Preliminary Ecological Appraisal

- Land at: 8 Walmsley Brow, Billington, Clitheroe BB7 9TT -

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A report for

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March 2024

Preliminary Ecological Appraisal

- Land at: 8 Walmsley Brow, Billington, Clitheroe BB7 9TT -

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PART 1 INTRODUCTION:

1.1 REASONS FOR SURVEY:

PENNINE Ecological have been commissioned to undertake a Preliminary Ecological Appraisal and protected species survey / assessment of land at: 8 Walmsley Brow, Billington, Clitheroe BB7 9TT.

The study includes a desk top study of the governments Magic data base, vegetation survey, preliminary bat roost assessment, badger survey and assessment for other potential protected species issues.

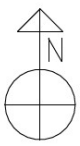
The report includes a full evaluation of the ecological significance of the survey findings. The surveys are required due to proposals the division of an existing bungalow to form two separate dwellings and the construction of one new residential property within the existing garden.

1.2 SITE LOCATION:

The site is located on the northern edge of Billington village within a residential area. The sites central National Grid Reference is SD 7270 3583.

The site location is shown below along with a Google Earth image on the following page.

1 LOCATION PLAN
1 : 1250



An aerial photograph of the site is shown below, dated 30/05/2023;

1.3 SITE STATUS:

A desk top study was not undertaken for non-statutory sites or data. Searches for statutory data were undertaken as outlined below.

1.3.1 Statutory Sites:

Details of statutory sites were sought from the Natural England web site search:

http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx

There are no statutory wildlife sites within 2km of the site.

Site of Special Scientific Interest (SSSI) Impact Risk Zones (IRZ's):

The site falls within a distant SSSI Impact Risk Zone (IRZ) However the nature / size and scale of the development does not require notification to Natural England.

1.3.2 Non-Statutory Sites:

Based on Lancashire County Councils Maps and Related Information Online (MARIO) there are no non-statutory sites (County Biological Heritage Sites) within 500m of the site.

1.3.3 Protected Species / Habitat Data:

Section 41 Habitats of Principal Importance in England (NERC) Act 2006;

The area of plantation woodland in the south western part of the site is not considered to qualify as a Section 41 Habitat of Principal Importance in England (NERC) Act 2006.

Section 41 Species of Principal Importance in England (NERC) Act 2006;

There were no Section 41 species recorded during the survey.

1.4 SURVEY CONSTRAINTS:

The site survey was conducted on 18/03/24, which is a marginally sub-optimal time for Extended Phase 1 Habitat Survey and some protected species surveys / assessment. However, all the habitats within the survey area have been defined / classified accurately and sufficiently assessed. All parts of the site were accessible. In the case of this site the constraints are not considered significant.

1.5 SURVEYOR EXPERINECE:

Surveyor experience:

The surveys and assessment were undertaken by Robert Leatham, a highly experienced ecological consultant and surveyor with approximately 30 years' experience in a wide range of ecological survey and assessment.

Key skills include the following;

- Extended Phase 1 Habitat Survey and National Vegetation Classification Survey.
- Highly proficient field botanist, including some difficult plant groups.
- Mammal surveys including surveys for badger, water vole*, otter*, brown hare and preliminary bat surveys.

*Over 400km of river reaches surveyed in England for the National Rivers Authority / Environment Agency.

- Extensive experience in great crested newt (GCN) survey, evaluation, licensing and mitigation. Natural

England Class Licence WML-CL08 held.

- Over 25 Great Crested Newt development licences held *(Natural England / Defra licences).*

- [1]Contributor to English Nature *(Natural England)* research papers in respect of great crested newt licensing and mitigation issues.

- Several Great Crested Newt Conservation Licences *(Natural England)* held, including extensive work at Hic Bibi Local Nature Reserve, Coppull, safeguarding a high population of Great Crested Newts.

- Bats: Accredited agent on the Class 2 Licence of Mr Stuart Macpherson, (Natural England Class 2 bat licence (2021-10079-CL18-BAT). Under this accreditation Mr Leatham is permitted to carry out work on all bat species in all UK counties using artificial light only.

- Ecological Evaluation and Impact Assessments in association with large scale commercial development and civil engineering.

[1] *English Nature (2004) *An assessment of the efficiency of capture techniques and the value of different habitats for the great crested newt (Triturus cristatus).* English Nature Research Report 576. PENNINE *Ecological* were contributors to this study.

PART 2 SURVEY RESULTS:

2.1 EXTENDED PHASE 1 HABITAT SURVEY:

2.1.1 Extended Phase 1 Habitat Survey Methodology:

An Extended Phase 1 Habitat Survey *(Nature Conservancy Council 1990)* of the study area was undertaken on 18th March 2024. The site's habitats were mapped, and higher vascular plant species were recorded and given abundance values according to the standard DAFOR scale, where:

D = Dominant
A = Abundant
F = Frequent
O = Occasional
R = Rare

Where appropriate these values can be prefixed by the letter L (locally) or V (very), to provide more subtle biogeographical data.

2.1.2 Habitats Present:

A 1.1.2 Broad-leaved plantation woodland.
A3.1 Broad-leaved scattered trees
G2 Running water (vertically sided unvegetated stone channel)
J1.2 Amenity grassland
J1.3 Ephemeral / short perennial
J1.4 Introduced shrub
J2.4 Fence
J2.5 Wall
J3.6 Building
J4 Bare ground

2.1.3 General Description:

The site forms a plot of land approximately 75m x 50m in maximum extent comprising of a single residential property and extensive mature gardens dominated by amenity grassland and introduced shrub with flagged areas, raise beds and stone pathways. The western part of the site forms an area of plantation woodland on sloping ground with a railway line to the west. The woodland area is not affected by the proposed development and accounts for approximately a third of the surveyed area.

A watercourse runs though part of the site, flowing from west to east and comprises a vertically sided unvegetated stone channel, which is then culverted to the south west of the existing property.

The boundaries are generally fenced and in part include garden privet and Leyland cypress hedges.

A small brick built storage building is present to the south east of the main house.

2.1.4 Target Notes:

Target Note 1: Residential bungalow and garden outbuilding subject to a preliminary bat roost assessment:

This is discussed further in Section 3.1.3.

Target Note 2: Broad-leaved plantation woodland (not affected by development).

The western part of the site forms an area of plantation woodland on sloping ground with a railway line to the west. The northern part of the woodland has a partial clearing that is fenced and has chicken sheds.

The woodland area is not affected by the proposed development and accounts for approximately a third of the surveyed area.

The following species were recorded;

Species:	Abundance:
Ivy	A
Common nettle	LA
Sycamore	F
Non-native garden herbaceous plant species	F
Dandelion species	LF
Montbretia species	LF
Bramble	LF
Herb Robert	LF
Lesser celandine	LF
Poplar species	LF
Willow species	LF
Currant species	VLF
Opposite-leaved golden-saxifrage	VLF
Hawthorn	O
Elder	O
Male-fern	O
St John's-wort species	O/R (non-native Hypericum variety)
Lords-and-ladies	R
Holly	R
Cyperus sedge	R

2.2 PROTECTED SPECIES SURVEYS:

During the Phase 1 Habitat Survey additional surveys were undertaken where appropriate for the presence of other potential protected species. The following surveys were undertaken.

2.2.1 Badger Survey:

Method:

A badger survey was undertaken of the site. The badger survey used standard techniques for establishing the use of the site by badger, and includes searches for evidence of badgers including:

- Setts
- Pathways
- Footprints
- Latrines
- Foraging areas
- Scratching posts
- Boundary searches for runs, pathways and latrines.

The survey results are outlined below.

Results:

Sett Search:

The survey found no setts on site.

Search for Foraging Signs and Pathways:

The site was thoroughly searched for badger pathways and signs of foraging. No sign of badger activity was found therefore it can be concluded that the species is not using this area for foraging or commuting.

Boundary Search:

All of the boundaries of the site were walked and examined for potential runs, pathways and latrines. The search found no evidence to suggest badger activity along any of the site boundaries.

The absence of any activity signs indicates that badgers are not entering the site. The absence of latrines indicates a lack of territorial activity in the near vicinity of the site.

2.2.2 Bats:

During the survey an assessment of bat roost potential and foraging habitats was undertaken.

The detached bungalow, a garden building and all trees / structures on site were assessed for bat roost potential. This is discussed further in Section 3.1.3.

2.2.3 Water Vole / Otter:

The watercourse that runs through part of the site was assessed for water vole / otter potential. The watercourse comprises a vertically stone sided unvegetated stone channel. This feature was scoped out of requiring detailed surveys since it is totally unsuitable for water voles and otters.

2.2.4 Other Protected Species:

Issues in relation to other potential protected species where no specific survey was undertaken are assessed in the following section.

PART 3 ECOLOGICAL EVALUATION & RECOMMENDATIONS:

3.1 EVALUATION OF SURVEY & RECOMMENDATIONS:

The following section evaluates the site in relation to statutory/non-statutory sites, protected species and species/habitats listed on the former UK Biodiversity Action Plan Priority List, Section 41 Species/Habitats of Principal Importance in England (NERC) Act 2006, and Lancashire Biodiversity Habitats.

3.1.1 Statutory Sites:

There are no statutory sites within 2km of the site.

3.1.2 Non-statutory Sites:

There are no non-statutory site (County Biological Heritage Sites) within 500m of the site.

3.1.3 Sites Habitats & Higher Plant Species:

The plantation woodland (unaffected by development) in the western part of the site would not qualify as a Section 41 Habitat of Principal Importance in England (NERC) Act 2006.

Plant species recorded on site are common and widespread and are considered to be of site value only.

Recommendations: Habitats & Higher Plant Species:

There are no requirements for further surveys.

Habitat Creation / Enhancement:

The proposals include the following;

- New native woodland understorey planting amounting to approximately 600m².
- Native woodland bulbs amounting to approximately 400m².

In addition, extensive permanent provision for bats and birds will be incorporated into the scheme design (see following sections below).

New native woodland understorey planting amounting to approximately 600m².

New native woodland understorey shrub / climber planting will be established within existing parts of the woodland that are open and lack significant understorey.

The following species (whips) will be planted (protected by rabbit guards) in the following numbers;

Species:	Number:
Guelder rose *(Viburnum opulus)*	20
Honeysuckle *(Lonicera periclymenum)*	20
Hazel *(Corylus avellana)*	10
Holly *(Ilex aquifolium)*	10
Crab apple *(Malus sylvestris)*	5

Useful information and guidance is provided on the following link;

https://www.creatingtomorrowsforests.co.uk/blog/creating-woodland-how-to-plant-trees

Native woodland bulb planting; approx. 4800 bulbs over an approximate 400m² area / 12 bulbs per m²:

Along the existing woodland edge swathes of native woodland bulbs will be planted. The total planting area will be approximately 400m². Planted at densities of approximately 12 bulbs per m².

The following species are recommended. The bulbs should be planted in random solid blocks of the same species with approximately 50 – 100 bulbs in each block / swathe. Intermixing of different species of bulbs in the same block must be avoided.

Woodland bulbs:

Species:	No. of bulbs:	No. of bulbs in each block:
Bluebell *(Hyacinthoides non-Scripta)*	3000	50 – 100
Ramsons *(Allium ursinum)*	800	50 – 100
Wood anemone *(Anemone nemorosa)*	500	50 – 100
Lesser Celandine *(Ranunculus ficaria)*	500	50 – 100

Native bulbs are available from many suppliers including Nature Scape; *https://www.naturescape.co.uk/*

See Appendix 2, Figure 1, for locations of new habitats and biodiversity enhancements.

3.1.3 Protected Species:

Badgers:

Badgers are protected under Schedule 6 of the Wildlife and Countryside Act 1981, and under the Protection of Badgers Act 1992, which prohibits deliberate interference with the animal or its sett.

The survey found no evidence of historic, recent or current use of the site by badgers for foraging, commuting or occupation and the species is considered to be absent.

Recommendations: Badgers;

There are no issues in relation to badgers arising from the development. No further surveys are required.

Bats:

Bats are comprehensively protected by European legislation.

All British bats and their roosts are afforded protection under Schedule 5 of the Wildlife & Countryside Act (1981) (as amended) and are listed in Schedule 2 of The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (SI 2019/579). When dealing with cases where a European Protected Species (EPS) (all UK bats) may be affected, a planning authority is a competent authority within the meaning of the Regulation 7 of the Regulations, that has a statutory duty as the local authority to have due regard to the provisions of the Regulations in the exercise of its functions. Paragraph 180 of the National Policy Planning Framework (as revised in July 2021) states:

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

a) *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

b) *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*

c) *development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons63 and a suitable compensation strategy exists; and,*

d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

Use of Buildings by Bats:

a) Summer breeding roost.
b) Hibernation.
c) Transitional or temporary roost.

Roost selection is often closely correlated to suitable foraging habitat within a reasonable commuting distance from the roost and different sites are used depending upon insect densities and abundance, climatic conditions can also affect their ability to successfully forage. All British bats are insectivorous.

Up to 11 bat species have been regularly recorded in Lancashire most of which use built structures, notably occupied residential properties for roosting. The most frequently encountered species is the Pipistrelle bat; its abundant status in Lancashire is reflected throughout the UK.

Survey Methodology:

The bungalow and brick outbuilding together with all trees on site were inspected for bat roost potential The bungalow and brick outbuilding were inspected internally and externally for bat roost potential. The inspection included a search for evidence of bats and potential places / points of internal access that may be of value to bats. The elevations were investigated from ground floor level, with the aid of close focusing binoculars, for places that are frequently used by bats as roosts or as access into roost chambers.

The internal parts of the bungalow supported a large internal loft space extending the full length of the property. The brick outbuilding has no loft spaces.

The daytime survey was conducted by Mr. Robert Leatham, who is an experienced ecologist and accredited agent on the Class 2 Licence of Mr. Stuart Macpherson, (Natural England Class 2 bat licence (2021-10079-CL18-BAT). Under this accreditation Mr. Leatham is permitted to carry out work on all bat species in all UK counties using artificial light only.

Constraints:

There were no constraints to the survey. All external elevations and internal areas were physically / visually accessible.

Bat Survey Results:

<u>Target Note 1: Single storey detached bungalow:</u>

This is a detached single storey bungalow of brick construction. The roof is concrete tiled.

The property is in a very good condition of repair. There were no observed gaps in masonry / under tiles or between soffits / barge boards and brick walls. There are no features present suitable for bat ingress.

There was no direct evidence of bats found inside or outside the property.

The property is defined as having **Negligible bat roost potential.**

Detached brick outbuilding:

This is a small detached outbuilding of brick construction. The roof is concrete tiled.

The property is in a very good condition of repair. There were no observed gaps in masonry / under tiles or between soffits / barge boards and brick walls. There are no features present suitable for bat ingress.

There was no direct evidence of bats found inside or outside the property.

The property is defined as having **Negligible bat roost potential.**

Trees:

None of the trees on site supported features suitable for roosting bats.

The trees on site are defined as having **Negligible bat roost potential.**

Surrounding Habitats:

The property is located in a residential sub-urban location with mature gardens. There are extensive areas of woodland and grassland associated with the railway line immediately west of the site and extending out into the wider landscape. Overall, both the immediate habitats and those extending in the wider landscape to the south are considered to be of **Good / locally High value** for foraging bats.

Recommendations:

The buildings and trees on site have no potential bat roost features (PRF's). The features present have been categorised as **Negligible potential** for crevice dwelling bats.

Recommendations: Bats;

Notwithstanding the absence of features suitable for roosting bats, the proposed extensions should include measures for enhancement, in accordance with local and national planning policy.

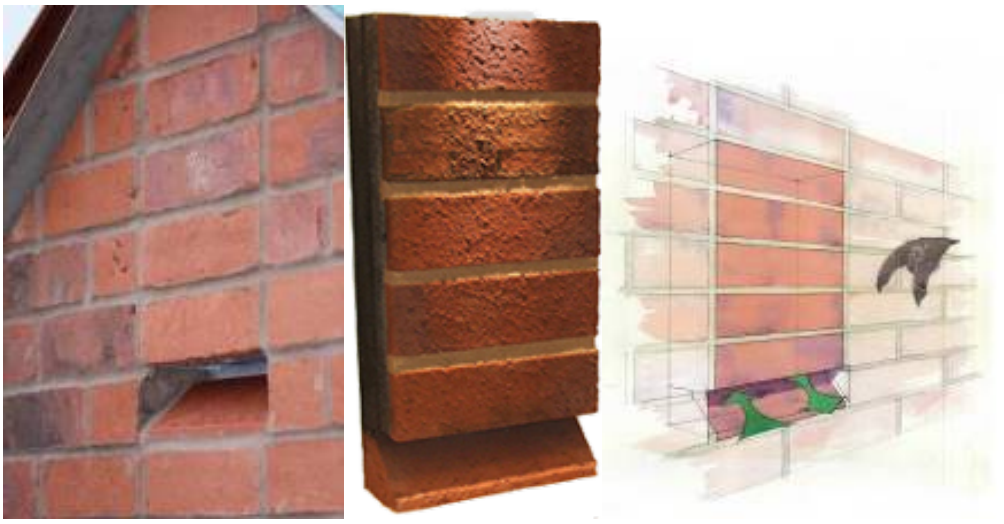
Enhancement for bats:

Irrespective of the findings from the bat surveys / inspections, the following enhancement measures will apply.

Integrated artificial bat roosts:

It is recommended that **two** integrated artificial roosts are provided in the new properties as shown on Figure 1, Appendix 2. The roosts must be located on southerly / easterly aspects and high up the wall towards the eaves / wall plate. Full instructions in relation to installation/positioning are provided via the link below.

In particular, the Habibat Bat Box is recommended and is a solid box made of insulating concrete with internal roosting space. The box blends seamlessly into brick-built properties and may be incorporated into the fabric of buildings.



https://www.wildcare.co.uk/wildlife-nest-boxes/bat-boxes/wall-integrated.html

Provision of bat boxes on trees:

It is recommended that **at least four** bat boxes on trees are provided. **At least one Mirimare Bat Box and three Eco Kent Bat Boxes will be erected.** The indicative locations on existing mature trees within the woodland are shown in Appendix 2, Figure 1 at the end of this report.

Mirimare Bat Box:

One Mirimare bat box will be installed on a mature sycamore tree as shown in Appendix 2, Figure 1.

The Mirimare bat box is designed to reproduce a natural roost site in a hollow tree and has 4 internal roosting compartments and 3 grooved wooden panels inside to accommodate a large number of bats. It is painted black to absorb the heat of the sun and provide the warmth that the bats need.

Eco Kent Bat Boxes:

Suitable boxes include the Eco Kent Bat Box. Three of these will be installed on existing mature trees within the woodland as shown in Appendix 2, Figure 1.

Information regarding installation of these boxes is provided here; https://www.wildcare.co.uk/10691-eco-kent-bat-box.html

See Appendix 2, Figure 1 for the locations of integrated bat roosts and boxes.

Birds:

All birds are offered various levels of protection under the Wildlife and Countryside Act (1981) as amended. The sites woody vegetation including introduced shrub and trees have potential to support breeding birds.

Recommendations: Birds;

No further surveys are required.

In order to minimize impacts on birds any removal of shrubs / trees should take place outside of the breeding season, i.e. between September 1st and February 28th. In addition a bird box is present on one sycamore tree next to the stone lined watercourse, this will need to be checked for occupancy prior to any removal.

If removal of the above vegetation types and bird box is envisaged during the breeding season *(March 1st to August 31st)*, then checks should be made to establish any nesting or breeding activity, prior to removal.

Enhancing the site for Birds:

Integrated bird boxes within the new properties;

Two integrated double chamber house sparrow nest boxes (Vivara Pro) will be installed on the upper gable northern / side elevations of the new properties. The boxes must be located on northerly / easterly aspects and high up the wall towards the eaves / wall plate. see Appendix 2, Figure 1. The following box is recommended;

House sparrow nest box (Vivara Pro), Double chamber:

House sparrows (*Passer domesticus*) are sociable opportunists that survive in most UK habitats, from towns and cities to farmland and countryside. Substantial declines in both urban and rural populations (estimated 71% decrease between 1977 and 2008) have led to concerns for this species.

This House Sparrow Nest Box is manufactured from WoodStone - a mix of concrete and FSC wood fibres. This material is strong and highly insulating which helps to provide a thermally stable environment within the box. It also protects against damage from predators such as cats, woodpeckers and squirrels. The two breeding chamber version is particularly suitable for house sparrows as they prefer to nest in colonies.

Three House Sparrow Nest Boxes will be integrated into the walls of the new properties at upper floor level locations as shown on Figure 1, Appendix 2.

These are available here, or, from other suppliers; https://www.nhbs.com/vivara-pro-woodstone-house-sparrow-nest-box

Bird Boxes suitable for the semi-mature / mature trees;

Three bird boxes will be installed on existing mature / semi-mature trees in indicative locations as shown in Appendix 2, Fig. 1. All bird boxes should be at least 3m above ground level sheltered from prevailing wind, rain and strong sunlight. Ideally a north eastern aspect is recommended.

The following boxes are recommended;

Schwegler 1B Nest Box –The 1B nest box will attract a wide range of species and is available with different entrance hole sizes to prevent birds from competing with each other for the boxes. The nest box can be

attached to the tree or wall using an aluminium nail or by hanging over a branch and is made from Woodcrete to ensure that it lasts for decades. The front panel is removable for inspection and cleaning.

https://www.nhbs.com/1b-schwegler-nest-box

Vivara Pro Seville Woodstone Nest Box – These WoodStone boxes provide a well insulated interior with a more consistent internal temperature than an ordinary wooden box, and can be fixed at a height of 1.5 – 3 metres to both garden and woodland trees.

https://www.nhbs.com/vivara-pro-seville-28mm-woodstone-nest-box

Great Crested Newt:

Great crested newt (GCN) is comprehensively protected under European legislation.

There are no ponds or suitable waterbodies within the species terrestrial range of the site.

Recommendations: Great Crested Newt;

There are no issues in respect of great crested newts. The species is considered absent from the site beyond reasonable doubt. No further action is required.

PART 4 REFERENCES:

4.1 REFERENCES:

Nature Conservancy Council (1990) *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit*. Nature Conservancy Council.

Rose, F. (1981) *The Wildflower Key*. Warne.

Stace, C., (1997) *New Flora of the British Isles (Second edition)*. Cambridge University Press.

Web Sites:

Google Earth.

Natural England – Nature on the Map.

APPENDIX 1:

Map 1: Extended Phase 1 Habitat Survey
(Separate file)

Site Photographs

APPENDIX 2:

Figure 1: On Site Ecological Enhancement Measures

APPENDIX 1: SITE PHOTOGRAPHS: 18th March 2024

Loft space of bungalow, lined with bitumen roofing felt below concrete tiles.

Looking south west across part of the plot where the proposed new house will be.

Loft space of bungalow, lined with bitumen roofing felt below concrete tiles.

Looking west across part of the plot where the proposed new house will be.

Looking south across part of the plot where the proposed new house will be.

Looking west across the site from the southern end of the bungalow.

Detached outbuilding showing boarded roof below concrete tiles.

Bungalow, showing southern gable elevation, soffits are tight to the brickwork.

Detached outbuilding showing tight fitted soffits to brickwork.

Existing bungalow viewed from the south west.

Detached outbuilding.

Rear western elevation of existing bungalow, soffits are tight fitting to the brickwork.

Vertical stone lined channel looking west.

Vertical stone lined channel looking east.

Southern end of the plot where the new proposed property is located.

Southern end of the plot where the new proposed property is located, looking west.

Southern end of the plot where the new proposed property is located, looking west.

Southern end of the plot where the new proposed property is located, looking north.

Woodland area western part of the site (Target Note 2).

Southern end of the plot where the new proposed property is located, looking north.

Woodland area western part of the site (Target Note 2).

Woodland area western part of the site (Target Note 2).

Woodland area western part of the site (Target Note 2).


Woodland area western part of the site (Target Note 2).


Looking east along part of the northern boundary.


Woodland edge area western part of the site, looking south (Target Note 2).


Looking east along the front driveway.


Looking south from the northern boundary and showing approximate location of proposed new building.


Front garden / driveway.

APPENDIX 2: Figure 1: On Site Ecological Enhancement Measures

PENNINE ecological

- *Protected species survey & licensing*
- *Habitat survey*
- *Habitat creation & management*
- *Arboricultural survey & impact assessment*
- *Invasive species survey & control*
- *Management plans*

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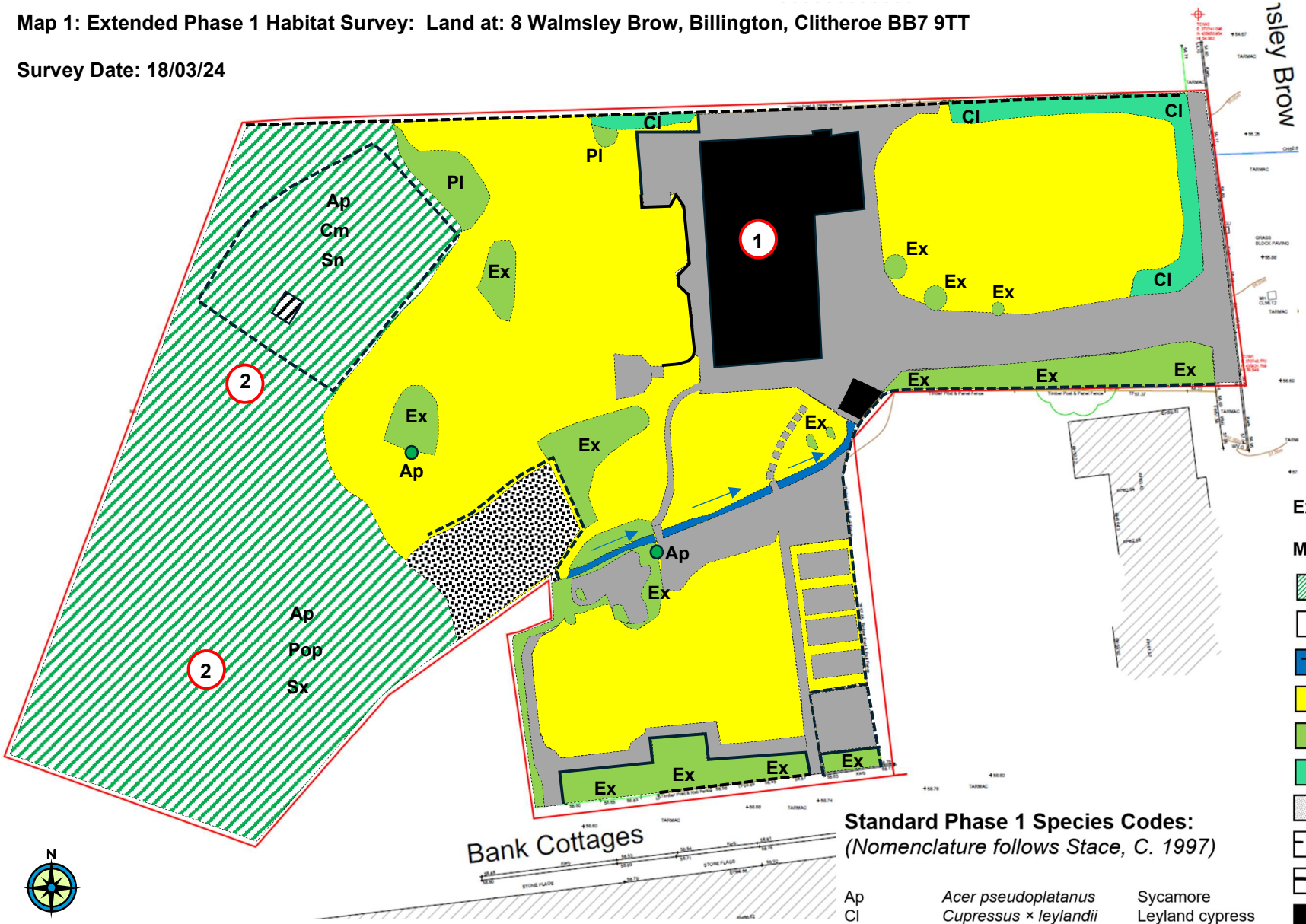
Key: On Site Ecological Enhancement Measures:

- New native woodland shrub under planting (approx. 600m²)
- Native woodland bulb planting (4200 bulbs / 400m² / 12 bulbs per m²).
- Habibat Integrated bat boxes x 2.
- Mirimare bat box x 1 on existing sycamore tree.
- Eco Kent bat boxes x 3 on existing mature trees.
- Integrated double house sparrow nest box x 2.
- Bird boxes x 3 on existing mature trees.

Refer to report for details / specifications.

Map 1: Extended Phase 1 Habitat Survey: Land at: 8 Walmsley Brow, Billington, Clitheroe BB7 9TT

Survey Date: 18/03/24



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- *Protected species survey & licensing*
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Extended Phase 1 Habitat Survey:

Map Colour Codes:

- Broadleaved plantation woodland
- Scattered broadleaved tree
- Running water (stream)
- Amenity grassland
- Introduced shrub
- Cupressus × leylandii hedge
- Ephemeral / short perennial
- Fence
- Wall
- Building
- Bare ground
- Target Notes1 - 2
- Site Survey boundary

Standard Phase 1 Species Codes:
(Nomenclature follows Stace, C. 1997)

Ap	*Acer pseudoplatanus*	Sycamore
Cl	*Cupressus × leylandii*	Leyland cypress
Cm	*Crataegus monogyna*	Hawthorn
Ex	-	Exotic species
Pl	*Prunus laurocerasus*	Cherry laurel
Pop	*Populus species*	Poplar species
Sn	*Sambucus nigra*	Elder
Sx	*Salix species*	Willow species