

# Preliminary Ecological Appraisal

## Pathways

Blackpool Road, Newton

June 2021

Prepared for: Mr Robinson

Report prepared by: Verity Webster BSc (Hons) MSc CEcol CMIEM



## EXECUTIVE SUMMARY

- On 4th June 2021 a Preliminary Ecological Appraisal was undertaken on land at Pathways, Blackpool Road, Newton.
- The site comprises mainly hard standing with industrial buildings. There is a small area of grassland and ruderal vegetation and a dense hedgerow along the southern boundary.
- Ecological constraints relate to the hedgerow along the southern boundary, foraging and commuting bats, badger, hedgehog, common toad, reptiles and nesting birds.

### *Hedgerow*

- Protection of the hedgerow along the southern boundary is proposed due to the status of the habitat as a habitat of principle importance. In addition, the hedgerow provides habitat for house sparrow, a species of conservation concern, and will likely provide a habitat corridor for commuting and foraging bats.

### *Bats*

- Bats are likely to utilise the southern boundary hedgerow to forage and commute. Recommendations have been made to minimise the risk of disturbance to this species group as a result of lighting.

### *Badger*

- Precautionary mitigation is recommended to avoid harm to badger that may occasionally cross the site.

### *Hedgehog*

- Precautionary mitigation is recommended to avoid harm to hedgehog that may occasionally cross the site.

### *Reptiles and Common Toad*

- Avoidance mitigation to minimise the risk of harm to reptiles and common toad is recommended.

### *Nesting birds*

- The survey site has potential to support nesting birds within trees and vegetation. Mitigation to avoid harm to nesting birds in the spring and summer months is recommended.

If the proposed mitigation is followed, the development will have no foreseeable impact upon protected species or species and habitats of conservation importance in the locality.

### *Enhancement*

- The proposals provide the opportunity to enhance the site for wildlife and recommendations for this have been made, including installation of bird and bat boxes, and the creation of a 'hedgehog highway'.

*Verity Webster*

Ecology and Protected Species Consultancy



## 1 Introduction

### 1.1 Application Site

- 1.1.1. This report details an updated Preliminary Ecological Appraisal of 1 land at Pathways, Blackpool Road, Newton, PR4 3RE. Ordnance Survey grid reference (centre of site): SD 4413 3134.
- 1.1.2. Mr Robinson commissioned Verity Webster Ltd to undertake a Preliminary Ecological Appraisal to inform the planning application.

### 1.2 Objectives

- 1.2.1 The objectives of the Preliminary Ecological Appraisal are to determine:
  - The potential for protected species and/or habitats of importance within and surrounding the site.
  - The presence of any designated sites within the surrounding area, or if the site is designated.
  - How the proposed works might impact protected species and/or habitats of importance.
  - How the proposed works might impact designated sites within the surrounding area.
  - How any impacts might be avoided, mitigated and/or ameliorated, including recommendations for further survey work if required.
  - Potential for enhancement of the site for protected species, habitats of conservation interest and overall biodiversity.

### 1.3 Background

- 1.1.3. The original Ecological Appraisal was undertaken by ERAP in 2018. Reference:
  - Ecological Survey and Assessment (including Licenced Bat Survey). July 2018. ERAP (Consultant Ecologists) Ltd Ref: 2018-157.

### 1.4 Proposals

- 1.4.1 The proposals for the site comprise the demolition of the existing structures and construction of 4 new dwellings with associated landscape.

### 1.5 Ecologist

- 1.5.1 The Ecological Assessment was undertaken by Verity Webster. Verity is a Chartered Ecologist and a full member of the Chartered Institute of Ecology and Environmental Management.
- 1.5.2 Verity has worked as an ecological consultant for over 14 years. She has undertaken Ecological Assessments and protected species surveys for a large variety of projects and schemes, producing the required impact assessment and subsequent mitigation schemes and method statements when necessary.



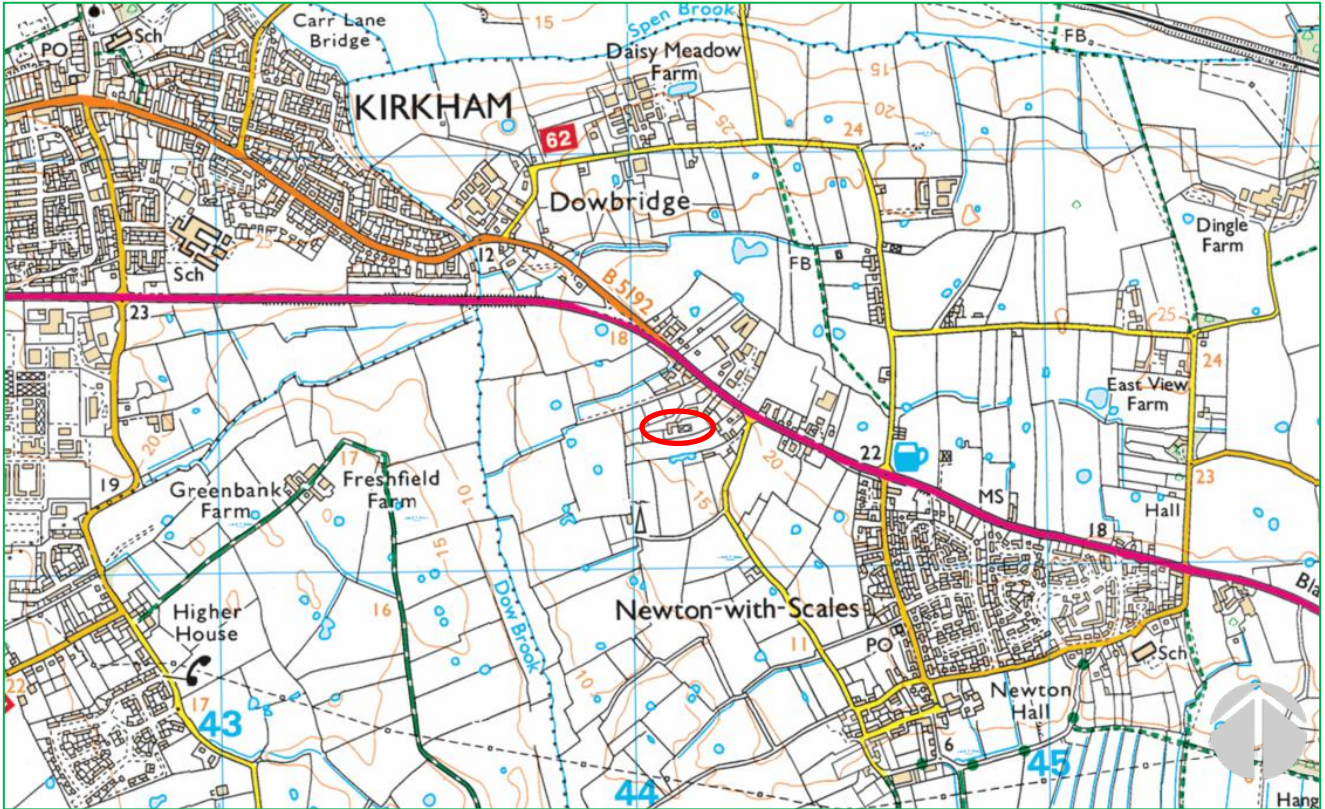
## 2 Site Location and Description

### 2.1 Site Location

- 2.1.1 The survey site is located in a rural location in Newton-with-Scales, approximately 700m from the southeastern edge of Kirkham town. The A583 road weaves east to west through the landscape. The access road runs approximately 20m southwest from the A583, providing access to the site.
- 2.1.2 The site is surrounded to the north west and south by grazed and arable land divided by tree lines and hedgerows. There are also areas of woodland and scrub. Waterbodies are scattered throughout the surrounding landscape, the closest of which lies approximately 45m to the south.
- 2.1.3 Dow Brook runs north to south approximately 440m to the west of the survey site.



Figure 1: Ordnance survey map showing the location of the proposed development site.



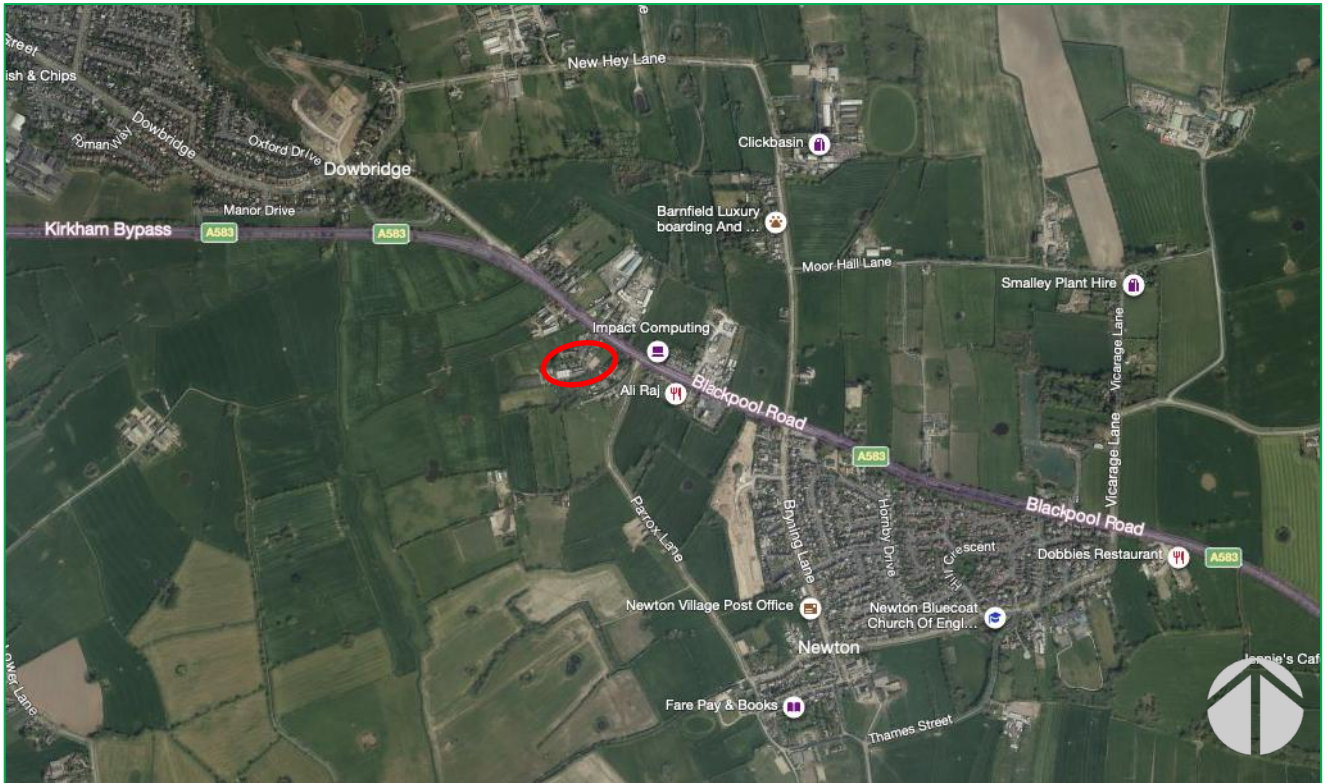
Ordnance survey 1:25000

Key

Survey site 



Figure 2: Aerial image showing the proposed development site and immediate surroundings




From BING Maps

250m



Key

 Survey site



## 2.2 Site Description

2.2.1 The survey site is roughly rectangular and composed mainly of hard standing with industrial buildings. There is a dense hedgerow and ditch along the southern boundary of the sites and an area of disturbed ground supporting ruderal vegetation to the north of Structures 1 and 2 (see Figure 3). There is some dense bramble scrub to the rear of Structure 7. A description of the habitats present is given in Section 6.

### *Structure 1*

2.2.2 Structure 1 is an industrial building constructed of breeze block with the upper section of the east and west elevation panelled in wood. There is a curved plastic roof beneath which some layers of plastic lining are showing. Internally the roof is panelled and there is no loft void.

### *Structure 2*

2.2.3 Structure 2 is an industrial building constructed of breeze block and rendered, with five pitched, corrugated metal sheet roofs, all of which have loft voids that are approximately 1.2m in height. The roof is single-skin and the beams are exposed, but there is thick insulation between them. There is a conservatory on the east elevation.

### *Structure 3, 5 and 6*

2.2.4 Structure 3, 5 and 6 are metal shipping containers.

### *Structure 4*

2.2.5 This structure is a small, square wood panel shed with a pitched felt-covered roof. There are windows on the north elevation. Internally the space is open to the roof; there is no loft void.

### *Structure 7*

2.2.6 Structure 7 is a u-shaped block of stables. The building is constructed of wood panels and wood beams with a corrugated panel roof. Internally the stables are open to the roof.

### *Structure 8*

2.2.7 Structure 8 is located immediately to the south of the eastern arm of Structure 7. The building is constructed of wood panelling with a shallow-sloped, felt-covered roof.

*The north elevation of the caravan on the west boundary*



*Structure 4*



*Structure 1*



*Structures 2 and 3*



*Structure 7*



*Grassland to the rear of structure 2*



*Hedgerow along the southern boundary*





Figure 3: The Survey Site




From BING Maps

10m



Key

 Survey site boundary

1-8 Structure numbers



## 3 Legislation

Relevant legislation is listed here. For full details, refer to Appendix A.

### 3.1 Bats

3.1.1 All UK bats receive full protection under the Wildlife and Countryside Act 1981 and are also protected under The Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018 (the Habitats Regs).

3.1.2 This makes it an offence to:

- Capture, injure or kill any bat,
- Disturb a bat of any species,
- Damage or destroy a breeding site or resting place of a bat (ie. The roost)
- Possess any bat, or part of a bat
- Offer for sale or trade any bat, or part of a bat

### 3.2 Badger

3.2.1 Under the Badger Act 1992, it is an offence to:

- Take, injure or kill a badger, or attempt to do so
- Cruelly ill-treat a badger
- Interfere with a badger sett including:
  - Damaging a badger sett or any part of it
  - Destroying a sett
  - Obstructing access to, or entry to a sett
  - Causing a dog to enter a sett; or
  - Disturbing a badger whilst it is occupying a sett.

### 3.3 Reptiles

3.3.1 Smooth snake and sand lizard receive full protection under the Wildlife and Countryside Act 1981 and are also protected under The Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018 (the Habitats Regs).

3.3.2 This makes it an offence to:

- Capture, injure or kill one of these species,
- Disturb these species,
- Damage or destroy a breeding site or resting place of these species.
- Possess one of these species, or part of one
- Offer for sale or trade one of these species, or part of one

3.3.3 Common lizard, adder, grass snake and slow-worm are partially protected under the Wildlife and Countryside Act 1981. This makes it an offence to:

- Kill or injure one of these species.
- Offer for sale or trade one of these species, or part of these animals.

### 3.4 Amphibians

3.4.1 Great crested newts receive full protection under the Wildlife and Countryside Act 1981 and are also protected under The Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018 (the Habitats Regs).



3.4.2 This makes it an offence to:

- Capture, injure or kill one of these species,
- Disturb these species,
- Damage or destroy a breeding site or resting place of these species.
- Possess a great crested newt, or part of this animal
- Offer for sale or trade a great crested newt, or part of this animal.

3.4.3 Common lizard, adder, grass snake and slow-worm are partially protected under the Wildlife and Countryside Act 1981. This makes it an offence to:

- Kill or injure one of these species.
- Offer for sale or trade one of these species, or part of these animals.

3.4.4 Common toad, common frog, palmate newt and smooth newt are protected from sale or trade only.

### 3.5 Section 41 Habitats and Species of Principal Importance

3.5.1 Section 41 Habitats and Species of Principal Importance (NERC Act 2006) are a material consideration for planners. The list is derived from the UK Biodiversity Action Plan list and supports species and habitats of conservation concern.

3.5.2 Species relevant to this report include hedgehog and common toad.

### 3.6 Designated Sites

3.6.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.

3.6.2 Statutory sites can be designated under UK legislation (the Wildlife and Countryside Act 1981), European Law (the Habitats Regulations 2017) or International law (Ramsar Convention).

3.6.3 Non-statutory sites can be designated by the Local Planning Authority, and different counties have different ways of designating local wildlife sites. Examples are Local Wildlife Sites and Biological Heritage Sites.

### 3.7 Planning Policy and Legislation

3.7.1 Under the NERC Act 2006, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site before they make a decision on the planning permission.

3.7.2 The National Planning Policy Framework (NPPF) encourages Local Planning Authorities to conserve and enhance biodiversity.

Chapter 15, Para 170 of NPPF states: *"The planning system should contribute to and enhance the natural and local environment by:*

- a) ***protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils...***
- d) ***minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures"***.

Para 171 states: *"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."*

Para 174 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:



- a) ***“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***
  - b) ***Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity.”***
- 3.7.3 Para 175 states that *“when determining planning applications, local authorities should apply the following principles:*
- a) ***if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused”***
- 3.7.4 The local planning authority has a responsibility, therefore, to obtain all information regarding the potential for protected species on a site prior to making a decision about a proposal.



## 4 Survey Methodology

### 4.1 Desk Study

4.1.1 The following data sources used to establish background information about protected species and their likely presence in the locality:

- Magic Map, Natural England (2018)
- Bing Maps (2019)
- Biological records data from Lancashire Environment Record Network (LERN)(2018)

4.1.2 Online mapping facilities, including MAGIC (Defra 2015), Google earth (for aerial mapping) and Ordnance Survey maps for the area were consulted to assess the site in relation to the surrounding landscape and any statutory and non-statutory designated sites.

4.1.3 Records data from LERN includes records of protected species and habitats of conservation interest within 2km of the survey site.

### 4.2 Site Survey

4.2.1 The survey site was walked in daylight on 4th June 2021, and during the visits the habitat was assessed for potential for protected species. The surveyor searched for signs of the presence of protected species where appropriate, including pathways, burrows / nests / resting places, scratch markings, footprints and droppings etc. The presence of all animals and birds, if seen or heard, was recorded.

4.2.2 Habitats on site were assessed and described.

#### *Preliminary Roost Assessment*

4.2.3 As part of the site survey, a Preliminary Roost Assessment was undertaken of the structures on site with respect to bats.

4.2.4 Internal and external inspection of the structures on site were undertaken during daylight to determine the potential for bats and establish, if possible, whether bats are using the structures or have been using the structures in the past.

4.2.5 All accessible parts of the structures were inspected to look for bats and signs of the presence of bats, including:

- Droppings.
- Feeding remains including moth and butterfly wings.
- Staining from urine or oils near crevices or holes or on timber (such as roof beams), walls, chimney breasts etc.
- Scratch marks on walls and timber.
- Squeaking or chattering calls.

4.2.6 The systematic search inside the structures included inspection of beams, floors, surfaces of stored materials, roof boarding, junctions between roof timbers and timbers and the walls,



crevices within brickwork. Potential access into the structures was also inspected by searching for holes in insulation and any light penetration into the interior from the outside.

- 4.2.7 The assessment outside the structures included inspection of all walls, windows, window sills, roof overhangs, fascias, eaves and tiles, including a search for any crevices under tiles, under lifted lead flashing or lifted roofing felt, missing mortar, gaps in the ridge or gable end of the roofs, crevices in brickwork or under flaking paintwork or render, gaps in cladding or hanging tiles and any other potential bat roost opportunities.
- 4.2.8 **Equipment:** During the survey a ladder, close-focussing binoculars and a strong torch with directional beam was used to inspect the building.
- 4.2.9 As a result of the preliminary roost assessment, the buildings on site were characterised as having 'negligible', 'low', 'medium' or 'high' suitability for bats. It may also be possible to confirm presence of a roost.
- 4.2.10 Buildings or structures typically characterised as having:
- **Negligible** suitability for bats will lack features with any potential to support roosting bats. Modern or newly-built well-sealed structures may fall into this category. Structures that are metal clad with metal internal beams might have negligible potential if there are no favourable roosting spaces. Structures may also be unfavourable due to the level of disrepair, being subject to poor weather conditions.
  - **Low** suitability for bats will have sub-optimal roost features with limited potential for roosting bats. Features may be used by single bats opportunistically, but do not provide enough space, shelter, protection, appropriate conditions and / or suitable surrounding habitat to be used on a regular basis by large numbers of bats.
  - **Medium** suitability for bats may have few features with potential for bats, that provide enough space, shelter, protection and other suitable conditions, or several features with limited potential for bats. It may also be that a potentially suitable structure is situated in an area with habitat that has only low potential for foraging and commuting bats.
  - **High** suitability for bats will support at least one or more features that provide opportunities for roosting bats such that they might be used regularly, for longer periods by larger numbers of bats. These may be external features, such as lifted weatherboard or crevices in brick or stonework, or internal, such as large loft spaces with potential access. Barns, with open doorways and windows with wooden rafters and beams may fall into this category. If a structure is close to good habitat, such as a waterway, marshland or woodland, this also increases potential for roosting bats.
  - **Confirmed** roost presence when it is evident as a result of signs from inspection, such as droppings, or sight of bats, that a roost exists within the building. It is not always possible to ascertain presence or absence of a roost even if some



signs, such as droppings or feeding remains are found.

### **Great Crested Newt Assessment**

#### **Habitat Suitability Index**

- 4.2.11 As part of the original Preliminary Ecological Appraisal undertaken by ERAP (2018) the Habitat Suitability Index assessment (Oldham *et al*, 2000) was used to determine the suitability of the waterbodies within 250m of the site (and connected by habitat corridors) for great crested newt. The Habitat Suitability Index is based upon 10 suitability indices, all of which are factors known to affect the likely use of the waterbody by great crested newt, for example percentage shade, percentage emergent vegetation, the presence of fish and waterfowl, the area of suitable surrounding habitat and the presence of other waterbodies in the area.
- 4.2.12 Each water body within 250m of the survey site was evaluated according to these indices and scored between 0 and 1. Values close to 0 indicate unsuitable habitat, 1 represents optimal habitat.
- 4.2.13 Two waterbodies were assessed. Waterbody 1 was assessed as having 'excellent' suitability for great crested newt, whilst Waterbody 2 was assessed as having 'bad' suitability for great crested newts.

#### **Environmental DNA Analysis as a Tool to Determine Presence/Absence of Great Crested Newts**

- 4.2.14 In 2014 Natural England adopted the use of eDNA as an effective method of surveying for the presence / absence of great crested newts following a report by DEFRA confirming the accuracy of the method.
- 4.2.15 Environmental (eDNA) is nuclear or mitochondrial DNA that is released from an organism into the environment. When great crested newts (*Triturus cristatus*) inhabit a water-body, they deposit traces of eDNA in the water. Research shows that the DNA from a range of aquatic organisms including great crested newts can be detected in water samples at very low concentrations using qPCR (quantitative Polymerase Chain Reaction) methods.
- 4.2.16 The accuracy of the method is high, over 98% accurate in determining the presence of great crested newts if they are present in the water-body.
- 4.2.17 Environment DNA (eDNA) tests were undertaken in 2018 on waterbody 1, the field pond approximately 50m to the south of the site (SD44133135) and waterbody 2, the garden pond approximately 50 to the south of the site (SD44133135) to determine the presence/absence of great crested newts. This was negative suggesting the absence of great crested newts.
- 4.2.18 In June 2021 an eDNA test for great crested newt was undertaken on the waterbody 1 closest to the site (see figure 1) that has a suitability score of 'excellent' to update the report and confirm presence/absence.



- 4.2.19 The water samples must be collected in accordance with strict criteria to ensure adequate sampling and to avoid contamination.
- 4.2.20 The method of water sample collection followed those in the technical report issued by Natural England: WC1067 Appendix 5 Technical Advice Note Updated September 2014: Technical advice note for field and laboratory sampling of great crested newt (*Triturus cristatus*) environmental DNA.
- 4.2.21 A single visit to the target water-body should be made between mid-April and June. The samples were collected at Waterbody 1 on 24<sup>th</sup> June 2021, within the recommended survey period.
- 4.2.22 Sampling equipment used was supplied by SureScreen Scientifics and was as follows:
- A sterile 30 mL ladle
  - A sterile self-supporting Whirl-Pak plastic bag with 1 L capacity
  - A sterile 10 mL pipette to resample the water-body water
  - Six sterile 50 mL centrifuge tubes containing preservative (Absolute Ethanol (200 Proof), Molecular Biology Grade, Fisher BioReagents (Product Code: 10644795), sodium acetate and other markers)
  - Two pairs of sterile gloves.
- 4.2.23 20 water samples were taken from the water-body, spaced evenly around the water-body margin. The entirety of the water-body margin was accessible.
- 4.2.24 The samples were sent to SureScreen Scientifics for analysis on the same day as they were taken, to avoid any degradation of the eDNA. The eDNA analysis protocol followed that stated by DEFRA WC1067 (Latest Amendments).

### 4.3 Survey Limitations

- 4.3.1 The survey work was undertaken in June 2021. At this time of year bats are likely to be accommodating summer roost sites. Evidence of bats using external features may be present, unless it has been washed away by the weather. However, internally is likely to be found if bats are using the interior of the structure with regularity.
- 4.3.2 At this time of year great crested newts are present in waterbodies and other wildlife, including birds are active.
- 4.3.3 The majority of higher plants are visible in June 2021, but some species are more conspicuous at some times of the year than others, and due to the presence of dense vegetation in some areas, some species may have been missed.





## 5 Findings: Surrounding Designated Sites

- 5.0.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.
- 5.0.2 The protection over European designated sites (or Natura 2000) sites and Ramsar sites require any potential direct and indirect impacts are assessed within at least a 5km radius of the survey site.
- 5.0.3 The protection over UK statutory sites (Sites of Special Scientific Interest and Local Nature Reserves) requires that any potential direct and indirect impacts from a development are assessed within at least a 2km radius of the survey site.
- 5.0.4 Any potential direct or indirect impacts upon non-statutory sites are assessed within 1km of the survey site.

### Statutory Sites

- 5.0.5 The protection over UK statutory sites (Sites of Special Scientific Interest) requires that any potential direct and indirect impacts from a development are assessed within at least a 2km radius of the survey site, whilst the protection over European designated sites (or Natura 2000) sites and Ramsar sites require any potential direct and indirect impacts are assessed within at least a 5km radius of the survey site.
- 5.0.6 UK designated site within 2km:
- Newton Marsh SSSI, which lies 1.9m south of the survey site at the closest point.
- 5.0.7 EU designated sites within 5km:
- Ribble and Alt Estuary Ramsar Site, Special Protection Area (SPA) (and SSSI) lies approximately 3.2km to the south of the survey site.
  - Ribble Estuary National Nature Reserve (NNR) lies approximately 3.9km to the south of the survey at the closest point.

### Non-statutory sites

- 5.0.8 There are four non-statutory sites, Biological Heritage Sites (BHS) within 2km of the survey site:
- Black Poplar at Newton Crossroads BHS lies approximately 480m southeast of the survey site. This BHS comprises a single female black poplar; one of only two known female trees in the county.
  - Freshfield Farm Pond, North BHS lies approximately 670m to the southwest of the survey site. This site comprises a pond supporting a diverse array of plants and invertebrates.
  - Freshfield Farm Pond, South BHS lies approximately 760m to the southwest of the survey site. This site comprises a pond with a variety of invertebrates.



- Bucks Moss Wood BHS lies approximately 1.68km to the northeast of the survey site. This site comprises broad-leaved semi-natural woodland.

#### **Assessment: UK and EU designated sites**

- 5.0.9 The survey site lies within the Site of Special Scientific Interest (SSSI) impact risk zone for Newton Marsh SSSI and Ribble Estuary SSSI, and within 5km of the Ribble and Alt Estuaries SPA and Ramsar Site.
- 5.0.10 However, the proposals to demolish the buildings on site and construct four dwellings do not require further consultation with Natural England due to the small scale of the proposals. Residential development of 10 or more houses outside existing settlements/urban areas require consultation.
- 5.0.11 The survey site is considered to be sufficiently distanced from the UK and EU designated sites that any direct or indirect impacts (as a result of noise or dust etc) are unlikely.
- 5.0.12 The survey site does not support similar habitats to those for which the UK and EU sites are designated, so any impact upon associated interest features (for example birds or invertebrates) is very unlikely.

#### **Assessment: Non-statutory designated sites.**

- 5.0.13 The survey site does not support habitats similar to those present within the Biological Heritage Sites.
- 5.0.14 The survey site is considered sufficiently distanced from the BHSs that any direct or indirect impacts are unlikely. There are no direct habitat links (such as waterways) apparent.
- 5.0.15 Overall, the proposals are unlikely to have any negative impact upon surrounding designated sites.

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#### **Statutory Site Designations**

**Site of Special Scientific Interest (SSSI)** A Site of Special Scientific Interest (SSSI) is the land notified as an SSSI under the Wildlife and Countryside Act (1981), as amended. SSSI are designated for wildlife and natural features (including geological features) in England. They support characteristic, rare and endangered species, habitats and natural features.

**Special Protection Area (SPA).** A Special Protection area is land classified under Directive 79/409 on the Conservation of Wild Birds. They are classified for rare and vulnerable birds (as listed on Annex 1 of the Directive) and for regularly occurring migratory species.

**Ramsar Site.** Ramsar sites are wetlands of international importance designated under the Ramsar Convention. Ramsar sites in the UK were first designated in 1976. The initial emphasis was on selecting sites of importance to waterbirds within the UK, and consequently many Ramsar sites are also Special Protection Areas (SPAs).



**National Nature Reserve (NNR).** National Nature Reserves were established to protect some of our most important habitats, species and geology, and to provide 'outdoor laboratories' for research. Most NNRs offer great opportunities to schools, specialist interest groups and the public to experience wildlife at first hand and to learn more about nature conservation.

#### Non-statutory Site Designations

**Biological Heritage Sites (BHS)** Biological Heritage Sites in Lancashire are identified within the county using a set of published guidelines. Their selection is based on the most important, distinctive and threatened species and habitats within a national, regional and local context. Local Wildlife Sites are locally valuable areas and are often corridors for wildlife forming key components of ecological networks. They are non-statutory designations, but are a material consideration within the planning process.

## 6 Findings: Habitat Survey

### 6.1 Habitat Assessment

#### Data Search

6.1.2 The data from LERN contains records for seven species on the Lancashire Biodiversity Action Plan; tubular water dropwort (*Oenanthe fistulosa*), black poplar (*Populus nigra* subsp. *Betulifolia*), blue water-speedwell (*Veronica anagallis-aquatica*), fat duckweed (*Lemna gibba*), golden dock (*Rumex maritimus*), midland hawthorn (*Caraegus laevigata*) and wild cabbage (*Brassica oleracea*).

6.1.3 None of the above species were recorded within the survey site.

#### Survey Site

6.1.4 The site is largely hard standing. There is a dense hedgerow and ditch along the southern boundary of the sites and an area of disturbed ground supporting ruderal vegetation to the north of Structures 1 and 2 (see Figure 3). There is some dense bramble scrub to the rear of Structure 7.

6.1.5 The mature hedgerow along the southern boundary is largely composed of hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*) with occasional ash (*Fraxinus excelsior*) and bramble (*Rubus fruticosus* agg.).

6.1.6 The ground flora below the hedgerow and extending approximately 2m into the site in places, comprises sterile brome (*Bromus sterilis*), common hogweed (*Heracleum sphondylium*), creeping thistle (*Cirsium arvense*), common nettle (*Urtica dioica*), ragwort (*Jacobaea vulgaris*), dandelion (*Taraxacum* agg.), herb Robert (*Geranium robertianum*), smooth sow-thistle (*Sonchus oleraceus*), smooth meadow-grass (*Poa pratensis*) and broad-leaved dock (*Rumex obtusifolius*).

6.1.7 The ditch, being overshadowed and with shallow water, does not support any emergent vegetation.



- 6.1.8 The area of disturbed ground to the north (rear) of structures 1 and 2 comprises sparse grassland with ruderal herbs. Yorkshire fog (*Holcus lanatus*) is dominant with meadow buttercup (*Ranunculus acris*), daisy (*Bellis perennis*), white clover (*Trifolium repens*), black medick (), soft brome (*Bromus hordeaceus*), herb Robert and field horsetail (*Equisetum arvense*). Sterile brome, broad-leaved dock, creeping buttercup (*Ranunculus repens*), dandelion, greater plantain (*Plantago major*) and willowherb (*Epilobium* spp.) are present but less abundant.
- 6.1.9 There are three birch trees (*Betula* sp.) to the rear of Structure 1.
- 6.1.10 No plant species or habitats of conservation interest were recorded, nor were they expected.
- 6.1.11 It is considered that in general, the habitats within the main body of the site are not of conservation value.
- 6.1.12 However, the hedgerow along the southern boundary of the site is well-established and of intrinsic value to wildlife including invertebrates, nesting birds and small mammals such as bats and hedgehog. The hedgerow is continuous with others within the wider landscape and will likely provide a habitat corridor for the movement of wildlife.
- 6.1.13 **Hedgerows are a habitat of Principle Importance under the NERC Act, 2006 and retention of the hedgerow is recommended to maintain the existing ecological functionality of the site for wildlife.**

#### Invasive Species

- 6.1.14 No invasive species, including Japanese knotweed (*Fallopia japonica*), giant hogweed (*Heracleum mantegazzianum*) or Himalayan balsam (*Impatiens grandiflora*) were recorded during the survey.
- 6.1.15 **There is therefore no requirement to mitigate or manage invasive species.**



## 7 Findings: Protected Species

### Mammals

#### 7.1 Bats

##### Potential for Bats

- 7.1.1 At a landscape level, the area surrounding the survey site is very good for bats. Refer to Figure 2.
- 7.1.2 Countryside extends in nearly all directions. The landscape comprises a matrix of pasture with tree lines, waterbodies and waterways within close proximity. The habitat will support a variety of bat species including widespread species such as common and soprano pipistrelle bat (*Pipistrellus pipistrellus* and *Pipistrellus pygmaeus* respectively). Species that favour open habitats such as Leisler's (*Nyctalus leisleri*) and noctule bat (*Nyctalus noctula*) would also be expected. As would Daubenton's bat (*Myotis daubentoni*), which favours water over which to feed. Species that favour wooded habitat, such as brown long-eared bat (*Plecotus auritus*), Natterer's bat (*Myotis nattereri*), whiskered bat (*Myotis mystacinus*) and Brandt's bat (*Myotis brandtii*) are likely to be in the area, but not in abundance as there are no substantial areas of woodland within 5km.
- 7.1.3 The linear features (hedgerows, tree lines and waterways) provide good habitat links that are likely utilised by commuting bats and will facilitate the movement of bats through the landscape.

##### Data Search

- 7.1.4 Data from LERN include records of a three bat species within 2km of the survey site; soprano pipistrelle (*Pipistrellus pygmaeus*), common pipistrelle (*Pipistrellus pipistrellus*) and brown long-eared bat (*Plecotus auritus*).
- 7.1.5 There are no records of bats or their roosts within 500m of the survey site.

##### *The Conservation Status of Bats in the Area*

- 7.1.6 The conservation status of bats in the area is shown in Table 1.

**Table 1:** *The Conservation Status of Bats in the area at a Local, County and Regional Level*

<b>Species</b>	<b>Local</b>	<b>County</b>	<b>Regional</b>
<i>Common pipistrelle</i>	<i>Likely to be common in the area. There are records of this species in the area (10km).</i>	<i>Common and widespread Frequently recorded.</i>	<i>Common and widespread Frequently recorded across the Northwest</i>
<i>Soprano pipistrelle</i>	<i>Likely to be present due to the presence of riparian habitat.</i>	<i>Widespread. Frequently recorded.</i>	<i>Common and widespread Frequently recorded across the Northwest</i>



<i>Nathusius's pipistrelle</i>	<i>Likely to be rare in the area.</i>	<i>Infrequently recorded, but this may be due to low survey effort. Not yet recorded breeding in the county.</i>	<i>Rare across the northwest. A migratory species.</i>
<i>Brown long-eared bat</i>	<i>Likely to be in the area. There is a recent record of this species within 10km of the site.</i>	<i>Common and widespread Frequently recorded.</i>	<i>Common and widespread Frequently recorded across the Northwest.</i>
<i>Natterer's bat</i>	<i>Likely to be in the area, although this species favours woodland habitat, which is infrequent in the landscape.</i>	<i>Scattered distribution in the county.</i>	<i>Widespread and scattered across the Northwest.</i>
<i>Noctule</i>	<i>Present</i>	<i>Widespread and frequently recorded.</i>	<i>Common and widespread. Frequently recorded in the Northwest.</i>
<i>Whiskered bat</i>	<i>Present but likely rare</i>	<i>Present</i>	<i>Widespread.</i>
<i>Brandt's bat</i>	<i>Rare / absent</i>	<i>Present</i>	<i>Widespread.</i>
<i>Alcathoe's bat</i>	<i>Unknown</i>	<i>Unknown</i>	<i>Widespread. Likely under-recorded.</i>
<i>Daubenton's</i>	<i>Presence is likely due to the riparian habitat present.</i>	<i>Widespread, frequently recorded near water.</i>	<i>Widespread</i>
<i>Serotine</i>	<i>Rare / absent</i>	<i>Unknown</i>	<i>Restricted to south and southwest Britain, rarely recorded in the northwest.</i>
<i>Leislars</i>	<i>Rare</i>	<i>Unknown</i>	<i>Rare, but widespread in Britain. Present in the northwest.</i>
<i>Barbastelle</i>	<i>Unlikely to be present in the area. This species is a woodland-specialist and there is a lack of this habitat present.</i>	<i>Unknown</i>	<i>Present south of a line from North Wales to the Wash.</i>

### Preliminary Roost Assessment

7.1.7 The inspection and bat roost assessment was undertaken in daylight on 4th June 2021.

#### *Structure 1*

7.1.8 **Structure 1 is considered to have negligible suitability for bats.**

7.1.9 Structure 1 does not contain any features internally or externally that provide suitable roosting opportunities for bats. Externally the building is well-sealed and there are no crevices or cracks



that might be utilised by bats. No evidence of bats was found externally or internally.

### *Structure 2*

7.1.10 **Structure 2 is considered to have negligible suitability for bats.**

7.1.11 Structure 2 is in good condition externally and there are no obvious crevices or holes that might allow bats to roost externally, or gain access to the building.

7.1.12 Internally the loft voids are of a size that is potentially large enough to accommodate a roost of bats which favour external roosting on beams in voids, such as brown long-eared bat, but there was no evidence of use by bats (no droppings, feeding remains or staining).



*A loft space in Structure 2*

7.1.13 The exposed wooden beams were partially covered by the insulation, so do not provide ideal roost opportunities

7.1.14 Due to the single-skin corrugated metal roof, it might be that the loft void fluctuates in temperature too widely to be favoured by bats.

### *Structures 3, 5 and 6*

7.1.15 **Structures 3, 5 and 6 are considered to have negligible suitability for bats.**

7.1.16 The shipping containers are metal and well-sealed externally. They provide no suitable roosting opportunities for bats.

### *Structure 4*

7.1.17 **Structure 4 is considered to have negligible suitability for bats.**

7.1.18 Structure 4 does not contain any potential roost opportunities for bats internally or externally; the roof is well fitted and the single-skin wooden boarding does not provide any crevice-roost space.

### *Structure 7*

7.1.19 **Structure 7 is considered to have negligible suitability for bats.**

7.1.20 Structure 7 is in good condition externally and there are no obvious crevices or holes within the roof materials.



- 7.1.21 There is potential for bats to enter and fly within the building as many of the stables are open. However, there was no evidence of bats inside the structure, and no potential roosting opportunities since the exposed internal beams would be subject to fluctuations in light.

#### *Structure 8*

- 7.1.22 **Structure 8 is considered to have negligible suitability for bats.**
- 7.1.23 Structure 8 does not contain any potential roost opportunities for bats internally or externally; the roof is well fitted and the single-skin wooden boarding does not provide any crevice-roost space.

#### *Conclusion*

- 7.1.24 The buildings on site at The Pathways are considered to have negligible suitability for roosting bats. No further survey work or mitigation regarding buildings is considered necessary.
- 7.1.25 Recommendations with regard to lighting are made with respect to the southern hedgerow, which might provide a habitat corridor for commuting bats.

## **7.2 Badger**

### *Data Search*

- 7.2.1 Data from LERN do not include any records of badger within 2km of the site.

### *Survey and Assessment*

- 7.2.2 The surrounding landscape, comprising grazed pasture with tree lines has potential for badger, which are likely to be present in the area.
- 7.2.3 However, the habitat on site is suboptimal for badger, comprising hard standing and buildings with limited soft habitat.
- 7.2.4 No evidence of the presence of badger, including latrines, pathways or setts were found on site.
- 7.2.5 It is possible that badger may travel through the site from time to time, but the proposals are unlikely to result in the disruption of patterns of badger movement, since the site is already occupied.
- 7.2.6 **The proposals are very unlikely to impact badger or their populations and therefore no further survey work or mitigation is required. However, measures during work to prevent harm to badgers that may travel through the site are recommended.**





### 7.3 Water Vole

#### Data Search

- 7.3.1 Data from LERN include two record of water vole (*Arvicola terrestris*) within 1km of the survey site.

#### Survey and Assessment

- 7.3.2 The ditch along the southern boundary of the site is considered unfavourable for water-vole as the banks are steep, it is densely shaded, so it is not well-vegetated with grasses and rushes, and there was very little water present at the time of survey.
- 7.3.3 No evidence of water vole was found upon inspection of the ditch. Although the possible presence of water vole further upstream or downstream, this species is not expected within the vicinity of the site (500m).
- 7.3.4 **The proposed development is considered very unlikely to impact this species and no further survey work or mitigation is recommended.**

### 7.4 Otter

#### Data Search

- 7.4.1 Data from LERN do not contain any records of otter (*Lutra lutra*) within 1km of the survey site.

#### Survey and Assessment

- 7.4.2 The ditch along the southern boundary of the site has low suitability for otter as it is shallow and narrow. Although otter do often travel widely from a main, source river, and may travel along the ditch, it is unlikely that they would do so with any regularity and unlikely that this species is present in any number within the vicinity of the site.
- 7.4.3 **The proposed development is considered very unlikely to impact this species and no further survey work or mitigation is recommended.**

### 7.5 Hedgehog

#### Data Search

- 7.5.1 Data from LERN do not contain any records of hedgehog (*Erinaceus europaeus*) within 1km of the survey site.

#### Survey and Assessment

- 7.5.2 Hedgehog are a Species of Principal Importance under the NERC Act, 2006 (also known as UK BAP species).



- 7.5.3 The majority of the survey site, comprising hard standing and buildings, provides suboptimal habitat for foraging and sheltering hedgehog. However, hedgehog are a mobile species and may be present within adjacent habitat and travel across the site from time to time.
- 7.5.4 Certainly, the proposed development of the site, which will result in creation of gardens, will improve the site for hedgehog.
- 7.5.5 **Precautionary measures to ensure the protection of hedgehog during works are proposed, along with proposals to enhance the ecological functionality of the site in the operational phase through the installation of a 'hedgehog highway'**

## 7.6 Reptiles

### Data Search

- 7.6.1 The data from LERN do not include any records or reptiles within 2km of the survey site.

### Survey and Assessment

- 7.6.2 The records for reptiles in the northwest are generally low. Reptiles are of very low distribution and found at low density even in ideal habitats such as rough grassland with scrub.
- 7.6.3 The habitat within the survey site is suboptimal for reptiles, comprising mainly hard standing and buildings.
- 7.6.4 However, the habitat within the surrounding area has potential for this species group.
- 7.6.5 Reptiles are not expected to be present on site, but some species, such as grass snake (*Natrix natrix*) may move into the site from time to time during works in order to disperse and forage, if the ground is soft or disturbed.
- 7.6.6 **The proposals are very unlikely to have any impact on reptiles in the locality. However, precautionary measures are recommended during works to minimise the risk of harm to individual animals.**



## 7.7 Amphibians

### Great crested newt

#### Data Search

7.7.1 The data from LERN include records for great crested newt within 2km of the survey site. The closest record is 1600m from the site.

#### Survey and Assessment

7.7.2 Great crested newt (*Triturus cristatus*), which have the highest protection of all amphibians under UK and EU law, favour still water bodies, such as ponds with good vegetation. They breed in ponds, but spend much of the year terrestrially, within habitat such as rough grassland and woodland, which provides good foraging and hibernacula. Great crested newts are known to travel, usually, within a 250m radius of breeding ponds, but can travel up to 500m.

7.7.3 There are four waterbodies within 250m of the site:

- Waterbody 1 (WB1) 50m to the south of the site in a field.
- Waterbody 2 (WB2) 50m south of the site in a garden
- Waterbody 3 (WB3) 170m to the west of the site in a field
- Waterbody 4 (WB4) 210m west of the site in a field.

7.7.4 In 2018 ERAP undertook a habitat suitability index (HSI) on waterbodies 1 and 2. Waterbody 1 was considered to have 'excellent' suitability for great crested newt, whilst waterbody 2 was considered to have 'poor' suitability for great crested newt.

7.7.5 The high quality of waterbody 1 was confirmed during the survey visit in June 2021.

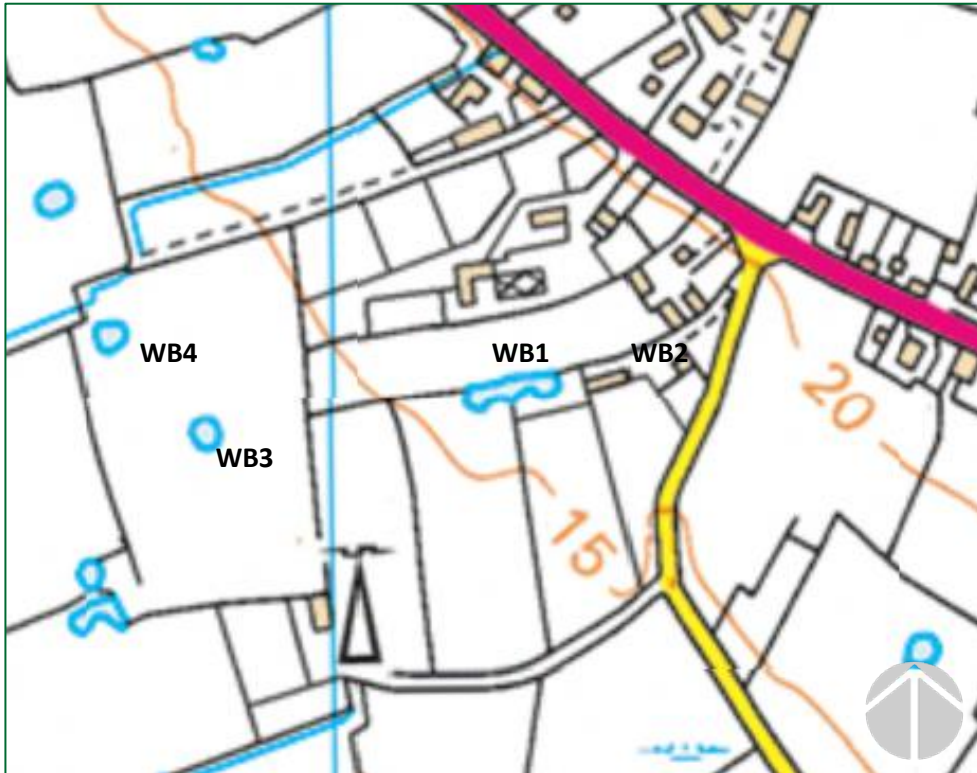
7.7.6 In June 2021 an eDNA survey of waterbody 1 was undertaken to determine whether or not great crested newts were present. The results of the survey were negative, suggesting the absence of great crested newts.

7.7.7 The absence of this species in the waterbody with highest suitability, closest to site, suggests that this species is very unlikely to be present in the vicinity of the site.

7.7.8 **No further survey work or mitigation for this species is considered necessary.**



Figure 3: Showing the locations of waterbodies in relation to the survey site



Ordnance survey 1:25000



## Common Toad

### Data Search

- 7.1.1 Data from LERN include records of common toad within 500m of the survey site.

### Survey and Assessment

- 7.1.2 Common toad are a Species of Principal Importance under the NERC Act, 2006 (also known as UK BAP species).
- 7.1.3 The hard standing and buildings on site provide suboptimal habitat for foraging and sheltering toads. However, common toad are a mobile species and will regularly travel long distances to reach breeding ponds. They may travel across the site regularly.
- 7.1.4 **The proposals for the site are not expected to impact upon populations of this species. However, precautionary measures are proposed during works to avoid unnecessary harm to individual common toad.**

## 7.2 Nesting Birds

### Data Search

- 7.2.1 Data from LERN includes records of 3 bird species listed on Schedule 1 of the Wildlife and Countryside act recorded within 1km of the survey site; black-tailed godwit (*Limosa limosa*), redwing (*Turdus illacus*) and barn owl (*Tyto alba*). Redwing and black-tailed godwit are winter visitors and are very unlikely to be present on site, as the habitat is unsuitable. Redwing foraging in grassland and farmland, whilst black-tailed godwit is found in coastal sites.
- 7.2.2 Barn owl, similarly, are unlikely to be present on site, but are likely to forage in the area over farmland.
- 7.2.3 The data also includes records for species on the red and amber list of Birds of Conservation Concern (BoCC), some of which are also Species of Principle Importance under the NERC Act, 2006 and/or Lancashire Biodiversity Action Plan Species. These include house sparrow (*Passer domestica*), song thrush (*Turdus philomelos*) and dunnock (*Prunella modularis*), which may nest in trees and shrubs on site.

### Survey and Assessment

- 7.2.4 Five bird species were recorded on site during the survey: swallow (*Hirundo rustica*), house sparrow (*Passer domesticus*), chiffchaff (*Phylloscopus sollybita*), goldfinch (*Carduelis carduelis*) and starling (*Sturnus vulgaris*).
- 7.2.5 House sparrow and starling are on the red list of BoCC. House sparrows were recorded in the dense hedgerow along the southern boundary of the site, whilst starling were recorded on the stable block.



- 7.2.6 Swallows were recorded foraging, but not nesting in the stables on site, although nesting is a possibility in the future.
- 7.2.7 **Avoidance mitigation is proposed to minimise the risk of harm to nesting birds during works.**
- 7.2.8 **The proposals provide the opportunity for enhancement for nesting birds.**
- 

**\*Birds of Conservation Concern (BoCC):** These lists indicate the population status of birds in the uK, Channel Islands and the Isle of Mand.

- BoCC Red list: Includes species globally threatened, a historical population decline in the UK, a severe 9at least 50% decline in the UK breeding population over the last 25 years or long-term period. A severe (at least 50%) contraction of the UK breeding range over the last 25 years or the longer term.
- Amber list: Includes species with unfavourable conservation status in Europe, a historical population decline, moderate (25-50%) decline in the UK breeding population over the last 25 years, moderate (25-50%) contraction in UK breeding or non-breeding range, rare breeders (1-300 breeding pairs in UK), rare non breeders, localised rare breeders or non-breeders, internationally important breeders or non-breeders.

### 7.3 Invertebrates

#### Data Search

- 7.3.1 Data from LERN includes numerous records of beetles, butterflies and moths within 2km of the survey site, the majority of which are Species of Principle Importance under the NERC Act, 2006.

#### Survey and Assessment

- 7.3.2 The survey site supports limited area of common and widespread habitat types composed of common and widespread species. As such, these will support common and widespread invertebrates. No invertebrates that are rare and/or protected are expected on site.
- 7.3.3 **The proposed development will not be of significance to populations of common and widespread invertebrates in the locality, which may be represented in limited numbers within the survey site.**
- 7.3.4 **For this reason, no further survey or mitigation is recommended.**



## 7.4 Other protected species and habitats.

- 7.4.1 Other protected species, including red squirrel (*Sciurus vulgaris*) are not expected on or near the site as there is no suitable habitat.

## 8 Appraisal

- 8.0.1 The survey site at The Pathways Newton comprises mainly hard standing with buildings. There is a dense hedgerow along the southern boundary of the site and some areas of grassland and ruderal vegetation.
- 8.0.2 The site has limited suitability for protected species, but consideration must be given to the potential presence of foraging and commuting bats, badger, hedgehog, nesting birds, common reptiles and common toad.
- 8.0.3 Protection of the hedgerow along the southern boundary is proposed due to the status of the habitat as a habitat of principle importance. In addition, the hedgerow provides habitat for house sparrow, a species of conservation concern, and will likely provide a habitat corridor for commuting and foraging bats.
- 8.0.4 Avoidance mitigation is recommended to take into consideration the presence of nesting birds in the spring and summer months, and the potential presence upon occasion of badger, hedgehog, reptiles and common toad.
- 8.0.5 The proposals provide the opportunity to enhance the site for wildlife and recommendations for this have been made.



## 9 Recommendations

### 9.1 Hedgerow

9.1.1 The hedgerow along the southern boundary of the site is a habitat of Principle Importance under the NERC Act, 2006, and has intrinsic value to wildlife, including house sparrow, a species of conservation concern.

9.1.2 It is recommended that the hedgerow is maintained on site and protected during works with the use of heras fencing.

### 9.2 Bats

9.1.1 Bats are likely to forage and commute along the southern boundary in the spring and summer months.

9.1.2 In order to minimise the impact of lighting on commuting and foraging bats, the following is recommended:

- Lighting during the construction and operational phase will be directed to avoid the woodland canopy.
- Baffles will be used to avoid spillage of light into the sky and into areas toward the site boundaries.
- Lighting installed during the operational phase will be High or Low Pressure Sodium or LED. These forms of lighting have a lower UV output, which reduces the attraction of insects. Outside lighting should be on a timer to minimise light pollution.

### 9.3 Badger

9.3.1 Badger are likely to be present within the locality and must be considered during works.

9.3.2 It is therefore recommended that during works:

- Large holes or ditches should be covered overnight to prevent badger falling into them. If this is not possible, then a plank or similar should be left in the hole to allow badgers and other wildlife to climb out.





## 9.4 Reptiles

9.4.1 There is potential for reptiles to be present in the surrounding area. In order to reduce the risk of harm to individual reptiles during works, the following is recommended:

- Materials on site are stored on pallets to prevent reptiles and amphibians hiding in them.
- No machinery or materials are stored within 5m of the southern boundary.

## 9.5 Common Toad and Hedgehog

9.5.1 There is potential for common toad and hedgehog, both UK BAP species, to be present on site upon occasion. In order to reduce the risk of harm to these species during works, the following is recommended:

- Any works to remove vegetation (in particular the scrub to the rear of the stables) is undertaken by hand with care, whilst checking for wildlife.
- If common toad or hedgehog are found during works, they can be picked up and moved to a safe place away from the area of works where there is vegetative cover.

## 9.6 Nesting Birds

9.6.1 Birds may nest in the trees and shrubs on site in the spring and summer months. In order to prevent disturbance and/or harm to nesting birds, if vegetation works are necessary, it is recommended that:

- Any vegetation works are undertaken in the winter months (October – February).
- If heavy machinery is required on site in the bird breeding season (breeding season: March – September), this must be stored as far away from trees and shrubs as possible, to minimise the risk of disturbance.
- If this is not possible, a suitably qualified ecologist should check the vegetation on site to determine the presence / absence of nesting birds prior to the start of any works.
- If birds are found actively nesting on site, the nest and surrounding vegetation (5m) must be left undisturbed until the young have fledged.



## 9.2 Biodiversity and Enhancement

9.2.1 The existing biodiversity and ecological functionality of the site for wildlife will be retained as part of the proposals.

- The hedgerow along the southern boundary must be retained.

9.2.2 In order to improve biodiversity on site and to enhance the site for wildlife, it is recommended that:

- Additional native trees and/or shrubs species are planted around the site boundary, particularly along the northern boundary, to provide additional nesting and foraging habitat for wildlife, including birds, small mammals and invertebrates. Shrubs should include native species of local provenance, those already present on site and adjacent to site, including hawthorn, holly, guelder rose and rowan. These plants must be locally sourced.

9.2.3 In addition to creation of habitats, additional enhancement for nesting birds and roosting bats can be achieved through provision of bird nest boxes and bat boxes.

9.2.4 The following are recommended:

- The 1FE Schwegler Bat Access Panel provides good roosting opportunities for bats in summer and winter. This can be installed on the exterior of or integrated into the new structures on site and requires no maintenance.



*1FE Schwegler Bat Access Panel*

It is recommended that at least four of these panels are installed.

- The 1 SP Schwegler sparrow terrace provide nest sites for a variety of passerine birds, but will particularly appeal to sparrow (a species of principle importance) and can be installed on, or integrated into a new building. The Schwegler 1MR Bird Nest Box provides suitable nesting opportunities for a variety of passerine birds and could be installed on a building or trees.



*1SP Schwegler sparrow terrace*

It is recommended that at least 6 of these boxes are installed.

Note that these are recommendations only, there are numerous options for integrated or external bird and bat boxes available at NHBS.com

9.2.5 In order to retain the ecological functionality of the site for hedgehog and common toad it is proposed that:

- Any fence panels installed around the site, and especially along the southern boundary, should be installed so there is a 13cm gap beneath, to allow hedgehogs passage into gardens (part of a hedgehog highway).



*Schwegler 1MR Bird Nest Box*



## 10 References

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- NBN (2019) National Biodiversity Network.



## • APPENDIX A: Wildlife Legislation and Planning Policy

### 1.0 UK AND EU LEGISLATION

#### KEY LEGISLATION

In the UK, the following legislation relates to wildlife and habitats:

- Wildlife and Countryside Act 1981 (as amended)
- The Countryside and Rights of Way Act (CROW), 2000
- The Badger Act 1992
- The Natural Environment and Rural Communities Act (NERC, 2006)
- Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations (2018)
- The Hedgerow Regulations (1997)

#### 1.1 WILDLIFE AND COUNTRYSIDE ACT 1981 (AS AMENDED)

1.1.1 The Wildlife and Countryside Act 1981 consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the conservation of wild birds (Birds Directive) in Great Britain (NB Council Directive 79/409/EEC has now been replaced by Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (codified version)).

##### BIRDS

1.1.2 The Act makes it an offence (with exception to species listed in Schedule 2) to intentionally:

- kill, injure, or take any wild bird,
- take, damage or destroy the nest of any wild bird while that nest is in use or being built (also [take, damage or destroy the nest of a wild bird included in Schedule ZA1] under the Natural Environment and Rural Communities Act 2006), or
- take or destroy an egg of any wild bird.

##### Schedule 1 birds

1.1.3 Special penalties are available for offences related to birds listed on Schedule 1, for which there are additional offences of disturbing these birds at their nests, or their dependent young, for example Barn Owl and Red Kite.

##### Areas of Special Protection for Birds

1.1.4 The Secretary of State may also designate Areas of Special Protection (subject to exceptions) to provide further protection to birds.

##### Other offences

1.1.5 The Act also prohibits certain methods of killing, injuring, or taking birds, restricts the sale and possession of captive bred birds, and sets standards for keeping birds in captivity.

#### OTHER ANIMALS

1.1.6 The Act makes it an offence (subject to exceptions) to intentionally ([or recklessly] - only under the Nature Conservation (Scotland) Act 2004) kill, injure or take any wild animal listed on Schedule 5, and prohibits interference with places used for shelter or protection, or intentionally disturbing animals occupying such places. The Act also prohibits certain methods of killing, injuring, or taking wild animals.

1.1.7 For animals listed in Schedule 5 of the act, it is an offence under:

- Section 9(1) to kill, injure or take the animal by any method
- Section 9(2) to possess or control a dead or live animal (or part of derivative).
- Section 9(4)(a) to cause damage to, destruction of, obstruction of access to any structure or place used by a scheduled animal for shelter or protection.
- Section 9(4)(b) to disturb any animal on the schedule occupying such as structure or place.
- Section 9(4)(c) to obstruct access to any structure or place which any such animal uses for shelter or protection.



- Section 9(5)(a) to sell, offer or expose for sale, possess or transport for the purpose of sale, any live or dead wild animal, or part or derivative of an animal included in Schedule 5.
- Section 9(5)(b) to publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

**Species that receive FULL PROTECTION under the act:**

- All UK bats
- Otter
- Water vole
- Dormouse
- Red squirrel
- Wildcat
- Reptiles – Smooth snake and sand lizard
- Amphibians – Great crested newt, Natterjack toad, Pool frog
- Invertebrates – some including, but not restricted to Swallowtail butterfly, Marsh fritillary butterfly, Large copper butterfly, Heath fritillary butterfly, Large blue butterfly, Barberry carpet moth, Rainbow leaf beetle, Violet click beetle, Medicinal leech.

**Species that protected from intentional KILLING, INJURY and SALE only:**

- Reptiles – widespread species; Common lizard, Slow-worm, Grass snake and Adder.

**Species protected from TAKING and SALE only:**

- Atlantic stream (white-clawed) crayfish

**Species protected from SALE only:**

- Common toad
- Common frog
- Palmate newt
- Smooth newt
- Invertebrates – Some including 18 butterflies such as Chalk hill blue butterfly, Adonis blue butterfly, Large tortoiseshell butterfly.

**Vascular Plants, Bryophytes, Lichens and Fungi (PLANTS)**

1.1.8 For any vascular plant, bryophyte, lichen or fungi listed in Schedule 8 of the Act, it makes it an offence under:

- Section 13(1)(a) to Intentionally pick, uproot or destroy plants in Schedule 8.
- Section 13(1)(b) to undertake unauthorised intentional uprooting of any wild plant not included in Schedule 8.
- Section 13(2)(a) to sell, offer for sale, possess or transport for the purpose of sale any plant (live or dead, part or derivatives) on Schedule 8.
- Section 13(2)(b) to publish or causes to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

1.1.9 Species with protection under Schedule 8 include, but are not restricted to:

1.1.10 Bluebell, Wood calamint, Rock cinquefoil, Early spider orchid, Spring gentian, Stinking goosefoot, Small hare's-ear, Alpine copper moss (*Mielichoferia mielichoferi*), Goblin lights lichen (*Catolechia wahlenbergii*).

**Non-Native Species**

1.1.11 Species listed in Schedule 9 of the Act are non-native species, which the establishment of in the wild may be detrimental to native wildlife. Species listed in Schedule 9 include Japanese knotweed, Himalayan Balsam and Giant hogweed.

1.1.12 For species listed in Schedule 9 of the act it is an offence:

- Under Section 14(1) if any person releases or allows to escape into the wild any animal which—
  - (a) is of a kind which is not ordinarily resident in and is not a regular visitor to Great Britain in a wild state; or
  - (b) is included in Part I of Schedule 9,
- Under Section 14ZA (1) to sell, offers or exposes for sale, or has in his possession or transports for the purposes of sale an animal or plant to which this section 14 applies, or anything from which such an animal or plant can be reproduced or propagated.



- Under Section 14ZA (2) to publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell an animal or plant to which this section applies, or anything from which such an animal or plant can be reproduced or propagated.

1.1.13 Section 14ZB gives the Secretary of State the power to issue codes of practice, or approve a code of practice issued by others, relating to non-native animal and plant species. It is intended that the codes will be used to provide recommendations, advice and information on how to stop the damage caused by non-native animals and plants.

## 1.2 SITES OF SPECIAL SCIENTIFIC INTEREST (SSSIs) AND OTHER PROTECTED AREAS

1.2.1 Sections 28 to 33 of Part 2 of the Wildlife and Countryside Act detail the law regarding SSSIs. Sections 34 to 53 deal with other protected areas within Great Britain.

- The Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) – these sites are identified for their flora, fauna, geological or physiographical features – by the country conservation bodies in England (Natural England) and Wales (Natural Resources Wales).
- The Act also contains measures for the protection and management of SSSIs.
- The Act provides for the making of Limestone Pavement Orders, which prohibit the disturbance and removal of limestone from such designated areas
- The Act provides means for the designation of Marine Nature Reserves.
- The Act prohibits the undertaking of agricultural or forestry operations on land within National Parks which has been either moor or heath for 20 years, without consent from the relevant planning authority.

## 1.3 THE COUNTRYSIDE AND RIGHTS OF WAY (CROW) ACT 2000

1.3.1 The Countryside and Rights of Way Act 2000 strengthened the Wildlife and Countryside Act 1981 in the following ways:

### Schedule 12

1.3.2 Schedule 12 of the Act amends the species provisions of the Wildlife and Countryside Act 1981 and strengthens the legal protection of species by:

- Providing provisions to make certain offences 'arrestable'
- Changing the term 'intentional' to 'reckless' with regard to disturbance offences, such that ignorance of the law is no longer a defence.
- Conferring greater powers to police and wildlife inspectors for entering premises and obtaining wildlife tissue samples for DNA analysis, and;
- Enabling heavier penalties on conviction of wildlife offences.

### Schedule 9

1.3.3 Schedule 9 of the Act amends SSSI provisions of the Wildlife and Countryside Act 1981, including provision to change SSSIs and providing increased powers for their protection and management, placement of a duty on public bodies to further the conservation and enhancement of SSSIs and increases in penalties on convictions where the provisions are breached.

## 1.4 THE BADGER ACT 1992

1.4.1 Under the Badger Act 1992, it is an offence to:

- Section 1 – Take, injure or kill a badger, or attempt to do so
- Section 2 – Cruelly ill-treat a badger, inclusive of digging for a badger
- Section 3 – Interfere with a badger sett. A person is guilty of an offence if, except as permitted by or under this Act, he interferes with a badger sett by doing any of the following things—
  - (a)damaging a badger sett or any part of it;
  - (b)destroying a badger sett;
  - (c)obstructing access to, or any entrance of, a badger sett;
  - (d)causing a dog to enter a badger sett; or



(e)disturbing a badger when it is occupying a badger sett,

- o Section 4 – To sell or possess a live badger.
- o Section 5 – To mark or ring a badger unless under licence to do so.

### 1.5 THE HEDGEROWS REGULATIONS, 1997

1.5.1 The Hedgerows Regulations, 1997 ensure the protection from damage or destruction of 'important' hedgerows. Criteria within the regulations determine the importance.

### 1.6 THE CONSERVATION OF HABITATS AND SPECIES AND PLANNING (VARIOUS AMENDMENTS) (ENGLAND AND WALES) REGULATIONS 2018

1.6.1 In addition to the Wildlife and Countryside Act 1984, certain species have additional protection under European Law.

1.6.2 The Conservation of Habitats and Species and Planning (Various Amendments) (England and Wales) Regulations 2018 (the Habitats Regs) consolidate the amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994 in England and Wales. The Regulations transpose the Council Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora (EC Habitats Directive) into UK law.

1.6.3 The Habitats Regulations 2010 provide protection for 'European Protected Species' and protection and designation for 'European Protected Sites'.

#### Schedule 2: European Protected Species of Animals

- All UK bats
- Dormice
- Otter
- Large blue butterfly
- Wild cat
- Sand lizard
- Smooth snake
- Great crested newt
- Natterjack toad
- Fishers estuarine moth
- Lesser whirlpool ram'- horn snail
- Sturgeon
- Marine turtles
- All dolphins, porpoises and whales.

1.6.4 For species listed in Schedule 2, Under Part 3 Regulation 41(1) it is an offence to

- (a) deliberately capture, injure or kill any wild animal of a European protected species,
- (b) deliberately disturb a wild animal of any such species,
- (c) deliberately take or destroy the eggs of such an animal, or
- (d) damage or destroy a breeding site or resting place of such an animal,

1.6.5 Under Part 3 Regulation 41 (2) For the purposes of paragraph (1)(b), disturbance of animals includes in particular any disturbance which is likely—

- (a) to impair their ability—
  - (i) to survive, to breed or reproduce, or to rear or nurture their young, or
  - (ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- (b) to affect significantly the local distribution or abundance of the species to which they belong.

Under Part 3 Regulation 41.(3) It is an offence for any person—

- (a) to be in possession of, or to control,
- (b) to transport,
- (c) to sell or exchange, or
- (d) to offer for sale or exchange any animal in Schedule 2.

#### Schedule 5: European Protected Species of Plants

- Shore dock
- Killarney Fern
- Early Gentian
- Lady's-slipper



- Creeping marshwort
- Slender naiad
- Fen orchid
- Floating-leaved water plantain
- Yellow-marsh saxifrage.

1.6.6 For species listed in Schedule 2, Under Part 3 Regulation 45(1) It is an offence deliberately to pick, collect, cut, uproot or destroy a wild plant of a European protected species.

1.6.7 Under Part 3 Regulation 45(1) (2) It is an offence for any person

- (a) to be in possession of, or to control,
- (b) to transport,
- (c) to sell or exchange, or
- (d) to offer for sale or exchange any plant in Schedule 5

#### European Designated Sites

1.6.8 These include:

- Special Protection Areas – SPAs are classified in accordance with Article 4 of the EC Birds Directive for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species
- Special Areas of Conservation – SACs are classified in accordance with Article 3 of the EC Habitats Directive. SACs are designated to establish a European network of important high-quality conservation sites that will make a significant contribution to conserving the 189 habitat types and 788 species identified in Annexes I and II of the Directive (as amended).

1.6.9 Natura 2000 is the name of the European Union-wide network of nature conservation sites established under the EC Habitats and Birds Directives. This network will comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs). Marine Natura 2000 sites contribute to our ecologically coherent network of marine protected areas.

## 1.7 NATURAL ENVIRONMENT AND RURAL COMMUNITIES (NERC) ACT 2006

### Planning Authorities: A Duty to Conserve Biodiversity

1.7.1 Under this legislation, planning authorities are obliged to make sure that they have all the information on the presence of protected species on site *before* they make a decision on the planning permission.

1.7.2 Part 2, Section 40 confers on the planning authorities a duty to conserve biodiversity and states:

*“Every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of biodiversity”*

### Species of Principal Importance

1.7.3 Part 3, Section 41 requires the Secretary of State to “publish a list of the living organisms and types of habitat which in the Secretary of State’s opinion are of **principle importance** for the purpose of conserving biodiversity”.

1.7.4 This requirement lead to production of a list of species and habitats of Principal Importance, which should be a material consideration during the planning process.

## 1.8 DESIGNATED SITES OF CONSERVATION INTEREST

1.8.1 Sites of conservation interest can be designated on a statutory or non-statutory basis.

### Statutory Sites

1.8.2 Statutory sites can be designated under UK legislation (the Wildlife and Countryside Act 1981), European Law (the Habitats Regulations 2010) or International law (Ramsar Convention).

1.8.3 The designated sites are referred to under the relevant legislation above.

1.8.4 UK designated sites include Sites of Special Scientific Interest (SSSIs).

1.8.5 European designated sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

1.8.6 Ramsar sites are wetlands of international importance designated under the Convention on Wetlands of International Importance, agreed in





Ramsar, Iran, in 1971.

1.8.7 Local Nature Reserves (LNRs): Under the National Parks and Access to the Countryside Act 1949 LNRs may be declared by local authorities after consultation with the relevant statutory nature conservation agency. LNRs are declared and managed for nature conservation, and provide opportunities for research and education, or simply enjoying and having contact with nature.

1.8.8 National Nature Reserves (NNRs): are declared by the statutory country conservation agencies under the National Parks and Access to the Countryside Act 1949 and the Wildlife and Countryside Act 1981.

#### Non-Statutory Sites

1.8.9 Local authorities for any given area may designate certain areas as being of local conservation interest. The criteria for inclusion, and the level of protection provided, if any, may vary between areas. Most individual counties have a similar scheme, although they do vary.

1.8.10 These sites, which may be given various titles such as 'Listed Wildlife Sites' (LWS), 'Local Nature Conservation Sites' (LNCS), 'Sites of Importance for Nature Conservation' (SINCs), 'Biological Heritage Sites' (BHS) or 'Sites of Nature Conservation Importance' (SNCIs), together with statutory designations, are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined.

## 2.0 Plans and Policies

In the UK, the following plans and policies relate to wildlife and habitats:

- o National Planning Policy Framework (NPPF, 2018)
- o The Natural Environment White Paper 'The Natural Choice: Securing the Value of Nature'
- o Biodiversity – The UK Action Plan (1994, and subsequent revisions)
- o Local Biodiversity Action Plans where applicable
- o Neighbourhood plans where applicable

### NATIONAL PLANNING POLICY FRAMEWORK

2.1.1 In March 2012 the Government introduced the National Planning Policy Framework (NPPF). This was revised in 2018.

#### Chapter 15: Conserving and Enhancing the Natural Environment

Chapter 15, Para 170 of NPPF states: "The planning system should contribute to and enhance the natural and local environment by:

- b) **protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils....**
- e) **minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures".**

Para 171 states: "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."

Para 174 identifies that plans should do the following to protect and enhance biodiversity and geodiversity:

- c) **"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**
- d) **Promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and peruse opportunities for securing measurable net gains for biodiversity."**

Para 175 states that "when determining planning applications, local authorities should apply the following principles:

- b) **if significant harm to biodiversity from a development cannot be avoided...,adequately mitigated, or, as a last resort compensated for, then planning permission should be refused"**
- c) **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;

- d) **Development result in the loss of deterioration of irreplaceable habitats (such as ancient woodland or ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensatory strategy exists; and**
- e) **Development whos primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.**

Para 177 states "the presumption in favour of sustainable development does not apply where development requiring appropriate assessment because of its potential impact on a habitats site is being planned or determined."

## 2.2 ODPM CIRCULAR 06/2005: BIODIVERSITY AND GEOLOGICAL CONSERVATION

- 2.2.1 This document, to be read in conjunction with NPPF provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England. It makes it clear that it is the intention of the government that local authorities and developers consider protected species at the earliest possible stage in the planning process. Any planning application that is likely to affect protected species should come with details of the surveys which have been undertaken and should include, if necessary, recommendations for mitigation. Applications which do not include sufficient data should be rejected.

## 2.3 The Natural Environment White paper

- 2.3.1 The Natural Environment White Paper 'The Natural Choice: Securing the Value of Nature' states that 'We want to create a resilient and coherent ecological network at national and local levels across England... To make this happen the government will put in place a clear institutional framework to support nature restoration. This means: establishing Local Nature Partnerships... Creating new Nature Improvement Areas (NIAs) and strengthening support through the planning system.'

### Biodiversity Offsetting

- 2.3.2 Biodiversity offsetting is described in the Natural Environment White Paper as 'conservation activities designed to deliver biodiversity benefits in compensation for losses in a measurable way. Good developments incorporate biodiversity considerations in their design but are still likely to result in some biodiversity loss. One way to compensate for this loss is by offsetting: the developer secures compensatory habitats elsewhere.'
- 2.3.3 The level of biodiversity offsetting required could be determine by means of assessments undertaken in accordance with the Department for Environment, Food and Rural Affairs (DEFRA) metric contained in Biodiversity Offsetting Pilots published in March 2012 as applied in the Defra offsetting pilot projects. Biodiversity offsetting could be delivered by developers in partnership with various partners including conservation organisations, local landowners and the borough council.

## 2.4 Biodiversity Action Plan (Local or UK)

### UK Biodiversity Action Plan

- 2.4.1 Biodiversity: The UK Action Plan outlines how the UK plans to address biodiversity conservation in response to the Rio Convention on Biological Diversity (1992). In 2004 a UK Biodiversity Steering Group was formed and discussions resulted in the publication of 'Biodiversity: the UK Steering Group Report – meeting the Rio challenge', which established a framework and criteria for identifying species and habitats of conservation concern. From this list, action plans for 391 species and 45 broad habitat types were prepared. In 2007, the UK List of Priority Species and Habitats was reviewed and the revised list identifies 1149 species and 65 habitats requiring conservation action.
- 2.4.2 These species are now listed in Section 41 of the NERC Act, 2006 and referred to as Habitats and Species of Principal Importance



(HPI or SPI).

- 2.4.3 Outcome 3 of the Government's Biodiversity 2020 strategy (DEFRA, 2011) contains an ambition to ensure that "*By 2020, we will see an overall improvement in the status of our wildlife and will have prevented further human-induced extinctions of known threatened species*". Protecting and enhancing England's Species and Habitats of Principal Importance is key to delivering this outcome.

#### Local Biodiversity Action Plans

- 2.4.4 Local Biodiversity Action Plans (LBAPs) are a means for delivering UK Biodiversity Action Plan targets at a local level. LBAPs were launched in 1997 by a partnership of conservation groups, government agencies and local authorities. They set out a framework for nature conservation in the specified area. This framework includes priority species and habitats and sets targets to maintain and enhance their conservation status.

## 2.5 Other Species Lists of Species of Conservation Concern

- 2.5.1 Species lists of Species of Conservation Concern also considered within this assessment are as follows:

- Birds of Conservation Concern: Based on an assessment of the conservation status of British birds. Following an assessment of data on population and trends against established criteria, there are red, amber and green lists of BoCC. The latest review was BOCC 4 (Eaton et al, 2015)

Red Data Book Species: In 1999 the Species Status Assessment project (JNCC) assigned conservation status to the UK flora and fauna using the internationally approved IUCN Red Data Book criteria and categories. The reviews were published in a series of data sheets and assigned a conservation status to each species.