

**Extended Phase 1 Habitat Survey
& Baseline Ecological Impact Assessment
Bluebell Farm, Longridge**

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Executive Summary

1. An ecological survey and impact assessment were carried out in respect of buildings and adjacent land situated within the curtilage of Bluebell Farm, Higher Road, Longridge, where proposals are to extend and link existing industrial buildings and construct a new underground dwelling linked by a tunnel
2. The site is used by a small number of relatively common breeding bird species though no signs of barn owl or other Wildlife & Countryside (WCA) Schedule 1 species were recorded on site or are reasonably expected to occur. The wider site, comprising mainly rush pasture and grassland, may be used by ground nesting and overwintering birds from time to time and several important species have been recorded in adjacent sites, but except for the footprint of the proposed underground dwelling, this habitat will remain unaffected and there will be no adverse impact in this respect, though precautions are advised
3. No suitable niches for roosting bats occur in any part of the building proposed for extension or demolition and all buildings on site have negligible to low potential for roosting. There are no mature trees on site or close enough to be affected by proposals, suitable for use by bats for roosting, and there is virtually no habitat of significant importance for commuting or foraging by bats within or close enough the development footprint to be adversely affected
4. There is only one extant pond within the wider site boundaries. Two other ponds occur within 250m *where there is direct habitat linkage* but these were found to have vegetated over at the time of survey with very little standing water. None of the ponds will be affected by proposals though the terrestrial habitat that forms the footprint of the proposed underground dwelling is marginal suitable for foraging amphibians including great crested newts and common toad. However, no signs of either of these species were found during the amphibian survey and few other amphibians other than a small number of smooth newt (max count 3) and common frog tadpoles (<50) were recorded in the extant pond. It is reasonable to conclude therefore that any impact upon important amphibian species such as great crested newt or common toad would be highly unlikely
5. No significant areas of semi-natural habitat will be affected either on site or near to the development footprint. Most of the site development footprint comprises existing buildings and hard-standing, along with several small, discrete areas of scrub and ruderal vegetation, and a relatively small area of species-poor rough grassland and rush pasture. There are no important habitats or vegetation communities occurring within or close enough to the development footprint boundaries to be *adversely affected by proposals*, so no adverse impact is considered likely in this respect
6. It is reasonable to conclude that with adequate mitigation to compensate for the modest loss of habitat along with a precautionary approach in respect of species such as birds and amphibians, there will be no negative ecological impact of any significance resulting from proposals to develop the site
7. The proposed landscaping scheme, which includes a high diversity of native species of trees, shrubs and herbs, along with the provision of new water courses including ponds and a stream, will result in a significant increase in ecological value of the site as a whole and contribute to the Lancashire Biodiversity Action Plan

Contextual Statement

This report ***must be read in conjunction with the documentation and drawings prepared and submitted to the Local Planning Authority in respect of current development proposals (as shown in Figure 6 of this report)***. The author of this report will accept no responsibility for any misunderstanding resulting from a failure to consult all relevant planning documentation or through any lack of information where responsibility for the provision of such is beyond the control of Cameron S Crook & Associates.

This report is not intended as a natural history text or scientific paper. Rather, its purpose is to inform the site owner, developer and local planning authority in accordance with current local and national planning guidance, in as clear and succinct a manner as possible. To that end, all survey and assessment works carried out in respect of current proposals are proportionate to the site and situation, and only the minimum level of information necessary has been provided. Detailed information on the respective life cycles of protected species such as the bat, badger or great crested newt, or detailed descriptions of sundry ecological scenarios that have no relevance to the site or development in question have therefore been omitted.

This report provides no planning or legal advice and no attempt has been made to interpret any respective planning or environmental laws that may apply to this case. Any such interpretation must be obtained from an appropriately qualified Planning Consultant, Planning Officer or Lawyer.

All survey works detailed within the methodology section below have been either carried out personally by the author or by appropriately qualified, licenced and/or experienced surveyors working under the supervision of the author. The author of this report takes full responsibility for the quality of data collected and any subsequent interpretation. Raw survey data and names of individual surveyors may be provided for *bone fide* reasons, upon request, but only where this is strictly necessary and does not otherwise conflict with client, landowner or surveyor confidentiality and privacy.

This report may not be used for any purpose other than in support of the current planning application (as per the proposals shown in *Figure 6*) without the prior written permission of Cameron S Crook & Associates. Copyright of this report and the intellectual property rights of all data herein shall remain with Cameron S Crook & Associates and may not be used or stored in any database without prior written permission.



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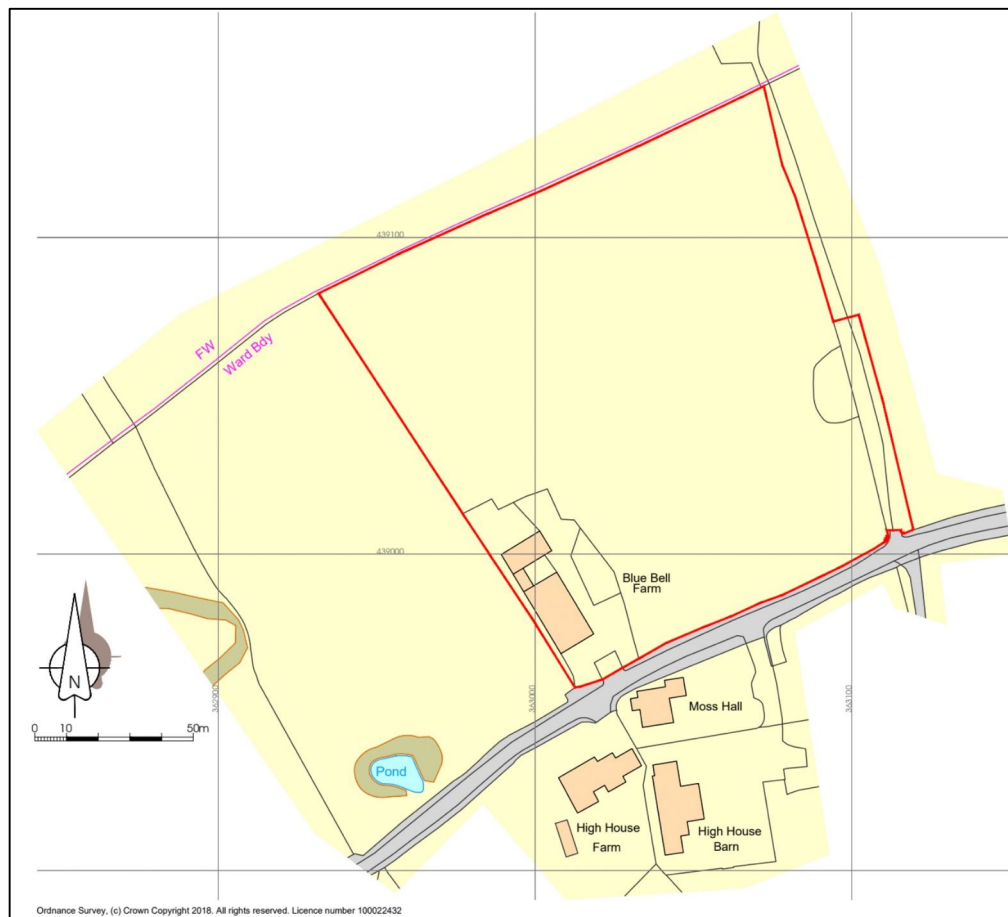
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1.0 Introduction

- 1.1 A baseline ecological survey, site appraisal and impact assessment were carried out in respect of land proposed for development at Bluebell Farm, Longridge, with the following aims:
1. To establish the likely presence or absence of protected or otherwise important species and evaluate the overall nature conservation status of the site
 2. To assess the likely impact of proposed works to develop the site upon any protected or otherwise important species that may occur on or adjacent to the area of land concerned and the integrity of nature conservation interest of any other sites of ecological or nature conservation importance within the vicinity
 3. To provide outline mitigation and habitat aftercare proposals, as appropriate
- 1.2 The term *Site* or *Development Footprint* will be used in this report to refer to the area of land proposed for development as shown on the site location plan (see *Figure 1* below) and proposed development as shown in *Figure 6*, unless otherwise indicated within the text.

Figure 1 Site Location Plan (within the red line boundary)



2.0 Methodology

Desktop Survey

- 2.1 Prior to undertaking any site survey works, a data search was carried out to check for any known protected or otherwise important species or habitats occurring within or closely adjacent to the site boundaries. Data sources include the following:

- ◆ NBN Gateway
- ◆ MAGIC
- ◆ LERN

Any *significant* results are provided within the relevant sections below or within the appendix, as appropriate.

General Ecological and Botanical Survey

- 2.2 This part of the survey comprised an Extended Phase 1 Habitat Survey carried out initially on the 17th May 2017 with any evidence of birds, amphibians, reptiles and mammals being noted during the survey. The survey methodology for the Extended Phase 1 Habitat Survey comprised a modified version of that described in NCC (1990) and IEA (1995) incorporating, where appropriate, a scaled down version of the methodology outlined in Rodwell (1991, 1992, 1995 & 2000) for determination of any National Vegetation Classification plant communities present.
- 2.3 The Phase 1 Habitat Survey was supplemented by a full vascular plant species survey using the 'walkabout method' as described in Kirkby (1988) and a generalized assessment of the site for suitability of habitat for animals, with emphasis upon protected species such as bats, badgers, water voles, breeding birds (including barn owls) and great crested newts. The results from the initial Phase 1 Habitat Survey were used to guide the requirement and level of detail of the more specific surveys, in this case for bats and barn owls, which are outlined below.

Bat Survey

- 2.4 The daytime bat survey was carried out on the 17th May 2017 and comprised a daytime inspection of all buildings that will be affected by proposals and any other suitable habitat such as trees, situated within or closely adjacent to the site boundaries, to check for any signs of actual or potential roosting, as well as an inspection of any vegetation, especially linear habitat, which was evaluated for suitability in respect of foraging and commuting.
- 2.5 No night-time survey was carried out due to the general lack or poor quality of suitable habitat for commuting, foraging and roosting.

Breeding Birds & Overwintering Birds

- 2.6 This was carried out concurrently with the daytime part of the bat and amphibian surveys comprising four visits during May 2017 with a further two visits in November & December 2018, and involved an evaluation of habitat to determine the potential for breeding or overwintering birds on or adjacent to the site, along with a series of observations from suitable vantage points.

Amphibians (in particular great crested newts and common toad) and reptiles

- 2.7 The survey for amphibians followed the methodology outlined in British Herpetological Society (1990) and was carried out over four visits between the 17th May 2017 and 31st May 2017 in accordance with the *Great Crested Newt Mitigation Guidelines* (English Nature, 2001). The surveys comprised four rounds of torchlight survey, netting, trapping (where possible), and egg-search, of the on-site pond and a visual inspection of two other ponds.

- 2.8 Each torchlight survey commenced 30 minutes after sunset and continued for a minimum of one hour to check for aquatic phase crested newts and other amphibia. Spotlights of one million candlepower were used for this part of the survey. Particular attention was given to open parts of the water bodies near to marginal vegetation and to the bank-side. The periphery of the water, where accessible, was netted, especially around the edges of dense marginal vegetation to check for newts that may have been hidden. This was undertaken either prior to or on a different occasion to the torchlight survey due to the amount of disturbance and turbidity caused.
- 2.9 Newt egg searches were carried out in daylight, comprising a detailed inspection of all suitable aquatic foliage within the water body, especially submerged foliage of broad-leaved species such as willow-herb and water mint, to check for any crested newt eggs folded into leaf blades.
- 2.10 Bottle-trapping was carried out using 2-litre plastic bottles with inverted lids, secured by canes, sited at an average of 2m intervals within each suitable water body. Bottle-traps were set one to two hours prior to sunset and checked by 11am at the latest the following morning. Any amphibians or other fauna such as fish and invertebrates were recorded.
- 2.11 In addition, terrestrial surveys were carried out across the survey area where suitable habitat was found, to check for terrestrial phase great crested newts and common toad, using any potential refugia such as plastic sheeting, wooden sheeting, hardcore, concrete, brick rubble and other debris. All potential refugia were closely examined, turning over as many loose materials as possible to check beneath and all cracks and crevices within the soil or hard-standing were examined with a high powered torch.
- 2.12 All the survey elements listed above were carried out during suitable weather conditions; i.e. air temperature above 5 degrees centigrade with no rain and little or no wind (less than Force 3 on the Beaufort Scale).
- 2.13 With respect to reptiles, any potential refugia such as metal, wooden or plastic sheeting or any potential egg-laying sites such as piles of sawdust were inspected for signs of sloughed skins and observations made on relatively warm days to check for any basking reptiles

3.0 Existing Situation

3.1 General Site Description

- 3.1.1 The site is located off Higher Road, Longridge. There is open grassland to the north, east and west, with Higher Road itself to the south, beyond which is more open farmland. The general site layout and principal features are shown in *Figure 2* below.

Figure 2 The existing site layout is shown within the red dashed-line, the approximate development footprint within the yellow dashed lines. Target notes are indicated by red circles and described in the text below



- 3.1.2 The site proposed for development (the development footprint) comprises a relatively small industrial site (TN3) with two large single-storey sheds and three smaller storage units set within a relatively narrow compound. The compound is located to the southwest of a large enclosure consisting principally of rough grassland and rush pasture (TN1).
- 3.1.3 The wider site is bounded by dry stone walling on all sides. The compound is bounded to the south and west by sections of stone walling, accessed via a close-boarded wooden gate to the south, with a line of post and wire fencing to the north and east which separate the existing compound from the extensive area of grassland.
- 3.1.4 There are no large mature trees, woodland or other significant areas of semi-natural vegetation on site, and no streams or other watercourses either within or close enough to the site boundaries to be affected by proposals. There is however a small pond and area of marshy grassland to the east (TN2), closely adjacent to and straddling the eastern boundary, as well as two vegetated-over ponds, beyond the site boundaries to the east (TN4 & TN5).

3.2 Habitats and Vegetation

Scrub

- 3.2.1 There is very little scrub habitat on site other than the occasional patch of low growing bramble, primarily at the site margins, and a single willow to the southwest of the compound and a group of ornamental shrubs adjacent to the access. This habitat is of low ecological value.

Grassland

- 3.2.2 The habitat that dominates the wider site is semi-improved, species poor grassland and rush pasture. The principle species are common bent, red fescue, cock's-foot, false oat-grass, Yorkshire Fog, perennial rye-grass, soft-rush, hard-rush, creeping buttercup, articulated rush, common sorrel and sheep sorrel. The wetter areas to the east, adjacent to the pond are dominated by rushes along with tufted hair-grass, marsh stitchwort and marsh bedstraw, but the flora is generally species poor. The soil is mildly acidic due to the underlying millstone grit but the habitat does not qualify as acidic grassland per se due to the level of agricultural improvement that has taken place in the past, and is of limited ecological value in botanical terms.

Tall Ruderal Vegetation

- 3.2.3 This habitat is located at the margins of the site, including around the less disturbed parts of the compound and includes typical species such as docks, nettle and Rosebay willow-herb and is of limited ecological value.

Ephemeral & Short Perennial Vegetation

- 3.2.4 This habitat is scattered across the site but occurs mostly along the margins of the compound and other areas of the wider site where there have been greater levels of disturbance. The vegetation is composed of typical species such as creeping bent, annual meadow grass, dandelion and creeping buttercup and is of negligible ecological value.
- 3.2.5 The habitats recorded during the Phase 1 Habitat Survey either on or closely bordering the development footprint are summarized within *Table 1* below. Only habitats that were recorded within the development footprint itself (within the yellow-dashed line in *Figure 2* above) or that will be otherwise affected by development proposals are listed in *Table 1*. No plant species list has been provided due to the limited number of species recorded within the development footprint and general lack of semi-natural vegetation in that location.

Table 1 Habitats & Vegetation Communities (within or directly bordering the development footprint)

NCC/RSNC ¹ Habitat	NVC ² Communities
Scrub: scattered	W24 <i>Rubus fruticosus</i> - <i>Holcus lanatus</i> underscrub community
Semi-improved Grassland	MG7 <i>Lolium perenne</i> leys and related grasslands MG10 <i>Holcus lanatus</i> - <i>Juncus effusus</i> rush pasture
Tall Ruderal Vegetation	OV23 <i>Lolium perenne</i> - <i>Dactylis glomeratus</i> community OV24 <i>Urtica dioica</i> - <i>Galium aparine</i> community
Cultivated/disturbed land: ephemeral/short perennial	OV21 <i>Poa annua</i> - <i>Plantago major</i> community OV22 <i>Poa annua</i> - <i>Taraxacum officinale</i> community OV28 <i>Agrostis stolonifera</i> - <i>Ranunculus repens</i> community
¹ Nature Conservancy Council and Royal Society for Nature Conservation habitat classification (NCC, 1990).	
² National Vegetation Classification communities (Rodwell, 1991)	

Significance of Sites, Habitats and Flora

- 3.2.6 All habitats and vegetation communities recorded on site are relatively common and widespread throughout Lancashire and Great Britain. There are no important habitats within the development footprint boundaries. Ponds are listed as *Priority Habitats* in Lancashire, though none will be directly affected by proposals. There are no important or designated wildlife sites within or closely adjacent to the site boundaries, or that are otherwise likely to be affected by proposals. The nearest site of ecological importance is the *Longridge Fell Biological Heritage Site*, situated some 700m to the east, followed by *Hoarsell Meadow BHS*, some 900m to the south, and *Spade Mill Reservoirs BHS*, approximately 1.5km to the southwest, none of which will be in any way affected by proposals.

3.3 Fauna*Mammals (Badgers)*

- 3.3.1 *Habitat Suitability:* There is very little habitat within the development footprint suitable for foraging and none suitable for the establishment of setts. The grassland within the wider site is marginally suitable for foraging but the relatively shallow soils and lack of cover preclude the likelihood of setts being established.
- 3.3.2 *Presence/Absence:* An inspection of all suitable habitat to a distance of at least 30m from the proposed development footprint boundaries (where accessible) revealed no conclusive signs of badger activity and the lack of any firm evidence suggests that the habitat on site is not of significant importance to this species.

Mammals (Bats)

- 3.3.3 *Habitat Suitability:* The two larger sheds are constructed partially of stone, partially tongue & groove timber with corrugated sheet roofing and close-fitting formed metal bargeboards. There are no internal voids in any part of the building, no secure niches suitable for roosting bats to roost. Similarly, the smaller sheds which are constructed of sheet materials with flat roofs and no secure voids, so are also unsuitable for use by roosting bats. In terms of the Bat Conservation Trust (BCT) roosting potential criteria, the buildings qualify as *Negligible-Low*.

Figure 3 The existing industrial buildings within the compound



- 3.3.4 There are no trees within the development footprint or that will be otherwise affected by proposals. Whilst there are trees within the adjacent site to the southwest, across Higher Road, which qualify as *Category 1 & 2* in respect of the BCT criteria for

roosting potential, none of these trees are close enough to be affected by proposals and no conclusive signs of bats were found during the daytime survey.

- 3.3.5 There is virtually no habitat on site suitable for foraging or commuting, though it is likely that bats may forage around the buildings from time to time. Otherwise, due to the level of exposure and lack of suitable habitat, the site is of very limited importance to bats and no impact upon bats is therefore considered likely.

Mammals (Brown Hare)

- 3.3.6 *Habitat Suitability:* The wider site, beyond the existing compound comprises an extensive area of grassland, currently grazed by a horse, leaving little in the way of semi-natural grassland or suitable cover to develop as cover. Within the development footprint, there is no habitat within the development footprint suitable for this species.
- 3.3.7 *Presence/absence:* Throughout the survey period, no records were made of brown hare though there are historic records of this species within 1km of the site boundaries. However, as most of the habitat within the development footprint is generally suboptimal, the site in question is considered to be of limited importance to brown hare. Nevertheless, whilst the presence of this species is considered unlikely, occurrence at a later date within the wider site boundaries cannot be totally ruled out so precautions are advised.

Mammals (General)

- 3.3.8 *Habitat Suitability:* The site provides habitat for several common mammal species, primarily those associated with open farmland.
- 3.3.9 *Presence/Absence:* A small number of small mammals including house mouse, wood mouse, bank vole and brown rat were recorded, mainly along the site margins. Otherwise, there was little evidence of mammal activity other than rabbit and fox, the latter two species indicated by occasional droppings and feeding remains or activity. There was no evidence of hedgehog or deer and none of these species are reasonably expected to occur within the development footprint or be otherwise affected by proposals, though the latter two species are expected to occur within the wider site boundaries from time to time. Aquatic mammals such as water vole and otter are highly unlikely to occur on site as there is no suitable habitat, the on-site pond being suboptimal in terms of habitat quality due to its limited size and depth and lack of connectivity to other suitable habitat such as rivers and streams.

Birds

- 3.3.10 *Habitat Suitability:* The site provides habitat suitable for a small number of breeding birds, primarily those associated with open farmland, the diversity of habitat on site is limited and confined mainly to the rough grassland that dominates the wider site. The most important parts of the site in relative terms are the rougher, less disturbed areas of grassland and rough pasture. The buildings are generally unsuitable for breeding birds due to the lack of suitable niches and there are no mature trees, hedges or significant areas of dense scrub.
- 3.24 *Species Recorded/Potential Breeding:* Table 2 below lists the birds recorded during the survey and provides an indication of those species considered likely to breed on site, or close to the site boundaries.

Table 2 Breeding birds recorded

Species Name	Common Name	Breeding Status
<i>Anthus pratensis</i>	Meadow Pipit	PoBr
<i>Columba palumbus</i>	Wood Pigeon	NoBr
<i>Corvus corone</i>	Carrion Crow	NoBr
<i>Erithacus rubecula</i>	Robin	PoBr
<i>Hirundo rustica</i>	Swallow	NoBr
<i>Falco tinnunculus</i>	Kestrel	NoBr
<i>Linaria cannabina</i>	Linnet	PoBr
<i>Numenius arquata</i>	Curlew	PoBr
<i>Parus caeruleus</i>	Blue Tit	NoBr
<i>Parus major</i>	Great Tit	NoBr
<i>Passer domesticus</i>	House Sparrow	PoBr
<i>Pica pica</i>	Magpie	NoBr
<i>Sturnus vulgaris</i>	Starling	PoBr
<i>Turdus merula</i>	Blackbird	PoBr
<i>Vanellus vanellus</i>	Lapwing	PoBr
Key to Breeding Qualifiers:		
NoBr – Not Breeding; PrNB –PoBr – Possibly Breeding		

- 3.25 Except for the species listed below, all the species recorded or considered likely to breed within or close to the development site boundaries are species that are relatively common and widespread in rural areas such as this. No WCA Schedule 1 species such as barn owl were found and the presence of this species on site is unlikely. However, lapwing, curlew, meadow pipit, linnet, house sparrow and starling, are listed as either Species and of Principal Importance for Conservation and therefore classified as *UK Priority Species* or *UK Red List* species, or within the Lancashire Biodiversity Action Plan (BAP), though none of these species were confirmed breeding on site, within the development footprint, and the habitat is currently suboptimal. However, all species listed are known to occur and breed on closely adjacent sites and may be expected to breed on site at a later date if the opportunity arises (i.e. suitable habitat becomes available).

Amphibians

- 3.26 *Habitat Suitability:* The site provides a limited diversity of habitats, some of which are suitable for foraging and overwintering by amphibians. Most terrestrial habitat within the development footprint (>80%) is however sub-optimal in quality due to the dominance of buildings, hard-standing, poor quality grassland, and the overall level of disturbance. The terrestrial habitat of most importance to amphibians, in particular great crested newt and common toad, is that which follows and includes the field margins and the habitat adjacent to the on-site pond.
- 3.27 There is only one pond within the wider site capable of supporting both great crested newt and common toad (see *Figure 4* and TN2 in *Figure 2*), as well as other amphibian species, though the pond falls beyond the development footprint and will not be directly affected by proposals. There are two other ponds within 250m of the site boundaries (TN4 & TN5 in *Figure 2*) where there is direct habitat linkage, though both ponds were found to have terrestrialised at the time of survey with little or no standing water and are unsuitable for use by great crested newts or common toad for breeding.

- 3.28 In terms of the *Habitat Suitability Index (HSI)* the on-site pond, the only one of the ponds that is currently extant, is classed as *Average* with an *HSI* score 0.62. The other two ponds were not assessed due to the lack of water.

Figure 4 The on-site pond (TN2) situated to the east of the proposed development footprint



Figure 5 One of the off-site, terrestrialised ponds (TN4)



- 3.28 *Presence/Absence:* During the full amphibian survey, the only on-site pond was surveyed using standard methodology. No signs of great crested newt or common toad were found during any of the survey visits. The only amphibian species recorded were common frog (a relatively small number of tadpoles <10) and smooth newt (max count 1 male, 2 female).
- 3.29 As there are no records of great crested newt within 1km of the site boundaries (where there is direct habitat linkage), and the nearest historic record of common toad is located some 600m to the east with numerous intervening barriers to dispersal such as roads and other inhospitable habitat, it is highly improbable that either of these species, or any significant populations of other amphibians, occur on site or are likely to be affected by proposals.

Reptiles

- 3.30 *Habitat Suitability:* The habitat on site is only marginally suitable for reptiles, the most important habitat being the rough grassland along the site margins and adjacent to the pond, which has moderate potential for use by slowworm, and the stone walls which may be used for refuge and overwintering by common lizard.
- 3.31 *Presence/Absence:* An inspection of all suitable habitat within the site boundaries revealed no conclusive evidence of use by reptiles and the whole site was found to be generally sub-optimal for this group of species. There are no historic records of reptiles within 1km of the site boundaries and reptiles are relatively uncommon in Lancashire.

Significance of Fauna

- 3.32 A number of birds that are protected in general terms during the breeding season, occur within the proposed development site boundaries. Several other species recorded on site may also be expected to breed from time to time, though this does not include any WCA Schedule 1 species.
- 3.33 However, some of the bird species recorded breeding on closely adjacent sites, including house sparrow, starling, linnet, curlew, lapwing and meadow pipit, are listed as either Species of Principal Importance for Conservation or are Lancashire BAP species. Consequently, any site works which may affect potential breeding sites should avoid the breeding season (February to July inclusive) and any unavoidable loss of breeding habitat should be compensated for by provision of proprietary breeding boxes sited in appropriate locations on completion of site works, if not before.
- 3.34 There is little or no potential for bat roosting on site and no conclusive signs were found. Similarly, the potential for foraging is also low. No adverse impact upon bats is therefore considered likely.
- 3.35 There is only one pond on site and no other extant ponds within 250m where there is direct habitat linkage. No signs of great crested newt or common toad were found in the existing ponds, there are no historic records of great crested newt within 1km of the site boundaries, and no records of common toad within 600m of the site boundaries. It is therefore reasonable to assume that neither of these important amphibian species occur on site.

4.0 Potential Impacts & Mitigation

4.1 Likely Impact

- 4.1.1 The likely impact of the proposed site works is evaluated against the criteria laid out in the table below which is based on NATA (New Approach to Appraisal) as described in Byron H. (2000). This evaluation is based on the assumption that no mitigation works will be implemented.

Table 3. Impact Assessment Matrix

Impact Magnitude	Nature Conservation Importance				
	<i>Negligible</i>	<i>Local</i>	<i>County</i>	<i>National</i>	<i>European</i>
Beneficial Effect	Non Significant	Non Significant	Non Significant	Non Significant	Non Significant
Nil Effect	Non Significant	Non Significant	Non Significant	Non Significant	Non Significant
Minor (short term or reversible effects)	Non Significant	Non Significant	Slight	Moderate	Moderate
Moderate (deterioration of feature)	Non Significant	Slight	Moderate	Severe	Severe
High (loss of feature)	Non Significant	Slight	Moderate	Severe	Severe

- 4.1.2 The evaluation criteria for nature conservation importance are as follows:

European

Habitats which are listed in Annexe 1 of the Habitats Directive and are included as candidate or proposed Special Areas of Conservation (cSAC, pSAC)

Species which are listed under Schedule 2 of the Habitats Directive and form a population which would qualify the site for consideration as a Special Protection Area (SPA) or Special Area of Conservation

National

Habitats that meet the criteria for designation of, or occur within, a Site of Special Scientific Interest (SSSI)

Species that are protected under national wildlife legislation such as the Wildlife & Countryside act, are listed in a national Red Data Book, or that are part of a population or assemblage of species that would meet the criteria for the site being designated a site of Special Scientific Interest (SSSI)

County

Habitats which are rare or uncommon in the County would meet the criteria for inclusion or are included within a second tier nature conservation site (SINC), or are Habitats of Principal Importance for Conservation

Species which are rare or uncommon within the County, form part of a population or assemblage of species which would meet the criteria for

inclusion or are included as part of a Site of Importance for Nature Conservation (SINC) or are Species of Principal Importance for Conservation

Local

Habitats that are uncommon or threatened within the Longridge area

Species that are uncommon or threatened within the Longridge area

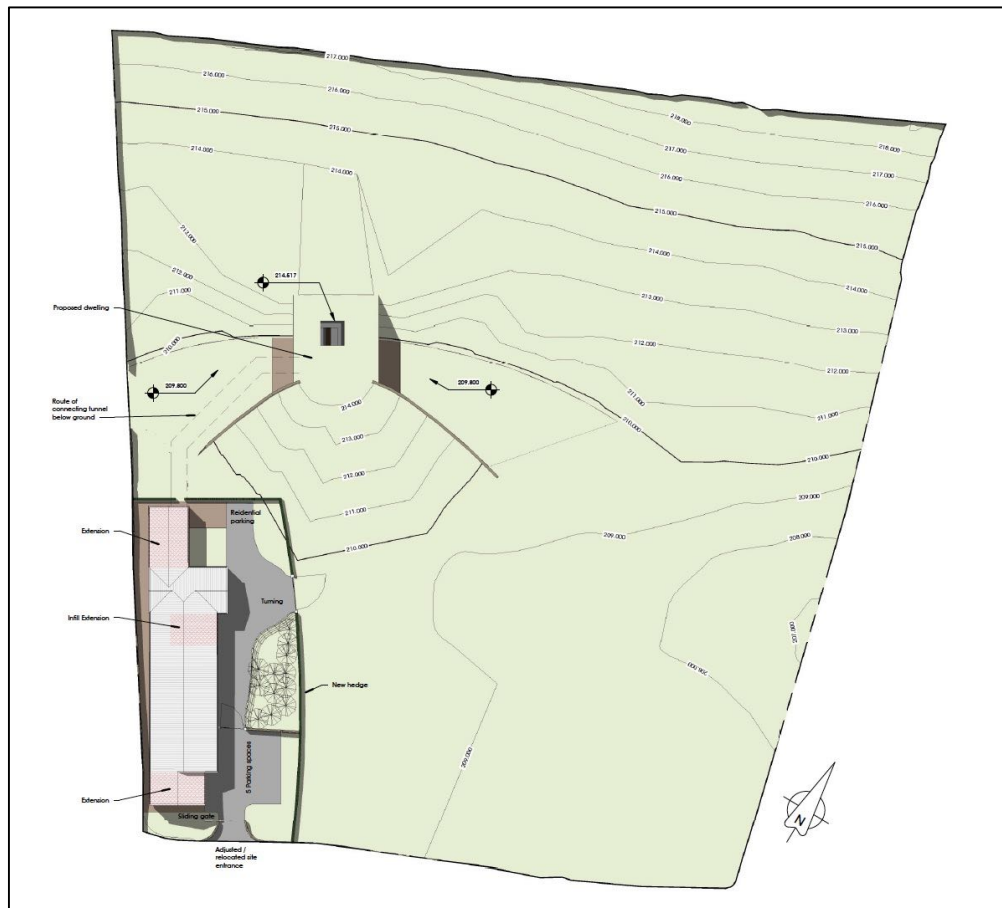
Negligible

Habitats or *Species* that fit into none of the above categories

4.2 Likely Impact of the Development and Outline Mitigation

- 4.2.1 The current ecological impacts resulting from the proposed site development works (see proposed layout, *Figure 6*) based on the criteria outlined above whilst considering the mitigation required to negate any impacts, are summarized within the following respective tables.

Figure 6 Proposed Site Layout (see drawings prepared and submitted by PGB Architects for full details)



4.2.2 Bats

Details	Likely Impacts	Required Mitigation and Residual Impact
There is little or no potential for bat roosting and little suitable habitat for foraging and commuting within or closely adjacent to the proposed development footprint	No significant impact likely	No specific mitigation is required
Nature Conservation Importance: European	Impact Magnitude: Nil Effect Overall Impact: (Nil Effect: European) Non Significant	Residual Impact: Non Significant

4.2.3 Brown Hare

Details	Likely Impacts	Required Mitigation and Residual Impact
Brown hare is known to occur within the wider vicinity though none were recorded during any of the survey visits and the presence of this species on site is considered reasonably unlikely	Should brown hare later use the site, the main impacts likely are direct mortality during any site works in respect of the proposed underground dwelling. However, most of the habitat within the development footprint is suboptimal so the presence of brown hares is considered reasonably unlikely, though not impossible	Due to the relatively low impact, no specific mitigation is required although, regarding any site works within the existing grassland, all pits and trenches etc. should be covered when not in use, especially overnight, and all works involving clearance or modification of mature or dense vegetation should be carried out with due care, allowing any hares that might be present to escape before earth works begin
Nature Conservation Importance: County	Impact Magnitude: Minor Overall Impact: (Minor: County) Slight	Residual Impact: Non Significant

4.2.4 Badgers

Details	Likely Impacts	Required Mitigation and Residual Impact
No badger setts found on site and badgers relatively unknown in the wider area	No significant impact likely	No specific mitigation required
Nature Conservation Importance: National	Impact Magnitude: Nil Effect Overall Impact: (Nil effect: National) Non Significant	Residual Impact: Non Significant

4.2.5 Breeding Birds

Details	Likely Impacts	Required Mitigation and Residual Impact
The site provides a small diversity of suitable niches for breeding birds such as the rough grassland, marshy grassland, more established areas of marginal scrub and to a lesser extent, the existing buildings. There is some potential for ground nesting birds within the development footprint though this is limited due to the level of disturbance from the adjacent industrial site usage and grazing by horses. There were no conclusive signs of any WCA Schedule 1 species such as Barn Owl breeding on site, though several other important birds, including ground-nesting species which have been recorded at closely adjacent sites, may be expected to occur on site from time to time	Removal of dense scrub and other mature vegetation and demolition or dismantling of any buildings during the breeding season (February-July) may result in disturbance to breeding birds and loss of breeding habitat. There may also be indirect impacts upon breeding birds that may use the adjacent meadows and the pond and drainage ditch, if adequate precautions are not taken	No vegetation to be removed and no buildings to be dismantled or otherwise affected during the breeding season (March to July inclusive) until or unless checked for breeding birds. Loss of potential roosting and breeding sites within buildings proposed for removal and any removed vegetation to be compensated for by the siting of proprietary nesting boxes, where possible, on new or existing buildings. Nest boxes to include designs suitable for house sparrows along with swallow cups. No works to take place beyond the development footprint boundary and the adjacent meadow should be fenced off and appropriately screened to prevent disturbance of breeding, especially ground-nesting, birds using adjacent parts of the site (if works take place between March and July inclusive)
Nature Conservation Importance: National	Impact Magnitude: High Overall Impact: (Severe: National) Severe (where works are carried out during the breeding season)	Residual Impact: Non Significant

4.2.6 Amphibians (Great Crested Newts and Common Toad)

Details	Likely Impacts	Required Mitigation and Residual Impact
No signs of great crested newt or significant populations of other amphibia were recorded on site or are reasonably expected to occur. No signs of common toad were recorded in the on-site pond, the extent of suitable foraging habitat within the development footprint is relatively limited	No significant impact is likely	No specific mitigation is required. However, as a precautionary measure, no works should take place within the mature vegetation situated adjacent to the pond and associated habitat, should this be required, until or unless this has been hand searched by an ecologist and any amphibians removed to safety. Similarly, all loose materials on site should be removed with care and any amphibians encountered transferred to suitable vegetation beyond the development footprint boundaries
Nature Conservation Importance: European	Impact Magnitude: Nil Effect Overall Impact: (Nil Effect: European) Non Significant	Residual Impact: Non Significant

4.2.7 Reptiles

Details	Likely Impacts	Required Mitigation and Residual Impact
Except for common lizard and slowworm, there is little suitable habitat for reptiles and none were recorded. Overall, the habitat is sub-optimal and there are no historic records of these species within 1km of the site boundaries. It is reasonable to assume therefore that they do not occur on site	No likely impact	No specific mitigation required. However, should any parts of the existing stone wall require dismantling, care should be taken, especially during the winter period and should any signs of reptiles be found, all works within the area concerned should cease immediately and further ecological advice should be sought
Nature Conservation Importance: European	Impact Magnitude: Nil Effect Overall Impact: (Minor: European) Non Significant	Residual Impact: Non Significant

4.2.8 Botany/Vegetation Communities/Habitats

Details	Likely Impacts	Required Mitigation and Residual Impact
There is no vegetation of any significance within the development footprint or that will be adversely affected by proposals	Virtually all vegetation within the development footprint will be lost. However, there will be little or no significant impact upon any semi-natural vegetation of importance	No specific mitigation required within the development footprint. However, the implementation of the proposed landscaping scheme, which includes a high proportion of native trees, shrubs and herbs, along with the creation of new wetlands including ponds and a stream, will be of net benefit to the environment, will positively increase the ecological value of the site, and will contribute to the Lancashire Biodiversity Action Plan
Nature Conservation Importance: Negligible	Impact Magnitude: Nil Effect Overall Impact: (High: Negligible) Nil Effect	Residual Impact: Beneficial

5.0 Conclusion & Summary Recommendations

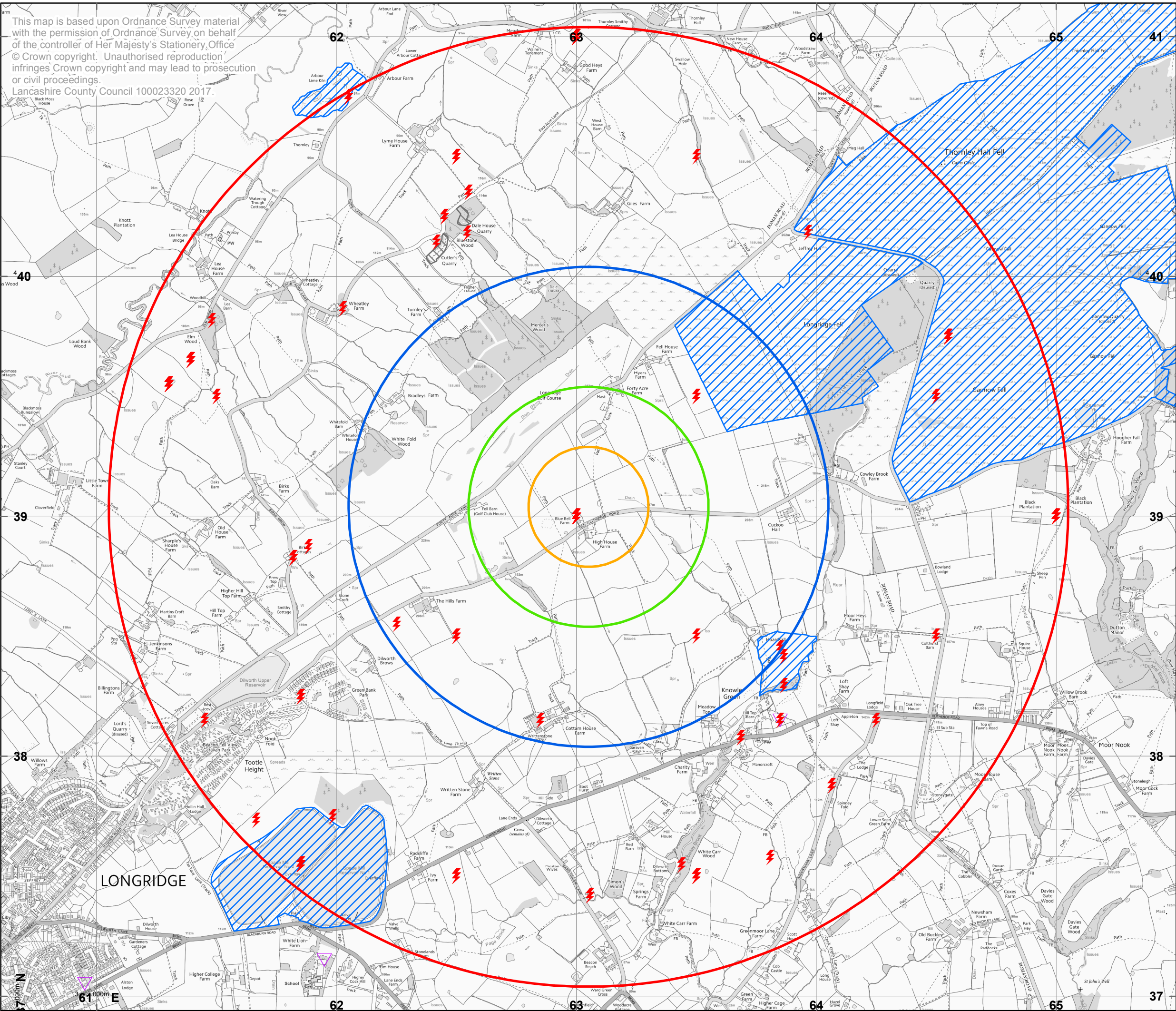
- 5.1 There was no evidence of any specifically protected or otherwise important species occurring within the development footprint and no important habitats were identified that will be adversely affected.
- 5.2 A small number of breeding birds occur on site, including several species that are listed as either Species of Principal Importance for Conservation or Lancashire BAP species. Whilst there were no indications of species specifically protected under Schedule 1 of the Wildlife & Countryside act (WCA) all breeding birds are protected in general terms during the breeding season. Consequently, there will be an initial but relatively minor loss of breeding habitat. To avoid any impact on breeding birds therefore, no removal of vegetation or dismantling of buildings should take place during the bird breeding season (March-July inclusive) until or unless checked by an ecologist.
- 5.3 There were no signs of brown hare on site though this species occurs in the wider area and the habitat on site is at least marginally suitable, so the later presence of this species cannot be totally ruled out. Appropriate precautions during initial site works are therefore advised, such as the covering of pits or holes overnight, and allowing any hares that may be on site to escape prior to excavating soil or any other such engineering operations.
- 5.4 The presence of great crested newts, common toad or reptiles such as common lizard or slowworm occurring on site is highly improbable. However, as a precautionary measure, removal of loose materials or dismantling of stone walls should be removed with care and should any signs of reptiles or amphibians be found, all works should cease and further ecological advice should be sought.
- 5.5 Otherwise, with adequate mitigation and the implementation of a number of mostly minor precautions as outlined above, it is considered that the proposed development will result in negligible overall ecological impact and there will be no detriment to the favourable conservation status of any protected species such as bats, great crested newts and breeding birds.
- 5.6 Beyond the mitigation necessary to negate any impact upon protected or otherwise important species, the proposed landscaping scheme, which includes a high diversity of native species of trees, shrubs and herbs, along with the provision of new water courses including ponds and a stream, will result in a significant increase in ecological value of the site as a whole, and contribute to the Lancashire Biodiversity Action Plan.

6.0 References

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7.0 Appendix

A. Desktop Survey Data (LERN)



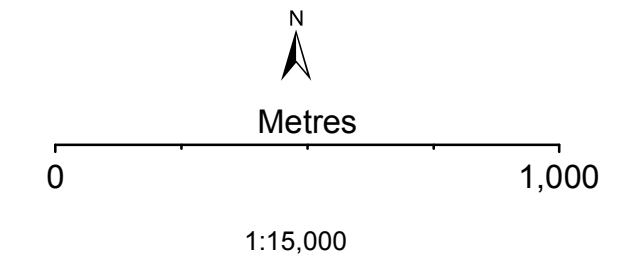
Project:
Higher Road

Client:
Cameron S Crook

Grid Ref: 363050 439040

- Legend**
- 250 m Buffer
 - 500 m Buffer
 - 1 km Buffer
 - 2 km Buffer
 - Lancashire Key Species
 - Other Bat Record
 - Biological Heritage Sites
 - Local Geodiversity Sites

**N.B. THIS IS AN INTERACTIVE PDF
LAYERS CAN BE TURNED ON OR OFF
TO AID CLARITY.**



"Boundaries of statutory designations (Natura 2000, SSSI etc) are included for information only. *Definitive, information for these designations should be obtained from Natural England.*"

Lancashire Key Species records are plotted at the centre of the area to which they relate (the precision of each record is given in the accompanying attribute data and spreadsheet).