national or international context;
- Endemic or locally distinct sub-populations of a species;
- Species on the edge of their distribution;
- Notably large populations of animals or concentration of animals considered uncommon or threatened in a wider context;
- Species, rich assemblages of plants or animals;
- Ecosystems and their component parts, which provide the habitats required by the above species, populations and/or assemblages;
- Plant communities (and associated animals) considered typical of valued natural/seminatural vegetation types; and
- Habitat diversity, connectivity and/or synergistic associations.



In this report, habitats are assigned to a value relating to their geographic frame of reference, using the following scale:

- International
- UK
- National (England)
- Regional (South East)
- County (Oxfordshire)
- District (West Oxfordshire)
- Local or parish (Chipping Norton)
- Immediate zone of influence of the site (Site)
- Negligible

4 Results & Evaluation

4.1 Desk Study

4.1.1 National Character Profile

Chipping Norton in the West Oxfordshire District of Oxfordshire. It is covered by the Cotswolds National Character Area (NCA) as defined by Natural England.

This NCA contains nationally important beech woods which are a feature of the landscape and are a notable feature on the scarp edge and in a number of the incised valleys. Mixed oak woodlands are concentrated on the upper slopes of valleys and on the flat high wold tops. Woodlands can contain a wide and notable range of calcicole shrubs and ground flora. Parkland and estates are characteristic of the area. Farming is mixed, with much of the high wold dominated by arable on thin, brashy soils prone to erosion. Pasture is predominant in the valleys, and in particular on steeper slopes and on more clayey soils. Meadows and treelined watercourses are found along the valley bottoms.

Important habitats include limestone grassland along the scarp, for example Rodborough Common Special Area of Conservation (SAC) and wet meadows with alder *Alnus glutinosa* and willow *Salix* sp. and springline flushes. Two further SACs are also present within this NCA: Cotswold Beechwoods SAC and Bath and Bradford-on-Avon Bats SAC. Steeply-incised stream and river valleys cut through the north-west facing scarp, flowing westwards towards the River Severn. The watercourses of the dip slope provide headwaters of the River Thames and flow eastwards within broad shallow valleys, and these rivers and underlying aquifer are an important supply of high-quality water for populations within and around the area.

The Cotswolds has a rich biodiversity and is particularly important for its internationally renowned beech wood hangers, and nationally important limestone grassland and associated species such as the Duke of Burgundy butterfly *Hamearis lucina*, the large blue butterfly *Phengaris arion* and many farmland birds. It is also important for species such as greater horseshoe bat *Rhinolophus ferrumequinum*, holding 15 per cent of the UK's population. The network of habitats, in particular beech hangers and limestone grassland, along the scarp edge are a good foundation for an ecological network running north to south. The rivers that run west to east, including the Evenlode, Windrush and Coln, and their associated habitats also serve as an important ecological network. Both networks could be enhanced to increase their biological value and to aid biodiversity in adapting to changes in climate.

4.1.2 Sites of Nature Conservation Importance

The site is not located within, or adjacent to, any sites of nature conservation importance.



4.1.2.1 Statutory Sites

There are no statutory sites of nature conservation importance within a 1km radius of the site and there are no internationally designated sites of nature conservation importance within a 5km radius.

4.2 Habitats

Appendix 1 presents an aerial photograph of the site and shows the location of the survey area within the surrounding landscape. Photographs of the site are presented in Appendix 2.

4.2.1 Overview

The site comprises a dwelling and outbuilding set within a garden (front and rear). The garden is dominated by amenity grassland (lawn) with planting (shrubs, trees and herbs) to the peripheries. A gravel drive and parking area is situated to the south-eastern end of the property. A paved path leads from the driveway to the dwelling and patioed areas are present around the dwelling.

As the dwelling does not form part of the plans for the site and will not be affected by the proposals, therefore it is not included within this study. Part of the front and the entire rear garden will be retained as part of the proposals, they are included here for completeness. The focus is the outbuilding which will be converted and surrounding south-eastern section of the property which will be landscaped. Please refer to Appendix 3 for proposal plans for the site.

4.2.1 Outbuilding

The outbuilding is located along the north-eastern boundary to the south side. It is constructed of stone and has two pitched roofs covered with slate roof tiles. The north-western roof covers two thirds of the outbuilding (two-storey section), with the three-storey section, covering the south-eastern end, having a separate roof.

The outbuilding has three floors, the ground floor is occupied by a series of three garages/storage rooms. The second floor contains three interconnecting rooms, separated by partial walls or open doorways. A series of windows are set along the south-western elevation and they bring in light into the second-storey rooms. At the south-eastern end of the outbuilding there is a third floor containing an attic room, which has a partially boarded window present in the north-western elevation. All floors are connected via stairways. A brick chimney is situated at this end of the building and has lead-flashing to the base. Wooden barge boards are integrated at the eaves. A flat roofed potting shed extension extends from the north-western end of the outbuilding.

There are no dark enclosed loft spaces within the outbuilding, the underside of the roof can be viewed throughout the two-storey section, and it is supported by a simple wooden frame. The underside is lined with a bitumen and hessian underfelt and a single ridge board is present at the apex. The roof in the attic room is supported by a wooden A-frame, constructed of traditional thick beams. The underside of the roof is not lined and is heavily cobwebbed throughout.

The building is in a moderate to good state of repair and contains a number of features that could potentially offer shelter to roosting bats. Such features include gaps within the stone work predominantly around the eaves and integrated wooden bargeboards on the exterior and some cracks in the stonework internally. There are a number of gaps that lead directly into the exterior including broken window panes, gaps around the windows and at the apex of the north-western gable end. There are also a small number of gaps below ridge tiles (where there is missing mortar) and around a number of slipped slate roof tiles.

As a result of the above discussion and the context of the site, the dwelling is assessed as having 'moderate' potential suitability to offer shelter to roosting bats (Collins, 2016).

4.2.2 Hard Standing & Artificial Unsealed Surfaces

An area of artificial unsealed surface (gravelled driveway and parking area) dominates the southeastern end of the site.



The hard standing (patios and paths) is associated with the dwelling, there are areas of paved pathed and patios leading to and around the dwelling.

Artificial unsealed surfaces and hard standing have no ecological value.

4.2.3 Amenity Grassland - Lawn

There is small area of amenity grassland to the north-eastern corner of the site, this is a sparsely vegetated patch on the edge of the driveway. Amenity grassland is most abundant habitat of the remainder of the front garden, as well as the rear garden.

All areas of amenity grassland are similar in their species composition, being dominated by common grass species such as perennial rye grass *Lolium perenne*. At the time of the survey the sward height was approximately 2-5cm and well maintained.

The sward contains a low abundance of herbaceous species, with patches that have a higher frequency of herbs. Herbaceous species noted within the amenity grassland include daisy *Bellis perennis, Geranium* sp., sow thistle *Sonchus* sp., nipplewort *Lapsana communis,* speedwell *Veronica* sp., dandelion *Taraxacum officinale* agg., springy turf moss *Rhytidiadelphus squarrosus,* ox-eye daisy *Leucanthemum vulgare,* self-heal *Prunella vulgaris,* black medic *Medicago lupulina,* yarrow *Achillea millefolium,* white clover *Trifolium repens,* lady's bedstraw *Galium verum* and fox and cubs *Pilosella aurantiaca.*

The amenity grassland is considered to be of ecological value within the context of the site only. This is due to its nutrient enrichment which has resulted in the relatively low species diversity of the sward. No rare or protected plant species are present within the sward and the habitat is not considered to meet the criteria for any grassland habitats of 'principal importance', as listed within Section 41 of the NERC Act 2006.

4.2.4 Trees & Ornamental Planting

There is an area of shrub, young trees and herbaceous planting along the south-western periphery of the garden within a raised bed and partially along the south-eastern periphery. This comprises ornamental species that form part of the garden landscaping, such as lilac *Syringa vulgaris*, *Fuchsia* sp., conifer, stinking hellebore *Helleborus foetidus*, *Cotoneaster* sp., snowberry *Symphoricarpos albus*, butterfly bush *Buddleia davidii*, rose of sharon *Hypericum* sp., holly *Ilex aquifolium*, elephant years Bergenia *cordifolia*, *Philadelphus* sp., *Hydrangea* sp., rose *Rosa* spp., Canadian golden rod *Solidago canadensis*, *Euonymus* sp. and *Crocosmia* species.

A small section of snowberry hedge lines the inside of the boundary stone wall on the northern side of the entrance of the site.

Other garden planting to the edges of the main front lawn and rear garden includes trees, shrubs and herbs, as well as fruit and vegetable plots (rear garden). A short section of shrub honeysuckle hedge *Lonicera nitida* is located along the rear patio.

Six trees have been planted within the north-western corner of the garden, these include three mature apple trees *Malus domestica*, a semi-mature pear *Pyrus communis* and a semi-mature *Magnolia* species.

The ornamental planting of the shrubberies and flowerbeds does not meet the criteria of any habitats of 'principal importance'. Given it is dominated by non-native species planted for their ornamental value it is considered to be of low ecological value at the site level only.

The young trees and shrubs are considered to be of ecological value within the context of the site only, due to their age and the fact that the majority of the species are non-native having been planted for their amenity value and as part of the garden landscaping. The mature apple trees and the semi-



mature pear tree being of the highest value. The trees and shrubs do not meet the criteria for any woodland habitats of 'principal importance' under Section 41 of the NERC Act 2006. The trees and shrubs do not significantly contribute to the green network of the locality.

4.2.5 Boundaries

The boundaries are predominantly marked by stone walls, at the north-western boundary a neighbouring ornamental hedge grows over the top of the stone wall.

The stone walls have limited value for protected species.

4.3 Species

4.3.1 Plants

No rare or protected plant species were noted within the site. The garden habitat is dominated by amenity grassland which contains widespread and common herbaceous species.

4.3.1 Invertebrates

The garden habitats are suitable for invertebrate species that will frequent garden habitats, in particular the garden habitats are likely to provide habitat for species of moth, including those listed as species of 'principal importance' under Section 41 of the NERC Act 2006.

4.3.2 Reptiles

The site is considered to be unsuitable for reptiles, with the amenity grassland having no thatch or tussocks, which are attributes favoured by reptiles. The lawns lacks and any structural diversity and does not provide any suitable habitat for this species. Furthermore, there are no areas of significant habitat that are suitable for reptiles close by from which reptiles could migrate to the site. Therefore, reptiles are predicted to be absent from the site.

4.3.3 Amphibians

There are no ponds or waterbodies within the site, and therefore no opportunities for amphibians to breed within the site boundaries. The hard standing and gravel associated with the driveway, parking area, patios and pathways are not suitable habitats for amphibians. The garden habitats only provide limited foraging opportunities, predominantly in association with the shrubberies. The amenity grassland does not provide areas of shelter, with no structural diversity such as tussocks or thatch (a layer of dead material below the growth).

The site appears to be within the green zone, on the edge of the amber zone of the NatureSpace Impact Risk Map. The green zone indicates that there are habitats of moderate suitability where great crested newts may be present.

The NatureSpace Impact Risk Map predicts great crested newt presence through habitat suitability. The South Midlands region has been allocated coloured great crested newt zones which refer to the density of great crested newts and newt habitat. The map is remodelled by experts every three years to keep it up to date with new developments and compensation land.

These zones are classified as follows:

- Black zone: denotes a nationally designated site for great crested newts. These areas are excluded from the scheme.
- Red zone: high density and frequent occurrence. Highly suitable habitat; the most important areas for great crested newts.
- Amber zone: medium density and frequency. Suitable habitat where great crested newts are likely to be present.
- Green zone: moderate/low density and frequency. Moderate habitat suitability where great crested newts may be present.



• White zone: low density and frequency (but not absent). Low habitat suitability where there is low probability of great crested newts being presence.

When considering great crested newts, one must take into account the potential for newts to move onto a site during the terrestrial phase of their lifecycle.

It is believed that great crested newts can disperse up to 500m from a breeding pond, with the majority of individuals being found within 250m of the pond. Research by Creswell and Whitworth (2004) found that the majority of great crested newts found within approximately 50m of a breeding pond, given suitable habitat in close proximity to the pond, and they also found a significant drop-off in capture of newts beyond 100m of a pond.

There are no ponds within a 250m radius of the site. There are six ponds located within a 500m radius, with the closest pond being located approximately 270m to the north of the site. All other ponds are located beyond a 320m radius of the site.

Given the urban context of the site and lack of any significant semi-natural habitats surrounding it. The distance of the site from ponds and their paucity in the surrounding landscape, particularly as there are no ponds within a 250m radius of the site, as well as the largely unsuitable terrestrial habitat within the site, it is considered unlikely that amphibians will be moving into the site during the terrestrial phase of their lifecycle and amphibians are considered to be absent.

4.3.4 Birds

A large pile of sticks was noted within the chimney breast, this appears to be a jackdaw's *Corvus monedula* nest. The chimney is located to the south-eastern end of the outbuilding and a fireplace is present in the ground floor room. The nest was not active at the time that the surveys were undertaken, in August and September 2023.

The trees and shrubs within the site provide potential nesting opportunities for birds. The breeding bird assemblage within the site is likely to be dominated by common species of garden bird. It may also include species such as the dunnock *Prunella modularis*.

The site is unsuitable for ground-nesting species, such as the skylark *Alauda arvensis*, with the habitats comprising built development or garden.

4.3.1 Bats

4.3.1.1 Bats & Buildings

Outbuilding

A very small number of bat droppings (4 bat droppings) were observed within the far north-western room on the first floor. These bat droppings are characteristic in shape and size of the brown longeared bat, being knobbly in appearance. These bat droppings appear to date from the start of current season of 2023/end of the 2022 survey season.

Two further bat droppings were also observed on the first floor, one on a stored item in the central room and one on the floor of the south-eastern room. These bat droppings are characteristic in size and shape of the pipistrelle bat being smooth and tapered. They are also of a similar age to the brown long-eared bat droppings.

No other evidence of bats such as, large accumulations of bat droppings to indicate a roost site, was found during the building inspection survey. There was no pattern of accumulation to the bat droppings, that would indicate favoured 'hanging up' locations or regular roost sites.

The evidence of bats observed in association with the first floor does not necessarily indicate that a bat roost is present. Given there are only a very small number of bat droppings within the building



and that they are loosely scattered, it could indicate that bats (individual, non-breeding bats) have flown in on occasion to investigate the space only to subsequently leave.

The outbuilding has been assessed as having 'moderate' potential suitability to offer shelter to roosting bats. This is due to features associated with the stone walls, gaps at the eaves, below roof tiles where they have slipped and below ridge tiles where there are crevices created by missing mortar. There is also free-flight access into the building via gaps associated with windows, although it should be noted that no bats were observed within the building and no significant evidence of bats was observed within the interior spaces.

These features could offer shelter to individual crevice dwelling bat species on an occasional basis, such as the pipistrelle bat species or brown long-eared bats as they will also use crevice roost locations. The interior spaces are illuminated during the day and are sub-optimal spaces for species that roost within voids, such as brown long-eared bats. The interior rooms could, however, serve a night roost. There is no evidence to suggest that the interior rooms are used as a roost site by larger numbers of bats and the residual features associated with the outbuilding are not suitable for larger numbers of bats.

No bats were seen to emerge from the dwelling during the dusk emergence survey undertaken on the 23rd August 2023 or the 13th September 2023. Furthermore, no bats were seen to enter the building to it as a night roost.

Activity around the outbuilding was frequent, being dominated by common pipistrelle bats which were foraging within the garden, around the outbuilding and under the street lamps along Churchill Road. Other species heard and seen within the immediate vicinity of the outbuilding during the dusk surveys were soprano pipistrelle bats *Pipistrelle pygmaeus*, whiskered bats *Myotis mystacinus*, noctule *Nyctalus noctula* and brown long-eared bats.

Given the results of the preliminary roost assessment and the dusk emergence surveys, bat roost sites are considered to be absent from the outbuilding. The bat droppings are not considered to indicate the presence of a bat roost, given the very small number of scattered droppings observed within the outbuilding. The evidence suggests that an individual brown long-eared bat and pipistrelle bat has investigated the interior of the outbuilding, only to subsequently leave and not return. This is not surprising that they use the gardens for foraging and there is easy access to the building via a broken window pane and gaps where windows are not closed properly. The level of evidence is not consistent with what would be expected if brown long-eared or pipistrelle bats are roosting within the outbuilding and no bats were seen to emerge from the outbuilding during the dusk emergence surveys, or indeed enter the building.

4.3.1.2 Bats & Trees

There are no trees that exhibit potential roost features that offer shelter to roosting bats within the construction zone (south-eastern area of the site) and the area that will be impacted by the proposals.

A mature apple tree within the rear garden, alongside which is a playhouse, contains a split in a branch that creates an exposed horizontal crevice and flaking bark. This feature is considered to offer 'low' potential suitability to offer shleter to roosting bats (Collins, 2016). This tree will remain unaffected by the proposal plans and will be retained within the rear garden.





Figure 2. Photograph of the mature apple tree within the rear garden of 2 Churchill Road, Chipping Norton. The yellow circle shows the area that offers 'low' potential suitability to offer shelter to roosting bats.

4.3.1.3 Bat Habitats

The habitats of 2 Churchill Road provide some foraging opportunities for bats, comprising of areas of lawn and tree and shrub planting to the boundaries.

4.3.2 Badgers

No badger *Meles meles* setts were noted within the site and no signs of badgers were observed, such as footprints, dung pits or foraging scrapes.

4.3.3 Hedgehogs

The site is considered to offer suitable habitat to the European hedgehog *Erinaceus europaeus*, comprising suitable areas of foraging and shelter within the peripheral tree and shrub planting.

Hedgehogs will use garden habitats for foraging and breeding. The species nests and hibernates within dense cover, tangled vegetation and uses features such as log piles for shelter.

4.3.4 Other Species

There is no evidence of other protected species within the site.

5 Discussion

5.1 Legislation & Policy Guidance

5.1.1 Nesting Birds

Nesting birds 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 or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. The nesting season for most species is between March and August inclusive.



5.1.2 Bats

As with many animal species within the UK, declines in the abundance and distribution of many bat species have been documented through recent decades. The reasons for these declines are various and complex but it is considered that the major factors are changes in landuse and agriculture, the loss of woodlands and hedgerows and the loss of suitable roosting sites.

Bats are particularly sensitive to human activity due to the fact that they roost within buildings, trees and underground structures such as mines, and the availability of suitable roost sites is considered to be a key factor in the conservation of bats within the UK. As a consequence, all species of bat and their roost sites are protected under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) and under The Conservation of Habitats and Species Regulations 2017 (as amended). Taken together, these make it an offence to:

- (a) Deliberately capture or intentionally take a bat
- (b) Deliberately or intentionally kill or injure a bat
- (c) To be in possession or control of any live or dead wild bat or any part of, or anything derived from a wild bat
- (d) Damage or destroy a breeding site or resting place of such an animal or intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection
- (e) Intentionally or recklessly disturb any wild bat while it is occupying a structure or place that it uses for shelter or protection
- (f) Deliberately disturb any bat, in particular any disturbance which is likely
 to impair their ability;
 (i) to survive, breed, reproduce or to rear or nurture their young; or
 - (ii) in the case of hibernating or migratory species, to hibernate or migrate; or

- to affect significantly the local distribution or abundance of the species to which they belong

A bat roost may be any structure a bat uses for breeding, resting, shelter or protection. It is important to note that since bats tend to re-use the same roost sites, current legal opinion is that a bat roost is protected whether or not the bats are present at the time.

Although the law provides strict protection to bats, it also allows this protection to be set aside (derogation) under The Conservation of Habitats and Species Regulations 2017 (as amened) through the issuing of licences. Where a lawful operation is required to be carried out but which is likely to result in one of the above offences, a licence may be obtained from Natural England (the statutory body in England with responsibility for nature conservation) to allow the operation to proceed. However, in accordance with the requirements of The Conservation of Habitats and Species Regulations 2017 (as amended), a licence can only be issued where the following requirements are satisfied:

- The proposal is necessary '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';
- 'There is no satisfactory alternative';
- The proposals 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range'.

5.1.3 The Natural Environment and Rural Communities Act 2006

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 places a duty on the Secretary of State to publish, review and revise lists of living organisms and types of habitat in England that are of principal importance for the purpose of conserving English biodiversity. It also requires the Secretary of State to take, and promote the taking of, steps to further the conservation of the listed organisms and habitats. This is important in the context of planning decisions as the



National Planning Policy Framework (paragraph 117) affords planning policy protection to the habitats of species listed by virtue of Section 41.

The current list of species and habitats is the same as those listed with the UK Post-2010 Biodiversity Framework.

There are no habitats listed within Section 41 of the NERC Act 2006 that are relevant to the site.

Species listed within Section 41 of the NERC Act 2006 that are relevant to the site, or considered to be potentially relevant, include:

- Certain species of moth (within garden habitats)
- Dunnock and certain other common bird species (potential for nesting sites within trees and shrubs)
- Brown long-eared bat and soprano pipistrelle bat (foraging within the site and commuting through the site)
- Hedgehog (suitable habitats for foraging and shelter)

5.1.4 The National Planning Policy Framework

The National Planning Policy Framework was revised on 20th July 2021 and sets out the government's planning policies for England and how these are expected to be applied. This revised Framework replaces the previous National Planning Policy Framework published in March 2012, revised in July 2018 and updated in February 2019.

The NPPF states that planning policies and decisions should contribute to and enhance the natural and local environment by:

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

Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries.

Great weight should be given to conserving and enhancing landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty which have the highest status of protection in relation to these issues. The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads. The scale and extent of development within all these designated



areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.

When considering applications for development within National Parks, the Broads and Areas of Outstanding Natural Beauty, permission should be refused for major development other than in exceptional circumstances, and where it can be demonstrated that the development is in the public interest. Consideration of such applications should include an assessment of:

- the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;
- the cost of, and scope for, developing outside the designated area, or meeting the need for it in some other way; and
- any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

Within areas defined as Heritage Coast (and that do not already fall within one of the designated areas mentioned in paragraph 176), planning policies and decisions should be consistent with the special character of the area and the importance of its conservation. Major development within a Heritage Coast is unlikely to be appropriate, unless it is compatible with its special character.

To protect and enhance biodiversity and geodiversity, plans should:

- Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and
- Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.

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

- If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- Development on land within or outside a Site of Special Scientific Interest, and which is likely
 to have an adverse effect on it (either individually or in combination with other developments),
 should not normally be permitted. The only exception is where the benefits of the
 development in the location proposed clearly outweigh both its likely impact on the features
 of the site that make it of special scientific interest, and any broader impacts on the national
 network of Sites of Special Scientific Interest;
- Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons, and a suitable compensation strategy exists; and
- Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

The following should be given the same protection as habitats sites:

Potential Special Protection Areas and possible Special Areas of Conservation;



- Listed or proposed Ramsar sites; and
- Sites identified, or required, as compensatory measures for adverse effects on a habitats site, (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitat's site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

5.2 Potential Impacts

5.2.1 Sites of Nature Conservation Importance

There are no foreseeable impacts on statutory or non-statutory sites of nature conservation importance. This is due to the distance of such sites from the study site, and the scale and nature of the development.

5.2.2 Habitats

The proposals will result in impacts on the existing outbuilding (conversion) and there will be some re-landscaping of the existing garden habitats immediate adjacent to the site. The vast majority of the garden will not be impacted by the proposals and will be retained.

Impacts on the existing outbuilding and surrounding driveway will not result in any significant ecological impacts with regard to habitats.

There will be a small loss in garden habitats due to the alternation in the location of the site access. The loss is namely a small area of sparse lawn and snowberry hedge adjacent to the existing entrance and some ornamental shrub planting to the south-east corner of the site. A new cottage garden will be established to the north-eastern corner of the site, this will replace bare ground, the existing gravelled drive and small parcel of sparse lawn.

The majority of the peripheral vegetation along the south-western boundary will be retained, with a small area lost to the south-east corner, as mentioned above, for the creation of the new access. The main area of lawn and other ornamental planting within the front garden will be retained, as will all garden habitats within the rear garden.

With the loss of small areas of garden habitat, mainly ornamental planting and sparse lawn which has low ecological value, there will be no significant ecological impacts. New planting should seek to achieve a maximum benefit for wildlife, by incorporating native species where possible and ornamental plant species known to provide value for wildlife.

None of the habitats within the site meet the criteria for a habitat of 'principal importance' under Section 41 of the NERC Act 2006.

Recommendations are made for enhancement of the existing rear garden, and for species-specific ecological enhancement to deliver a net gain for biodiversity.

5.2.3 Species

5.2.3.1 Birds

Conversion works and removal of woody vegetation during the bird nesting season (March to August, inclusive) may result in the damage and destruction of active nests and the killing and/or injury of eggs and young.



5.2.3.2 Bats

There is no evidence to suggest that the outbuilding is being used as a place of shelter/protection by roosting bats. As a result of this conclusion, the proposed conversion will not result in any significant impacts on bats or the places that they use for breeding, shelter and/or protection (roosts) and no specific compensation measures are considered necessary (Mitchell-Jones, 2004).

In addition, since no significant impacts on bats are predicted under The Conservation of Habitats and Species Regulations 2017 (as amended) a European Protected species (bat) licence will not be required for the proposed works to proceed.

Nevertheless, given there are a small number of roosting opportunities beneath roof and ridge tiles and gaps within the walls and around the eaves and evidence that bats have entered the outbuilding in the past, a precautionary approach is recommended.

The property is located within a residential area that is subject to existing light levels, with street lighting all along the adjacent Churchill Road.

5.2.3.3 Hedgehogs

The development will not result in the significant loss of foraging or sheltering habitat for this species and a similar area of garden habitat will remain in the long term.

Without appropriate mitigation, clearance of small areas of ornamental planting may result in the killing and injury of hedgehogs. With careful work practices and mitigation, it is considered that impacts of killing, and injury can be avoided.

5.2.3.4 Other Species

There are no predicted impacts on other protected species, including plants, invertebrates, reptile, amphibians and badgers.

6 Recommendations

6.1 Further Surveys

No further surveys are considered to be necessary.

6.2 Habitats

6.2.1 Retention and Protection

6.2.1.1 Trees

All retained trees within the ornamental planting will be protected in accordance with British Standard 5837:2012, with the establishment of an appropriate root protection zones.

6.2.2 Creation

6.2.2.1 Garden Planting

It is recommended that new areas of garden planting are designed, planted and managed to maximise their value to wildlife. One key element of this would be the species used within the planting, which should comprise native species (preferably of local provenance) where possible, as well as ornamental plants of known value to wildlife. The key will be to provide a variety of flowers and fruits throughout the year in order to provide food for insects and birds, as well as providing potential nest sites through the planting of trees and shrubs.

Garden planting should aim to provide ground cover for animals such as hedgehogs and invertebrates, and so low-growing ground cover should be encouraged. Native species such as bugle, ivy and periwinkle could be used for this purpose, or ornamental species such as lady's



mantle, elephant's ears or perennial geraniums may also be suitable for formal areas of ornamental planting. A diversity of structure should also be encouraged through the planting of small trees, with shrubs and herbaceous plants below. Appendix 4 provides a list of plant species that are considered suitable for 'wildlife-friendly' garden planting.

6.3 Species

6.3.1 Birds

Any woody vegetation will be removed outside of the bird breeding period, avoiding March to August inclusive. This will protect active bird nests from damage and destruction.

No active nest sites were noted during the surveys of the outbuilding, it is recommended that the survey is checked for active bird nests prior to the commencement of works. If active nest sites are identified, advice should be sought from an ecologist and no works should be undertaken in the vicinity of the nest site until the young have fledged.

The erection of bird nesting boxes is also recommended in order to provide suitable nest sites for species within the local area, as nest boxes can be excellent substitutes for the holes found in old trees. Over 60 species are known to adopt nest boxes including blue tits, great tits, starlings, robins and sparrows.

On buildings, the integration of bird boxes is particularly recommended as species such as the house sparrow *Passer domesticus* will readily adopt such features as nest sites. Unless there are trees or buildings which shade the box during the day, boxes should be faced between north and east, thus avoiding strong sunlight and the wettest winds. Therefore, a house sparrow nesting feature will be erected on the north-western gable of the converted outbuilding. It should be noted that swift nest boxes are not appropriate in this instance, as there are no suitable elevations with 'free-flight' access.

• A Vivara Pro WoodStone House Sparrow Nest Box will be erected on the north-western elevation of the converted outbuilding.



Figure 3. Vivara Pro WoodStone House Sparrow Nest Box.



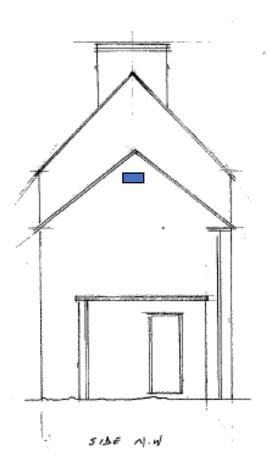


Figure 4. Plan showing the location of the Vivara Pro WoodStone House Sparrow Nest Box (indicated by the blue rectangle).

6.3.2 Bats

As previously discussed, a European Protected Species (Bat) Licence is not considered to be necessary for the proposed works to proceed. However, it is recommended that the following precautionary approach is followed.

6.3.2.1 Timing

No timing constraints are considered necessary in this instance.

6.3.2.2 Careful Work Practices

Contractors will be briefed with regard to the fact that individual bats can often exploit very small crevices as roost sites (such as gaps beneath roof and ridge tiles and within walls) and that bats can move between roost sites on a regular basis. They should remain vigilant for bats and any evidence of bats (bat droppings) when removing the roof tiles and underfelt and within gaps when repointing.

Works to remove the roof tiles of the outbuilding should proceed in a careful and controlled manner, with the removal of the roof tiles, by hand, checking below for any bats that may be present.

In the unlikely event that bats or significant evidence of bats (for example large accumulations of fresh bat droppings) are encountered, works should stop immediately, and advice sought from a qualified ecologist and/or Natural England.

If disturbance to small numbers of bats were to occur, it is unlikely to impair their ability to survive, breed, and reproduce or to rear or nurture their young or to significantly affect the local distribution or abundance of the species to which they belong. Therefore, works may be able to continue once



advice has been given and the issue has been resolved. However, individual situations will have to be evaluated on a case-by-case basis and a European Protected Species (Bat) Licence may be required to allow works to proceed if the impacts are considered to be significant under The Conservation of Habitats and Species Regulations 2017 (as amended).

6.3.2.3 Enhancement

Although it is not necessary from a legal perspective, in order to create an enhancement to the existing situation a Lela Bat Box (see Figure 5) will be integrated on the exterior of the converted outbuilding.

The Lela Bat Box is designed to provide a roosting space for several crevice dwelling bat species, including the brown long eared and pipistrelle bats. There are two internal crevices, separated by a woodstone divider. This creates a varied set of internal microclimates, allowing the inhabitants to choose the most suitable place to roost. It is constructed from wood-concrete, a blend of concrete and wood fibres that is durable and long lasting.

The Lela Bat Box has twin entrances at the base of the box, these face downwards ensuring that no upkeep is required. This bat box should be installed as high as possible on the exterior wall, just under the eaves. The bat box will be erected on the south-eastern elevation (see Figure 6).



Figure 5. A Lela Bat Box.



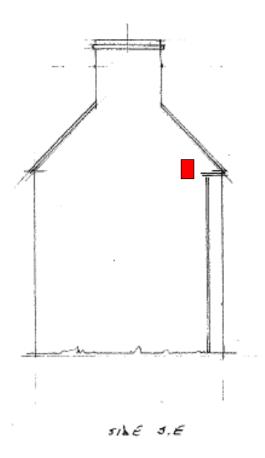


Figure 6. Plan showing the location of the Lela Bat Box (indicated by the red rectangle).

6.3.2.4 Hedgehogs

It is recommended that hedgehogs are encouraged to move from the development footprint by a careful programme of site clearance and vegetation removal, where required. Woody vegetation should be removed outside the bird nesting season and should be taken away from the development footprint (not piled-up, which would create suitable habitat).

As a precaution, if a hedgehog is discovered during works, it should be either allowed to move to a safe area under its own power or be moved by hand to a relatively nearby, safe location, such as a mature section of hedgerow to the far northern end of the site. Hedgehogs should be moved no further than 200m from where they are found as they may have dependent young that rely on their return for survival.

When handling hedgehogs, gloves should be worn to protect the handler from their spines, infection and parasites.

In the unlikely event that an occupied hedgehog nest is disturbed, or a baby hedgehog is encountered (eyes shut) all works will stop in the vicinity and advice be sought from an appropriate wildlife hospital (such as Tiggywinkles) or animal charity (such as the RSPCA). If the nest has been exposed or destroyed then the entire nest should be covered over, for example with dry leaves/vegetation. Baby hedgehogs should not be handled with bare hands as this can result in abandonment by their mother.

It is recommended that permeability of the site for hedgehogs is maintained.



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8 Appendix 1. Location Plans



Aerial photograph showing the location of 2 Churchill Road, Chipping Norton (the survey area is indicated with a red outline). Source: Google Earth Pro.



Ordnance Survey map showing the approximate location of 2 Churchill Road, Chipping Norton (the survey area is indicated with a red outline) within the local area. *Source: http://www.bing.com/maps/*

9 Appendix 2. Photographs



Photograph 1. The south-western (front) and southeastern elevations of the outbuilding.



Photograph 2. The north-western elevation of the outbuilding.



Photograph 3. Example of the inside of one of the garages/storage rooms.



Photograph 4. The eastern-most garage/storage room, with stairs (in the back left corner of the room) leading to the first floor.



Photograph 5. The eastern-most room on the first floor; above which is a third floor attic room.



Photograph 6. The central and north-western second floor rooms.



Photograph 7. Heavily cobwebbed underside of the roof of the attic room (third floor).



Photograph 8. Brown long-eared bat dropping on the floor of the north-western first floor room (outlined in yellow).



Photograph 9. Pipistrelle bat dropping on a stored item in the south-eastern first floor room.



Photograph 10. The driveway, carparking area and garden vegetation at the south-eastern end of the site.

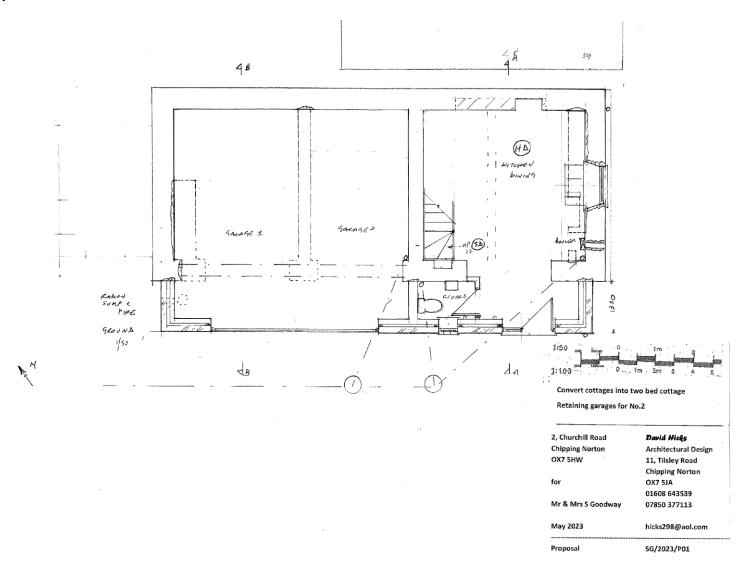


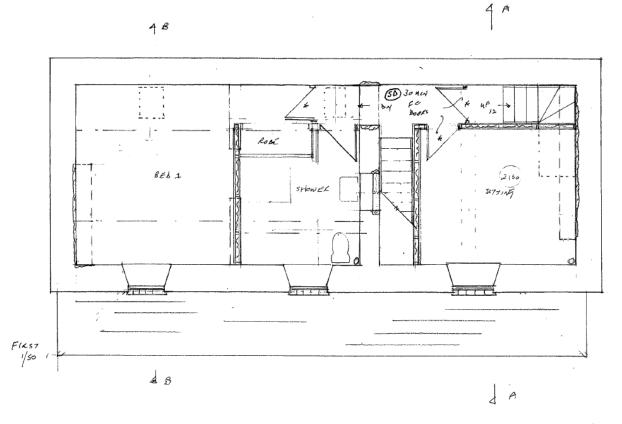
Photograph 11. The south-eastern elevation of the dwelling, which will remain unaffected by the proposals.



Photograph 12. The rear garden of the property.

10 Appendix 3. Proposal Plans

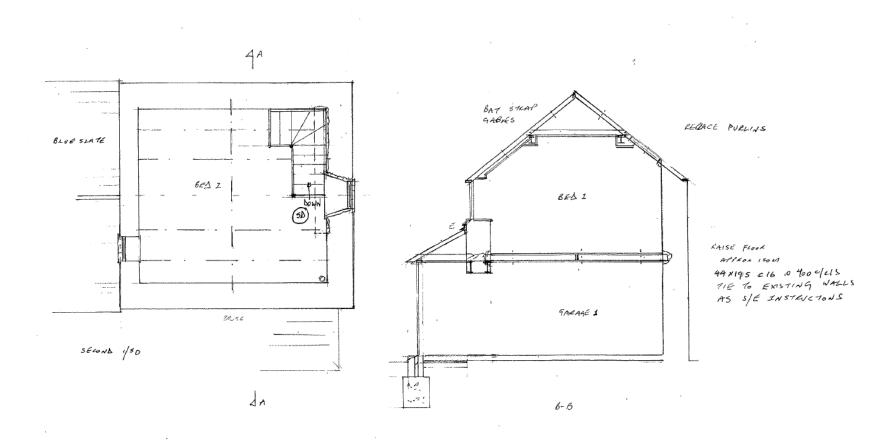


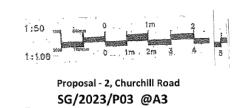


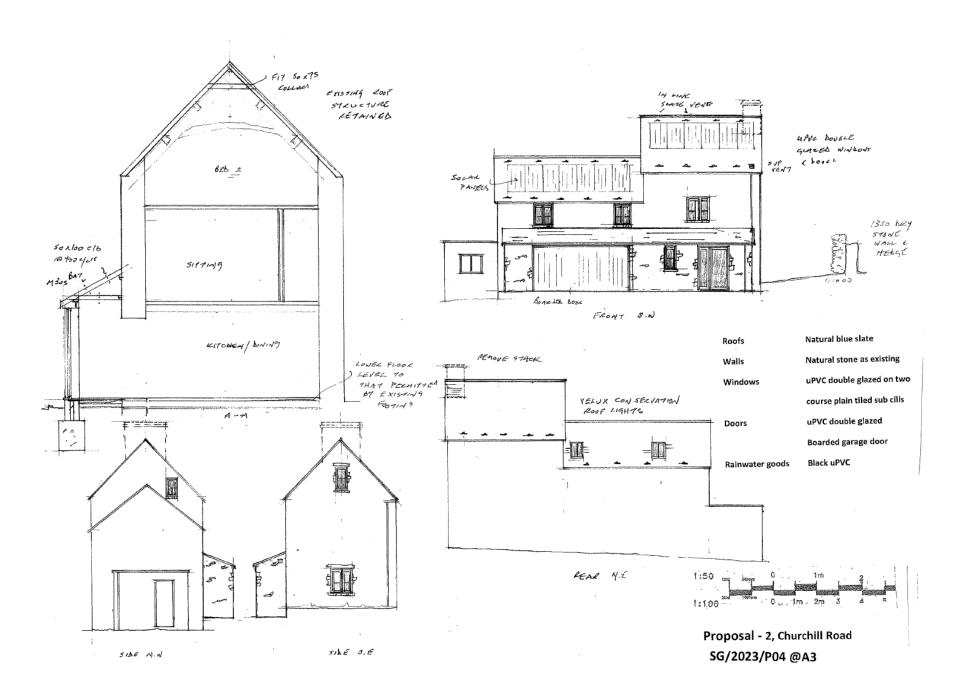


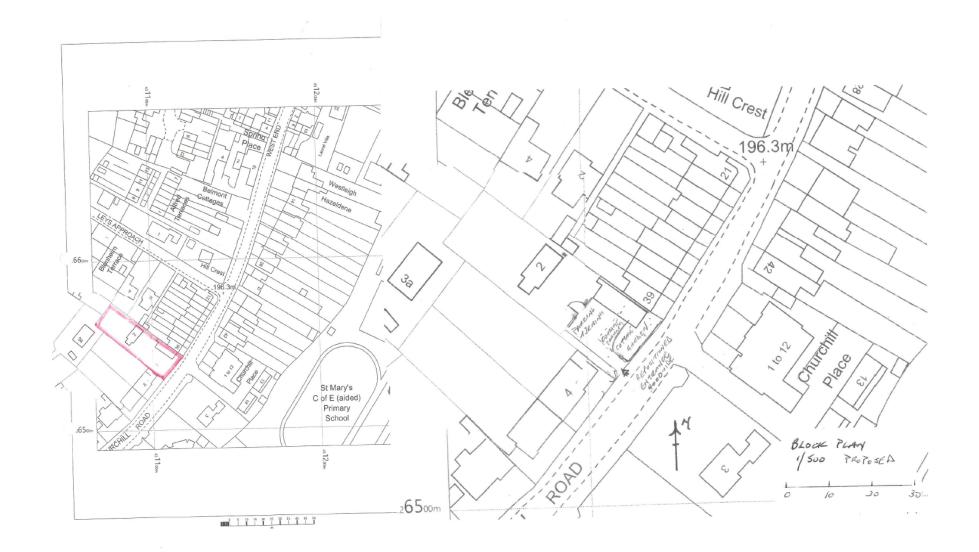


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11 Appendix 4. Species for Landscape and Ornamental Planting

Common Name	Botanical Name
Trees	
Field maple*	Acer campestre
Beech*	Fagus sylvatica
Hornbeam*	Carpinus betulus
Willow*	Salix sp.
Silver birch*	Betula pendula
Rowan*	Sorbus aucuparia
Whitebeam*	Sorbus aria
Alder*	Alnus glutinosa
Wild cherry*	Prunus avium
Flowering cherry	Prunus sp.
Flowering pear	Pyrus calleryana
Crab apple*	Malus sylvestris
Fruiting apple	Malus sp.
English oak*	Quercus robur
Elm*	Ulmus sp.
Small-leaved lime*	Tilia cordata
Shrubs	
Holly*	llex aquifolium
Hazel*	Corylus avellana
Wayfaring tree*	Viburnum lantana
Wild service tree*	Sorbus torminalis
Buckthorn*	Rhamnus cathartica
Guelder rose*	Viburnum opulus
Hawthorn*	Crataegus monogyna
Hebe	Hebe sp.
Rosemary	Rosmarinus
Ceanothus	Ceanothus sp.
Weigela	Weigela sp.
Dog rose	Rosa canina
Dogwood*	Cornus sanguinea/alba
Rose (single flowered varieties)	Rosa sp.
Wild privet*	Ligustrum vulgare
Garden privet	Ligustrum ovalifolium
Lilac	Syringa vulgaris
Escallonia	Escallonia sp.
Lavender	Lavandula sp.
Flowering currant	Ribes sp.
Honeysuckle*	Lonicera periclymenum
Mexican orange blossom	Choisya sp.
Spiraea	Spiraea sp.
Amelanchier	Amelanchier lamarckii/canadensis
Cotoneaster	Cotoneaster sp.
Yew*	Taxus baccata
Broom	Cytisus sp.
Rose of Sharon	Hypericum calycinum
Firethorn	Pyracantha sp.

Common Name	Botanical Name
Butterfly bush	Buddleia davidii
Clematis	Clematis sp.
Perennials	
Elephant's ears	Bergenia cordifolia
Sage	Salvia sp.
Lamb's ears	Stachys byzantia
Periwinkle*	Vinca major & Vinca minor
lvy*	Hedera helix
Bugle*	Ajuga reptans
Lady's mantle	Alchemilla mollis
Geraniums	Geranium sp.
Globe thistle	Echinops ritro
Monk's hood	Aconitum sp.
Yarrow*	Achillea millefolium
Teasel*	Dipsacus fullonum
Oriental poppy	Papaver orientalis
Michaelmas daisy	Aster sp.
Bear's breeches	Acanthus spinosus
Montbretia	Crocosmia sp.
Purple coneflower	Echinacea purpurea
Ornamental onion	Allium sp.
Catmint	Nepeta sp.
Verbena	Verbena sp., Verbena bonariensis
Marjoram	Origanum majorana
Thyme	Thymus sp.
Crocus	Crocus sp.
Daffodil	Narcissus sp.
Snowdrop	Galanthus nivalis
Winter aconite	Eranthis sp.
Bluebell*	Hyacinthoides non-scripta
Primrose*	Primula veris
Forget-me-not*	Myosotis sp.
Grape hyacinth	Muscari botryoides
Hollyhock	Althaea rosea
Lenten rose	Helleborus orientalis
Foxglove*	Digitalis purpurea
Greater knapweed*	Centaurea scabiosa
Great mullein*	Verbascum thapsus
Toadflax*	Linaria vulgaris
Meadow crane's-bill*	Geranium pratense
*indicates native species	