PURE ECOLOGY

23 Gorsty Lane

Hereford

HR1 1UL

Ecological Assessment

November 2017

PURE ECOLOGY

Client	Collins Design and Build
Job name	23 Gorsty Lane, Hereford HR1 1UL
Report title	Ecological Assessment
Reference	510 Pha1 17-10-17.

	Signed	**Name**	**Position**	**Date**
Prepared by	[redacted]	Anna Gundrey MCIEEM	Consultant Ecologist	06/11/2017
Reviewed by	[redacted]	Anton Kattan MCIEEM	Director	07/11/2017

Pure Ecology
5 High Street
Ledbury
Herefordshire
HR8 1 DS

info@pureecology.co.uk
www.pureecology.co.uk
07870 668 974

Table of Contents

Executive Summary

The study area for the ecological assessment is the house and associated gardens of 23 Gorsty Lane, a residential on the eastern edge of Hereford. The proposal is to retain the existing house and erect a further five houses in the large rear garden.

An extended Phase 1 habitat survey was undertaken on the 2nd October 2017 to identify the habitats present on site and assess the potential for protected species to be present within the site. The field survey is supported with desk study data from the Hereford Biological Records Centre (HBRC), with information on designated wildlife sites and records of protected species and within 2km of the property.

The ecological study did no identify any significant constraints to development. There is no predicted adverse effect on designated sites for nature conservation, and the habitats present on site are common and widespread with limited intrinsic value for protected species. The sheds on site have negligible potential to support bats, and the house will not be directly affected by the proposed development. The neglected garden supports manmade habitats, and there is no established semi-natural vegetation. The trees and ornamental shrubs do however provide opportunities for nesting birds.

This report provides mitigation advice to avoid disturbance to breeding birds and habitat enhancement recommendations for wildlife-friendly landscaping and provision of artificial bat roost facilities in the new houses.

1 Introduction

1.1 Site Description

Number 23 Gorsty Lane ('the site') is a property on the eastern edge of Hereford and is located at Ordnance Survey (OS) grid reference SO5323,3970. The site consists of a modern detached house with a large rear garden. It is in a residential neighbourhood with similar age properties (with smaller gardens). Gorsty lane is to the south-west and to the north-east the end of the garden borders local sports playing fields.

1.2 Proposed Scheme

The existing house and its immediate curtilage will be retained, but an additional five dwellings will be erected in the garden to the rear. An access road to the new development will run to the north of the existing house, along the north-west boundary. The indicative site plan (drawing no. 002) is shown in Appendix 1.

1.3 Scope of the Study

The aims of this study are to describe and evaluate the habitats present within the site and to assess the potential for the site to support protected species, such as bats and reptiles. This report discusses the likely impact of the proposed development on the ecology of the site and the local area and makes recommendations for appropriate mitigation measures and habitat enhancement in this regard.

2 Methodology

2.1 Desk Study

The Herefordshire Biological Records Centre was contacted in October 2017 to obtain records of protected species and information on non-statutory sites within a 2km radius of the site.

The Government geographical information website MAGIC (www.magic.defra.gov.uk) was referred to for information on statutory protected sites within 2km. Online mapping and aerial photograph resources such as GoogleEarth and Bing Maps (www.bingmaps.com) were also consulted for contextual information.

2.2 Phase 1 Habitat Survey

A Phase 1 habitat survey was carried out following standard methodology (JNCC 2010). This involved a site walk over to map the habitats present according to standard habitat classifications. The Phase 1 habitat survey was undertaken on 2 October 2017. The survey included an examination of the site for evidence of, and potential for protected and otherwise notable species. A Phase 1 habitat map was

produced (Appendix 2) illustrating the findings of the survey, accompanied by numbered Target Notes (TN), which describe features of interest.

The survey included an inspection for evidence of bats of the garages and garden sheds that will be removed for the development. The survey was carried out in accordance with professional standards published by the Bat Conservation Trust (Collins, 2016). The exterior of the house that will be retained within the proposed site plan was surveyed to look for potential access points for bats and to assess the potential of the building to support a significant bat roost.

The field survey was carried out by Anna Gundrey MCIEEM, an ecological consultant with 20 years habitat surveying experience and holder of a Natural England survey licence for bats (no. 2015-16917-CLS-CLS).

3 Results

3.1 Designated Sites

3.1.1 Designated Sites

There is one European-designated Special Area of Conservation (SAC) and three nationally designated Sites of Special Scientific Interest (SSSI) within 2km of the site, which are listed in Table 1. These are Lugg and Hampton Meadows SSSI, the River Lugg SSSI and the River Wye SSSI and SAC.

Table 1: Statutory sites within 2km of 23 Gorsty Lane

Designated Site	Wildlife Interest	Proximity
River Wye SSSI and SAC	Riparian habitats and species. Annex I habitats that are a primary reason for SAC selection are *"Water courses of plain to montane levels with the Ranunculion fluitantis and Callitricho-Batrachion vegetation"*.	0.75 km South
Lugg and Hampton Meadows SSSI	Species-rich neutral grassland	1.0 km North
Lugg River SSSI	Riparian habitats and species	1.5 km North

HBRC provided details of 16 non-statutory locally designated sites within 2km. These are known as 'Sites of Nature Conservation Importance' (SINCs) or 'Special Wildlife Sites' (SWS) in Herefordshire. A plan showing the location of SINCs is provided in Appendix 3 and the sites are listed in Table 2.

Table 2: Non-statutory Sites within 2km of 23 Gorsty Lane

Designated Site (and Site Code)	Description	Proximity to Site
Land north of Hampton Park Road (SINC_20)	None provided	0.75km South-east
Litley Court, Hampton Park Road (SINC_21)	Parkland	0.75km South
68 Hampton Park Road (SINC_22)	Parkland	0.75km South
Hampton Grange Nursing Home (SINC_23)	Broadleaved woodland and neutral grassland	0.75km South
Sewage Works (SINC_24)	Wooded river bank	1.5km South-east
Eign Brook (SINC_25)	Brook habitat	1.25km West
Eign Brook Corridor (SINC_26)	Meadows	1.25km West
Scrub aside Eign Brook (SINC_27)	Scrub	1.75km North-west
Castle Pool (SINC_28)	Pool habitat	2.0km West
Castle Green River Bank (SINC_29)	River bank	2.0km West
Withy Brook (SINC_55)	Brook habitat	2.0km South-west
River Wye SWS (SO53/06)	Riparian habitat and species	0.75km South
Pool at Rotherwas SWS (SO53/08)	Pool habitat	0.75km South-east
Eign Hill Quarry SWS (SO53/32)	Disused quarry habitat	0.75km South-west
Lugg Meadows SWS (SO54/03)	Flood meadows	1km North
River Lugg SWS (SO55/04)	Riparian habitats and species	1.5km North

3.2 Habitats

The following description of habitats should be read with reference to the Phase 1 Habitat Plan and Target Notes (TN) in Appendix 2. The photographs referred to are in Appendix 4.

3.2.1 Overview

The site is a detached dwelling with a small front garden, but extensive grounds to the rear. The property unoccupied and it appears the large rear garden had been neglected (and become overgrown) until it was cleared recently. The result is that

the back garden habitat is short perennial vegetation with tall garden shrubs on the boundaries.

3.2.2 Short Perennial Vegetation

Ephemeral, short perennial vegetation is the predominant habitat in the rear garden (TN 7, Photos 1 and 2). Species present include nipplewort (*Lapsana communis)*, prickly sow thistle (*Sonchus asper)*, nettle (*Urtica dioica)*, Yorkshire fog grass (*Holcus lanatus)*, cleavers (*Galium aparine)*, broad-leaved dock (*Rumex obtusifolius)*, and self heal (*Prunella vulgaris)*. The hardstanding yard to the immediate north-east and south-east of the house is also covered in short vegetation (TN 11, Photo 6), which is predominantly mosses with occasional small plants of herb robert (*Geranium robertianum)* and bittercress (*Cardamine* sp.) noted.

3.2.3 Amenity Grassland

The front garden is a small lawn (TN 12) that is heavily shaded by the tall, overgrown garden shrubs and a tall leylandii (*Leyalndii x cupressocyparis)* garden hedge. As a consequence of the shading ivy (*Hedera) helix* and mosses are dominant in the amenity grassland. (Photo 3).

3.2.4 Trees and Shrubs

The boundaries of the site are fringed with tall garden shrubs (Photo 4) and a leylandii hedge (TN5, Photo 5). The front garden is ringed by large shrubs and there is a tall leylandii hedge running in front of the north-west elevation of the house (TN8). There is a small group of leggy fruit trees in the easternmost corner of the site (TN4).

3.2.5 Buildings

The current house appears to date from the late Twentieth Century (circa. 1980s) and sits near the front of the site, off Gorsty Lane. It has a hipped roof with clay tiles and red brick walls with uPVC windows and doors. To the rear is pair of garages and within the back garden are three sheds. Two sheds are simple, corrugated metal structures, one of which has partially collapsed. The third shed has single-coarse brick walls and asbestos sheet cover. Further details of the buildings are given in Section 3.3.1, which describes the bat roost potential of the structures.

3.3 Protected Species

3.3.1 Bats

Information on Local Bat Populations

HBRC provided 236 records of bats from the 2km radius search area. The bat species recorded form the local area are:

- Common pipistrelle (*Pipistrellus pipistrellus);*
- Soprano pipistrelle (*P. pygmaeus);*
- Brown long-eared (*Plecotus auritus);*
- Lesser horseshoe (*Rhinolophus hipposideros);*

- Noctule (*Nyctalus noctula);*
- Natterer's (*Myotis nattererii);*
- Daubenton's (*M. daubentonii).*

The closest data are a group of 8 records from approximately 0.3km to the north of the site. These are records of droppings from an unidentified species and bats in flight.

The most significant record is a roost of 131 soprano pipistrelle bats recorded in 2005 from a location 2km from the site. Most other records were bat activity, with data from recordings of bats in flight.

Bat Roost Assessment at the Site

There is no evidence of roosting bats within the garages, sheds or trees within the site. The buildings have negligible potential to support bat roosts because there are no enclosed spaces or crevices in the fabric of the buildings that would provide shelter for bats.

Shed at TN1

The largest of the sheds is on the north-east boundary, at the end of the garden. It has brick walls and a corrugated asbestos roof that has partially collapsed, which means the interior is exposed. The northern part of the roof remains, but there are missing bricks and large gaps at the top of the walls (as seen in the photograph below). The structure is heavily overgrown with ivy with roots of the plant coming through the roof. The poor construction and state of repair of the shed precludes there being any meaningful shelter for bats.

There is no evidence of bats and no crevices or enclosed voids suitable for roosting bats.

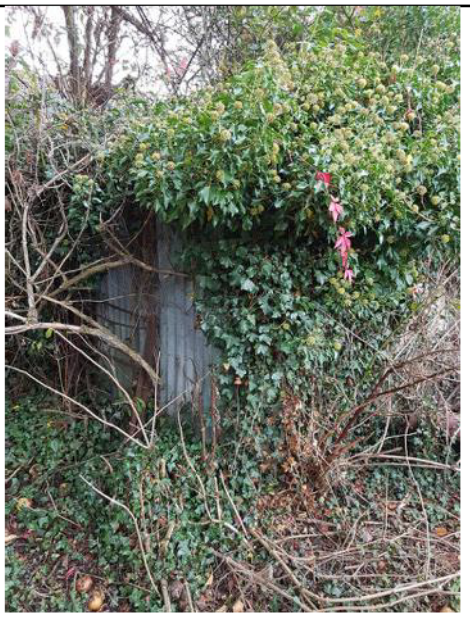
The collapsed roof of the shed can be seen above and enclosed section is shown below.

Shed at TN3

There is a small corrugated iron shed on the south-east boundary at the end of the garden. The structure has partially collapsed and is covered in ivy. .

The shed is unsuitable for day roosting bats and there is no evidence that bats have exploited the shelter of the standing section for night roosting activity.

The collapsed part of the shed can be seen above and the standing section is shown below.

	
Shed at TN 10 A small corrugated iron shed stands centrally in the garden. It is a low structure and some of the sheets on the wall are missing. ***This structure has no bat roost potential.***	

Adjoining Garages (TN13)

There is a pair of adjoining garages to the rear of the house. The garages have pitched asbestos-covered roofs with large roof lights. The solid brick walls are in relatively good condition and there are no crevices or gaps in the brickwork, and the bargeboards are flush to wall.

The interior is light and is unsuitable for day roosting bats. There are no signs of night roosting.

There are no day roosting opportunities for bats and no evidence of night roost activity.

There are no crevice roost features on the exterior of the garages and no dark, enclosed areas within the interior.

House (TN14)

The house is in a relatively good condition and there are no crevices or gaps in the brick walls. Access for bats to the fabric of the building is limited to the roof, where there are a low number of lifted clay tiles.

No crevices around windows, doors or soffits. Roof looks in fairly good order, but a few lifted clay tiles.

The roost potential for bats is limited to small crevices under lifted roof tiles, which may provide access to a loft.

The well maintained condition of the walls and windows can be seen in the photograph above and the only access for bats to the fabric of the building is through lifted roof tiles as shown on the photograph below.

3.3.2 Great crested newts

HBRC returned 28 records of great crested newt (*Triturus cristatus)* from six locations within the 2km search area. The closest record is approximately 0.4km to the north and was recorded in 2006.

There are no ponds on site and examination of Ordnance Survey mapping did not reveal any ponds within 250m of site. The short vegetation within the garden does not provide shelter for newts.

Given the distance to known or potential breeding ponds for great crested newts it is considered reasonably likely that this species will no occur at the site. The likelihood of great crested newts being present on the site is therefore considered to be negligible and this species can be scoped out of the assessment.

3.3.3 Reptiles

HBRC provided 30 records of reptiles from 11 locations with grass snake (*Natrix natrix)* and slow worm (*Anguis fragilis)* recorded in the 2km search area. The closest records were two recordings of grass snake and one of slow worm on the banks of the River Wye, approximately 0.6km southwest of the site.

The garden habitats at the site are not considered to be suitable for reptiles. The short, perennial vegetation is devoid of cover and the tall shrubs and leylandii at the boundaries cause heavy shading. The garden habitats lack the structural variation and open mosaic habitats favoured by reptiles. Furthermore, the site is bound by Gorsty Lane to the west, the playing fields of the sports ground to the east and neighbouring properties to the north and south. The urban context is considered sub-optimal for reptiles and there is no connectivity with semi-natural habitats.

It is considered reasonably likely that reptiles will be absent because of the lack of suitable habitat within the site or connectivity to sites that may support local reptile populations.

3.3.4 Breeding Birds

The mature shrubs around the periphery of the site provide nesting opportunities for a variety of common garden birds.

4 Assessment

4.1 Study Limitations

There are no significant survey constraints to the ecological assessment. Although the Phase 1 habitat survey was carried out outside the growing season, the surveyor is an experienced botanist and was able to readily identify the manmade habitats and planted vegetation within the gardens. All buildings that will be removed for development were thoroughly inspected for bats. There was no access to the roof space of the house, but the house is being retained and the proposed development will not alter the ecological context of the residential neighbourhood. Any bat species roosting in the roof of the house will not be affected by the development.

4.2 Legislative and Policy Context

The legal protection afforded to key habitats and species identified in Section 3 has informed the scope of the ecological survey required to determine baseline conditions and guided measures that will protect and benefit valued ecological resources associated with the site. Further information on wildlife legislation and policy guidance is provided in Appendix 5.

4.2.1 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.

4.2.2 National Planning Policy Framework (NPPF)

The National Planning Policy Framework (NPPF) was published in March 2012 and this new document forms a key part of the Government's reforms to make the planning system less complex and more accessible, to protect the environment and to promote sustainable growth. The NPPF states that the planning system should enhance the natural and local environment by:

- protecting and enhancing valued landscapes, geological conservation interests and soils;
- recognising the wider benefits of ecosystem services;
- minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites, so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks. To minimise impacts on biodiversity and geodiversity, planning policies should:

- plan for biodiversity at a landscape-scale across local authority boundaries;
- identify and map components of the local 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 local partnerships for habitat restoration or creation;

- promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;
- aim to prevent harm to geological conservation interests; and
- where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas.

When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- if significant harm 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;
- proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have 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 proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- opportunities to incorporate biodiversity in and around developments should be encouraged;
- planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and
- the following wildlife sites should be given the same protection as European 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 European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

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

4.2.4 UK Post-2010 Biodiversity Framework

The UK Post-2010 Biodiversity Framework succeeds the UK Biodiversity Action Plan (BAP) and 'Conserving Biodiversity - the UK Approach'. The Framework continues the conservation work initiated by the UK BAP following the establishment of the Convention on Biological Diversity in 1992. The purpose of the Biodiversity Framework is to set a broad enabling structure for conservation action across the UK until 2020, in summary:

- To set out a shared vision and priorities for UK-scale activities, in a framework jointly owned by the four countries, and to which their own strategies will contribute.
- To identify priority work at a UK level which will be needed to help deliver biodiversity targets and the EU Biodiversity Strategy.
- To facilitate the aggregation and collation of information on activity and outcomes across all countries of the UK, where the four countries agree this will bring benefits compared to individual country work.
- To streamline governance arrangements for UK-scale activity.

Many of the tools developed under UK BAP remain of use, for example, background information about the lists of priority habitats and species and the plans for the priority species and habitats agreed under UK BAP still form the basis of the Framework.

There are no priority habitats listed under the UK Post-2010 Biodiversity Framework, that are considered to be relevant to the site.

Several common bird species that are often found in gardens, such as dunnock and bullfinch are priority species listed under the UK Post-2010 Biodiversity Framework.

4.3 Assessment of Potential Ecological Impacts

4.3.1 Designated Sites

The nearest designated sites all lie approximately 0.75km from the site at Gorsty Lane. These are the statutory designated River Wye SSSI/SAC and six non-statutory locally designated sites. The distance between the proposed development and these

sites is considered sufficient to mitigate any adverse effects during construction, such as such dust or noise pollution. The development is within a residential area and the new houses will connect to existing utilities, such as water, drainage and electricity. Furthermore, access will be via existing neighbourhood roads. Given the small-scale and localized nature of the proposed development, the magnitude of impacts on habitats or wildlife is not expected to be beyond the site, and immediate curtilage of the development. Consequently, there are no predicted impacts on designated wildlife sites.

4.3.2 Habitats

The development will result in the loss of the short perennial vegetation and ephemeral habitats that have established since the overgrown garden has been cleared. As such it has very limited value for biodiversity and consequently the loss of this habitat will have a negligible ecological impact.

Garden shrubs, fruit trees, and a section of garden hedge will also be removed to make way for the new access and to landscape the area around the new houses. These non-native garden species also have low intrinsic ecological value and removal of localised vegetation on the site boundary is considered to have a negligible effect. The garden boundary planting is all manmade habitats and therefore can be readily recreated within the new development.

4.3.3 Bats

The sheds and garages have negligible potential to support bats and there is no evidence to suggest that they have previously been used by bats. The loss of these structures is therefore not predicted to be detrimental to local bat roost resources, and there is no risk of disturbance to, or adverse impacts on local bat populations.

The possibility that bats roost in the roof of the house cannot be entirely discounted because there are a few gaps and access points between tiles. However, the house is being retained and there is no foreseeable risk of indirect impacts that would cause bats to abandon any roosts that are present. 23 Gorsty Lane is an existing residential property and bat species in the local area are habituated to the urban setting. The proposed development does not change the local ecological context and garden of 23 Gorsty Lane is not considered to be a significant foraging resource in terms of importance for maintaining the favourable conservation status of local populations or movement of bat species in their natural range.

It is therefore considered that the proposed development will not be detrimental to the conservation of local bat populations and will not affect the movement or distribution of any of the species recorded in the vicinity.

4.3.4 Breeding Birds

The removal of tall shrubs from the margins of the site will result in the loss of a small amount vegetation that may be used by nesting birds. If undertaken during

the bird breeding season there is a risk of disturbance or destruction of active nests. The impact from the loss of habitat on the conservation status local assemblage of garden birds is considered negligible, but mitigation to avoid contravening the legal protection afforded to breeding wild birds is required and recommendations for careful timing and ecological supervision to avoid active nests during site clearance are provided in Section 5.

5 Recommendations

5.1 Further Survey Work

No further survey is required to inform the ecological impact assessment.

5.2 Mitigation

5.2.1 Breeding Birds

To comply with the legislation that protects breeding birds, measures should be taken to avoid nesting birds when shrubs and trees are removed. This can be done either by removing the trees and clearing shrubs outside the bird breeding season (March to September) or by having an ecologist check the trees and shrubs immediately before the vegetation clearance. If nesting birds are absent, the work can proceed without any further ecological supervision. If nests are found, the removal of the trees or shrubs in question should be delayed until an ecologist confirms the chicks have fledged and left the nest.

5.3 Habitat Enhancement

5.3.1 New Roost Location for Bats

The proposed development provides an opportunity to erect bat boxes on the five new houses. Bat boxes designed to be integrated into the external walls of a building can be installed in the gables of the house or garage. The bat boxes, also referred to as 'bat tubes' are pre-fabricated and can be installed directly into the block work of the exterior walls (e.g. the Schwegler 1FR bat tube or the Habibat) to create an artificial roosts. The artificial roosts have an external entrance slot which leads to an internal cavity for roosting. The bat boxes/tubes can be concealed behind external render or faced with stone to blend unobtrusively into the renovated wall. Bats can fit through very small gaps and a discrete entrance opening 2-2.5cm provides sufficient space to allow access to the slot of the bat tube.

It is recommended that two 'bat tubes' are fitted: – one in the eastern gable end of the western-most house; one in the north-facing gable on the adjacent property. These should be fitted as high as possible in the apex of the gable wall.

5.3.2 Wildlife Gardening

The development provides an opportunity for wildlife-friendly landscaping within the gardens of the new houses that will help deliver biodiversity gain within the site context, and will have benefits for species at a local (neighbourhood) scale.

Planting new trees and shrubs on boundaries will strengthen the existing vegetation and will compensate for the small loss of vegetation removed for the scheme. It will provide sheltered linear features mobile species such as bats and birds will use for navigation. Planting deciduous, native trees is preferable to conifers for wildlife, and berry-bearing trees such as rowan *Sorbus aucuparia*, whitebeam *Sorbus aria* and wild cherry *Prunus avium* will provide foraging resources for animals, such as breeding birds.

Within garden beds, plant species should be chosen to provide structural variation within landscaped areas. Ground cover for shelter will attract species such as hedgehog and shrubs can be used by nesting birds. Berry and nectar-rich shrubs such as *Buddleja, Berberis* and privet *Ligustrum* sp. could be planted, along with a good range of nectar-rich herbaceous species. Ground cover species could include *Aubretia*; bellflower *Campanula carpatica*; wood anemone *Anemone nemorosa* and bugle *Adjuga reptans*. Taller species good for invertebrates include Fleabane *Erigeron* sp.; golden marguerite *Anthemis tinctoria* and red valerian *Cetranthus ruber*.

The Royal Horticultural Society website provides an extensive list of plants that are good pollinators at different times of the year. This can be found by following the link –

www.rhs.org.uk/science/pdf/conservation-and-biodiversity/wildlife/rhs_pollinators_plantlist

6 References

Collins J. (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines. (3rd Ed) Bat Conservation Trust. London.

JNCC, 2010. Handbook for Phase 1 Habitat Survey - a technique for environmental audit. JNCC Revised reprint 2003, reprinted 2007 & 2010.

Appendix 1. Design Plan

Indicative Site Plan 1:500

House siting indicative only

Indicative Detached Dwelling nts

Indicative Semi Detached Dwellings nts

OUTLINE PLANNING

Collins Design & Build & Project Management

UNIT 5, WESTWOOD INDUSTRIAL ESTATE, PONTRILAS, HEREFORD, HR2 0EL
TEL: 01981 240882 FAX: 01981 242926

TITLE: Proposed Residential Development
Land to the rear 23 Gorsty Lane, Hereford HR1 1UL

CUSTOMER	K.Davies	DRN	ARP	JOB No.	508D
SITE ADDRESS	Gorsty Lane, Hereford HR1 1UL	DATE	20.09.17	DRG No.	P002
		SCALE	1:500@A3		A3

Appendix 2. Phase I Habitat Map and Target Notes

Target Notes

1. Brick shed with flat corrugated asbestos roof. Shed is collapsed on northern end, but southern end is still a functional storage shed. There are gaps in the southern wall of this enclosed section where bricks are missing and gaps under the eaves at where it adjoins the collapsed section. This would allow access to bats, but also makes the interior light and drafty. The interior ceiling is swathed in cobwebs and ivy tendrils. Negligible bat roost potential.
2. Offsite: mature oak *Quercus robur* tree, which may have bat roost potential (could not be thouroughly examined as it lies within another garden.
3. Small shed with walls and roof of corrugated metal. Half of the shed is open fronted and collapsed, the other half completely enclosed in ivy. No bat roost potential.
4. Group of tall apple *Malus pumila* trees.
5. Tall Leylandii hedge.
6. Overgrown garden shrubs with bare ground below. Rear boundary a corrugated metal fence.
7. Ground cover is short perennial vegetation – presumably resulting habitat after overgrown shrubs/scrub cleared. Includes - nipplewort *Lapsana communis,* prickly sow thistle *Sonchus asper,* nettle *Urtica dioica,* willowherb sp. *Epilobium* sp., Yorkshire fog *Holcus lanatus,* cleavers *Galium aparine,* broad-leaved dock *Rumex obtusifolius* and selfheal *Prunella vulgaris*.
8. Line of tall Leylandii.
9. Ivy *Hedera helix* and cleavers, with scattered bramble *Rubus fruticosus* agg.
10. Small open-fronted shed constructed of corrugated metal. No bat roost potential.
11. Hardstanding becoming colonized by short vegetation and moss.
12. Front garden. Overgrown all around with garden shrubs and creepers. Lawn is short and ivy – covered.
13. Pair of adjoined garages – each with a pitched roof. Brick walls 2m high and 3.5m to apex. Roof is asbestos-covered with large roof lights so interior of both garages is very light. Bargeboards flush to wall and heavily cobwebbed and no crevices in brickwork. Negligible bat roost potential.
14. House. Brick built – circa 1980s? Overhanging eaves with boxed soffits. Plastic windows to rear and front. Roof looks in fairly good order, but a few lifted clay tiles.

Legend

- Site boundary
- Structure
- Hardstanding
- Ephemeral short perennial
- A Amenity - Lawn
- Garden hedge Line of garden shrubs
- Fence
- Tree
- Target note (1-14)

PURE ECOLOGY

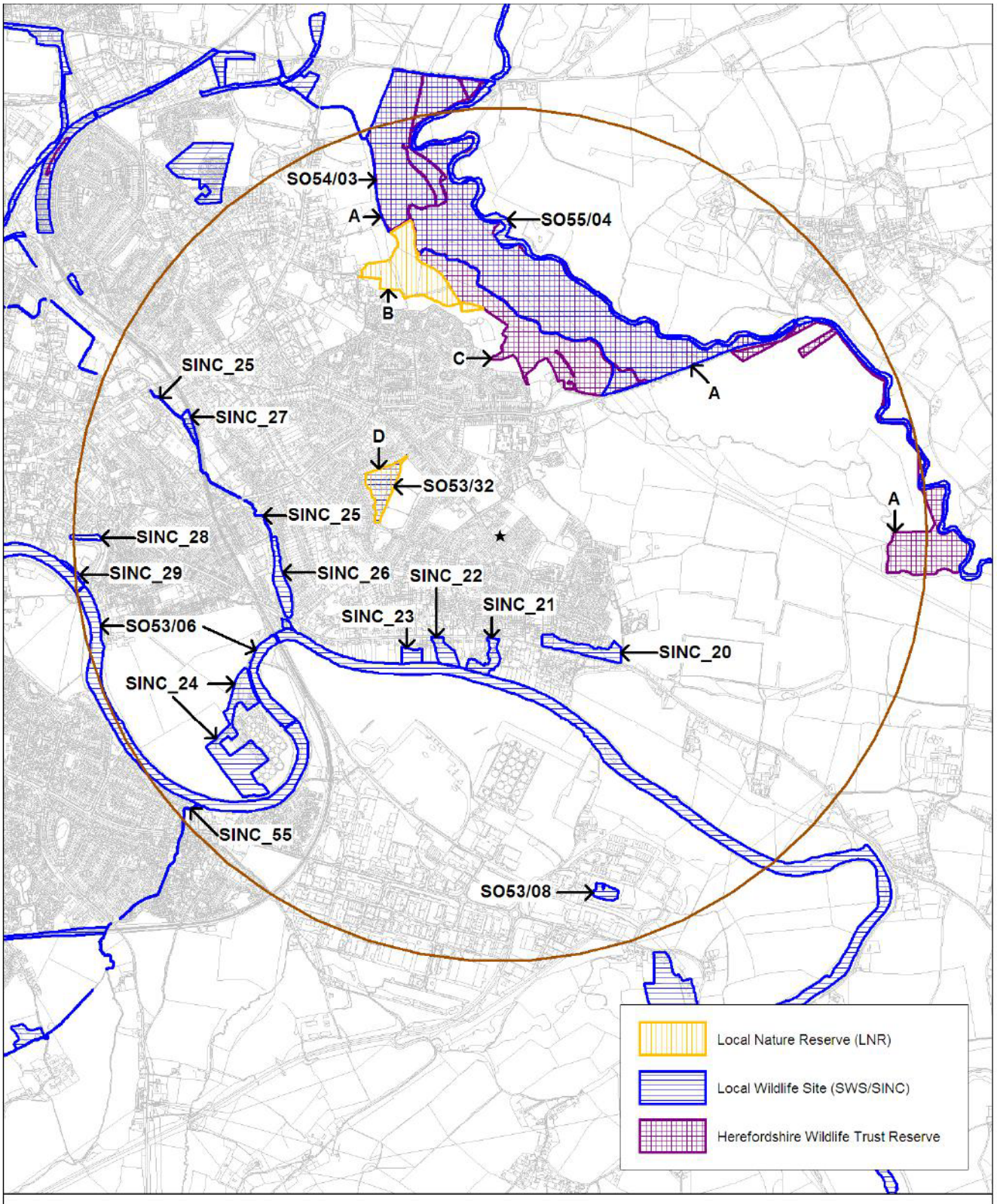
DATE: 23/10/17
PROJECT: Gorsty Lane, Hereford
REF.: 510-2017
CREATOR: RP
APPROVED: AG

Phase 1 Habitat Survey

Pure Ecology Ltd

5 High Street
Ledbury, Herefordshire
HR8 1DS

Appendix 3. Non – Statutory Designated Wildlife Sites



Map showing locally designated sites within 2km of SO53223968
23 Gorsty Lane, Hereford

NORTH

SCALE 1:23,500

Herefordshire Biological Records Centre

Herefordshire Archive and Records Centre
Fir Tree Lane
Rotherwas
Hereford
HR2 6LA

Telephone: (01432) 261538
Email: hbrc@herefordshire.gov.uk

Appendix 4. Photographs

Photo 1: Back garden looking NE	Photo 2: Back garden looking SW
	

Photo 3: Front lawn	Photo 4: Tall shrubs on NE boundary
	

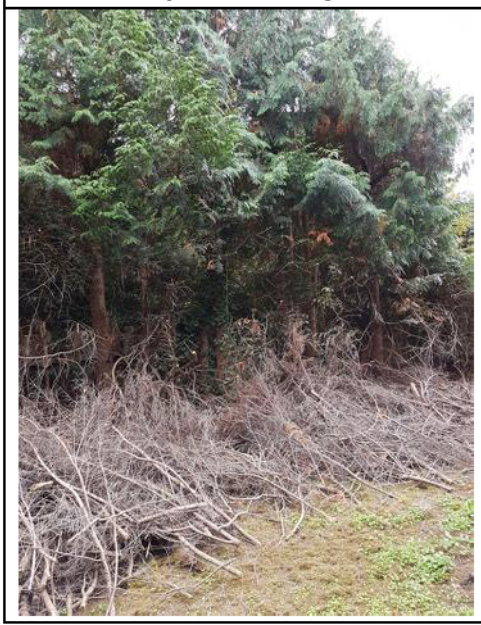
Photo 5: Leylandii hedge TN5	Photo 6: Hardstanding at TN11
	

Photo 7: Entrance at S corner of site	
	

Appendix 5. Legislation and Planning Policy

Conservation of Habitats and Species Regulations 2010

In relation to wildlife and nature conservation, two key Directives have been adopted by the European Community. These are (i) Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds ("The Birds Directive" formerly 79/409/EEC); and (ii) Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora ("The Habitats Directive"). These Directives provide for the protection of animal and plant species of European importance and the habitats which support them, particularly through the establishment of a network of protected sites.

The Habitats Directive is transposed into domestic law through the Conservation of Habitats and Species Regulations 2010. These regulations came into force on 1st April 2010 and consolidate the many changes that have been made to the domestic law over the years since the predecessor regulations made in 1994. The regulations provide for the designation and protection of European Sites, the protection of European protected species and the adaptation of planning and other controls for the protection of European Sites.

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) (WCA) consolidated and amended existing national legislation to implement the Convention of the Conservation of European Wildlife and Natural Habitats (The Bern Convention) and the Birds Directive. There have been various amendments since the original enactment. Schedules 1 and 5 of the Act identify species of bird and other animal in relation to which the Act makes killing, injury, taking and disturbance an offence while Schedule 8 to the Act lists species of plant in relation to which the Act makes it an offence to intentionally pick, uproot or destroy.

Great Crested Newts, Dormice, Otters and Bats

The above species 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 2010. They are collectively known as 'European Protected Species' (EPS) Taken together, these make it an offence to:

(a) Deliberately capture or intentionally take an EPS
(b) Deliberately or intentionally kill or injure a EPS
(c) To be in possession or control of any live or dead wild animal or any part of, or anything derived from an animal
(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 great crested newt or bat uses for shelter or protection

(e) Intentionally or recklessly disturb any wild EPS while it is occupying a structure or place that it uses for shelter or protection.
(f) Deliberately disturb EPS, 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

The law applies to aquatic habitats used by great crested newts (ponds and other wetland features) as well as suitable non-aquatic habitats (grassland, woodland, hedgerow, gardens etc.) used by the species during its terrestrial phase.

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 great crested newts and bats, it also allows this protection to be set aside (derogation) under The Conservation of Habitats and Species Regulations 2010 through the issuing of licences. These licences in England are currently determined by Natural England (NE) for development works.

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 NE to allow the operation to proceed. However, in accordance with the requirements of The Regulations, 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'.

Nesting Birds
It is an offence under the Wildlife and Countryside Act to intentionally take, damage or destroy the nest of any wild bird whilst it is in use or being built.

Common Species of Reptiles

Common species of reptile (common lizard, slow worm, adder and grass snake) are protected under the Wildlife and Countryside Act from killing and injury only.

Policy Context

The protection of ecological resources is promoted by planning statements and policies made at national and local levels.

National Planning Policy Framework

The government published the National Planning Policy Framework (NPPF) on 27th March 2012. The NPPF states that, "the planning system should contribute to and enhance the natural and local environment by protecting and enhancing valued landscapes, minimising impacts on biodiversity and recognising the wider benefits of ecosystem services. The policies and objectives of NPPF are summarised in Section 4.2 of this report.

The Government will "now embark on a new exercise to consider what underpinning guidance continues to be needed" with the outcome of this process being "an appropriate and easy to use set of guidance, focussing on issues that require national expression, to support implementation of the National Planning Policy Framework." The Government has "not established the process or set a timetable" for this yet and "until such time as the guidance review is complete, the existing guidance where relevant can still be used." Regarding what guidance is still relevant, "Annex 3 of the NPPF indicates that ODPM Circular 06/2005: *Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System* (Circular 06/05) is still relevant. This Circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England.