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Preliminary Ecological Appraisal

Thorpe Leazes Farm

September 2023

Tom Walker & Sons



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Summary

OS Ecology Ltd were commissioned by Tom Walker & Sons in August 2022 to undertake a Preliminary Ecological Appraisal of Thorpe Leazes Farm.

The site is a cheese distribution, importing and packaging factory, and it proposed to construct two additional warehouses and a car park, demolish two existing sheds and internally refurbish an existing farmhouse for office use.

Summary Table	
Habitat Assessment	<p>The site comprises a mixture of different habitats including buildings, hard standing, artificial un-sealed aggregates, grasslands, woodland, lines of trees and hedgerows.</p> <p>Several species of <i>Cotoneaster</i>, listed as invasive on schedule 9 of the Wildlife and Countryside Act 1981, were found throughout scrub habitat at the east of the site surrounding the farmhouse.</p> <p>The development footprint is much smaller than the site boundary and largely covers scrub and grassland at the east of the site.</p> <p>Habitats on site are considered to be of up to local value.</p>
Bats	<p>The structures within the site are considered to be of negligible to moderate bat roosting suitability.</p> <p>The structures being affected by the proposals however, Buildings 2B and 3, are both of negligible suitability for roosting bats, comprising a well-sealed metal portacabin, and a corrugated metal shed respectively.</p> <p>The habitats within the site are considered to be of likely local value and up-to moderate suitability to foraging and commuting bats.</p> <p>The majority of habitats are being retained, including the woodland, hedgerow, line of trees, much of the scrub and the western area of grassland. As such, no further survey for bats is recommended.</p>
Birds	<p>The site provides opportunities for a small range of foraging and nesting birds within buildings, nest boxes, scrub, trees and grasslands.</p> <p>The site is considered to be of up to local ornithological value, supporting a relatively typical range of species.</p> <p>The majority of habitats are being retained and as such, no further bird survey is required.</p>
Great Crested Newt	<p>Two ponds are present within the site boundary, one of which was dry at the time of survey in August 2022.</p> <p>The habitats within the site have potential to be used by the species during its terrestrial phase, including for hibernation.</p>

	It is proposed that a Great Crested Newt District Level License is obtained prior to works commencing on site.
Other Protected Species	<p>The site provides some suitable areas for badger sett creation, and opportunities for foraging are present throughout. No evidence of badger was recorded during the survey, however the species may be present on occasion.</p> <p>Due to the nature of the site no other protected species are considered likely to be present, however hedgehog, white-letter hairstreak, brown hare, and common toad, all national priority species, may be present on site on occasion.</p> <p>Additional protected or notable species are considered likely to be absent from the site.</p>
Designated Sites	The site is within an identified SSSI Impact Risk Zone relating to designated sites in the wider area, however development of the nature proposed does not meet the identified impact risk triggers.
Further Survey	No further survey is recommended
Impact Assessment	<p>The following initial impact assessment is based on survey completed to date, and detailed site design is necessary to allow a full impact assessment to be completed:</p> <ul style="list-style-type: none"> • Loss of habitats of up to local value including two ponds and potentially amphibian populations. • Spread of Schedule 9 Cotoneaster species during site clearance works. • Harm or disturbance to nesting birds should site clearance works be undertaken during the nesting bird season. • Loss of a nesting and foraging opportunities to a range of bird species likely of local value, though both direct habitat loss and disturbance. • Loss/degradation of habitats utilised by a bat assemblage of likely local value. • Damage to crowns or roots of retained trees and scrub during works on site through severance or asphyxiation. • Risk of entrapment to badger, hedgehog and other small mammals on site during site works.
Recommendations	<p>The following avoidance, mitigation and/or compensation measures are recommended; a detailed scheme can only be developed following completion of a full impact assessment:</p> <ul style="list-style-type: none"> • External lighting that may affect the site's suitability for bats will be avoided. If required this will be limited to low level, avoiding use of high intensity security lighting.

	<ul style="list-style-type: none">• Works will not be undertaken during the nesting bird season (March to August inclusive) unless the site is checked by an appropriately experienced ecologist and nests are confirmed to be absent.• Any excavations left open overnight will have a means of escape for mammals that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.• Retained trees will be protected from damage in line with the recommendations in BS5837:2012.• Scrub and trees will be retained where practicable and will be managed for biodiversity, looking to create a range of structural diversity.• Schedule 9 Cotoneaster species should be removed in line with best practices to a working method statement.• A pre-construction walkover for badger setts should be undertaken within the woodland habitat 1 month before the expected commencement of works.• Landscape planting shall include berry and fruit bearing species to provide increased foraging opportunities in the local area.• The including of bat and bird boxes within the site post development.• It is proposed that a Great Crested Newt District Level License is obtained prior to works commencing on site.• Consideration should be given to the creation of habitats on site to achieve a biodiversity gain.
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1. Introduction

Site Location

1.1 The site is located at Thorpe Leazes Farm at an approximate central grid reference of NZ386246. The site location is illustrated within figure 1 in the appendices.

Site Description

1.2 The site is approximately 3.59ha in size and comprises a factory complex and farmhouse at the centre, woodland to the south, a large garden to the east and a paddock to the west.

1.3 Whilst the site is 3.59ha in size, the development footprint is much smaller at approximately 0.57ha in size and largely covers the residential garden of the farmhouse at the east.

Objectives of the Study

1.4 The objectives of this report are:

- To identify and describe any potential ecological receptors that may be present on site or within an identified zone of influence.
- To identify and assess whether proposals may impact on the identified receptors.
- To identify potential mitigation, compensation or enhancement measures if required.
- To identify and detail further surveys if required.

Development Proposals

1.5 The development will comprise the following:

- The demolition of two existing metal buildings on site (Building 2B and 3),
- The construction of two new warehouses,
- The construction of a new car park at the east of the site,
- The refurbishment of the existing farmhouse for office use (internal renovations only)

2. Methodology

Scope of Study

- 2.1 The site was surveyed to identify whether the following were present for legislative and planning purposes:
- Habitats of Conservation Value
 - Priority Habitats
 - Protected and Priority Species
- 2.2 A summary of relevant legislation is provided within Appendix 2.
- 2.3 The ecological characteristics of the site were reviewed to identify the scope of the assessment, with the zone of influence determined through professional judgement.
- 2.4 The survey area comprised the “site” defined within figure 2 (Appendix 4). The desktop study included a data search covering the site and a 2km buffer zone while habitats within the local area were reviewed via aerial imagery.
- 2.5 Access permitting, all potential bat roosting sites within the survey area were assessed. Guidance regarding the assessment of the suitability of sites for use by bats is provided within Appendix 1.

Planning Policy

- 2.6 Planning policy relevant to this site, specifically the National Planning Policy Framework and the Durham Local Plan, can be found within Appendix 2.

Desk Study

- 2.7 Desk study was undertaken to assess the nature of the surrounding habitats and included:
- Assessment of aerial imagery and Ordnance Survey mapping.
 - A search of the MAGIC website¹ for statutorily designated sites for nature conservation, habitat listed within the Priority Habitat Inventory or the Ancient Woodland Inventory and European protected species licensing records within 2km of the survey area.
 - A data search request submitted to the Local Record Centre.

¹ Multi Agency Geographic Information for the Countryside (www.magic.gov.uk)

Field Survey

Habitats/Protected Species

2.8 The site was subject to a walk over, during which habitats were assessed in line with the habitat classifications detailed within the UK Habitat Classification User Manual². For plant species, abundance has been recorded using the DAFOR scale as detailed in the following table.

Abundance		Percentage Cover
D	Dominant	50-100%
A	Abundant	30-50%
F	Frequent	15-30%
O	Occasional	5-15%
R	Rare	<5%

2.9 Mandatory Secondary Codes within the UK Habitat Classification have been used as defined within the User Manual.

2.10 During the survey the site was checked for evidence of protected species and habitats were assessed for their potential to support such species.

2.11 Survey was undertaken by Mike Perkins ACIEEM, an experienced surveyor who holds protected species licences for a range of species including bats and great crested newts.

2.12 The following equipment was utilised during survey:

- Zeiss 8x30 binoculars.
- Digital camera.

2.13 The survey was undertaken on the 24th August 2022 in the following weather conditions:

Date	Temperature	Cloud Cover	Precipitation	Wind Conditions
24 th August 2022	17.5°C	100%	Dry	F2-SW

Limitations to Survey

2.14 There were considered to be no major constraints to survey.

² Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). The UK Habitat Classification User Manual Version 1.1 at <http://www.ukhab.org/>

Assessment Methodology

- 2.15 Guidance from the Chartered Institute of Ecology and Environmental Management (CIEEM) is utilised to provide habitat valuations.
- 2.16 The level of value of specific ecological receptors is assigned using a geographic frame of reference. For, example international value being most important (SACs, SPAs and pSPAs), then national (SSSIs), regional, county (LWS), district (LNR), local and lastly, within the immediate zone of influence of the site only (low).
- 2.17 In terms of species, for example breeding birds, should the population within the site constitute greater than 1% of the geographic population, it would be considered significant at that level. In addition, presence of designated sites, scarce species and or quality³/diversity of habitats are used to guide that valuation
- 2.18 Assessment methods for bats have been undertaken with reference to Wray et al. (2007)⁴, which correlates with the geographic frame of reference. Within which they define the relative rarity of each species based on the known distribution⁵ at the time and the value of the roost type, assuming that roosts such as feeding perches are of lower value that maternity roosts or sites that have a high level of fidelity.
- 2.19 Examples of ecological receptors at various levels of value are provided within Appendix 3.

³ Quality can be subjective and vary in different geographic areas. Reasoned professional judgement is therefore used to inform the assessment.

⁴ Wray et al (2007) Valuing Bats in Ecological Impact Assessment. In Practice. Based on a presentation at the Mammal Society – Specific Issues with Bats

⁵ It should be noted that there are regular changes to our understanding of distribution as further studies are undertaken.

3. Results

Desk Study

General Land Use

3.1 A review of aerial imagery and Ordnance Survey mapping highlighted that the general land use in the surrounding area is dominated by pastoral and arable farmland with occasional woodland copses.

Designated Sites

3.2 A search of the Multi Agency Geographic Information for the Countryside Website⁶ indicated that the following designated sites for nature conservation lie within 2km of the site.

Table 3.1: Designated Sites Within 2km			
Designation	Site Name	Reason for Designation	Distance from Survey Area (Closest point)
Special Area of Conservation	None within 2km		
Special Protection Area	None within 2km		
National Nature Reserve	None within 2km		
Site of Special Scientific Interest	None within 2km		
SSSI Impact Risk Zone (IRZ)			
The site lies within an identified SSSI Impact Risk Zone relating to designated sites in the wider area, however development of the nature proposed does not meet the identified impact risk triggers.			
Local Nature Reserve	Stillington Forest Park	Wildflowers meadows, scrub and wetlands	1.2km south west

⁶ Multi Agency Geographic Information for the Countryside (MAGIC) www.magic.gov.uk (Accessed September 2022)

Designation	Site Name	Reason for Designation	Distance from Survey Area (Closest point)
	Thorpe Wood	Semi-natural ancient woodland	1.8km northeast

Priority Habitats

3.3 A search of the MAGIC website identified areas of habitat within 2km of the site identified within the Priority Habitat Inventory as the following habitat types:

- Deciduous Woodland
- Open Mosaic Habitats on Previously Developed Land

3.4 Of the identified areas of habitat, the closest is an area of Deciduous Woodland which lies 400m south.

Ancient Woodland

3.5 The MAGIC website identified the following areas of woodland listed within the Ancient Woodland Inventory within 2km of the site:

- Thorpe Wood

European Protected Species Licensing

3.6 The MAGIC website identified the following granted Natural England European Protected Species licenses within 2km of the site⁷.

Licence Reference	Species	Licensed Work	License Period
EPSM2010-1653	Great Crested Newt	Destruction of a resting place	2010
EPSM2010-1902	Great Crested Newt	Destruction of a resting place	2010-2012

⁷ The dataset is noted as having been last updated in January 2022.

Data Search

Local Records Centre

3.7 The following table summarises the data search results from ERIC. Records were provided for all protected and notable species within 2km of the site, of which key species are listed. The full data search can be provided on request.

Taxon	Species	No. of Records within Search Area	Records of Particular Note
Amphibians	Common Frog	26	-
	Common Toad	29	-
	Great Crested Newt	26	Closest record ~1580m
	Smooth Newt	34	-
Mammals (excluding bats)	Brown Hare	9	-
	Eurasian Badger	11	Closest record ~1800m
	European Water Vole	1	-
	West European Hedgehog	5	-
Bats	Common Pipistrelle	25	-
	Daubenton's Bat	4	-
	Nathusius's Pipistrelle	1	-
	Noctule Bat	2	-
	Soprano Pipistrelle	2	-
	Whiskered/Brandt's Bat	5	-
Butterflies	Dingy Skipper	31	-
	Small Heath	379	-
	Wall	239	-
	White-letter Hairstreak	29	Closest record ~1620m
Birds	711 bird species records were received from ERIC NE. A full list is available upon request		

3.8 The records centre also provided information regarding the following Local Wildlife Sites (LWS) which lie within 2km of the site:

- Stillington Forest Park (the closest 1.2km south west)
- Thorpe Wood
- Wynyard Woodland Park
- New Homer Carr Plantation

Field Survey

Habitats



Table 3.4: Habitat Descriptions

Overview of habitats

The site comprises a cheese packing factory and residential house and garden, with several small surrounding fields and a woodland copse.

The habitats within the site are illustrated within Figure 3.

Habitat Description			Habitat Category
Grassland			<i>Primary Code</i>
<p>Sections of Other Neutral Grassland are found at the east of the site where it forms part of an amenity grassland residential garden around the farmhouse, and the west where there is a small paddock.</p> <p>Both have mown short swards, with no or little bare ground. At the east scattered amenity trees, a small orchard and sections of introduced shrub are present throughout. Where trees are present, they tend to be of young age classification.</p>			g3c – Other Neutral Grassland
Species/m ² : 9	Sward Height: ~5cm	Bare ground (%):5%	<i>Secondary Code</i>
<p>Species List D: N/A</p> <p>A: Ribwort plantain (<i>Plantago lanceolata</i>), perennial rye (<i>Lolium perenne</i>).</p> <p>F: Dandelion (<i>Taraxacum</i> agg.), self-heal (<i>Prunella vulgaris</i>), daisy (<i>Bellis perennis</i>).</p> <p>O: Yorkshire fog (<i>Holcus lanatus</i>), creeping buttercup (<i>Ranunculus repens</i>), false oat (<i>Arrhenatherum elatius</i>), white clover (<i>Trifolium repens</i>), red clover (<i>Trifolium pratense</i>), broad-leaved plantain (<i>Plantago major</i>), cocks-foot (<i>Dactylis glomerata</i>).</p> <p>R: Rose bay willowherb (<i>Chamaenerion angustifolium</i>), nettle (<i>Urtica dioica</i>), cow parsley (<i>Anthriscus sylvestris</i>), Broad-leaved dock (<i>Rumex obtusifolius</i>), lesser trefoil (<i>Trifolium dubium</i>), prickly sow thistle (<i>Sonchus asper</i>), field speedwell (<i>Veronica persica</i>), shepherds purse (<i>Capsella bursa-pastoris</i>), scented mayweed (<i>Matricaria chamomilla</i>), oxford ragwort (<i>Senecio squalidus</i>), spear thistle (<i>Cirsium vulgare</i>), tufted hair grass (<i>Deschampsia cespitosa</i>), bramble (<i>Rubus fruticosus</i>), creeping thistle (<i>Cirsium arvense</i>), ragwort (<i>Jacobaea vulgaris</i>), apple (<i>Malus</i> sp.), crab apple (<i>Malus sylvestris</i>), plum (<i>Prunus domestica</i>), spruce sp. (<i>Picea</i> sp.), lleyland cypress (<i>Cupressus × leylandii</i>), beech (<i>Fagus sylvatica</i>), horse chestnut (<i>Aesculus hippocastanum</i>), sycamore (<i>Acer pseudoplatanus</i>), cherry laurel (<i>Prunus laurocerasus</i>), willow sp., (<i>Salix</i> sp.), Portuguese laurel (<i>Prunus lusitanica</i>), dogwood (<i>Cornus</i> sp.), sumac (<i>Rhus</i> sp.), <i>Viburnum</i> sp., greenstem forsythia (<i>Forsythia viridissima</i>), Siberian dogwood (<i>Cornus alba 'Sibirica'</i>), spurge sp. (<i>Euphorbia</i> sp.), wall cotoneaster (<i>Cotoneaster horizontalis</i>), California lilac (<i>Ceanothus</i> sp.), sage (<i>Salvia officinalis</i>), rosemary (<i>Salvia rosmarinus</i>),</p>			10-Scattered scrub 11-Scattered trees 16- Tall Herb 17-Ruderal / Ephemeral 21- Traditional orchards 36-Plantation 48-Non native 66-Frequently mown 69-Fence

Habitat Description		Habitat Category
mint (<i>Mentha</i> sp.), Spirea sp., hebe sp., lambs-ear (<i>Stachys byzantina</i>), butterfly bush (<i>Buddleja</i> sp.) ragwort silver dust (<i>Jacobaea maritima</i> 'Silver Dust')		
Schedule 9/Undesirable species present (Y/N):Y	Further Survey Needed (Y/N):N	
		

Deciduous Woodland		Primary Code
At the south of the site and surrounding one of the grassland fields is a copse of plantation woodland. The woodland canopy is 10-15m in height and at its peripheries contains ornamental species. Trees are generally of young or semi-mature age classification.		w1g-Other Woodland Broadleaved
Number of Age Classes present: 2	Veteran Trees Present (Y/N): N	Secondary Code
Deadwood Present (Y/N): Y	Evidence of Disturbance ⁸ (Y/N): N	
Species List Canopy layer D: N/A A: N/A F: Sycamore, beech, silver birch (<i>Betula pendula</i>), English oak (<i>Quercus robur</i>) O: Willow sp. (<i>Salix</i> sp.), ash (<i>Fraxinus excelsior</i>), goat willow (<i>Salix caprea</i>) R: Horse chestnut, field maple (<i>Acer campestre</i>), larch (<i>Larix decidua</i>), <i>Eucalyptus</i> sp., apple sp., Sitka spruce (<i>Picea sitchensis</i>) Shrub layer D: N/A A: N/A		16- Tall Herb 17-Ruderal / Ephemeral 36-Plantation 48-Non native 57-Young tree self set 69-Fence 130 - ecotone



⁸ e.g. significant nutrient enrichment, soil compaction from trampling, machinery or animal poaching, litter


<p>F: hawthorn (<i>Crataegus monogyna</i>)</p> <p>O: Cherry laurel, Privet sp., (<i>Ligustrum</i> sp.) <i>Cotoneaster</i> sp., Blackthorn (<i>Prunus spinosa</i>), viburnum sp., dog rose (<i>Rosa canina</i>), plum, elder (<i>Sambucus nigra</i>),</p> <p>R: Hazel (<i>Corylus avellana</i>), guelder rose (<i>Viburnum opulus</i>), holly (<i>Ilex aquifolium</i>),</p> <p>Ground flora</p> <p>D: N/A</p> <p>A: cow parsley, nettle, cleavers (<i>Galium aparine</i>), bramble</p> <p>F: wood aven, broad leaved dock, garlic mustard (<i>Alliaria petiolata</i>), red dead nettle (<i>Lamium purpureum</i>), hogweed (<i>Heracleum sphondylium</i>)</p> <p>O: honeysuckle (<i>Lonicera</i> sp.)</p> <p>R: N/A</p>	
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Schedule 9/Undesirable species present (Y/N):Y	Further Survey Needed (Y/N):N
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<p>Dense Scrub</p> <p>Sections of dense scrub dominated by ornamental planting, are present at the east of the farmhouse.</p>	<p><i>Primary Code</i></p> <p>h3h- Mixed Scrub</p>				
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Good Age Range Present (Y/N):N</td> <td style="width: 50%;">Well Developed Edge (Y/N):Y</td> </tr> <tr> <td colspan="2">Clearings/Glades Present (Y/N):N</td> </tr> </table> <p>Species List</p> <p>D:</p> <p>A:</p> <p>F: Blackthorn, hawthorn</p> <p>O: Cherry laurel, <i>Cotoneaster</i> sp., <i>Berberis</i> sp., butterfly bush, sycamore</p> <p>R: <i>Wisteria</i> sp., dogwood, box, holly sp., snowberry, tutsan</p>	Good Age Range Present (Y/N):N	Well Developed Edge (Y/N):Y	Clearings/Glades Present (Y/N):N		<p><i>Secondary Code</i></p> <p>16- Tall Herb</p> <p>17-Ruderal /</p> <p>Ephemeral</p> <p>36-Plantation</p> <p>48-Non native</p> <p>69-Fence</p> <p>130 - ecotone</p>
Good Age Range Present (Y/N):N	Well Developed Edge (Y/N):Y				
Clearings/Glades Present (Y/N):N					

Schedule 9/Undesirable species present (Y/N):Y	Further Survey Needed (Y/N):N
	



Hedgerow At the north of the site a small hedgerow adjoins the line of trees. Height is approximately 2.5m as is width.			<i>Primary Code</i> h2a-Hedgerow (Priority habitat)
Height: 2.5m	Width:2.5	Intact (Y/N):Y	<i>Secondary Code</i> 47-Native 69-Fence 81-Flailed hedgerow
Species Rich (Y/N):N		Managed (Y/N):Y	
Species List D: Hawthorn A: N/A F: O: Blackthorn R: Plum, ash, wych elm (<i>Ulmus glabra</i>)			
Schedule 9/Undesirable species present (Y/N):		Further Survey Needed (Y/N):	
			

Line of Trees At the far northwest corner of the site, a line of trees runs along the road. The trees are largely of semi-mature age classification with a canopy height of ~15m and some under-story shrub.	<i>Primary Code</i> w1g6-Line of Trees
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Height: 5-15m	Percent Tree Canopy: 20%	Veteran Trees Present (Y/N): N	<i>Secondary Code</i>
Species List D: N/A A: Wych elm F: N/A O: N/A R: Ash, blackthorn			47-Native 69-Fence
Schedule 9/Undesirable species present (Y/N): N		Further Survey Needed (Y/N): N	
			

Buildings, Gravel Tracks & Hard Standing Numerous buildings associated with the cheese packing factory and the adjacent farmhouse are present at the centre of the site. Surrounding these buildings are areas of hard standing and aggregate tracks.	<i>Primary Code</i> u1b5 - Buildings u1b – Developed Land Sealed Surface. u1c - Artificial Unvegetated Unsealed Surface
	

Target Notes

Table 3.5: Target Notes	
<p>Target Note 1</p> <p>A small, lined garden pond, holding water and smothered with duck weed (<i>Lemnoideae</i> sp.) with aquatic and bankside plants including water forget-me-not (<i>Myosotis scorpioides</i>), yellow flag iris (<i>Iris pseudacorus</i>), marsh marigold (<i>Caltha palustris</i>), ribbon grass (<i>Phalaris arundinacea</i>), pickerelweed (<i>Pontederia cordata</i>).</p>	
<p>Target Note 2</p> <p>A small dry lined pond adjacent to the woodland, with ribbon grass and <i>Sedum</i> sp. present.</p>	<p>#</p> 

Protected Species

Bats

3.9 The results of the daytime bat risk assessment are provided within the table below. The locations of the structures can be seen in the appendices.

Table 3.6: Bat Risk Assessment Results	
Buildings 1A, B & C: Small stables and sheds – Not affected by development	
Suitability: Moderate	
<i>Building Description and Summary of Potential Roost Features</i>	
Small stable and sheds at the far west of the site with some gaps in the wooden cladding.	
Building Type	Stable and sheds
No. of Storeys	Single Storey
Roof Type	Both have pitched roofs.
Roof Material	A mixture of corrugated asbestos sheets and bitumen felt.

Ridge Tiles	N/A
Coping Tiles	N/A
Gable Ends	Wooden boarding.
Chimney	N/A
Skylights/Velux	N/A
Roof Condition	Frequent gaps beneath roof and at wall tops
Other Roof Features	N/A
Soffits	N/A
Fascias	Timber present to some sections with plastic guttering attached.
Wall - Material and Condition	Wood cladding with occasional gaps.
Windows – Material and Condition	Open stable windows in good condition.
Doors – Material and Condition	Stable and wooden doors in good condition.
Other Wall Features	N/A
Loft Height	No internal Access
Other Features	N/A



Maternity Roost Assessment

No evidence of a maternity colony was recorded around the exterior of the structure and no internal access was available during the survey.

Overall a small number of features are present which are considered sub optimal in nature to support a maternity colony. No impacts on the structure are anticipated and no further survey is recommended.

Hibernation Assessment

Features present are considered to be of low suitability to bats during the hibernation period.

Table 3.7: Bat Risk Assessment Results

Buildings 2A: Factory Building–Not significantly affected by development with only the removal of two steel struts supporting Building 2B. There are no features around these steel struts.

Suitability: Low

Building Description and Summary of Potential Roost Features

Large factory building, with some gaps at the wall tops.

Building Type	Large warehouse
No. of Storeys	Single Storey
Roof Type	Pitched roofs
Roof Material	Corrugated metal sheets
Ridge Tiles	N/A
Coping Tiles	N/A
Gable Ends	Corrugated metal sheets and brick
Chimney	N/A
Skylights/Velux	Occasional sky lights
Roof Condition	Frequent gaps beneath roof and at wall tops
Other Roof Features	N/A
Soffits	N/A
Fascias	Wooden barge board with plastic guttering, with gap to wall top
Wall - Material and Condition	Corrugated metal sheets and brick in good condition
Windows – Material and Condition	N/A
Doors – Material and Condition	Wooden and roller doors in good condition.
Other Wall Features	N/A
Loft Height	No internal Access
Other Features	N/A



Maternity Roost Assessment

No evidence of a maternity colony was recorded around the exterior of the structure and no internal access was available during the survey.

Overall a small number of features are present which are considered sub optimal in nature and limit the structures suitability to support a maternity colony. No significant impacts on the structure are anticipated and no further survey is recommended.

Hibernation Assessment

Features present are considered to be of low suitability to bats during the hibernation period.

Table 3.8: Bat Risk Assessment Results

Buildings 2B: Portacabin Office–To Be Demolished.

Suitability: Negligible

Building Description and Summary of Potential Roost Features

Portacabin Office with no obvious potential roost features.

Building Type	Portacabin
No. of Storeys	Single Storey
Roof Type	Flat roof
Roof Material	Metal
Ridge Tiles	N/A
Coping Tiles	N/A
Gable Ends	N/A
Chimney	N/A
Skylights/Velux	N/A
Roof Condition	Metal, well-sealed
Other Roof Features	N/A
Soffits	N/A
Fascias	Metal, well-sealed
Wall - Material and Condition	Metal, well-sealed
Windows – Material and Condition	N/A
Doors – Material and Condition	Metal, well-sealed
Other Wall Features	N/A
Loft Height	No internal Access
Other Features	N/A



Maternity Roost Assessment

No evidence of a maternity colony was recorded around the exterior of the structure and no internal access was available during the survey.

No suitable features were noted and no further survey is recommended.

Hibernation Assessment

No suitable features were noted.

Table 3.9: Bat Risk Assessment Results

Buildings 3: Metal Shed– To Be Demolished.

Suitability: Negligible

Building Description and Summary of Potential Roost Features

Metal Shed with no obvious potential roost features.

Building Type	Shed
No. of Storeys	Single storey
Roof Type	Pitched roof
Roof Material	Metal
Ridge Tiles	N/A
Coping Tiles	N/A
Gable Ends	N/A
Chimney	N/A
Skylights/Velux	N/A
Roof Condition	Metal, well-sealed
Other Roof Features	N/A
Soffits	N/A
Fascias	Metal, well-sealed
Wall - Material and Condition	Metal, well-sealed
Windows - Material and Condition	N/A
Doors - Material and Condition	Metal, well-sealed
Other Wall Features	N/A
Loft Height	No internal Access
Other Features	N/A



Maternity Roost Assessment

No evidence of a maternity colony was recorded around the exterior of the structure and no internal access was available during the survey.

No suitable features were noted and no further survey is recommended.

Hibernation Assessment

No suitable features were noted.

Table 3.10: Bat Risk Assessment Results

Buildings 4: Factory Building—Not affected by development

Suitability: Negligible

Building Description and Summary of Potential Roost Features

Large factory building with no obvious potential roosting features.

Building Type	Large warehouse
No. of Storeys	Single Storey
Roof Type	Pitched roofs
Roof Material	Plastic fabric
Ridge Tiles	N/A
Coping Tiles	N/A
Gable Ends	Plastic sheeting and fabric
Chimney	N/A
Skylights/Velux	N/A
Roof Condition	Well-sealed
Other Roof Features	N/A
Soffits	N/A
Fascias	N/A
Wall - Material and Condition	Plastic sheeting, well-sealed
Windows - Material and Condition	N/A
Doors - Material and Condition	Metal roller doors in good condition.
Other Wall Features	N/A
Loft Height	No internal Access
Other Features	N/A



Maternity Roost Assessment

No evidence of a maternity colony was recorded around the exterior of the structure and no internal access was available during the survey.

No suitable features were noted and no further survey is recommended.

Hibernation Assessment

No suitable features were noted.

Table 3.11: Bat Risk Assessment Results

Buildings 5: Main Farmhouse-Internal refurbishment only

Suitability: Moderate

Building Description and Summary of Potential Roost Features

Two storey farmhouse and adjoining barn. Brick construction. Potential roost features include gaps in concrete and terracotta roof tiles, gaps in the mortaring of the brickwork, and gaps at the wall tops also associated with missing mortar.

Building Type	Farmhouse & adjoining barn.
No. of Storeys	Two Storey
Roof Type	Pitched roof.
Roof Material	Sections of terracotta roof and ridge tiles and sections of concrete roof and ridge, some occasional gaps in mortar.
Ridge Tiles	Interlocking terracotta and concrete tiles.
Coping Tiles	N/A
Gable Ends	Exposed brick and whitewashed rendered brick.
Chimney	Rendered brick chimney on the house
Skylights/Velux	N/A
Roof Condition	Occasional gaps beneath roof and ridge tiles
Other Roof Features	Some gaps noted at wall tops.
Soffits	N/A
Fascias	Timber fascia present to some sections with plastic guttering attached.
Wall - Material and Condition	Brick with parts rendered and white washed. Some small mortar gaps.
Windows – Material and Condition	Mixture of single and double glazed with some wooden and some uPVC surrounds. Some gaps around wooden window surrounds.
Doors – Material and Condition	Some double-glazed uPVC doors, and wooden doors in a mixture of conditions.
Other Wall Features	uPVC guttering present and broken in places.
Loft Height	No internal Access
Other Features	Security lights present around the exterior of the structure. Sparrow terrace and dove cot attached to one wall.



Maternity Roost Assessment

No evidence of a maternity colony was recorded around the exterior of the structure and no internal access was available during the survey. Overall frequent features are present, some of which may be suitable to

support a maternity colony however only internal refurbishment is planned so no further surveys are considered necessary.

Hibernation Assessment

Features present are considered to be of low suitability to bats during the hibernation period.

Table 3.12: Bat Risk Assessment Results

Buildings 6: Office Building- Not affected by development

Suitability: Low

Building Description and Summary of Potential Roost Features

Single storey office building.

Building Type	Office building
No. of Storeys	Single storey
Roof Type	Pitched roof.
Roof Material	Corrugate concrete roofing sheets
Ridge Tiles	Interlocking concrete tiles.
Coping Tiles	N/A
Gable Ends	Whitewashed rendered brick.
Chimney	N/A
Skylights/Velux	Occasional skylights
Roof Condition	Occasional gaps beneath roof and ridge tiles
Other Roof Features	Some gaps noted at wall tops.
Soffits	N/A
Fascias	Timber fascia present to some sections with plastic guttering attached.
Wall - Material and Condition	Brick, rendered and white washed. Well-sealed.
Windows – Material and Condition	Mixture of single and double glazed with some wooden and some uPVC surrounds. Some gaps around wooden window surrounds.
Doors – Material and Condition	Some double-glazed uPVC doors, and wooden doors in a mixture of conditions.
Other Wall Features	uPVC guttering present and broken in places.
Loft Height	No internal Access
Other Features	Security lights present around the exterior of the structure.



Maternity Roost Assessment

No evidence of a maternity colony was recorded around the exterior of the structure and no internal access was available during the survey.

Overall a small number of features are present which are considered sub optimal in nature to support a maternity colony. No impacts on the structure are anticipated and no further survey is recommended.

Hibernation Assessment

Features present are considered to be of low suitability to bats during the hibernation period.

3.10 Grasslands, woodland, tree lines and hedgerows have the potential to support both foraging and commuting bats.

3.11 The trees within the woodland were largely young or semi-mature specimens and no suitable roosting features were noted, although a large number of bird boxes are present.

Birds

3.12 The bird boxes, hedgerows, woodland, scrub and buildings have the potential to support nesting bird species, whilst foraging opportunities are present throughout the site.

3.13 Ground-nesting species are unlikely due to the poor sight lines and, active management.

3.14 A total of 3 species were recorded during the survey, these are listed in the following table:

Species	Priority species⁹	Comment
Wood pigeon	No	-
Barn swallow	No	-
House sparrow	Yes	Several sparrow terraces present on Building 5
Notes:		
1. Red list species are of high conservation concern		
2. Amber list species are of medium conservation concern ¹⁰		

⁹ National Priority Species are species of principal importance listed in Section 41 of the NERC Act (2006),

¹⁰ Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D. and Win, I. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain.

Great Crested Newts

- 3.15 Two lined garden ponds were identified within the site (Target Note 1 and 2, Appendices Figure 4). Target Note 2 pond was not holding water at the time of survey, and rips in the pond liner were apparent.
- 3.16 Target Note 1 pond was botanically diverse and contained several aquatic and bankside species. Both ponds were anecdotally created 5-8 years ago. No additional ponds were apparent from a review of aerial imagery and Ordnance Survey maps within 500m.
- 3.17 The scrub, woodland and hedgerow on site will provide potential foraging and dispersal opportunities for great crested newts during their terrestrial phase, as well as potential hibernation opportunities, and potential hibernacula, are present in the woodland within wood piles.

Badger

- 3.18 The woodland and hedgerows on site offer some potential for sett creation and foraging opportunities are present across the site. No evidence of badger was noted during the survey, although the species may be present on occasion.

Other protected and notable species

- 3.19 There is potential for the national priority species hedgehog, brown hare and common toad, to be present within the site on occasion.
- 3.20 The line of trees at the west of the site contained several wych elms, the larval food source for the S41 and local BAP butterfly species white-letter hairstreak. Whilst no consultation responses were provided for this species, its highly cryptic nature means it is often overlooked. As no impacts on this tree line are anticipated, no impacts to the species should they be present are expected and they are not considered further.

4. Site Assessment

Assessment of Survey Findings

Habitats

- 4.1 The site comprises a mixture of different habitats including buildings, hard standing, artificial un-sealed aggregates, grasslands, woodland, lines of trees and hedgerows.
- 4.2 Several species of Cotoneaster, listed as invasive on schedule 9 of the Wildlife and Countryside Act 1981, were found throughout scrub habitat at the east of the site surrounding the farmhouse.
- 4.3 The development footprint is much smaller than the sites itself and largely covers scrub and grassland at the east of the site.

4.4 Habitats on site are considered to be of up to local value

Bats

- 4.5 The structures within the site are considered to be of negligible to moderate bat roosting suitability.
- 4.6 The structures being affected by the proposals however, Building's 2B and 3, are both of negligible suitability for roosting bats, comprising a well-sealed metal portacabin, and a corrugated metal shed respectively.
- 4.7 The habitats within the site are considered to be of likely local value and up-to moderate suitability to foraging and commuting bats.
- 4.8 The majority of habitats are being retained, including the woodland, hedgerow, line of trees, much of the scrub and the western area of other neutral grassland. As such, no further survey for bats is recommended.

Birds

- 4.9 The site provides opportunities for a small range of foraging and nesting birds within buildings, nest boxes, scrub, trees and grasslands.
- 4.10 The site is considered to be of up to local ornithological value, supporting a relatively typical range of species.
- 4.11 The majority of habitats are being retained and as such, no further bird survey is required.

Great Crested Newt

- 4.12 Two ponds are present within the site boundary, one of which was dry at the time of survey in August 2022. The habitats within the site have potential to be used by the species during its terrestrial phase, including for hibernation.
- 4.13 It is recommended that further survey work for great crested newts is undertaken and/or that a Great Crested Newt District Level Licensing approach is utilized prior to works commencing on site.

Other Protected Species

- 4.14 The site provides some suitable areas for badger sett creation, and opportunities for foraging are present throughout. No evidence of badger was recorded during the survey, however the species may be present on occasion.
- 4.15 Due to the nature of the site no other protected species are considered likely to be present. However, hedgehog, white-letter hairstreak, brown hare, and common toad, all national priority species, may be present on site on occasion.
- 4.16 Additional protected or notable species are considered likely to be absent from the site.

Designated Sites

- 4.17 The site is within an identified SSSI Impact Risk Zone relating to designated sites in the wider area, however development of the nature proposed does not meet the identified impact risk triggers.

5. Impact Assessment

5.1 The following impact assessment is based on the survey work to date and the understanding that the Client wishes to undertake the following:

- The demolition of two existing metal buildings on site (Building 2B and 3),
- The construction of two new warehouses,
- The construction of a new car park at the east of the site,
- The refurbishment of the existing farmhouse for office use (internal renovations only)

5.2 As a result of the assessment completed and the nature of the proposed works, the likely impacts, without appropriate avoidance measures, mitigation and/or compensation scheme, are anticipated to be:

- Loss of habitats of up to local value including two ponds and potentially amphibian populations.
- Spread of Schedule 9 Cotoneaster species during site clearance works.
- Harm or disturbance to nesting birds should site clearance works be undertaken during the nesting bird season.
- Loss of a nesting and foraging opportunities to a range of bird species likely of local value, though both direct habitat loss and disturbance.
- Loss/degradation of habitats utilised by a bat assemblage of likely local value.
- Damage to crowns or roots of retained trees and scrub during works on site through severance or asphyxiation.
- Risk of entrapment to badger, hedgehog and other small mammals on site during site works.

5.3 Detailed site design is required to complete a detailed impact assessment.

6. Recommendations

6.1 Completion of site design is required for a detailed avoidance, mitigation and compensation strategy to be developed, however the following initial recommendations can be made.

Further Survey

6.2 No further survey is recommended.

Avoidance Measures

6.3 The following measures should be incorporated into the design of the scheme to avoid impacts on wildlife:

- External lighting that may affect the site's suitability for bats will be avoided. If required this will be limited to low level, avoiding use of high intensity security lighting.
- Works will not be undertaken during the nesting bird season (March to August inclusive) unless the site is checked by an appropriately experienced ecologist and nests are confirmed to be absent.
- Any excavations left open overnight will have a means of escape for mammals that may become trapped in the form of a ramp at least 300mm in width and angled no greater than 45°.
- Retained trees will be protected from damage in line with the recommendations in BS5837:2012.
- It is proposed that a Great Crested Newt District Level License is obtained prior to works commencing on site.

Mitigation Strategy

6.4 The following is recommended:

- Scrub and trees will be retained where practicable and will be managed for biodiversity, looking to create a range of structural diversity.
- Schedule 9 Cotoneaster species should be removed in line with best practise to a method statement.
- A pre-construction walkover for badger setts should be undertaken within the woodland habitat 1 month before the expected commencement of works.

Compensation Scheme

6.5 The following is recommended:

- Landscape planting shall include berry and fruit bearing species to provide increased foraging opportunities in the local area.
- The including of bat and bird boxes within the site post development.

- Consideration should be given to the creation of habitats on site to achieve a biodiversity gain.

Appendix 1 – Bat Suitability and Survey Effort

Classifications of suitability are based on those provided within the Bat Conservation Trust Good Practice Survey Guidelines¹¹, with the table below taken from page 35 of the guidelines (table 4.1).

Guidelines for Assessing the Potential Suitability of Proposed Development Sites for Bats (based on the presence of habitat features within the landscape, to be applied using professional judgement)		
Suitability	Description	
	Roosting Habitats	Commuting and foraging habitats
Negligible	Negligible habitat features on site, likely to be used by roosting bats	Negligible habitat features on site, likely to be used by commuting and foraging bats
Low	<p>A structure with one or more potential roost sites that could be used by individual bats opportunistically.</p> <p>However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions^a and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e unlikely to be suitable for maternity or hibernation^b).</p> <p>A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential^c.</p>	<p>Habitat that could be used by small numbers of commuting bats such as gappy hedgerow or unvegetated stream, but isolated, i.e not very well connected to the surrounding landscape by other habitat.</p> <p>Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in a parkland situation) or a patch of scrub.</p>
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions ^a and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).	<p>Continuous habitat connected to the wider landscape that could be used by bats for commuting such as lines of trees and scrub or linked back gardens.</p> <p>Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.</p>
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions ^a and surrounding habitat	<p>Continuous high-quality habitat that is well connected to the wider landscape that is likely to be used regularly by commuting bats such as river valleys, streams, hedgerows, lines of trees and woodland edge.</p> <p>High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaved woodland, tree lined watercourse and grazed parkland.</p> <p>Site is close to and connected to known roosts.</p>
<p><i>a. For example in terms of temperature, humidity, height above ground level, light levels or levels of disturbance.</i></p> <p><i>b. Evidence from the Netherlands shows mass swarming events of common pipistrelle bats in the autumn followed by mass hibernation in a diverse range of building types in urban environments (Korsten et al., 2015). This phenomenon requires some research in the UK but ecologists should be aware of potential for larger numbers of this species to be present during the autumn and winter in larger buildings in highly urbanised environments.</i></p> <p><i>c. The system of categorisation aligns with BS 8596:2015 Surveying for bats in trees and woodland (BSI, 2015)</i></p>		

¹¹ Collins, J. (ed) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). Bat Conservation Trust

The classification of the suitability relates to the level of further survey recommended.

Survey Effort and Timing Depending on Suitability of the Structure or Tree (Tables 7.1-7.3 in the BCT Guidelines)			
	Low roost suitability	Moderate suitability	High roost suitability
Survey Effort	One survey visit One dusk emergence or dawn re-entry survey	Two separate visits One dusk emergence and a separate dawn re-entry survey	Three separate visits At least one dusk emergence and a separate dawn re-entry survey. The third can be either dusk or dawn.
Timings	May-August (structures) No further survey (trees)	May to September. At least one must be in the optimum period (May to August)	May to September. two must be in the optimum period (May to August)
If bats are recorded	If bats emerge from or enter a building during surveys, the survey schedule will be adjusted to increase the survey effort so that enough information can be collected to characterise the roost and provide data should a Natural England Licence be required.		

Appendix 2 – Policy and Legislation

Planning Policy

National Planning Policy Framework (NPPF)¹²

The revised National Planning Policy Framework sets out the government's planning policies for England and how these are expected to be applied. It provides a framework within which locally prepared plans for housing and other development can be produced. Planning law requires that applications for planning permission be determined in accordance with the development plan. The key paragraphs from the relating to the natural environment are detailed below.

Ecologically Relevant Paragraphs of the NPPF	
Paragraph	Statement
8	<p>Achieving sustainable development means that the planning system has three overarching objectives, which are interdependent and need to be pursued in mutually supportive ways (so that opportunities can be taken to secure net gains across each of the different objectives):</p> <ul style="list-style-type: none"> a) an economic objective – to help build a strong, responsive and competitive economy, by ensuring that sufficient land of the right types is available in the right places and at the right time to support growth, innovation and improved productivity; and by identifying and coordinating the provision of infrastructure; b) a social objective – to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering well-designed, beautiful and safe places, with accessible services and open spaces that reflect current and future needs and support communities' health, social and cultural well-being; and c) an environmental objective – to protect and enhance our natural, built and historic environment; including making effective use of land, improving biodiversity, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy
174	<p>Planning policies and decisions should contribute to and enhance the natural and local environment by:</p> <ul style="list-style-type: none"> a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan); b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland; c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate; d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;

¹² National Planning Policy Framework July 2021
(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf)

Ecologically Relevant Paragraphs of the NPPF	
Paragraph	Statement
	<p>e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and</p> <p>f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate</p>
175	<p>Plans should: distinguish between the hierarchy of international, national and locally designated sites; allocate land with the least environmental or amenity value, where consistent with other policies in this Framework; take a strategic approach to maintaining and enhancing networks of habitats and green infrastructure; and plan for the enhancement of natural capital at a catchment or landscape scale across local authority boundaries</p>
179	<p>To protect and enhance biodiversity and geodiversity, plans should:</p> <p>a) Identify, map and safeguard components of local wildlife-rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and</p> <p>b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.</p>
180	<p>When determining planning applications, local planning authorities should apply the following principles:</p> <p>a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;</p> <p>b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;</p> <p>c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons⁶³ and a suitable compensation strategy exists; and</p> <p>d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.</p>
181	<p>The following should be given the same protection as habitats sites:</p> <p>a) potential Special Protection Areas and possible Special Areas of Conservation;</p> <p>b) listed or proposed Ramsar sites⁶⁴; and</p> <p>c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites</p>

Ecologically Relevant Paragraphs of the NPPF	
Paragraph	Statement
182	The presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

Local Planning Policy

The following table details the ecologically relevant policies of the local plan relevant to this site.

Ecologically Relevant Policies of the County Durham Plan¹³	
Policy No.	Policy
Policy 40	<p>Trees, Woodlands and Hedges</p> <p>Proposals for new development will not be permitted that would result in the loss of, or damage to, trees of high landscape, amenity or biodiversity value unless the benefits of the proposal clearly outweigh the harm. Where development would involve the loss of ancient or veteran trees it will be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists.</p> <p>Proposals for new development will be expected to retain existing trees where they can make a positive contribution to the locality or to the development, maintain adequate stand-off distances between them and new land-uses, including root protection areas where necessary, to avoid future conflicts, and integrate them fully into the design having regard to their future management requirements and growth potential.</p> <p>Where trees are lost, suitable replacement planting, including appropriate provision for maintenance and management, will be required within the site or the locality.</p> <p>Where applications are made to carry out works to trees in Conservation Areas or that are covered by a Tree Preservation Order, they will be determined in accordance with the council's Tree Management Policy Document (or any subsequent revisions).</p> <p>Proposals for new development will not be permitted that would result in the loss of, or damage to, woodland unless the benefits of the proposal clearly outweigh the impact and suitable replacement woodland planting, either within or beyond the site boundary, can be undertaken.</p> <p>Proposals for new development resulting in the loss or deterioration of ancient woodlands as shown on the policies map, will be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists. Proposals affecting ancient woodland (including planted ancient woodland sites) not previously identified as such, will be subject to the same considerations.</p> <p>Proposals for new development will be expected to maintain adequate stand-off distances between woodland and new land-uses to avoid future conflicts, and integrate them fully into the design having regard to their future management requirements and growth potential.</p> <p>Proposals for new development will not be permitted that would result in the loss of hedges of high landscape, heritage, amenity or biodiversity value unless the benefits of the proposal clearly outweigh the harm.</p>

¹³ County Durham Plan, Adopted 2020, Durham County Council

Ecologically Relevant Policies of the County Durham Plan¹³	
Policy No.	Policy
	<p>Proposals for new development will be expected to retain existing hedgerows where appropriate and integrate them fully into the design having regard to their management requirements.</p> <p>Where any hedges are lost, suitable replacement planting or restoration of existing hedges, will be required within the site or the locality, including appropriate provision for maintenance and management.</p>
Policy 41	<p>Biodiversity and Geodiversity</p> <p>Proposals for new development will not be permitted if significant harm to biodiversity or geodiversity resulting from the development cannot be avoided, or appropriately mitigated, or, as a last resort, compensated for.</p> <p>Proposals for new development will be expected to minimise impacts on biodiversity by retaining and enhancing existing biodiversity assets and features and providing net gains for biodiversity including by establishing coherent ecological networks(152) . Measures should be appropriate, consistent with the biodiversity of the site and contribute to the resilience and coherence of local ecological networks.</p> <p>Proposals for new development will be expected to protect geological features and have regard to Geodiversity Action Plans, the Durham Geodiversity Audit and where appropriate promote public access, appreciation and interpretation of geodiversity.</p> <p>Development proposals where the primary objective is to conserve or enhance biodiversity or geodiversity will be permitted, where they accord with other relevant policies in the Plan.</p> <p>Development proposals which are likely to result in the loss or deterioration of irreplaceable habitat(s) (such as peatlands or lowland fen) will not be permitted unless there are wholly exceptional reasons and a suitable compensation strategy exists.</p>
Policy 42	<p>Internationally Designated Sites</p> <p>Development that has the potential to have an effect on internationally designated site(s), (including all development within 0.4 kilometres of the sites, as shown on Map B of the policies map document), either individually or in combination with other plans or projects, will need to be screened in the first instance to determine whether significant effects on the site are likely and, if so, will be subject to an Appropriate Assessment.</p> <p>Development will be refused where it cannot be ascertained, following Appropriate Assessment, that there would be no adverse effects on the integrity of the site, unless the proposal is able to pass the further statutory tests of 'no alternatives' and 'imperative reasons of overriding public interest' as set out in Regulation 64 of the Conservation of Habitats and Species Regulations 2017. In these exceptional circumstances, where these tests are met, appropriate compensation will be required in accordance with Regulation 68.</p> <p>Where development proposals would be likely to lead to an increase in recreational pressure upon internationally designated sites, a Habitats Regulations screening assessment and, where necessary, a full Appropriate Assessment will need to be undertaken to demonstrate that a proposal will not adversely affect the integrity of the site. In determining whether a plan or project will have an adverse effect on the integrity of a site, the implementation of identified strategic measures to counteract effects, can be considered during the Appropriate Assessment.</p> <p>Land identified and/or managed as part of any mitigation or compensation measures should be maintained in perpetuity. Development proposals which have an adverse impact on mitigation or compensation measures will not be allowed.</p>
Policy 43	Protected Species and Nationally and Locally Protected Sites

Ecologically Relevant Policies of the County Durham Plan¹³	
Policy No.	Policy
	<p>All development proposals in, or which are likely to adversely impact upon (either individually or in combination with other developments), any of the following national designations (where not a component of an internationally designated site):</p> <ul style="list-style-type: none"> • Sites of Special Scientific Interest • National Nature Reserves <p>will only be permitted where the benefits of development in that location clearly outweigh the impacts on the interest features on the site and any wider impacts on the network of sites.</p> <p>All development proposals in, or which are likely to adversely impact upon, any of the following local designations:</p> <ul style="list-style-type: none"> • Local Sites (Geology and Wildlife) • Local Nature Reserves (LNRs) <p>will only be permitted when it can be demonstrated that the benefits of development in that location outweigh the impacts on the local nature conservation interest or scientific interest on the site and any wider impacts on the network of sites.</p> <p>In all cases where development impacts adversely on a designated site, mitigation, or as a last resort compensation, must be provided and it must be demonstrated that the proposed mitigation or compensatory measures are appropriate to the designations assigned to the site and deliver clear net gains for the habitats and/or species assemblages the site is designated for.</p> <p>In relation to protected species and their habitats, all development which, alone or in combination, has a likely adverse impact on the ability of species to survive, reproduce and maintain or expand their current distribution will not be permitted unless:</p> <p>a. appropriate mitigation, or as a last resort compensation, can be provided, which maintains a viable population and where possible provides opportunities for the population to expand; and</p> <p>b. where the species is a European protected species, the proposal also meets the licensing criteria (the 3 legal tests) of overriding public interest, no satisfactory alternative and favourable conservation status.</p>

Government Circular ODPM 06/2005 Biodiversity and Geological Conservation¹⁴ (England only)

This Circular provides administrative guidance on the application of the law relating to planning and nature conservation as it applies in England.

Part IV - Conservation of Species protected by Law details that the presence of a protected species is a material consideration when considering a development proposal that may result in harm to the species or its habitat and that planning authorities must have regard to species protected under the Habitat Regulations.

It goes on to say that: *it is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the*

¹⁴ODPM Circular 06/2005 Office of the Deputy Prime Minister Eland House, Bressenden Place, London SW1E 5DU
Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their Impact within the Planning System

decision. The need to ensure ecological surveys are carried out should therefore only be left to coverage under planning conditions in exceptional circumstances, with the result that the surveys are carried out after planning permission has been granted.

Natural Environment and Rural Communities (NERC) Act 2006^{15 16}

Section 40 – To conserve biodiversity

This section puts a duty on public authorities to conserve biodiversity when undertaking its duties and functions.

Section 41 – Biodiversity list and Action

Requires the Secretary of State to *publish a list of the living organisms and types of habitat which in the Secretary of State's opinion are of principal importance for the purpose of conserving biodiversity. They must also take such steps as appear to the Secretary of State to be reasonably practicable to further the conservation of the living organisms and types of habitat included in any list published under this section or promote the taking by others of such steps.*

The 2007 lists were superseded by the UK Post-2010 Biodiversity Framework.

UK Priority Habitats (excl. marine habitats)¹⁷	
UK BAP Broad Habitat	UK BAP Priority Habitat
Rivers and Streams	<ul style="list-style-type: none"> • Rivers
Standing Open Waters and Canals	<ul style="list-style-type: none"> • Oligotrophic and Dystrophic Lakes • Eutrophic Standing Waters • Ponds • Aquifer Fed Naturally Fluctuating Water Bodies • Mesotrophic Lakes
Arable and Horticultural	<ul style="list-style-type: none"> • Arable Field Margins
Boundary and Linear Features	<ul style="list-style-type: none"> • Hedgerows
Broadleaved, Mixed and Yew Woodland	<ul style="list-style-type: none"> • Traditional Orchards • Upland Mixed Ashwoods • Wood-Pasture and Parkland • Wet Woodland • Upland Oakwood • Lowland Mixed Deciduous Woodland • Lowland Beech and Yew Woodland • Upland Birchwoods
Coniferous Woodland	<ul style="list-style-type: none"> • Native Pine Woodlands
Acid Grassland	<ul style="list-style-type: none"> • Lowland Dry Acid Grassland
Calcareous Grassland	<ul style="list-style-type: none"> • Lowland Calcareous Grassland • Upland Calcareous Grassland
Neutral Grassland	<ul style="list-style-type: none"> • Lowland Meadows • Upland Hay Meadows

¹⁵ <https://www.legislation.gov.uk/ukpga/2006/16/section/40>

¹⁶ <https://www.legislation.gov.uk/ukpga/2006/16/section/41>

¹⁷ <http://jncc.defra.gov.uk/page-5706>

UK Priority Habitats (excl. marine habitats)¹⁷	
UK BAP Broad Habitat	UK BAP Priority Habitat
Improved Grassland	<ul style="list-style-type: none"> Coastal and Floodplain Grazing Marsh
Dwarf Shrub Heath	<ul style="list-style-type: none"> Lowland Heathland Upland Heathland
Fen, Marsh and Swamp	<ul style="list-style-type: none"> Upland Flushes, Fens and Swamps Purple Moor Grass and Rush Pastures Lowland Fens Reedbeds
Bogs	<ul style="list-style-type: none"> Lowland Raised Bog Blanket Bog
Montane Habitats	<ul style="list-style-type: none"> Mountain Heaths and Willow Scrub
Inland Rock	<ul style="list-style-type: none"> Inland Rock Outcrop and Scree Habitats Calaminarian Grasslands Open Mosaic Habitats on Previously Developed Land Limestone Pavements
Supralittoral Rock	<ul style="list-style-type: none"> Maritime Cliff and Slopes
Supralittoral Sediment	<ul style="list-style-type: none"> Coastal Vegetated Shingle Machair Coastal Sand Dunes

Protected Species Legislation

European Protected Species

European Protected Species (EPS) are species of plants and animals (other than birds) protected by law throughout the European Union. They are listed in Annexes II and IV of the European Habitats Directive and receive full protection under The Conservation of Species and Habitats Regulations 2017 (as amended). This make it an offence to:

- deliberately capture, injure or kill any European Protected Species (EPS)
- deliberately disturb any European Protected Species (EPS);
- damage or destroy a breeding site or place of rest or shelter used by any European Protected Species (EPS).

The Wildlife and Countryside Act 1981 (as amended) adds further protection by making it an offence to intentionally or recklessly¹⁸ disturb an EPS while it is occupying a structure or place which it uses for shelter or protection, or to obstruct access to any structure or place the species uses for shelter or protection.

European Protected Species Relevant to the UK			
Animals		Plants	
All bat species	Great Crested Newt	Yellow saxifrage	marsh Creeping marshwort

¹⁸ Under the Countryside and Rights of Way Act 2000 (CROW Act) extended the protection to cover reckless damage or disturbance

European Protected Species Relevant to the UK			
Animals		Plants	
Large blue butterfly	Otter	Shore dock	Slender naiad
Wild cat	Smooth snake	Killarney fern	Fen Orchid
Dolphins, porpoises and whales (all species)	Sturgeon fish	Early gentian	Floating-leaved water plantain
Dormouse	Natterjack toad	Lady's slipper	
Sand lizard	Pool Frog		
Fisher's Estuarine Moth	Snail, Lesser Whirlpool Ram's-horn		
Marine turtles			

Other Protected Species

Other Protected Species Legislation		
Species	Legislation	Level of Protection
Birds	Wildlife and Countryside Act 1981 (as amended)	<p>Under the Wildlife and Countryside Act (1981) it is an offence if any person:</p> <ul style="list-style-type: none"> intentionally kills, injures or takes any wild bird intentionally takes, damages or destroys the nest of any wild bird whilst that nest is in use or being built; intentionally takes, damages or destroys eggs of any wild bird; <p>Wild birds listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are protected from:</p> <ul style="list-style-type: none"> intentional or reckless disturbance whilst it is building a nest or is in, on or near a nest containing eggs or young; disturbance of dependent young
Badger	Protection of Badgers Act 1992 Wild Mammals (Protection) Act 1996	<p>The Protection of Badgers Act (1992) makes it an offence to wilfully or attempt to:</p> <ul style="list-style-type: none"> kill or injure a badger possesses a dead badger or any part of, or anything derived from a dead badger; digs for badgers; damages a badger sett or any part of it; destroys a badger sett obstructs access to, or any entrance of, a badger sett; causes a dog to enter a badger sett; disturbs a badger whilst it is occupying a badger sett. <p>Under the Wild Mammals (Protection) Act, badgers are protected from unnecessary suffering by a number of methods.</p>

Appendix 3 - Receptor Valuation

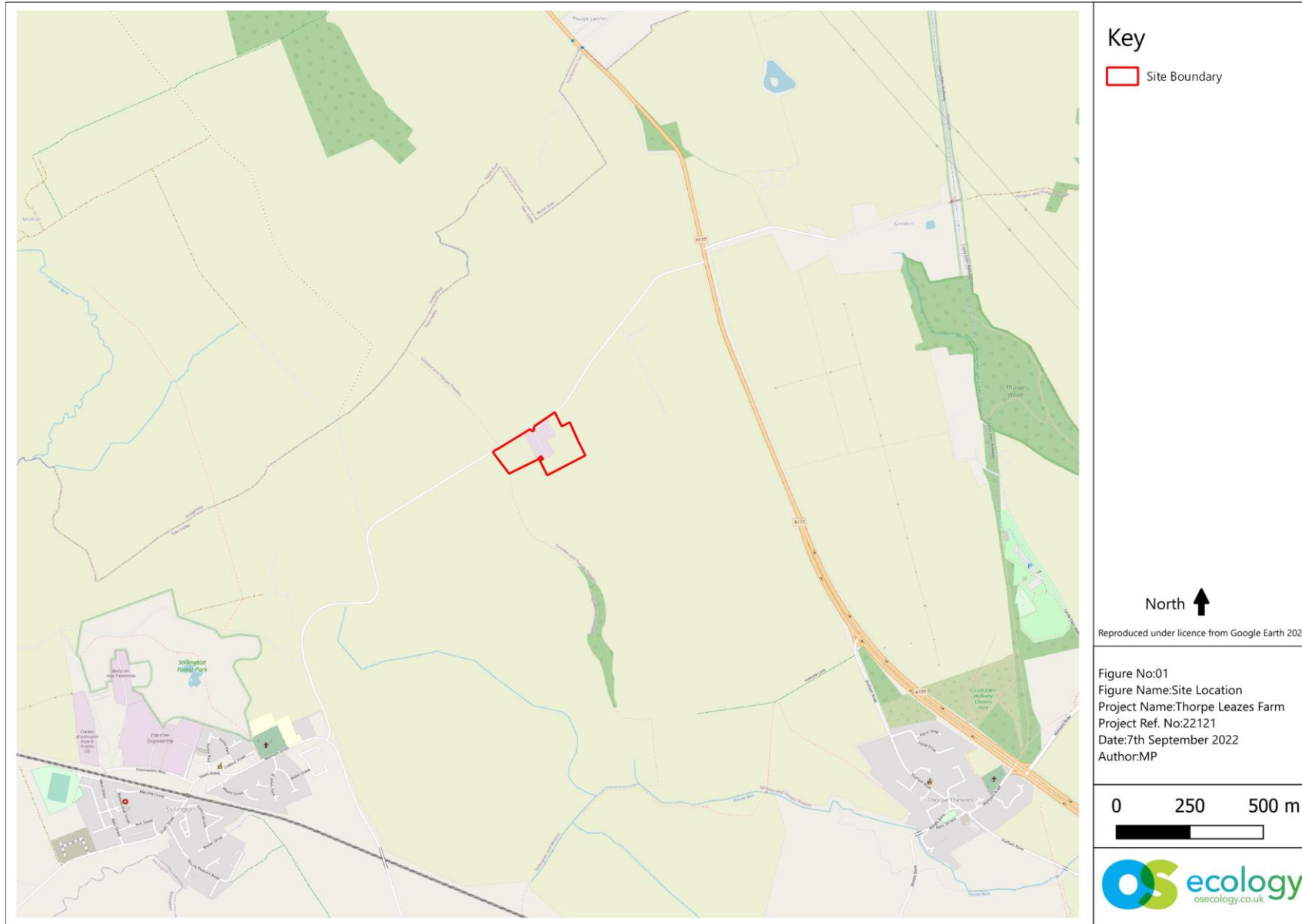
The importance of ecological features is considered within a defined geographic context, examples of which are provided within the table below. The valuation of features is a complex process and, in many cases, requires the application of expert judgement. Valuation considers a range of factors including statutory designations, national biodiversity lists, biodiversity action plan lists and lists of declining, rare or legally protected species. Other factors to be considered include the 'naturalness' of habitats, the functional importance of features and whether habitats are irreplaceable.

Examples of Importance of Ecological Features (Geographic Context)¹⁹			
Importance	Designated Site	Habitat	Species
International and European	Special Protection Area/Proposed Special Protection Area Special Area of Conservation/Proposed Special Area of Conservation Ramsar Site	A significant area of a Priority Habitat listed on Annex 1 of the Habitats Directive or a smaller area of such habitat that is thought to be functionally linked to a significant area of such habitat	An area that is functionally important to a species listed on Annexes II, IV or V of the Habitats Directive or Annex I of the Birds Directive which is present in internationally significant numbers (>1% of the biogeographic population)
National	Site of Special Scientific Interest	A significant area of a Priority Habitat listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities Act 2006 or a smaller area of such habitat that is thought to be functionally linked to a significant area of such habitat	An area that is functionally important to a species listed as a species of principal importance under Section 41 of the Natural Environment and Rural Communities Act 2006, which is present in nationally significant numbers (>1% of the national population)
Regional	-	An area of a Priority Habitat listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities Act 2006 which is not significant enough in extent to be considered of national importance but is considered to be of greater than metropolitan or county value.	An area that is functionally important to a species which is present in regionally significant numbers (>1% of the regional population)
Metropolitan area or County	Local Wildlife Site designated at a metropolitan area or county level	A significant area of a Priority Habitat listed within the relevant local Biodiversity Action Plan or a smaller area	An area that is functionally important to a species listed as a Priority Species within the relevant local Biodiversity

¹⁹ Based on information provided within Guidelines for Ecological Impact Assessment in the UK and Ireland (2018) CIEEM

Examples of Importance of Ecological Features (Geographic Context)¹⁹			
Importance	Designated Site	Habitat	Species
Local (District/ Borough of Parish)	Local Wildlife Site designated at a district or borough level	of such habitat that is thought to be functionally linked to a significant area of such habitat	Action Plan, which is present in significant numbers within the geographic context.
Low	-	Habitats that are unexceptional in a local context and do not meet the above criteria.	Species populations that are unexceptional in a local context and do not meet the above criteria.

Appendix 4 – Figures











Drawn prior to the planning application. The information on this drawing is for information only and does not constitute a contract. The information on this drawing is for information only and does not constitute a contract. The information on this drawing is for information only and does not constitute a contract. The information on this drawing is for information only and does not constitute a contract.

Scale 1:1000
Date: 14/09/23

- Existing
- To be removed
- High Fencing Choice
- Temporary Structures to be removed
- Temporary Lane to be added



Thorpe Leazes Farm

Proposed Site Plan

Date:		Drawn:	
15/09/23		T.W.	
Scale:		Project:	
1:1000		1450-WAL	
Author:		Version:	
T.W.		01	
Date:		Status:	
14/09/23		CIV	
Project:		Drawing:	
1450-WAL		PD-10.01	