

# Land at the former Watergate School, Speke Road, Liverpool, Merseyside, L25 8QA

# **Ecological Survey & Assessment**

**November-December 2014** 

Ribble Ecology ref: RB-14-168 Prepared by: Ms L Bousfield BSc (Hons) MCIEEM Date checked & released: rev.1\_10/12/2014\_rev.2\_10/12/2014

> Ribble Ecology Ltd 20 Hall Road Fulwood Preston PR2 9QD www.ribbleecology.co.uk



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#### SUMMARY

This report presents the results of an ecological survey and assessment, undertaken at land and features associated with Watergate School, Speke Road, Liverpool, L25 8QA. The work has been requested in preparation for a detailed planning application for residential development on the land.

The scope of survey and assessment has included consideration of: a) designated sites; b) vegetation and plant species; c) protected species of fauna; and d) species and habitats of principal importance, as listed in Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

As summarised in **Section 4.1** of this report, the results have shown that **there are only minor ecological considerations**, with no requirement for wildlife licensing. In brief the ecological considerations are: **a**) the presence of an invasive Cotoneaster shrub species, **b**) localised low potential for roosting bats at one building and four trees, **c**) habitat value for nesting birds in association with shrubs, trees, Bramble, Ivy and two buildings, and **d**) a low risk of Hedgehog presence.

Practical and achievable precautionary protection measures are presented in **Section 4.2.1** of this report and it is respectfully recommended that their implementation is enforced by means of one or more suitably worded planning conditions. This will ensure that the planning authority demonstrates due consideration of wildlife legislation and policy when determining the application and it will ensure that the work is compliant with wildlife legislation and policy at all times during its implementation.

Further, **Section 4.2.2** describes additional considerations, opportunities and measures of best practice to help retain and protect long-term biodiversity value. Implementation of such measures would demonstrate accordance with paragraph 118 of the *National Planning Policy Framework 2012* (*NPPF 2012*), hence should be regarded favourably if such recommendations are applied.

#### 1.0 INTRODUCTION

#### 1.1 Overview

In November 2014, Ribble Ecology Limited was commissioned to undertake an ecological survey and assessment at the former Watergate School, which is centred at grid reference **SJ 42637 86637**.

The request for an ecological survey and assessment was made in preparation for a detailed planning application for residential development, to replace the former school.

A plan showing the red-line boundary of the survey area was supplied with the commission, encompassing an area of approx. 1.7 hectares (ha).

Hereafter, the land within the red-line boundary is termed **`the Site**' or **`the Application Site**' throughout the rest of this report.

#### 1.2 Objectives

Ribble Ecology identified the objectives of the survey and assessment to be as follows:-

- Investigate all vegetation and habitat types, in accord with the JNNC guidelines<sup>1</sup> and compile one or more plant species lists where appropriate.
- Identify any occurrences of rare and/or protected plant species at the Site and also any non-native invasive plant species as listed on Schedule 9 of the *Wildlife and Countryside Act 1981 (WCA 1981)*.
- Using aforementioned plant species lists, identify National Vegetation Classification (NVC) communities and 'habitats of principal importance' under the NERC Act 2006.
- Undertake *habitat appraisal* for protected species such as: roosting, commuting & foraging bats; Badger; Water vole; Great crested newt and Schedule 1 birds.
- Where appropriate conduct additional surveys to conclusively determine the presence or absence of protected species (e.g. undertake daylight and nocturnal bat work), with such work also determining information about abundance and locations of occurrence.
- Similarly, undertake habitat appraisal and survey work in relation to other wildlife, such as breeding birds and 'species of principal importance' listed in the NERC Act 2006.
- From the survey results, identify any ecological concerns or constraints and provide feedback on appropriate mitigation and compensation measures to avoid impacts on protected species and other local wildlife.

#### 2.0 METHODOLOGIES

#### 2.1 Personnel

The survey and assessment has been undertaken by **Ms Lorna Bousfield BSc (Hons) MCIEEM** who is Principal Ecologist at Ribble Ecology Limited and holds Natural England class survey licenses (**class licence registration number CLS001700**) in respect of Great crested newt (**WML CL08 Level 1**) and bats (**WML CL18 - Bat Survey Level 2**). She is an experienced consultant with a wide skill base in respect of ecological surveying and assessment, including plant species and habitat identification, detection of protected

<sup>1</sup> Ref: Handbook for Phase 1 Habitat Survey – a technique for Environmental Audit" published by the Joint Nature Conservation Committee (JNCC 2003).

faunal species, assessment of potential impacts in accord with IEEM Guidance on EcIA's and also the design and implementation of mitigation, compensation and habitat enhancement schemes.

#### 2.2 Desk Study & Data Search

#### Desk study:

A range of desk and internet based resources were used to obtain background information prior to attending the Site, with the internet resources being as follows:

- Bing Maps (<u>www.bing.com/maps</u>) and Google Earth 5 (<u>http://earth.google.co.uk</u>) for aerial photographs, including historic photographs in the case of Google Earth.
- Bing Maps (<u>www.bing.com/maps</u>) for a 1:25,000 Ordnance Survey map extract.
- Multi-Agency Geographic Information for the Countryside (MAGIC) collaborative database website (<u>http://magic.defra.gov.uk/MagicMap.aspx</u>), for information on key environmental schemes and statutory designations.
- National Biodiversity Network (NBN) Gateway (<u>www.nbn.org.uk</u>), for collated low-resolution records of protected species and species of principal importance.
- The Liverpool Unitary Development Plan Proposals Map (2002), to identify land-use designations (<u>http://liverpool.gov.uk/media/86417/The-UDP-map.pdf</u>).

#### <u>Data search:</u>

In addition, a request for existing ecological data for a 1.0km radius around the Application Site was submitted to the ecological records centre at Mersey Biobank, with the aim of obtaining information about the following:

- Protected species records
- Local BAP species records
- Section 41 (UK BAP) species records
- Red Data species records
- Notable species records
- Invasive species records
- UK BAP habitat inventories
- Detailed Phase 1 and NVC habitats (see below)
- Designated sites (both statutory and non-statutory).

#### 2.3 Date, Weather Conditions & Any Limitations

The survey work was undertaken on **21<sup>st</sup> November 2014**, at which time no access or visibility limitations were encountered.

The weather conditions were adequate for completing the survey, comprising intermittent sunny spells and light rain and with a gentle breeze (Beaufort 2 - 3). The air temperature was  $10^{\circ}$  Celsius throughout the survey.

The seasonal timing of the survey was inappropriate for recording breeding birds and many flying invertebrates (butterflies, bees and dragonflies) but habitat appraisal by the experienced surveyor determined the suitability and potential value for such wildlife.

#### 2.4 Vegetation & Habitats

An Extended Phase 1 Habitat Survey was carried out throughout the Application Site. The Phase 1 Habitat Survey is a standardised method used to record habitat types and characteristic vegetation, as set out in the "*Handbook for Phase 1 Habitat Survey – a technique for Environmental Audit*" published by the *Joint Nature Conservation Committee (JNCC 2003)*. The methodology is 'Extended' through the additional recording of specific features indicating the presence, or likely presence, of protected species or other species of nature conservation significance.

Plant species lists were compiled where appropriate and the Site and survey area was searched for uncommon plant species, plant species listed as protected in the *Wildlife and Countryside Act 1981 (WCA 1981)*, plants listed as 'Priority Species' in the former UK Biodiversity Action Plan (UK BAP) and comparably 'species of principal importance', as listed under Section 41 of the extant NERC Act.

All higher plant nomenclature within this report is written in accord with *Stace's New Flora* of the British Isles (Stace, C. A. 1997).

A search was carried out for the presence of invasive species, as covered by Section 14 and listed on Schedule 9 in the *WCA 1981* (as amended) (Schedule 9 as updated April 2010).

Any occurrences of 'Priority Habitat' (as listed in the former UK BAP) and comparably 'habitats of principal importance' (as listed under Section 41 of the extant NERC Act) were noted. Where possible, the plant species lists were also used to identify National Vegetation Classification (NVC) communities (*Rodwell, J. S. Volumes 1 – 5, 1991 – 2000*), as the NVC provides a systematic and comprehensive analysis of British vegetation.

#### 2.5 Fauna

#### 2.5.1 Bat Species

#### <u>Overview:</u>

UK bat species are provided full legal protection under Schedule 5 (Section 9) of the *WCA 1981 (as amended)* and under *The Conservation of Habitats and Species Regulations 2010 (the Regulations 2010)*, making them European Protected Species. In combination this legislation makes it illegal to intentionally kill, injure, harm or disturb bats and illegal to damage, disturb or obstruct access to bat roosts.

During the Extended Phase 1 Survey, all features were assessed for their *habitat suitability* and *potential* to support roosting, hibernating, foraging and commuting bats.

The former school buildings were inspected externally and internally, using close-focus binoculars and a high-powered torch where appropriate, to identify potential access points, roost features and/or hibernation features.

Trees within the Site were inspected from the ground, using close-focus binoculars and a high powered torch where necessary, to identify potential roost habitats such as rot holes, crevices and lifting bark. All were categorised in accord with the 'protocol for visual inspection of trees', presented in Table 8.4 (page 60) in the *Bat Surveys. Good Practice Guidelines – 2nd Edition. Bat Conservation Trust. 2012*, which is summarised in the table on the following page.

Tree Assessment categories - as summarised from Table 8.4 in the Guidelines					
Known or confirmed roost	As determined from current or historic evidence.				
Category 1* trees	Trees with multiple highly suitable features, feasibly capable of supporting larger roosts.				
Category 1 trees	Trees with definite potential for the support of bats, but <i>either</i> with fewer suitable features than Category 1* trees <i>or</i> with potential for use by single bats, rather than groups.				
Category 2 trees	These have no obvious / clear potential for bat use, but <i>either</i> the size and age is such that cracks or crevices may be present at elevation, <i>or</i> there is visible occurrence of features which may have limited potential to support bats, particularly lone bats.				
Category 3 trees	This accounts for trees that have no potential to support bats.				

All features of interest were searched for field signs indicative of the current or former presence of bats, including droppings, remains of invertebrate prey, grease marks from repeated contact or passage through narrow roost accesses and/or bats themselves.

#### 2.5.2 Badger

Badgers *(Meles meles)* and their setts are protected under the *Protection of Badgers Act 1992.* This legislation makes it illegal to kill, injure or take Badgers or to interfere with a Badger sett, with the *Act* defining 'a sett' as being "any structure or place which displays signs indicating current use by a Badger".

The land was searched for evidence of Badger, with the aim of identifying any combination of the following field signs:

- Sett holes, wider than high, often with spoil heaps in front, sometimes also with discarded bedding;
- Disturbed ground and small holes from foraging activity;
- Trampled dispersal pathways and breach points under boundary fences;
- Distinctive hairs, snagged on fences etc. or found at sett entrances;
- Dung pits/ latrines;
- Characteristically shaped footprints;
- Scratching at the base of trees and other features.

#### 2.5.3 Birds

Wild birds, their nests and their eggs are protected under Part 1 of the *WCA 1981*, which makes it illegal to kill or injure a bird and to destroy its eggs or its nest whilst it is in use or being built. Game birds are an exception and are protected under the separate *Game Acts*, which fully protect them during the close season. In addition, certain bird species (such as Barn owl and Kingfisher) are specially protected under Schedule 1 of the *WCA 1981 (as amended),* making it illegal to disturb these birds and their young at the nest.

All visible and audible birds were recorded during the survey and habitats at the Application Site were assessed for their *potential value* for nesting, roosting, feeding, and wintering birds, as indicated by the amount of shelter and species diversity amongst the shrubs, trees and grassland habitats in the Site.

#### 2.5.4 Great Crested Newt & Other Amphibians

The Great Crested Newt (GCN) *(Triturus cristatus)* is provided full legal protection under Schedule 5 (section 9) of the *WCA 1981 (as amended)* and under *the Regulations 2010*, making it a European Protected Species. The legislation makes it illegal to intentionally kill, injure, harm or disturb Great Crested Newts (GCNs) and illegal to damage, destroy or obstruct access to any place used by sheltering or breeding GCNs.

Whilst the species breeds in water it forages, shelters and hibernates on land, typically within 250m of its breeding pond but sometimes up to 500m from the pond. Where planning proposals entail disturbance of land within range of GCN breeding ponds there is therefore a legal requirement to consider GCNs in relation to planning proposals, both in terms of aquatic habitat and terrestrial habitat.

Also, although the Common toad (*Bufo bufo*) is not afforded comparable legal protection to the GCN, it is regarded as a material consideration for planning applications because it is listed as a 'priority species' in the former UK BAP and a 'species of principal importance' in Section 41 of NERC Act 2006.

Prior to attending the Application Site an Ordnance Survey map and Google Earth aerial photographs were checked, with the aim of identifying any occurrences of ponds within 250m unobstructed dispersal radius of the Site, plus obtaining information about their sizes and any intervening terrestrial compositions. However, since there was no evidence of such features it was established that no detailed survey or assessment work was required in relation to Great crested newt, Common toad or other amphibians.

#### 2.5.5 Water Vole & Otter

Water voles (*Arvicola amphibious*) and their habitat are provided full legal protection under Schedule 5 (Section 9) of the *WCA 1981* (as amended), which makes it illegal to intentionally kill, injure or take Water voles and to damage, disturb or destroy their 'place of shelter', i.e. their habitat.

In England and Wales Otters *(Lutra lutra)* are protected under Section 9(4)(b) and (c) and (5) of the *WCA 1981* and they are fully protected under *the Regulations 2010*. Collectively, this makes it illegal to deliberately or intentionally capture, injure, kill, harm or disturb Otter and illegal to damage, destroy or obstruct access to an Otter holt.

Both species are characteristically associated with a range of aquatic habitat types, including ponds, field drains, reservoirs, wetlands and rivers.

Prior to attending the Application Site an Ordnance Survey map and Google Earth aerial photographs were checked for evidence of water courses and water bodies within or adjoining the Site. As there was no evidence of such features, this was checked and verified on Site and then no further survey work was required.

#### 2.5.6 Reptiles

All native British reptiles are provided partial legal protection against intentional killing and injury under Schedule 5 (Section 9) of the *WCA 1981* (as amended). In addition, Sand lizard *(Lacerta agilis)* and Smooth snake *(Coronella austriaca)* are fully protected under the *WCA 1981* (as amended) *and* under *the Regulations 2010*.

Reptile occurrences are localised and relatively rare in north-west England, with the only species recorded in the wider 20km radius of the Application Site being Common lizard *(Zootoca vivipara)* and Slow worm *(Anguis fragilis)*.

Habitats throughout the Application Site were assessed for their suitability and potential to support these species, but from the habitat appraisal it was determined that presence /absence surveys were not required.

#### 2.5.7 Other Wildlife

Any evidence of other wildlife occurrences was to be noted during the survey.

Habitat appraisal was also applied in respect of Brown hare *(Lepus europaeus)* and Hedgehog *(Erinaceus europaeus)*, which are both UK BAP priority species and NERC Act 'species of principal importance'.

#### 2.6 Evaluation Methods

Although the UK Biodiversity Action Plan (BAP) was succeeded by 'The Post-2010 Biodiversity Framework' in July 2012, evaluation of habitats and fauna with reference to the old UK BAP lists of 'priority habitats' and 'priority species' still proves helpful in qualifying their 'value'. The lists of priority habitats and species presented in the former UK BAP also form the basis of list of *'habitats and species of principal importance'* presented in Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act, which came into force on 1st Oct 2006. This requires the Secretary of State to regard such habitats and species as conservation priorities under the UK Post-2010 Biodiversity Framework.

Furthermore, local BAP lists are important for identifying species and habitats that are notable on a countywide basis (rather than nationally).

Resultantly, throughout this report there remains reference to UK and North Merseyside BAP priority species and habitats. There is also reference to habitats of principal importance and species of principal importance, in accord with Section 41 of the NERC Act 2006.

#### 3.0 RESULTS

#### 3.1 Desk Study & Data Search

#### 3.1.1 Designated Sites

The Application Site is centred at grid reference **SJ 42637 86637** and in relation to designated sites the desk study and data search results have identified the following:

- There is <u>no internationally or nationally designated statutory site of ecological interest</u> <u>at the Application Site or flanking its boundaries</u> (e.g. Special Protection Area (SPA), Special Area of Conservation (SAC), Ramsar wetlands or Site of Special Scientific Interest (SSSI)).
- The nearest <u>national and statutory designation</u> is that of <u>the 'Allerton Eric Hardy'</u> <u>Local Nature Reserve (LNR)</u>, which is located approx. 840m south-west of the Application Site at the closest point. This is separated from the Site by the large and busy A562 and the substantial separation distance means that it is beyond the zone of influence of a proposed change of land-use at the Site.
- There are no other internationally or nationally designated statutory sites within a 1.0km radius around the Application Site.
- In relation to non-statutory sites of local biodiversity interest, the data search has

shown that there are no Liverpool Local Wildlife Sites within or adjacent to the red-line boundary.

- However, <u>there are two current Liverpool Local Wildlife Sites</u>, two proposed Liverpool Local Wildlife Sites, two potential Liverpool Local Wildlife Sites and one current Knowsley Local Wildlife Site within a 1km search radius around the Application Site.
- The nearest locally designated site is <u>Woolton Manor, Woolton Woods & Camp Hill</u>, which spans an area of woodland located approx. 230m south-west of the Site (at its closest point). This woodland, like all of the other locally designated sites identified in the data search, is separated from the Application Site by the presence of busy roads and developed land. It is judged to be outside the zone of influence of the Application Site and therefore does not require further consideration.

In relation to land-use designations, the Liverpool Unitary Development Plan Proposals Map (2002) illustrates other land-use designations of ecological interest in the surrounding area, such as 'Greenbelt' (policy OE2) and Green-wedge (OE3). Reference to **Fig. 1** (**Appendix 1**) presents an extract from the map and exemplifies that the <u>Application Site is on land designated as 'Green space' (policies OE11 and OE12</u>), but these policies do not have an ecological element to them, hence this does not require further consideration within this report.

#### 3.1.2 Protected & Priority Species

In combination, results from the data search and the desk study reveal evidence of the known presence of a range of protected species within a 1.0 - 10.0km radius of the Application Site. This is by no means likely to be a conclusive or exhaustive list, but the species accounted for in the search are summarised in the list below (distances shown in brackets indicate their closest recorded occurrences from the red-line boundary):

- <u>Amphibians</u>: Great crested newt (10.0km range).
- <u>Birds (Schedule 1 species)</u>: Barn owl, Brambling, Common Kingfisher, Fieldfare, Hobby, Little ringed plover, Merlin, Peregrine, Redwing, (ranging from 2.0 - 10.0km);
- <u>Mammals</u>: Badger (5.0km); Brown Long-eared bat (10.0km), Common pipistrelle (1.0km), Daubenton's bat (5.0km), Noctule bat (1.0km), Red squirrel (2.0km), Soprano pipistrelle (5.0km), Water vole (2.0km), Whiskered / Brandt's bat (5.0km).
- <u>Plants</u>: Bluebell (5.0km).
- <u>Reptiles:</u> Slow worm (10.0km).

In addition, a wide array of UK BAP priority species has been recorded in the 10.0km surrounding area, including many bird, invertebrate and plant species, plus Brown hare, Hedgehog and Common toad.

Where appropriate, i.e. where above-listed records of protected species occurrences are within potential dispersal range of the Site, there is further discussion presented under sub-headings in **Sections 3.2 and 3.3** of this report.

#### **3.2 Vegetation & Habitats**

#### 3.2.1 Location & Surroundings

**Fig. 2** (next page) presents labelled extracts from a 1:25,000 Ordnance Survey map and an aerial photograph (© Bing Maps), both exemplifying the location of the Application Site in relation to its surroundings. As shown, the setting is highly urbanised, with abundant houses and many large roads in the surrounding area, but with green space to the west.



#### 3.2.2 Features within the Site

**Fig. 3** (**Appendix 1**) presents a labelled vegetation and habitat map of the Application Site, as prepared using an aerial photograph (© Google Earth) and results from the walkover survey. Photographs and descriptions of habitat features and vegetation types throughout the Site are provided in the following paragraphs.

#### Buildings & Hard-standings:

Central to the Site there is a complex of interlinked former school buildings (labelled as **B1** – **B16** on **Fig. 3**), whilst towards the northern edge there are two detached auxiliary buildings (labelled **B17 and B18**). Whilst the interlinked structures are predominantly devoid of vegetation, building **B18** supports abundant Ivy (*Hedera helix*) on its north and west aspects, as shown in **Photo. 1** (next page). This plant cover does not represent an NVC community, BAP Priority Habitat or Habitat of Principal Importance, but it merits consideration in relation to fauna (see **Section 3.3**).



**Hard-standings** are present in the form of car-parking, paths and former playground / sports areas, spanning a relatively high proportion of the Site. Since they currently stand disused they are sparsely colonised by ruderal vegetation, including common mosses, Annual meadow-grass (*Poa annua*) and Greater plantain (*Plantago major*) (see **Photo. 2**). Again, there is no example of an NVC community and the composition is not an example of a BAP Priority Habitat or a Habitat of Principal Importance.



Locally frequent moss and ruderal plants on hard-standings

Photo. 2

#### <u>Grassland:</u>

There is mesotrophic grassland throughout the Site, which has formerly comprised amenity grassland lawns, but has more recently been left unmanaged. Resultantly the grass is long and matted, as exemplified in **Photo. 3**.



The grassland composition is botanically species-poor, with abundant Red fescue (*Festuca rubra*) and frequent Yorkshire fog (*Holcus lanatus*), accompanied by occasional forbs such as Ribwort plantain (*Plantago lanceolata*) and Dandelion (*Taraxacum officinale* agg.). **Table 1** (see **Appendix 2**) presents a full species list. <u>There is no clear example of an NVC community and there is not an example of a BAP Priority Habitat or a Habitat of Principal Importance</u>.

#### Ruderal tall-herb & scrub vegetation:

Naturally colonised ruderal tall-herb and scrub vegetation is becoming established sparsely and also in locally dominant stands towards the edges of the Site, with Common nettle (*Urtica dioica*), Cleavers (*Galium aparine*) and Broad-leaved dock (*Rumex obtusifolius*) being prominent and locally presenting diminutive examples of the *OV24: Urtica dioica* – *Galium aparine NVC community*.

Bramble (*Rubus fruticosus*) is also locally dominant along the eastern side of the Site and this represents the *W24: Rubus fruticosus – Holcus lanatus* NVC *community*.

All such vegetation is of common and widespread occurrence throughout lowland Britain. <u>It presents no example of BAP Priority Habitat or Habitat of Principal Importance</u>, but the Bramble scrub merits consideration in relation to fauna (**Section 3.3**).

#### Shrubs & trees:

There are fourteen moderate-large sized trees rooted within the red-line boundary, as labelled **T1 – T14** on **Fig. 3**. These range from semi-mature to mature in stature and comprise a high proportion of Silver birch (*Betula pendula*), plus Sycamore (*Acer pseudoplatanus*) and ornamental varieties of cherry, oak and willow. They are accounted for in greater detail in **Section 3.3**, where their potential value for bats is assessed, but all appear to be in good condition and display balanced crowns. They do not represent an <u>NVC community</u>, <u>BAP Priority Habitat or Habitat of Principal Importance</u>, but merit consideration in relation to fauna.

There is also patchy occurrence of young / smaller trees, plus a variety of ornamental shrubs, particularly in the north-west of the Site. Species such as Cherry laurel (*Prunus laurocerasus*), *Spirea* sp and *Cotoneaster* sp. are prominent and these exotics again <u>do not represent an NVC community</u>, Priority Habitat or Habitat of Principal Importance, whereas they merit consideration in relation to fauna, as discussed in **Section 3.3**.

Outside the red-line boundary there are also nearby trees, including a line of mature conifers (to heights of approx. 20m) along the southern boundary, a line of smaller conifers alongside part of the northern boundary, a multi-stemmed Goat willow (*Salix caprea*) at the southern boundary and also a mature Hornbeam (*Carpinus betulus*) adjacent to the northern boundary, all of which are illustrated and labelled on **Fig. 3**. Where branches overhang the Site there is a risk of rootstocks extending into the Site as well, hence these trees rooted close to the boundary require further consideration.

#### Invasive species:

The ornamental shrub planting within the Site includes <u>one of the *Cotoneaster* sp. listed</u> <u>on Schedule 9, which merits precautionary consideration</u>.

However, there is no evidence of Himalayan balsam *(Impatiens glandulifera)*, Giant hogweed *(Heracleum mantegazzianum)*, Japanese knotweed *(Fallopoa japonica)* or other invasive plant species.

#### Tipped debris & boundary features:

The presence of heaped debris is shown illustratively in Fig. 3 and Photo. 4, with this comprising an array of man-made features, plus local heaps of branches. The materials are becoming overgrown with grasses and ruderal tall herb vegetation, but there is no botanical value associated with them. They do not represent BAP Priority Habitat or Habitat of Principal Importance, but they merit consideration in relation to fauna.



Heaped debris, mostly in the south of the site



The boundaries are denoted by a combination of fence types and wall compositions, including palisade fencing along the east boundary, sections of vertical timber plank fencing along northern and southern boundaries, sections of stone wall, sections of brick wall and also brick wall with timber fencing atop it, as shown in Photo. 5. There is local permeability under fence-lines, but a high proportion of the boundary is not permeable to ground-dwelling creatures. There is very locally abundant Ivy along the northern wall but negligible vegetation associated with the boundary fences and negligible ecological value.



#### 3.3 Fauna

#### 3.3.1 Bats

#### Built structures:

The complex of school buildings is predominantly interlinked, with adjoining components labelled as **B1 – B16** on **Fig 3**. Only buildings **B17 & 18** stand detached from the others. Brief accounts of their structural features are provided in the following paragraphs.

Components **B1**, **B3**, **B4**, **B5** and **B8** all display flat roofs, some with protruding skylight windows and some without. Their walls are a combination of brickwork and breeze-block, with uPVC window frames and with uPVC fascias / wall-trims to the exterior upper walls, as exemplified in **Photo's 6 and 7**. The fascia / trim features are predominantly tight fitting against the walls, but very locally there is damage and there are slight gaps, which are judged to afford very low potential for access and use by opportunistic crevice-roosting bats. In all other respects these components have <u>no potential value for bats or birds</u>.

Component **B13** was also a flat-roofed structure, but it has been subjected to an arson attack and it is now severely degraded. It presents no habitat value for bats or birds.



Components **B2, B6, B7, B9, B10, B11, B14 and B16** all have single-pitch roofs, comparable to those shown in **Photo's 6 and 8** (see above and below). The roofs are finished with bitumen felt overlaid onto boards, internally clad with insulation and in most instances finished with plasterboard and paint to form vaulted ceilings: there are no roof voids throughout. Again, the walls are a combination of brickwork and breeze-block, with uPVC window frames and with uPVC fascias / wall-trims to the exterior upper walls. It is judged that these components have no potential value for bats or birds.



Components B12 and B15 also have single-pitch roofs, but these are constructed from

corrugated transparent uPVC, hence differ from the preceding components. They are comparable in all other ways and present <u>no potential value for bats or birds</u>.

Structure **B17** is a small detached shed-like feature, which is illustrated in **Photo. 9**. It has brick lower walls, with no cavity access, above which there are timber walls that comprise horizontal cladding and no lining. The pitched roof is constructed from a timber frame that is overlaid with corrugated sheets that are not lined. <u>Although there is interior access for bats or birds, it is judged that there is negligible potential value</u>.



Structure **B18** is the other detached building in the Site and comprises brick walls, additionally with horizontal timber planking at both upper gable ends (see **Photo's 1 & 9**), with damage to the planks at the western gable, hence potential for bat or bird access. Additionally there are timber barge boards, behind which there are access gaps. To the roof there is a timber frame, externally finished with curved ceramic tiles and ridge tiles, additionally covered with dense Ivy on the north-facing pitch. <u>Collectively, the gaps under timbers at both gables, plus gaps under tiles, present low-moderate potential for opportunistic use by crevice roosting bats, which requires further consideration. The Ivy cover additionally presents moderate potential value for nesting birds, prompting a requirement for further consideration.</u>

#### Trees:

The trees have all been assessed in accord with the Category  $1^*$  to Category 3 criteria (as accounted for in the methodology of this report). The outcome is as follows:

- Trees **T1** and **T2** are mature Cherry sp. that display slightly lifting bark and <u>bw</u> <u>potential for opportunistic use by lone crevice-roosting bats, hence Category 2 status</u>. <u>This prompts a minor requirement for further consideration</u>.
- Tree **T9** is an early-mature Silver birch and has two small and shallow holes into its trunk and a large bough on its northern side, which again are <u>suitable for use by lone</u>, <u>crevice-roosting bats and present Category 2 status</u>. This prompts a minor requirement for further consideration.
- The mature **Hornbeam** overhanging the northern boundary of the Site displays Ivy and also fissured bark, forming crevices that have <u>low potential for opportunistic use</u> by lone crevice-roosting bats, hence Category 2 status. This prompts a minor requirement for further consideration.
- Trees T3, T4, T5, T6, T7, T8, T10, T11, T12, T13 and T14, plus the Goat willow overhanging the southern boundary are all healthy specimens that do not have rot, Ivy cover or crevices and therefore present negligible potential value for bats and Category 3 status.

In relation to active bats, daylight assessment indicates that the shrubs and trees rooted

within the Site and also flanking its northern and southern boundaries are likely to provide sheltered air-space and suitability for foraging and commuting bats. However, by comparison to the woodland to the south-west, the Site's habitat is very limited and is unlikely to substantively contribute to the foraging requirements of local bat populations. It is judged that this does not require further consideration.

#### 3.3.2 Badger

There is no evidence of Badger at Site or on the adjoining vegetated land to the east. With the Site being at a highly urbanised location, bound by a combination of walls and fencing on all sides and flanking built land to the north, west and south, it is judged that colonisation is very unlikely and that <u>no further consideration of Badger is required</u>.

#### <u>3.3.3 Birds</u>

The bird species recorded during the course of the walkover survey were as follows:

- Blackbird (x several)
- Pied wagtail (x1).
- Robin (x 1)

No occurrences of Schedule 1 bird species were recorded during the walkover survey and it is assessed there is no habitat value for Schedule 1 birds to nest at the Site or to use the Site for foraging.

No UK BAP species were recorded during the survey, but it is judged that shrubs, trees and also Bramble scrub at the eastern end of the Site could feasibly support BAP priority species such as Dunnock Song thrush and House sparrow, along with common garden birds such as Robin and Chaffinch. <u>Risk of shrub-nesting birds therefore requires precautionary consideration</u>.

Buildings B17 and B18 also have potential for use by nesting birds, with opportunistic Blackbirds or Starling having access to the interior of B17 and with species such as Wren and Robin feasibly being attracted to the Ivy on B18. This prompts further consideration in relation to structures B17 and B18.

However, there is negligible potential value for ground-nesting birds in the Site and there is negligible potential value for wintering migratory birds such as thrush species or waders.

#### 3.3.4 Great Crested Newt & Other Amphibians

There are no records of GCN occurrence in the data search results and there are no ponds associated with the Site or within an accessible dispersal radius around its boundaries. There is therefore no reasonable likelihood of GCN occurrence at the Site and <u>there is no requirement for further survey or for further consideration of GCN or other amphibians in relation to the proposal.</u>

#### 3.3.5 Water Vole & Otter

The daylight survey confirmed that there are no water features within the Site or flanking its boundaries. There is no habitat for Water vole or Otter and these species do not require further consideration.

#### 3.3.6 Reptiles

Habitat assessment indicates there is negligible potential for occurrence of Slow worm or

other reptiles at the Application Site, largely due to its highly urbanised location and its former use as a school in which the grounds were neatly tended and regularly disturbed. It is assessed that reptiles do not require further consideration in relation to the proposal.

#### 3.3.7 Other Wildlife

The tipped debris and also the shelter beneath the Bramble and shrubs within the Site is suitable for use by Hedgehog, which is a species of principal importance. <u>This merits minor further consideration</u>.

#### 4.0 SUMMARY, ASSESSMENT & RECOMMENDATIONS

#### 4.1 Summary

The results from the desk study, data search and walkover survey, show that there are the following ecological considerations at the Application Site:

- <u>Statutory / non-statutory sites of ecological interest</u> = No concerns or constraints.
- <u>Habitats of principal importance, and/or plant species that are rare, protected or</u> <u>species of principal importance</u> = No concerns or constraints.
- <u>Invasive plant species</u> = The presence of an invasive *Cotoneaster* at the north-west corner of the Site is a material consideration and removal will be necessary. Guidance is presented in **Section 4.2** and **Appendix 3** accordingly.
- <u>Bats</u> = There is no evidence of a bat roost and the buildings are predominantly unsuitable for bats, but structure B18 requires further consideration, as do trees T1, T2, T9 and the adjacent Hornbeam overhanging the Site because they have Category 2 status. Guidance is presented in **Section 4.2**.
- <u>Badger, Great crested newt, other amphibians, Water vole, Otter and reptiles</u> = No concerns or constraints.
- <u>Breeding birds</u> = The trees and shrubs throughout the Site, plus Bramble along the eastern boundary, Ivy on building B18 and also the structures of buildings B17 and B18 are suitable for use by low numbers of breeding birds. Precautions for protecting breeding birds will be needed, in accord with **Section 4.2**.

#### 4.2 Recommendations

The recommendations are for a combination of standard and best-practice measures.

**Sub-section 4.2.1** present recommendations that are *essential measures*, required for compliance with wildlife legislation. It is respectfully recommended that these are made the subject of one or more planning conditions to ensure that they are enforceable.

**Sub-section 4.2.2** presents recommendations that are *additional considerations and opportunities*, i.e. examples of how biodiversity value can be retained at the Site. Their implementation is not essential or enforceable, but it would demonstrate accordance with the principles of para. 118 of the National Planning Policy Framework 2012 (NPPF 2012).

#### 4.2.1 Essential Measures

#### Remove invasive Cotoneaster:

The presence of an invasive Cotoneaster species within the Site prompts a requirement for

removal. See **Appendix 3** for information about how to identify Cotoneaster shrubs, plus what control measures to apply.

#### Protection of the roots & canopies of trees:

Although the trees rooted within the red-line boundary are not of substantive value for their age, size or species diversity they provide shelter and potential habitat value for wildlife such as birds. Where possible, the trees are to be retained and it is important that the roots and branches of retained trees (included those rooted outside the Site but overhanging into it) are protected against damage by heavy machinery.

It is therefore recommended that before any invasive work commences on the Site, protective stand-offs should be denoted using demarcation tape or fencing. The stand-off distances are to be in accord with British Standards *BS5837: 2012 Trees in relation to design, demolition and construction*.

#### Precautionary protection of bats:

In relation to buildings, there is negligible risk associated with structures B1 - B17 and there is no requirement for a nocturnal survey. For structure B18 there is potential value for crevice-roosting bats, specifically Common pipistrelle because this is the most opportunistic and resilient bat species in the area. The following precautions are therefore recommended:

- At the discretion of the local planning authority, the implementation of a pre-demolition nocturnal survey on B18 is advisable, to conclusively establish whether or not any bats are using the features of potential value and whether or not any species-specific and roost-specific mitigation and compensation is required.
- Additionally, as a standard measure of good practice, all workers should be vigilant when removing features such as barge boards and soffit boxes if they have gaps behind them, or tiles if they have gaps under them, because bats are opportunistic and will sometimes use gaps on a transient basis. For guidance, the following photographs show a Common pipistrelle bat (the species most likely to be encountered) and an accumulation of bat droppings.



Fully grown Common pipistrelle bat



Pipistrelle bat droppings, which look like mouse droppings, but crumble to dust when squashed between the fingers (comprising tiny, glistening bits of insect wings etc.)

 If a bat (or an accumulation of bat droppings) is discovered at any time during the roof removal, work is to temporarily cease on this part of the roof whilst an experienced bat ecologist is contacted for guidance and assistance. This can be the consultant who undertook the initial survey (Ribble Ecology: 01772 879545), any other licensed bat worker, or the Bat Conservation Trust (BCT) helpline (0845 1300 228). • If it is necessary to capture a bat to remove it to safety, this should be undertaken with gloves or a light cloth, capturing the bat and containing it whilst the advice of the bat worker is sought. Thereafter, following the on-site advice of the bat worker will ensure there is no breach of the legislative protection afforded to roosting bats.

In relation to trees, any requirement to fell or prune trees T1, T2, T9 and the adjacent Hornbeam must be undertaken in accord with guidelines in 'Trees and Bats' (Arboricultural Association Guidance Note 1, May 2003, 2nd Ed). In summary, it is necessary for an experienced tree worker to implement the following:

- Optimally, schedule the work to take place over the autumn-winter period (i.e. between October and February) when there is least likelihood of occurrence of bats, but with workers nonetheless remaining alert for the presence of bats during the process.
- Initially, any shallow holes are to be checked for sheltering bats, using a torch. If any bats are found, a licensed bat worker must attend to provide guidance.
- If any rot holes or crevices are too deep to inspect with a torch then a licensed bat worker must inspect them with an endoscope.
- If unable to inspect holes because of safety constraints, these must be soft-felled in sections, isolating the cavities and lowering them to the ground for inspection.

In relation to bat roost habitat, whilst there is no obligation to include bat roost features in the proposal, it should be noted that there are many means of creating roost habitat features when constructing new buildings and there are also many long-lasting bat boxes available for purchase.

#### Protection of breeding birds:

The standard protection of breeding birds is applicable at the Site. Retention of trees should be prioritised where possible, so that impacts are avoided. Where retention and avoidance cannot be achieved, mitigation is necessary and <u>the bird breeding season is typically March to August inclusive so the clearance of such vegetation is to take place outside this breeding season</u>.

If other constraints dictate that sensitive timing is *not* possible, commencement *may* be able to take place during the bird breeding season, provided extra due diligence is implemented prior to and during the clearance; the following precautions must be applied:

- In the days immediately prior to commencing work, a thorough inspection is to be made, to check for active birds' nests.
- If any occurrences of breeding birds are detected, the nest(s) must be left undisturbed until the chicks have fledged, at which point the work can take place. As a rough indication, the incubation of eggs and rearing of chicks until they depart the nest can take 2 – 4 weeks, depending on the bird species and what stage the process has reached at the time that the nest is discovered.
- Once it is demonstrated that no birds are actively nesting, features can then be removed.

#### Precautionary protection of Hedgehog:

Precautionary action is considered to be necessary, to ensure that there is no reasonable likelihood of negative impacts on Hedgehog. Recommended actions are listed below:

• Invasive clearance of Bramble, shrubs and tipped debris is to be sensitively timed.

Hedgehogs typically breed between April and early-September (i.e. throughout a similar seasonal time frame to birds), which reinforces that <u>optimally the vegetation clearance</u> <u>should commence outside the summer period, hence minimising any risks</u>.

- At the outset of clearance, the tipped debris is to be uplifted by hand and Bramble and tall-herb vegetation is to be strimmed down to a height of approx. 6 7 inches (15 18cm), whilst any shrubs being removed are to be felled down to stumps at a similar height. The ground beneath is to be checked, to identify any sheltering animals.
- If animals are found, they are to be carefully captured and placed outside the eastern boundary of the Site, where there will be shelter and connectivity.

#### 4.2.2 Additional Considerations & Opportunities

#### <u>Lighting:</u>

Outdoor lighting is typically a deterrent to wildlife, thus where any outdoor lights are required these are to be kept directional, low-level, focussed and/or screened or hooded so that they do not illuminate the roofs or upper walls of buildings, retained trees and shrubs along the northern boundary or any other boundary where retention or planting has been achieved. This will permit bats, birds and other wildlife to continue using such vegetation for feeding and shelter.

#### Boundary fences permeable to wildlife:

Close boarded fences with concrete bases, or any fences that meet with the ground, are barriers to animal movement. It is therefore recommended that any new perimeter fences along the boundaries of new residential gardens are *not* to be sealed at their bases. Where possible there is to be a 5 - 10cm gap between the fence base and the ground (greater in some locations and less in others is not a problem). This is so that the Site is permeable to wildlife such as Hedgehog.

#### <u>Planting:</u>

Where it is possible to incorporate landscape planting into the scheme then this should favour the introduction of species that have value for local wildlife. New shrubs and trees should be planted in mixed-species clusters, which provide greater value than single-species planting. An array of suitable trees, shrubs and plants is available, but some suggestions are listed below:

#### Native species

- Trees: Alder (*Alnus glutinosa*), Bird cherry (*Prunus padus*), Common whitebeam (*Sorbus aria*), Crab apple (*Malus sylvestris*), Rowan (*Sorbus acuparia*), Silver birch (*Betula pendula*), Wild cherry (*Prunus avium*).
- Shrubs: Dog rose (Rosa canina), Elder *(Sambucus nigra)*, Guelder rose *(Viburnum opulus)*, Holly *(Ilex aquifolium)*, Hazel *(Corylus avellana)*, Hawthorn *(Crataegus monogyna)*.
- Climbers: Field rose (*Rosa arvensis*), Honeysuckle (*Lonicera periclymenum*), Ivy (*Hedera helix*).

Exotic species

- Trees: Apple (*Malus* sp.), Plum (*Prunus* sp.).
- Shrubs: *Forcythia* sp., Lilac (*Syringa vulgaris),* Ornamental currant (*Ribes* sp.), *Hydrangea* sp.

- Climbers: honeysuckle (*Lonicera periclymenum*), *Clematis* sp., climbing roses (*Rosa* sp.), *Wisteria floribunda*.
- Night-scented: White jasmine (*Jasminum officinale*), Tobacco plant (*Nicotiana sylvestris / alata*), Night-scented stock (*Matthiola bicornis / oxyceras*).
- Herbs: Lavender (*Lavendula angustifolia*), Sage (*Salvia officinalis*), Rosemary (*Rosmarinus officinalis*), Mint (*Mentha* sp.), Oregano (*Origanum vulgare*), Thyme (*Thymus vulgaris*), Chives (*Allium schoenoprasum*).

#### 5.0 CONCLUSION

In conclusion, there are minor ecological considerations at the Application Site and precautions will apply, but provided the essential legal measures presented in **Section 4.2.1** of this report are implemented then this will ensure that there is due consideration of wildlife legislation.

Further, if it is possible to apply some or all of the measures of best practice that are described in **Section 4.2.2** then the proposal will help retain biodiversity value in the immediate locality of the Site.

#### 6.0 REFERENCES

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#### **APPENDIX 1 – FIGURES**



Ecological Survey & Assessment. Ribble Ecology Ltd. (Nov-Dec 2014) 22



Fig. 3: Vegetation and Habitat Plan of the Application Site

Ecological Survey & Assessment. Ribble Ecology Ltd. (Nov-Dec 2014) 23

## **APPENDIX 2 – TABLES**

Table 1: A collective plant species list for the grassland				
Species common name	Species Latin name	Distribution		
Grasses and herbaceous plants				
Autumn hawkbit	Leontodon autumnalis	0		
Broad-leaved dock	Rumex obtulifolius	O/VLF		
Cock's-foot	Dactylis glomerata	VLF		
Common knapweed	Centurea nigra	VL		
Common mouse-ear	Cerastium fontanum	0		
Common nettle	Urtica dioica	VLF		
Common ragwort	Senecio jacobaea	0		
Creeping buttercup	Ranunculus repens	LF		
Cuckooflower	Cardamine pratense	VL		
Dandelion	Taraxacum officinalis	0		
False oat-grass	Arrhenatherum elatius	VLF		
Perennial rye-grass	Lolium perenne	F		
Red fescue	Festuca rubra	F/LA*		
Ribwort plantain	Plantago lanceolata	0		
Rough meadow-grass	Poa trivialis	F		
White clover	Trifolium repens	O/VLF		
Yorkshire fog	Holcus lanatus	LF/LA		
Bryophytes				
	Rytidiadelphus squarrosus	VLA		
	Hypnum cupressiforme	VLA		
<b>Key:</b> D = Dominant; A = Abundant; F = Frequent; O = Occasional; R = Rare; L = Locally, v = very				

#### **APPENDIX 3 – FURTHER GUIDANCE**

Cotoneaster species: identification and control sheet:

