

**Extended Phase 1 Habitat Survey &
Baseline Ecological Impact Assessment**
Land at The Warren, Hurst Grange

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Executive Summary

1. A baseline ecological survey and ecological impact assessment were carried out in respect of land at The Warren, Hurst Grange, with regard to the proposal's development of the site to housing
2. There is no semi-natural habitat of *significant ecological importance* within the site boundaries and there are no important habitats or vegetation communities occurring on site or within the site boundaries *that will be adversely affected by proposals*
3. There are no specifically protected or otherwise important species such as badgers, roosting bats or great crested newts occurring on site and there are no known species occurring within any adjacent site that would be likely affected by proposals
4. It is reasonable therefore to conclude that, with adequate mitigation, there will be no negative ecological impact resulting from proposals to develop the site

Contextual Statement

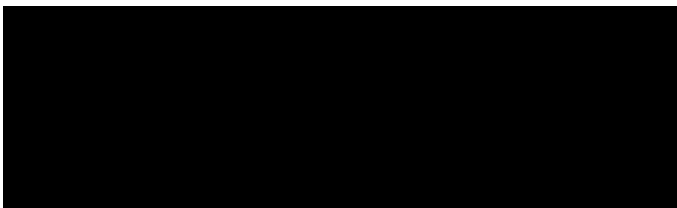
This report ***must be read in conjunction with the documentation and drawings prepared and submitted to the Local Planning Authority in respect of current development proposals (as shown in Figure 5 of this report)***. The author of this report will accept no responsibility for any misunderstanding 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 the requirements of 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 for an informed decision to be made 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 is 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 5* of the report) 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.

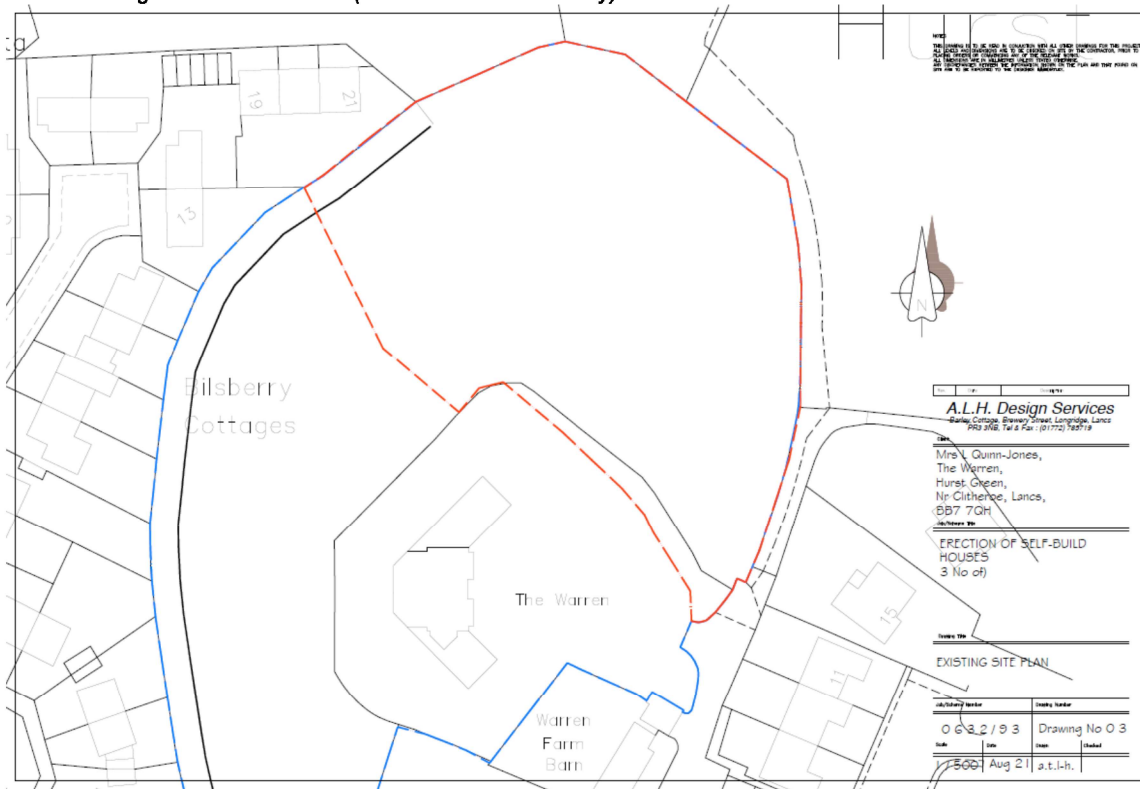


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1st June 2022

1.0 Introduction

- 1.1 An ecological survey, site appraisal and impact assessment were carried out in respect of land at The Warren, Hurst Grange, with the following aims:
1. To establish the presence or absence of protected species and evaluate the overall nature conservation status of the site
 2. To assess the likely impact of proposed site development works upon any protected 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 mitigation, management and aftercare proposals, as appropriate
- 1.2 The term *site* will be used in this report to refer to the area of land proposed for development in accordance with the 'red line' planning boundary (at the location shown within *Figure 1.*) and proposed site layout (*Figure 6.*) unless otherwise indicated within the text. In that respect, it is assumed that this report will be read in conjunction with all relevant documentation supplied as part of the respective planning application.

Figure 1. Site location (within red line boundary)



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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 For this part of the survey, an appropriately cut down version of Extended Phase 1 Habitat Survey methodology covering the site proposed for development was carried out in April 2013 with any evidence of birds, mammals or other species of importance noted. The survey methodology comprised a modified version of that described in NCC (1990) and IEA (1995).

- 2.3 The habitat survey was supplemented by a 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, in particular protected species such as badger, bats, barn owls and breeding birds in general, and great crested newts. Only those species or species groups considered reasonably likely to occur on site or be otherwise affected by proposals to develop the site (in this case badgers and breeding birds) were included in the more detailed survey and assessment.

Badgers

- 2.4 This part of the survey was carried out concurrently with the Phase 1 Habitat survey using a scaled down version of the standard badger survey methodology as described in Harris et al (1989). In practice, this comprised a generalized search of the whole site where suitable habitat was found to 30m from the site boundaries, in an attempt to identify any feeding signs, habitual runs and footprints, hairs, droppings and latrines, scratching posts and actual setts.

Birds

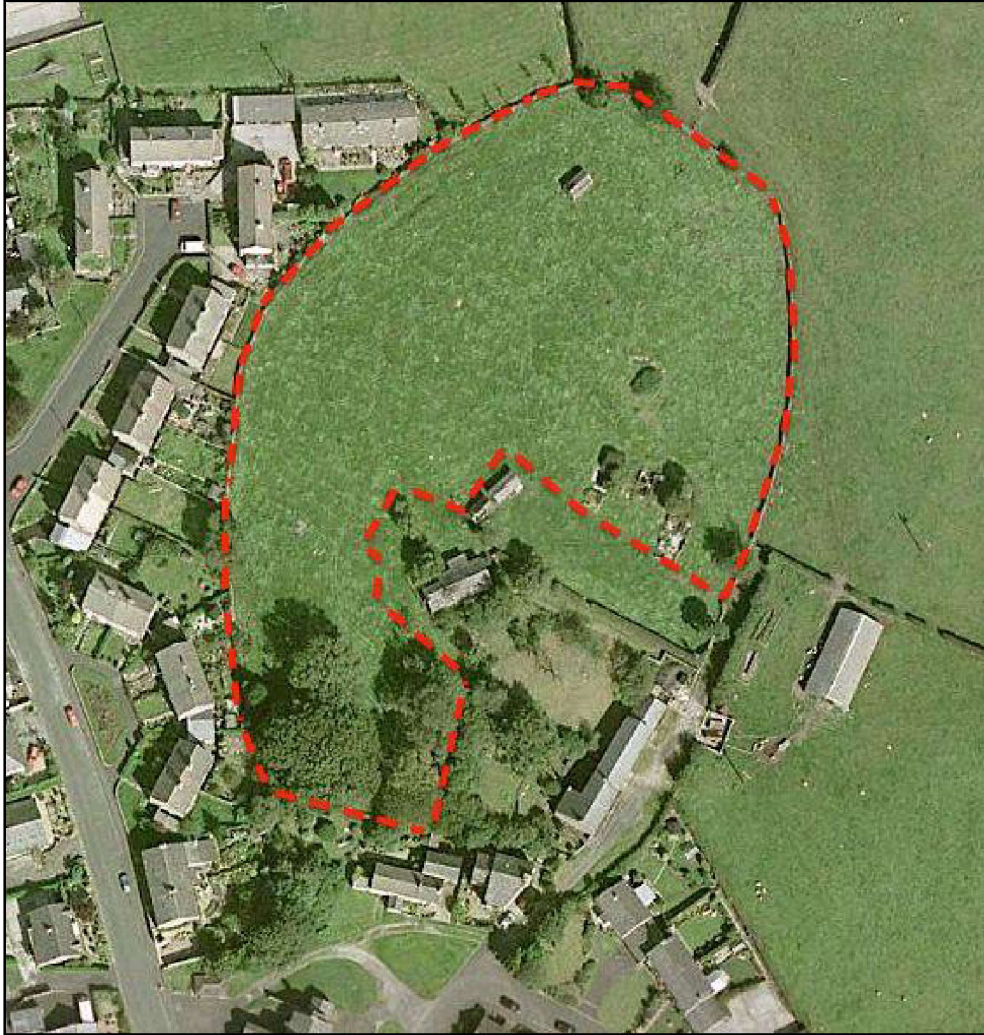
- 2.5 The survey was carried out concurrently with the Phase 1 Survey and followed a modified, much scaled-down version of the methodology described in Bibby *et al* (1992), reflecting the quality and extent of suitable breeding habitat. The results of the survey have been tabulated (within the Appendix) according to the breeding potential of each species recorded within or closely adjacent to the site.

3.0 Existing Situation

General Site Description

- 3.1 The site in question comprises an area of currently unmanaged, partially developed, disturbed ground situated within a rural, agricultural setting on the edge of the small village of Hurst Green.

Figure 2. Existing site layout (within dashed red line boundary)



- 3.2 The majority is dominated by species-poor improved grassland that has developed to a mosaic of rank grassland, tall-ruderal and scattered scrub, with rush pasture prominent in the areas of poor drainage or soil compaction.
- 3.3 With the exception of the southern boundary, there are no mature trees on site and no extensive areas of scrub. There are occasional clumps of mature hawthorn to the north, which are fragments of a former hedgerow, but otherwise, no intact hedges. A dry-stone wall with post and rail fence in areas where the wall is absent mostly bound the site. There are no water bodies on site or close enough to the site boundaries to be affected.
- 3.4 The trees to the south of the site comprise a small clump of mature to semi-mature sycamore, intermixed with ash, birch and hawthorn.

3.5 The general site layout is shown in the aerial photograph (*Figure 2*) above, although this photograph is relatively out of date as it shows the site prior to development. Further details of habitats and site features are shown within the respective photographs (*Figure 3*) below, all of which were taken in 2013 showing the site in its current state.

Figure 3. Photographs of site features and habitats



Photo 3.1 The centre of the site looking towards the east with the rank grassland and rush pasture clearly visible in the mid- and foreground



Photo 3.2 View from the centre of the site looking towards the southwest



Photo 3.3 View from the centre of the site looking towards the southeast



Photo 3.4 View from the centre of the site looking due south, the clump of tree along the southern boundary visible to the rear left



Photo 3.5 Part of the site dominated by rank grassland with scattered scrub. The adjacent agricultural land visible to the rear



Photo 3.6 As Photo 3.5 looking further east showing and area of disturbed ground to the top right of view.



Photo 3.7 Detailed view of the western boundary with the dry-stone wall to the rear



Photo 3.8 Close up view of the small area of dense scrub along the northern boundary, adjacent to a section of dry-stone wall



Photo 3.9 View of the northern boundary looking east, a dense patch of tall-ruderal vegetation clearly visible



Photo 3.10 An alternative view of the extensive area of tall-ruderal, rank grassland and scattered scrub towards the northern end of the site, looking southwards

Habitats and Flora

- 3.6 The semi-natural habitats and vegetation communities recorded during the Phase 1 Habitat Survey are summarized below.

Table 1

NCC/RSNC ¹ Habitat	NVC ² Communities
Woodland: broadleaved	No discernible vegetation communities
Scrub: dense continuous Scrub: scattered	W21 <i>Crataegus monogyna-Hedera helix</i> scrub W22 <i>Prunus spinosa-Rubus fruticosus</i> scrub W23 <i>Ulex europeaus-Rubus fruticosus</i> scrub W24 <i>Rubus fruticosus-Holcus lanatus</i> underscrub community
Grassland: neutral, semi-improved (naturally seeded)	MG1 <i>Arrhenatherum elatius</i> grassland OV23 <i>Lolium perenne-Dactylis glomeratus</i> community OV28 <i>Agrostis stolonifera-Ranunculus repens</i> community
Improved Grassland	MG7 <i>Lolium perenne</i> leys and related grasslands
Marsh/Marshy Grassland	MG10 <i>Holcus lanatus-Juncus effusus</i> rush pasture
Tall herb and fern: tall ruderal	OV24 <i>Urtica dioica-Galium aparine</i> community OV25 <i>Urtica dioica-Cirsium arvense</i> community OV26 <i>Epilobium hirsutum</i> community OV27 <i>Epilobium angustifolium</i> community
Cultivated/disturbed land: ephemeral/short perennial	OV10 <i>Poa annua-Senecio vulgaris</i> community OV21 <i>Poa annua-Plantago major</i> community OV22 <i>Poa annua-Taraxacum officinale</i> community OV28 <i>Agrostis stolonifera-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)	

- 3.7 A full list of vascular plants has been provided within the appendix.

Significance of Habitats and Flora

- 3.8 The plants and habitats recorded on site (within the proposed development footprint) are all relatively common and widespread in both Lancashire and Great Britain. With respect to Biodiversity Action Plan (BAP) the hedge fragments on site are species-poor and semi-defunct so do not qualify as Important Hedgerows in respect of the Hedgerow Regulations. Otherwise, no plant species or habitats were recorded that are listed as BAP species or habitats either nationally or regionally.

Mammals (General)

- 3.12 The site is well used by rabbits and there was some evidence red fox and small mammal activity such as that of field vole, bank vole and wood mouse. However, due to the level of recent disturbance, the site is likely to be sub-optimal for most of the mammal species that would be expected to occur on semi-natural habitat in this type of setting.

Mammals (Badgers)

- 3.13 A detailed inspection of all suitable habitat within the site boundaries, to 30m, found no conclusive signs of badger activity such as feeding signs, runs, latrines or setts. Whilst there is habitat on site is at least marginally suitable for foraging and the establishment of setts, no conclusive evidence was found. It is reasonable to assume therefore that badgers do not currently occur on site and will not be impacted by proposals for development.

Mammals (Bats)

- 3.14 During the initial site inspection, no potential bat roosting habitat such as buildings were found although the site is likely to be used to a small extent for foraging and commuting though this activity will be confined to the margins of the site, particularly at the northern end where the vegetation is better established and the site more sheltered. The mature trees to the south are unsuitable for roosting and will not be affected by development proposals. Overall, the site is of very limited importance to bats.
- 3.15 Whilst there is a building within the wider site (The Warren), this does not form part of the development and will not be affected by proposals. Other buildings on site that are shown on the aerial photographs are no longer extant.

Birds

- 3.16 A small number of common bird species were recorded on site or close by (i.e. seen flying over or in adjacent habitat, or heard calling). These are listed within the table below. Those that are considered likely to breed on site are highlighted in bold type within the table below with a qualifier in the third column as to certainty.

Table 2

Species Name	Common Name	Qualifier
<i>Carduelis chloris</i>	Greenfinch	PrNB
<i>Columba livia (domest.)</i>	Feral Pigeon	PrNB
<i>Columba palumbus</i>	Wood Pigeon	PrNB
<i>Erithacus rubecula</i>	Robin	PrB
<i>Fringilla coelebs</i>	Chaffinch	PoB
<i>Parus caeruleus</i>	Blue tit	PrB
<i>Parus major</i>	Great Tit	PrB
<i>Pica pica</i>	Magpie	PrNB
<i>Troglodytes troglodytes</i>	Wren	PoB
<i>Turdus merula</i>	Blackbird	PrB
Key to Breeding Qualifiers: CoBr - Confirmed Breeding; NoB – Not Breeding; PrNB – Probably Not Breeding; PrB – Probably Breeding; PoB – Possibly Breeding		

- 3.17 The site provides a modest number of niches suitable for breeding birds, the most important areas being the mature scrub and remaining sections of hawthorn hedge to the north of the site. Otherwise, the site has limited potential for breeding and the potential for ground nesting birds is very low due to the unsuitable habitat structure and level of disturbance. For the same reason, no Schedule 1 species such as barn owl were recorded or are considered likely to breed or roost on site.

Great Crested Newts

- 3.18 No specific amphibian survey was carried out due to there being no standing water bodies on site. There are no ponds within 250m of the site boundaries, the nearest

pond being some 500m to the north with poor habitat connectivity. There are no historic records of any great crested newts within 1km of the site boundaries, so it is therefore reasonable to assume that great crested newts (*Triturus cristatus*) do not occur on site and so there is unlikely to be any impact upon this species.

Reptiles

- 3.19 Very little habitat was found on site that is considered suitable for reptiles. The site is marginally suitable for slowworm, grass snake and adder but there were no signs of their likely presence. Therefore, since this group of species is relatively unknown in this locality, given the poor quality of habitat and level of disturbance, it is reasonable to conclude that reptiles do not occur.

Invertebrates

- 3.20 Due to the time of year and sub-optimal nature of the site, no specific invertebrate survey was carried out. However, no uncommon or otherwise important species are expected to occur due to the disturbed, cultivated nature or relatively recent succession of the habitat on site.

Significance of Fauna

- 3.21 With the exception of breeding birds, no protected or otherwise important species were recorded during any of the surveys and for the reasons outlined above none are reasonably expected to occur on site.
- 3.22 Whilst no bird species listed under Schedule 1 of the Wildlife & Countryside act were recorded breeding or roosting within or are considered to be exclusively confined to any specific habitat on site, since all breeding birds (with a small few exceptions) are protected in general terms under the Wildlife & Countryside act., site design, mitigation and the programme of site operations, must take this into account. The most important habitats for bird breeding at this site are the trees and shrubs, particularly those along the site boundaries, and most of which will be retained.

4.0 Potential Impacts

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.

Impact Assessment Table

Impact Magnitude	Nature Conservation Importance				
	Negligible	Local	County	National	European
Beneficial Effects	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 would meet the criteria for inclusion, or, are located 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 form 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 that 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 which form part of a local Biodiversity Action Plan (BAP) or Habitat Action Plan (HAP)

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)

Local

Habitats that are uncommon or threatened within the Hurst Green area

Species that are uncommon or threatened within the Hurst Green area

Negligible

Habitats or Species that fit into none of the above categories

4.2 The current ecological impacts resulting from the proposed sites development works (see proposed layout, *Figure 5*. below), based on the criteria outlined above, are summarized within *Table 4* below.

Figure 5. Proposed site layout (extract of drawing prepared by ALH Design Services)



Table 4. Summary of Impacts

Ecological Issues (Receptors)	Details and Impact Magnitude	Impact without Mitigation
Habitats, Vegetation Communities and Flora	The proposals will result in the loss or modification of some areas of semi-natural habitat including rough grassland, tall-ruderal vegetation. However, the majority of the habitat that will be lost is of low nature conservation importance comprising mostly disturbed or cultivated ground or that of low species-diversity. Therefore, the impact magnitude is considered to be: Moderate: Negligible	Non Significant
Mammals (Badger)	No signs of badger activity or setts were recorded on site or within at least 30m of site boundaries. Therefore the impact magnitude of the proposed development is considered to be: Nil Effect: National	Non Significant
Mammals (Bats)	No conclusive signs of roosting were found within the existing buildings and no other built structures or mature trees suitable for use as bat roosts occur on site <i>or will be otherwise affected</i> . The habitat on site, whilst likely to be used by bats to small extent for commuting and foraging, is likely to be of little overall importance to the local bat population. The impact magnitude is therefore considered to be: Nil effect: European	Non Significant
Amphibians (Great Crested newts)	There are no ponds on site and none within 250m of the site boundaries. There are no historic records of great crested newt within 1km of the site boundaries. Therefore, based on current evidence, the impact magnitude of the proposed development is considered to be: Nil Effect: European	Non Significant
Reptiles	No signs of any reptiles were found anywhere on site and their presence is considered to be unlikely in the general area. Therefore the impact magnitude resulting from the proposed development is considered to be: Nil Effect: National	Non Significant
Breeding Birds (general)	Removal or management of vegetation or other habitat such as the existing pre-fabricated buildings <i>during the breeding season</i> is likely to result in disturbance and temporary loss of breeding habitat. The impact magnitude, without mitigation, is therefore considered to be: Minor: National	Moderate
Invertebrates	No rare, uncommon or otherwise important invertebrates are considered likely to occur on site. The impact magnitude is therefore considered to be: Nil Effect: Negligible	Non Significant

5.0 Mitigation Proposals

5.1 Taking the survey results and impacts above into consideration, the implications for the proposed site works and required mitigation are summarized below.

Table 5. Summary of Mitigation Proposals

Ecological Issues	Implications/Mitigation
Botanical/Habitat	1. No specific mitigation required
Breeding Birds	<ol style="list-style-type: none"> 1. No vegetation (or other habitat) to be removed or disturbed during the bird breeding season (February to July inclusive) until or unless this has been first checked for breeding birds by an ecologist 2. Appropriate landscaping with native trees, shrubs to be used to provide alternative or additional breeding sites and structural diversity as well as species diversity will be allowed for in planting mixtures. This to include the fitting of bird boxes of various designs to retained trees.
Mammals (Badger)	1. No signs of badger were found within 30m of the site boundaries. However, as a precautionary measure, in the unlikely event that any signs of badger activity are subsequently found or if there is any reason to believe that badger setts have been established within 30m, all site works should cease and further ecological advice should be sought with a view to a set of appropriate mitigation measures being prepared and implemented.
Mammals (Bats)	<ol style="list-style-type: none"> 1. With respect to current proposals, there will be no significant impact upon bats therefore no specific mitigation will be required 2. However, should it be later necessary to remove the mature trees situated along the southern boundary, a specific bat survey will be required to determine presence of absence of roosting bats
Amphibians (Great Crested Newts)	1. There is unlikely to be any impact upon great crested newts. Therefore, no specific mitigation necessary
Reptiles (Grass Snakes)	1. No specific mitigation is necessary
Invertebrates	1. No specific mitigation is necessary

6.0 Appendix

6.1 Vascular Plant Records

Scientific Name	Common Name	Relative Abundance*
<i>Acer pseudoplatanus</i>	Sycamore	O(LD)
<i>Achillea millefolium</i>	Yarrow	R
<i>Aegopodium podagraria</i>	Ground Elder	O(LF)
<i>Agrostis capillaris</i>	Common Bent	O(LF)
<i>Agrostis stolonifera</i>	Creeping Bent	F(LA)
<i>Anthriscus sylvestris</i>	Cow Parsley	O
<i>Alopecurus pratensis</i>	Meadow Fox-tail	O(LF)
<i>Arrhenatherum elatius</i>	False Oat-Grass	A(LD)
<i>Bellis perennis</i>	Daisy	O(LF)
<i>Brachythecium rutabalum</i>	moss	F(LD)
<i>Calystegia sepium</i>	Bindweed	O(LF)
<i>Cerastium fontanum</i>	Common Mouse-ear	O
<i>Chamerion angustifolium</i>	Rosebay Willow-herb	F(LA)
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Cirsium vulgare</i>	Spear Thistle	O
<i>Crataegus monogyna</i>	Hawthorn	O(LD)
<i>Dactylis glomeratus</i>	Cock's-foot	F(LA)
<i>Dryopteris dilatata</i>	Broad Buckler-fern	R
<i>Dryopteris filix-mas</i>	Common Male Fern	R
<i>Epilobium hirsutum</i>	Great Willow-herb	F(LA)
<i>Epilobium parviflorum</i>	Willow-herb	O
<i>Eurhynchium praelongum</i>	Moss	F(LD)
<i>Festuca rubra</i> agg.	Red Fescue	F(LA)
<i>Fraxinus excelsior</i>	Ash	O
<i>Gallium aparine</i>	Cleavers	F(LA)
<i>Geranium robertianum</i>	Herb-Robert	R
<i>Hedera helix</i>	Ivy	F(LA)
<i>Heracleum sphondylium</i>	Hogweed	O(LF)
<i>Holcus lanatus</i>	Yorkshire Fog	F(LA)
<i>Holcus mollis</i>	Creeping Soft-grass	O(LF)
<i>Ilex aquifolium</i>	Holly	O
<i>Juncus effusus</i>	Soft Rush	F(LD)
<i>Juncus inflexus</i>	Hard Rush	F(LA)
<i>Lolium perenne</i>	Perennial Ryegrass	A(LD)
<i>Matricaria discoides</i>	Scented Mayweed	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O

<i>Polygonum aviculare</i> agg.	Knot-grass (agg.)	O
<i>Phelum pratense</i>	Timothy	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Plantago major</i>	Broadleaved Plantain	F
<i>Poa annua</i>	Annual Meadow-grass	F(LA)
<i>Poa trivialis</i>	Rough Meadow-grass	F(LA)
<i>Potentilla anserina</i>	Silverweed	R
<i>Psuedoscleropodium purum</i>	moss	F(LD)
<i>Prunella vulgaris</i>	Selfheal	O
<i>Quercus robur</i>	Common Oak	O
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Rosa ceasia</i>	Northern Dog-rose	O
<i>Rubus fruticosus</i> agg.	Bramble	F(LD)
<i>Rumex acetosa</i>	Common Sorrell	F
<i>Rumex cristatus</i>	Curly Dock	F
<i>Rumex obtusifolius</i>	Broad-leaved Dock	F(LA)
<i>Salix alba</i>	White Willow	O(LF)
<i>Salix caprea</i>	Goat Willow	O(LF)
<i>Salix cinerea</i>	Grey Willow	OLF)
<i>Sambucus nigra</i>	Elder	F
<i>Senecio jacobaea</i>	Common Ragwort	O
<i>Silene dioica</i>	Red Campion	O
<i>Sonchus oleraceus</i>	Perennial Sow-thistle	O
<i>Trifolium pratense</i>	Red Clover	F
<i>Trifolium repens</i>	White Clover	F
<i>Urtica dioica</i>	Common Nettle	F(LD)
*D – Dominant; A – Abundant; F – Frequent; O – Occasional; R – Rare; L – Locally; P-Planted		

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