PROTECTED SPECIES RISK ASSESSMENT

Land off Durham Road, Coatham Mundeville

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Where field investigations have been carried out these have been restricted to a level of detail required to achieving the stated objectives of the work. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by AES-LTD for inaccuracies in the data supplied by any other party.

Data / Report Validity

The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections. Environmental conditions can vary, and no guarantee is given as to the possibility of changes in the environment of the site and surrounding area at differing times. The details within this report will be determined by a number of factors including its original purpose, the Client's instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals upon which this report was based on.

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Issue Status	**Prepared by:**	**Approved / Date**
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1.0 INTRODUCTION

1.1 Applied Ecological Services Ltd. was commissioned to undertake a protected species risk assessment at Land off Durham Road, Coatham Mundeville, Co Durham. The purpose of the survey was to collect baseline ecological data for the site and to assess the risk of protected species being impacted upon negatively because of the proposed development. This report presents the results of the desktop study and an assessment of any potential ecological constraints to the development of the site based on the results of the survey, along with recommendations for further, more detailed surveys to be undertaken, if applicable.

1.2 The site is located to the east of Durham Road and is located just north of the centre of the village of Coatham Mundeville. The site lies 5.3km north of Darlington Town Centre and 1.2km south east of Junction 59 of the A1(M). The land use surrounding the village is mostly mixed agricultural land with improved pasture and arable fields divided by a combination of fences and hedgerows. The golf course associated with Hall Garth Golf and Country Club lies 0.15km to the north east of the site and the River Skerne lies 0.26km to the north east.

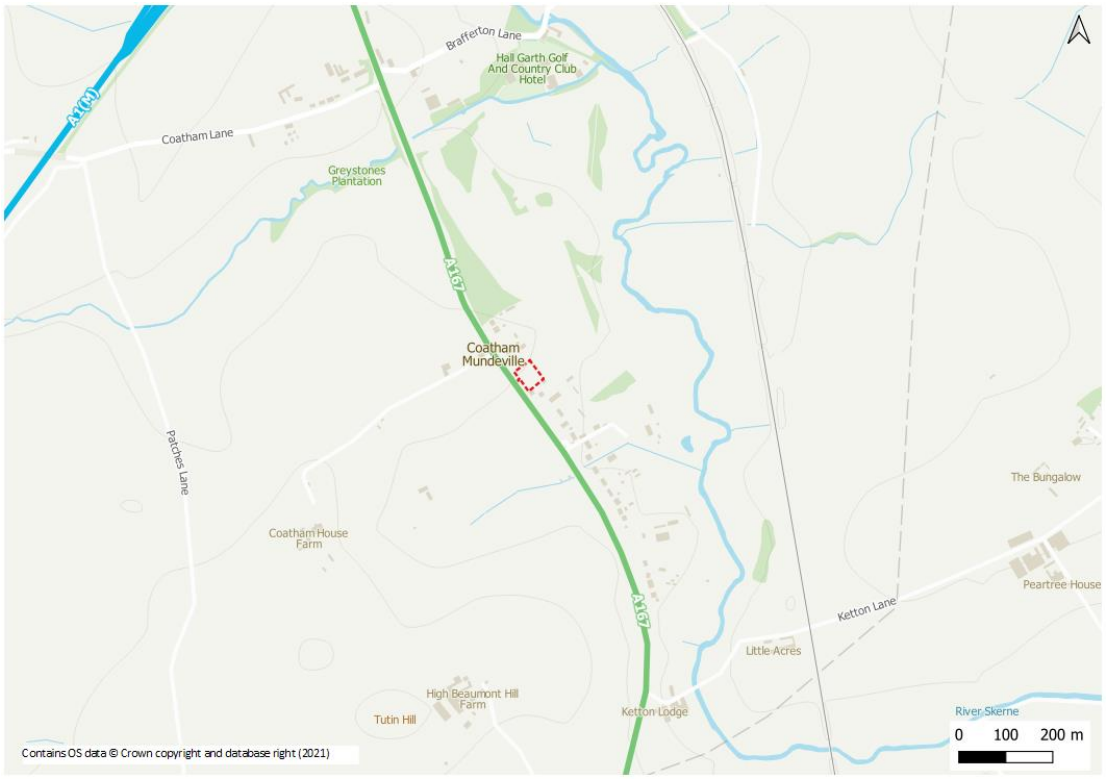
1.3 The proposed development site comprises 0.22 hectares (0.55 acres) comprising improved grassland, a hardcore access track, three ornamental shrub beds, fences, gates and ornamental hedgerows and an area of tarmacadam with a dropped kerb which allows access onto the site from Durham Road (A167). The approximate centre of the site lies at an altitude of 70m AOD and is located at OS grid reference NZ 29032 19952 (approximate central point).

2.0 THE PROPOSED DEVELOPMENT

SITE LOCATION

2.1 The application site (red line boundary) covers approximately 0.22 hectares (0.55 acres) and is located at grid reference NZ 29032 19952 (approximate central point). The survey area will be referred to as the site or the survey area within the report.

Figure 1: Site Location



2.2 The development comprises the construction of two residential dwelling and associated access and soft landscaping.

3.0 SURVEY AND SITE ASSESSMENT METHODS

DESK STUDY

3.1 In order to compile existing baseline information, relevant ecological information was requested from the following organisations which for the purposes of this report, included:

- Environmental Records Information Centre North East (ERIC NE); and
- Multi Agency Geographic Information for the Countryside (Magic) website.

3.2 A 2km radius was searched for sites within the National Site Network of International nature conservation importance, such as Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and RAMSAR sites. A 2km radius was searched for statutory sites of national, regional and local importance, such as Sites of Special Scientific Interest (SSSIs) or National Nature Reserves (NNR), Local Nature Reserves (LNRs), and a 2km radius for non-statutory designated sites such as Local Wildlife Sites (LWS) and also for records of protected and notable species.

3.3 Durham Bat Group webpage (http://www.durhambats.co.uk/412-2/) was accessed on 21st December 2021 to discover which species of bat are present in the wider area.

3.4 Further inspection, using colour 1:25,000 OS base maps (www.ordnancesurvey.co.uk) and aerial photographs from Google Earth (www.maps.google.co.uk), was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.

FIELD SURVEY

3.5 A walkover survey was undertaken on the 14th of December 2021. The survey was used to assess the site and its associated features for the presence of protected / notable species. The walkover survey was used to enable the classification of features within the site for their suitability to support roosting bats and other protected / notable species.

Table 1 below is taken from Collins (2016) [1] detailing what makes features on site more, or less suitable for bats.

Table 1: Potential Suitability of Proposed Development Sites.

Suitability	Description Roosting Habitats	Commuting and Foraging Habitat
Negligible	Negligible habitat features on site likely to be used by roosting bats.	Negligible habitat features on site likely to be used by commuting or foraging bats.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and or suitable surrounding habitat to be used on a regular basis or by a large number of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain potential roost features (PRF) but with none seen from the ground or features seen only with limited roosting potential.	Habitat that could be used by small numbers of commuting bats such as a gappy hedgerow or unvegetated stream, but isolated, i.e. not very well connected to the surrounding landscape by other habitat. Suitable but isolated habitat that could be used by small numbers of foraging bats such as a lone tree (not in parkland situation) or a patch of scrub.
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 and surrounding habitat but are 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).	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. Habitat that is connected to the wider landscape that could be used by bats for foraging such as trees, scrub, grassland or water.
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger number of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat	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. High-quality habitat that is well connected to the wider landscape that is likely to be used regularly by foraging bats such as broadleaf woodland, tree-lined watercourses and grazed parkland. Site is close to and connected to known roosts.

[1] Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edn). The Bat Conservation Trust, London.

3.6 A preliminary roost assessment was also undertaken during the walkover. This is a detailed inspection of the interior and exterior of structures on site (e.g., buildings & trees) to look for features bats could use for entry/exit and roosting and to search for signs of bats. The aim of this survey is to determine the actual or potential presence of bats and the need for further survey and/or mitigation **if applicable**.

3.7 The following criteria, as outlined by Neal, 1977[2] and Harris, 1990[3], were used to assess badger land utilisation of areas within and adjacent (within 100m) to the proposed development site and to determine presence / absence and status of setts:

- Presence / absence of active badger setts.
- Presence / absence of disused badger setts.
- Presence / absence of spoil heaps outside entrances.
- Presence / absence of bedding material on spoil heap or in sett entrance.
- Presence / absence of odour emanating from sett entrance.
- Presence / absence of spoors on spoil heap or paths.
- Presence / absence of badger paths.
- Presence / absence of dung pits / latrines.
- Presence / absence of snuffle holes / destroyed cow pats.
- Presence / absence of scratching posts.
- Presence / absence of badger hair on fencing or around entrance holes

3.8 Potential badger paths observed during this survey were walked to determine the location or points of access to the proposed Site and to potential foraging grounds situated within the extended survey area. In areas where it was not possible to follow a path, fencing and other boundary structures were followed and observed for signs of badger hair, dung pits, footprints (spoors), and other characteristic foraging signs indicating badger activity. If found, badger setts were examined closely to determine both their level of use and number of entrances, this information was then used to classify the status of the sett, again using criteria outlined by Neal, 1977 and Harris, 1990.

[2] Neal, E. (1977). Badgers. Blandford Press, England.
[3] Harris S. (1990). *The badger in Britain.* NCC, Peterborough.

3.9 All observations made in the field were noted directly onto a site plan and the position of that observation was recorded electronically using a Garmin geographical positioning system (GPS).

3.10 All ponds within 500m of the proposed development were surveyed and their Habitat Suitability Index (HSI) (Oldham *et al*., 2000)[4] for great crested newt calculated using standard methodology. HSI scoring systems were originally developed as a means of evaluating habitat quality and quantity. An HSI is a numerical index, between 0 and 1. Values close to 0 indicate unsuitable habitat, 1 represents optimal habitat. The HSI for the great crested newt incorporates ten suitability indices, all of which are factors known to affect this species.

ECOLOGICAL APPRAISAL OF THE SITE

3.11 The preliminary appraisal of the site forms a baseline to inform any likely ecological constraints to development and whether additional information is required. Where relevant, the ecological appraisal considers policy and legislative protection afforded to specific habitats and species. A summary of key policy and wildlife legislation is provided in **Appendix 2**.

SURVEY LIMITATIONS

3.12 The access to the site was freely available, but the survey was undertaken outside of the optimum time to undertake HSI assessments.

[4] Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). Herpetological Journal 10(4), 143-155.

4.0 RESULTS

DESKTOP STUDY

National Site Network

4.1 A data search on the MAGIC website for sites of International, national, regional, and local conservation importance (National Site Network) indicates that there is one statutory site of nature conservation interest located within a 2.0km radius of the site.

- **Redcar Field SSSI** Located 0.11km south east of the site. The SSSI supports a range of fen vegetation types not found at any other site in County Durham, including basic flush, fen meadow, tall fen and willow carr. It is one of the few remaining examples of spring fed vegetation on the Magnesian Limestone of County Durham, and the only site to contain fen meadow.

4.2 ERIC NE indicates the presence of two non-statutory designated sites (Darlington Local Wildlife Sites) the location of which in relation to the site is illustrated on **Drawing 1**. The non-statutory sites are as follows:

- **Coatham Grange Marsh** Located 1.14km to the west south west of the site. The LWS comprises marsh and a small pond with bulrush, water-plantain, reed canary-grass. Areas to the west include soft rush, bladder sedge, yellow iris, marsh marigold, amphibious bistort, ragged robin and goat willow. Tubular water dropwort *Oenanthe fistulosa* and great crested newt *Triturus cristatus* are present.
- **Whiley Hill Sandpit:** Located 1.43km to the west of the site. Unimproved neutral grassland with scrub and a pond in a former sand pit. Species within the grassland include red clover, common spotted orchid, self-heal, common knapweed, cowslip, yarrow, common bird's-foot-trefoil, great burnet and sweet vernal-grass.

4.3 Sites of Special Scientific Interest (SSSIs) are designated under Section 28 of the 1981 Wildlife and Countryside Act (as amended) for their ecological or geological interest.

4.4 Local Wildlife Sites (LWS) are areas of land which are rich in wildlife and are equivalent to Sites of Importance for Nature Conservation (SNCI). Criteria for selection take in threats and declines in certain species, national priorities and local distinctiveness. The LWS system is

managed, in partnership, by The Wildlife Trust, local authorities, statutory nature conservation agencies, local naturalists and landowners. LWS are non-statutory sites of County level importance and protected under planning policies of the component district authorities.

ECOLOGICAL RECORDS

Durham Bat Group

4.5 Durham Bat Group state that 11 species of bat have been recorded in County Durham. Pipistrelle bats are the most abundant and widespread bat species in the UK but are thought to have undergone a significant decline in numbers in the last century. Estimates from the National Bat Colony Survey suggest a population decline of approximately 70% between 1978 and 1993. The current pre-breeding population estimate for the UK stands at approximately 2,000,000. The problems of estimating population trends have been compounded by the recent discovery that there are 3 distinct species of Pipistrelle bat in the UK.

Common pipistrelle *Pipistrellus pipistrellus* are widespread, often found in modern housing estates.

Soprano pipistrelle *Pipistrellus pygmaeus* are known to occur on the Tees, Wear and Derwent, so are probably also widespread.

Nathusius' pipistrelle *Pipistrellus nathusii* have been observed at several wetland sites across the county but, as yet, we have found no nursery roosts. Nathusius' pipistrelle calls at a lower frequency than common pip, at about 37kHz.

Brown long-eared bat *Plecotus auritus* are reasonably widespread but localised. They require large undisturbed roof spaces within flying distance of suitable woodland feeding Although they are Britain's second most common bats they are often missed because their calls are much quieter than other bats.

Noctule *Nyctalus noctula* are reasonably widespread and associated with mature woodland.

Leisler's Bat *Nyctalus leisleri* There are three reports**,** all from Teesdale in late summer. This corresponds with dispersal from breeding roosts. The nearest known breeding colonies are in Sheffield, so this is a species to watch for as it may be expanding its breeding range.

Serotine Bats *Eptesicus serotinus.* Two unverified reports of from Teesdale in late summer, again coinciding with post-breeding dispersal.

Whiskered Bat *Myotis mystacinus* are also reasonably widespread but localised. This is an important species in Durham as few roosts are known in Southern England.

Brandts Bat *Myotis brandtii* is much rarer here than Whiskered bats and our few roosts are of national importance.

Alcathoe's Bat *Myotis alcathoe* has been identified from Yorkshire but is extremely difficult to separate from whiskered and Brandt's Bats. It may well be present in Durham but has yet to be identified

Natterer's Bat *Myotis nattereri* can be a hard bat to study because of its quiet echolocation calls, but is one of our rarer species. It roosts in trees and large undisturbed buildings where it can fly to warm up before venturing outside.

Daubenton's Bat *Myotis daubentonii* is very widespread along the middle reaches of all our rivers. Most bridges on suitable waterways seem to support colonies. A thrilling sight on a warm summer evening!

Common and Soprano Pipistrelles *Pipistrellus pipistrellus / Pipistrellus pygmaeus* Until 1999, it was thought that there was only one native species of pipistrelle in Britain. With improvements in detectors, it was found that there were in fact two distinct species that echo-located at different frequencies. The common pipistrelle has a peak near 45kHz, and the soprano pip about 55kHz.

4.6 Nine of the bat species recorded in County Durham are a local priority. Priority species include; common pipistrelle, soprano pipistrelle, Daubenton's, noctule, brown long-eared, Natterer's, Brandt's, whiskered and Nathusius' pipistrelle. Soprano pipistrelle, brown long-eared, and noctule bats are priority species in the UK BAP 2007 and Section 41 species under the NERC Act (2006), and remain national priority species for Biodiversity 2020.

ERIC NE

4.7 Environmental Records Centre North East (ERIC NE) returned 967 records of protected and priority species within the 2km search area on 14th December 2021. These data were filtered to include records for the last ten years which left 296 records, 191 of which related to protected and priority species. None of the records related to the site. The location of the protected species records in relation to the site is illustrated on **Drawing 2**.

Protected species

4.8 Of these modern records, six were of great crested newt (there were a further seven historical records). The nearest records were at Brafferton and Coatham Grange Marsh which are located 1.17km to the north east and 1.31km to the west south west, respectively.

4.9 ERIC NE provided 197 bird records including nine protected bird species and included those on Annex 1 of the Habitats Directive and on Schedule 1 of the Wildlife and Countryside Act.

- Fieldfare
- Goosander
- Green sandpiper
- Hobby
- Kingfisher
- Osprey
- Red kite
- Redwing
- Whooper swan

4.10 There was a further record of a bird species listed on Schedule 1 part 2 of the Wildlife and Countryside Act which are protected during the close season (1st February to 31 August) but may be taken outside this period.

- Gadwall

4.11 ERIC NE provided 14 bat records, none of which were roost records. Species recorded foraging and in flight included unidentified bats, brown long-eared bats, common pipistrelle, Nathusius' pipistrelle, soprano pipistrelle, noctule bat and *Nyctalus sp*. The nearest record is of an unidentified bat in flight on Durham Road 0.6km to the north west of the site.

4.12 ERIC NE held three records of badger, all over 1.3km from the site. There were also eleven records of otter, the nearest being 0.29km to the north east on the River Skerne.

4.13 There was one record of protected plant species Wood crane's-bill on Patches Lane 0.9km to the south west.

4.14 The location of protected species records in relation to the site is illustrated on **Drawing 2.**

EPS LICENCE APPLICATIONS

4.15 A search on Magic website for granted European Protected Species Applications on 21st December 2021 indicates there are no granted licence applications within the 2km search area. There are great crested newt licence returns for the ponds at Coatham Marsh, identifying the presence of great crested newts in 2014.

Priority Species

4.16 There were six contemporary amphibian records including three records of common toad *Bufo bufo* in the 2km search area. The nearest record was from Coatham Marsh 1.3km west south west of the site.

4.17 Of the 197 bird records, 26 species of birds were of conservation interest, being listed on UK Biodiversity Action Plan, Durham (Local) Biodiversity Action Action Plan or Section 1 of the NERC Act 2006. This included the following priority species:

- Cuckoo
- Curlew
- Grasshopper warbler
- Grey partridge
- Grey wagtail
- House martin
- House sparrow
- Kestrel
- Lapwing
- Linnet
- Mistle thrush
- Reed bunting
- Shelduck
- Skylark
- Snipe
- Song thrush
- Spotted flycatcher
- Starling
- Swallow
- Swift
- Tree sparrow
- Willow tit
- Willow warbler
- Woodcock
- Yellow wagtail
- Yellowhammer

4.18 There were four records of hedgehog (the closest record was 0.3km to the north east on the golf course), and nine records of brown hare (the closest being off Ketton Lane 0.16km to the south east).

4.19 There were four records of butterflies/moths including two records of wall at Newton Aycliffe, 0.6km to the north west and two records of cinnabar moth 1.39km to the north west.

4.20 There are three records of black-poplar associated with a field east of Patches Lane, 0.93km to the south west of the site.

Invasive/non-native species

4.21 Plants and animals listed in Schedule 9, Parts 1 or 2 of the Wildlife & Countryside Act (as amended) recorded in the search area included one record of Canada Goose, one record of few-flowered garlic at Brafferton, two records of Himalayan balsam at Brafferton and Skerningham and three records of grey squirrel within Coatham Mundeville.

FIELD SURVEY

4.22 Land within the red line boundary is a garden, comprised of a lawned area (improved grassland), ornamental flower/shrub beds, a hardcore access road and surrounded on three sides by ornamental hedgerows. There are gates to access the site from the A167 and to access the garden of the adjacent property and the field to the east. There is a wooden shed in the north west corner of the site.

4.23 There were no buildings or trees within the red line boundary of the site.

4.24 There were no ponds within the application site. There are three ponds on the golf course, that are located within 500m of the site boundary, which are not considered to be separated from the site by a considerable barrier. These ponds are located 0.32km to the south east, 0.29km east north east and 0.45km to the north north east of the site.

4.25 There were no signs of protected species recorded throughout the survey.

4.26 No INNS were recorded within the site.

5.0 SITE ASSESSMENT AND EVALUATION

STATUTORY & NON-STATUTORY SITES

5.1 No impact is expected on statutory and non-statutory sites of nature conservation interest as a result of the proposed very small-scale residential development, the nearest site is Redcar Fields SSSI located 0.11km south east of the site and designated for its range of fen vegetation types not found at any other site in County Durham, including basic flush, fen meadow, tall fen and willow carr. There is no feasible ecological mechanism by which this small-scale project will impact on this site or any of the LWS within the 2km search area.

PROTECTED & PRIORITY SPECIES

BATS

5.2 There are no features within the site that are suitable to support roosting bats. Trees outwith the application site will not be affected by the proposals and the hedgerows are being retained. The development proposals are limited to the construction of two residential dwellings, associated utilities, and soft and hard landscaping. The hedgerows will continue to provide flyways for foraging and commuting bats in the local area.

GREAT CRESTED NEWT

5.3 The closest records for GCN are at Brafferton and Coatham Grange Marsh which are located 1.17km to the north east and 1.31km to the west south west of the site. There are no granted EPS licences relating to GCN within a 2km search area. There were no ponds (breeding habitat) within the site. The closest ponds were approximately 0.32km to the south east, 0.29km east north east and 0.45km to the north north east of the site within the golf course. The GCN records in relation to the site (all records, including historical records) are illustrated on **Drawing 3**, which shows that with the exception of the records for the 10km grid square that is associated with the 'Trent Factory', Bishop Auckland, many miles from the site, that there are no GCN records within 500m of the site boundary or the ponds on the golf course. The River Skerne, A1(M) and Durham Road (A167) would all also be considerable barriers to the movement of GCN onto the site.

5.4 Ponds 1 and 3 are assessed as below average and Pond 2 is assessed as poor. HSI score calculations for the ponds are provided in **Appendix 2**. The lack of records within the

surrounding area and poor HSI scores indicate that GCN are highly likely to be absent from the site and surrounding waterbodies.

BIRDS/NESTING BIRDS

5.5 A total of nine protected bird species listed on Annex 1 of the habitat Directive or Schedule 1 Of the Wildlife & Countryside Act (WCA) were included within the records return, with a further species being listed on Schedule 2 of the WCA. The small site area is unlikely to be an important resource for protected bird species.

5.6 Hedges on the periphery of the site and the ornamental shrub beds could potentially be utilised by nesting and foraging common and widespread BAP species. Birds are an ecological constraint and will be considered within the development proposals.

BADGER

5.7 There were no badger setts or characteristic signs indicating the use of the site by this species found during this survey.

OTHER SPECIES

5.8 The peripheral hedgerows and adjoining gardens will provide movement corridors, food and nesting opportunities for a range of small mammals (e.g. hedgehog and rodents), although none were recorded during the survey it is highly possible that they are present. These species will benefit from the retention of hedgerows in the site and a sensitive landscaping scheme within the residential gardens.

5.9 There is no suitable habitat for riparian mammals such as otter within the site.

5.10 The garden will provide suitable grasses and herbaceous species for common and widespread BAP invertebrates and the loss of a proportion of the lawned area will not have a significant impact on invertebrates due to the amount of alternative habitat in the surrounding area.

PROTECTED AND PRIORITY PLANTS

5.11 There were no protected or priority plants recorded in the wider area present within the site boundary.

6.0 SUMMARY & RECOMMENDATIONS

SUMMARY

6.1 The desktop assessment shows that there is one statutory site that forms part of the National Site Network and two non-statutory sites of nature conservation interest (Darlington Local Wildlife sites) within a 2km radius of the survey area.

6.2 No significant negative impact is anticipated on any of the sites of local conservation interest because of the proposed development. There is no ecologically feasible mechanism by which the development could have a negative effect on any of these sites

6.3 There are no protected or priority species of plants recorded within or around the proposed site.

6.4 'Priority Habitats' within the survey area would include the peripheral hedgerows (which are being retained).

6.5 The site is a residential garden and is likely to be utilised by local foraging and commuting bats. There is some potential for common and widespread priority birds to be present.

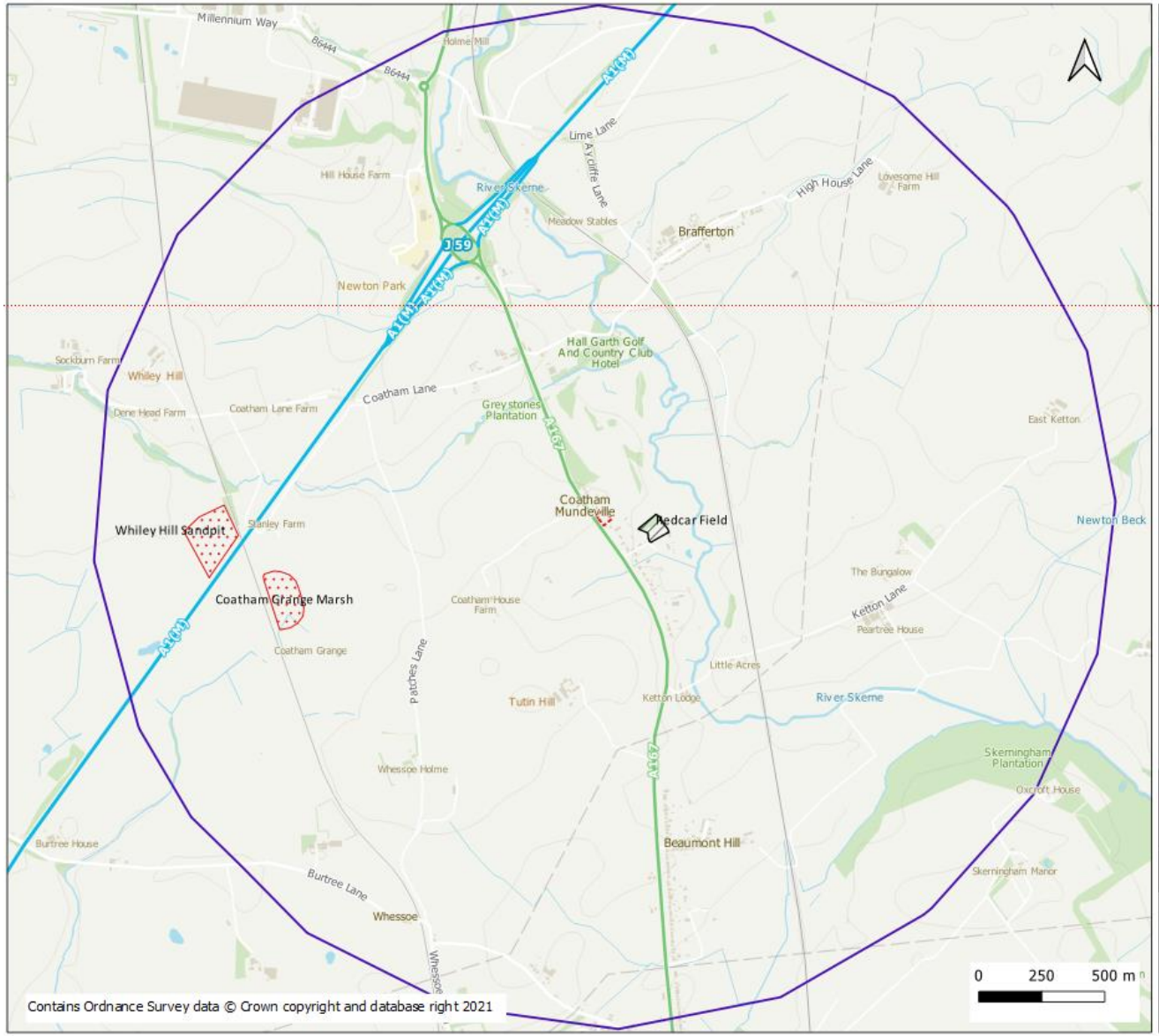
RECOMMENDATIONS

6.6 It is recommended that any vegetation clearance or removal is undertaken outside of the bird breeding season. This includes all ground level vegetation. The bird breeding season can extend from March until August (inclusive), weather and species depending, but generally birds have completed breeding by the end of July. If the works are not undertaken outside of the bird breeding season the site will be subject to a thorough walkover survey by a suitably qualified ecologist prior to any clearance or disturbance work being undertaken.

6.7 It is recommended that habitat enhancement for bats is incorporated into one of the residential properties as part of the development proposals. A Habibat 3S Bat Box, or similar, integrated into a south facing wall would be ideal roost enhancement for local bats. The Habibat 3S Bat Box (**Figure 2**) is a small, solid box made of insulating concrete which provides an internal roost space, and can be integrated into the fabric of a building as it is built

or renovated. Suitable for most species commonly found in the UK, this single chambered unit features an integrated V system to increase the surface for bats to roost against, whilst allowing them to move around. The Habibat 3S can be finished in a variety of facings to ensure it can be seamlessly integrated into the design build. Finishes include, plain for render with a choice of plinth, brick, block, stone, wood or a rendered finish, ensuring the box is unobtrusive and aesthetically pleasing. The box should be placed at a height of between 3 – 5m and should not be placed above windows or doors, where droppings could cause a nuisance.

Figure 2: Habibat 3s Bat Box


Millennium Way
B6444
Holme Mill
Lime Lane
Aycliffe Lane
Hill House Farm
River Skerne
A1(M)
J59
Meadow Stables
Brafferton
High House Lane
Lovesome Hill Farm
Newton Park
Hall Garth Golf And Country Club Hotel
Sockburn Farm
Whiley Hill
Dene Head Farm
Coatham Lane Farm
Coatham Lane
Greystones Plantation
A167
East Ketton
Coatham Mundeville
Redcar Field
Whiley Hill Sandpit
Stanley Farm
Newton Beck
The Bungalow
Coatham Grange Marsh
Coatham House Farm
Ketton Lane
Peartree House
Coatham Grange
Patches Lane
Little Acres
Tutin Hill
Ketton Lodge
River Skerne
Skerningham Plantation
Oxnott House
Whessoe Holme
Burtree House
Beaumont Hill
Burtree Lane
Whessoe
Skerningham Manor
0 250 500 m
Contains Ordnance Survey data © Crown copyright and database right 2021
Key:
Application site
2km search area
Sites of Special Scientific Interest (SSSIs)
Local Wildlife Site (LWS)
Land off DUrham Road, Coatham Mundeville
Drawing 1: Statutory & non-statutory sites
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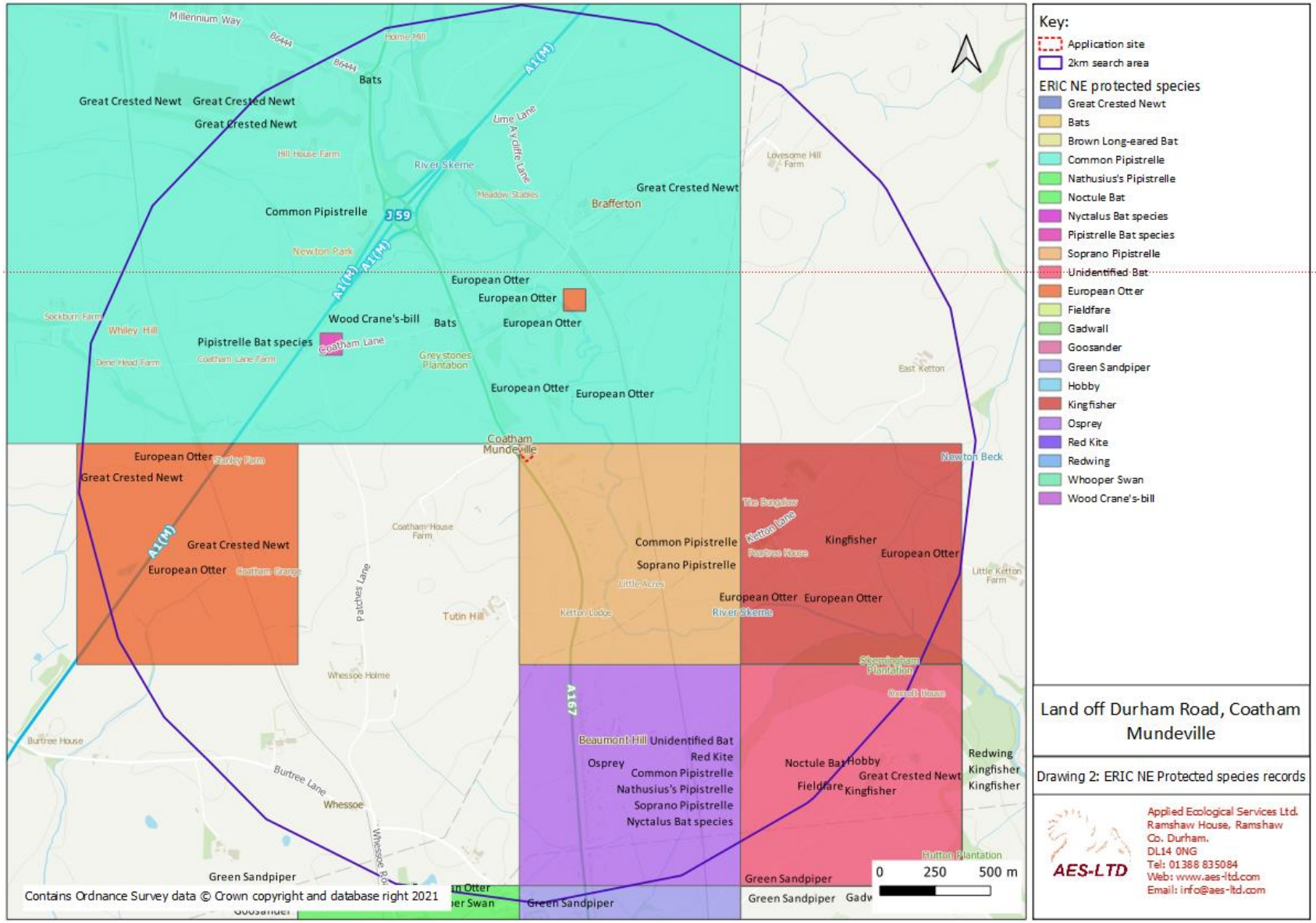
Key:
Application site
2km search area
ERIC NE protected species
Great Crested Newt
Bats
Brown Long-eared Bat
Common Pipistrelle
Nathusius's Pipistrelle
Noctule Bat
Nyctalus Bat species
Pipistrelle Bat species
Soprano Pipistrelle
Unidentified Bat
European Otter
Fieldfare
Gadwall
Goosander
Green Sandpiper
Hobby
Kingfisher
Osprey
Red Kite
Redwing
Whooper Swan
Wood Crane's-bill
Land off Durham Road, Coatham Mundeville
Drawing 2: ERIC NE Protected species records
Applied Ecological Services Ltd.
Ramshaw House, Ramshaw
Co. Durham.
DL14 0NG
Tel: 01388 835084
Web: www.aes-ltd.com
Email: info@aes-ltd.com
AES-LTD
0 250 500 m
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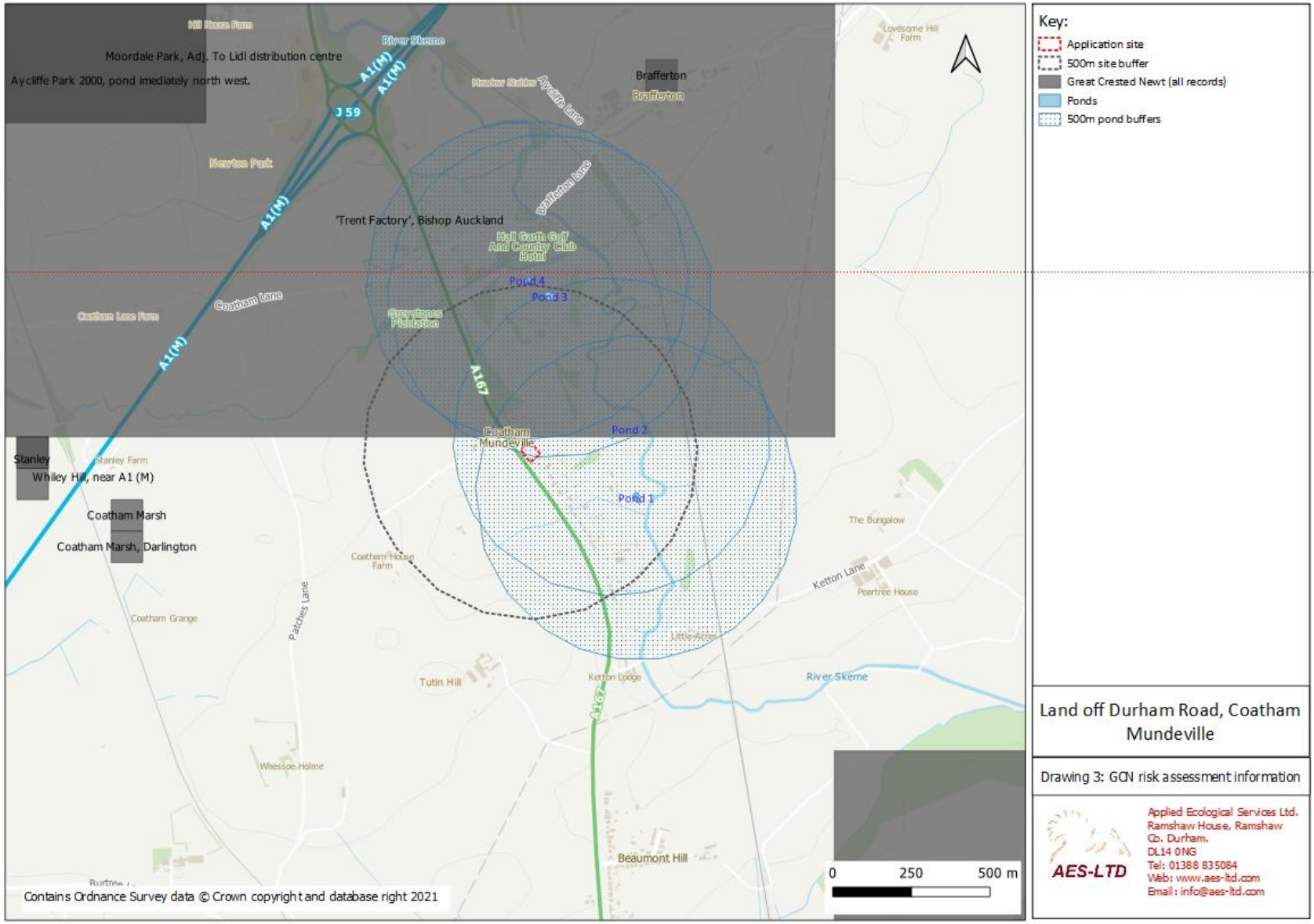
Millennium Way
B6444
Holme Hill
Bats
Great Crested Newt
Great Crested Newt
Great Crested Newt
A1(M)
Lime Lane
Aycliffe Lane
Hill House Farm
River Skerne
Meadow Stables
Great Crested Newt
Brafferton
Common Pipistrelle
J59
Newton Park
A1(M)
A1(M)
European Otter
European Otter
Wood Crane's-bill
Bats
European Otter
Sockburn Farm
Whiley Hill
Pipistrelle Bat species
Coatham Lane
Dene Head Farm
Coatham Lane Farm
Grey stones Plantation
European Otter
European Otter
Coatham Mundeville
European Otter
Great Crested Newt
A1(M)
Great Crested Newt
European Otter
Coatham Grange
Coatham House Farm
Patches Lane
Tutin Hill
Whessoe Holme
Common Pipistrelle
Soprano Pipistrelle
Kingfisher
European Otter
European Otter
European Otter
River Skerne
Newton Beck
The Bungalow
Ketton Lane
Little Ketton Farm
A167
Beaumont Hill
Unidentified Bat
Red Kite
Osprey
Common Pipistrelle
Nathusius's Pipistrelle
Soprano Pipistrelle
Nyctalus Bat species
Noctule Bat
Hobby
Great Crested Newt
Fieldfare
Kingfisher
Redwing
Kingfisher
Kingfisher
Burtree House
Burtree Lane
Whessoe
Green Sandpiper
Green Sandpiper
Green Sandpiper
Green Sandpiper
Hutton Plantation


Key:
Application site
500m site buffer
Great Crested Newt (all records)
Ponds
500m pond buffers
Land off Durham Road, Coatham Mundeville
Drawing 3: GCN risk assessment information
Applied Ecological Services Ltd.
Ramshaw House, Ramshaw
Co. Durham.
DL14 0NG
Tel: 01388 835084
Web: www.aes-ltd.com
Email: info@aes-ltd.com
AES-LTD
Moordale Park, Adj. To Lidl distribution centre
Aycliffe Park 2000, pond imediately north west.
Brafferton
'Trent Factory', Bishop Auckland
Pond 4
Pond 3
Pond 2
Pond 1
Coatham Mundeville
Stanley
Whitey Hill, near A1 (M)
Coatham Marsh
Coatham Marsh, Darlington
Tutin Hill
Beaumont Hill
River Skerne
A1(M)
A167
J59
Coatham Lane
Ketton Lane
Patches Lane
0
250
500 m
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APPENDIX 1 PHOTOGRAPHS

Photograph 1: Pond 1.

Photograph 2: Pond 2.

Photograph 3: Pond 3

Photograph 4: The site looking from north to south across the garden.

Photograph 5: The site, looking south west along the south western boundary with hardcore track.

Photograph 6: The site, looking south east along the north eastern site boundary (hawthorn and Leyland cypress hedgerow).

APPENDIX 2 HABITAT SUITABILITY INDEX (HIS)

Habitat suitability for the ponds was assessed as follows HSI = (SI1 x SI2 x SI3 x SI4 x SI5 x SI6 x SI7 x SI8 x SI9 x SI10)1/10. The results of the calculations are presented in **Table 1**.

Table 1: HSI calculations

	Pond Name:	**Pond 1**	**Pond2**	**Pond 3**
	Grid Ref:	NZ 29369 19807	NZ 29290 20002	NZ 29095 20448
SI No	**SI Description**	***SI Value***	***SI Value***	***SI Value***
1	Geographic location	1.00	1.00	1.00
2	Pond area	1.00	0.20	1.00
3	Pond permanence	0.10	0.10	0.10
4	Water quality	0.33	0.33	0.33
5	Shade	1.00	1.00	1.00
6	Water fowl effect	1.00	1.00	1.00
7	Fish presence	1.00	1.00	0.67
8	Pond Density	0.33	0.33	0.33
9	Terrestrial habitat	0.33	0.33	0.33
10	Macropyhyte cover	0.80	0.30	0.80
HSI Score		**0.56**	**0.43**	**0.54**
Pond suitability (see below)		Below average	Poor	Below average

The suitability of the ponds for great crested newts is categorised in **Table 2** as follows:

Table 2: Pond suitability

HSI	Pond suitability
<0.5	Poor
0.5 – 0.59	Below average
0.6 – 0.69	Average
0.7 – 0.79	Good
>0.8	Excellent

Ponds 1 and 3 are categorised as below average, within ponds categorised as below average, the proportion of ponds with great crested newt present is up to 0.20 (20%). Pond 2 is categorised as poor. It is anticipated that a proportion of 0.003 (3%) of ponds categorised as poor would support a population of GCN.

APPENDIX 3: LEGISLATION & POLICY

LEGISLATION

Environment Act 2021

The Environment Bill (2021) passed into law on 9th November 2021. The Environment Bill aims to establish a new framework for environmental governance and to meet the ambitions of the Government's 25-year environment plan. Environmental governance is currently provided by the European Union (EU). Without the Bill, there would be a gap in governance when the UK leaves the EU.

The aim of the 25 Year Environment Plan is to set out a comprehensive and long-term approach to protecting and enhancing our natural landscapes and habitats in England for the next generation. The Environment Bill is to make provision for:

1. targets, plans and policies for improving the natural environment;
2. statements and reports about environmental protection;
3. the Office for Environmental Protection;
4. waste and resource efficiency;
5. air quality;
6. the recall of products that fail to meet environmental standards;
7. water;
8. nature and biodiversity;
9. conservation covenants;
10. regulation of chemicals; and
11. connected purposes.

Targets, plans and policies for improving the natural environment

Targets will be set to combat the environmental and climate crises and provide a vehicle for delivering the 25-year Environment Plan. They will aim to help stimulate investments in green technology and innovative practices by providing long term certainty for business. At least one target will be set in four priority areas: air quality, biodiversity, water and resource efficiency and waste reduction. The Government will decide the targets and they will come into force once approved by Parliament by 31 October 2022. An example of a target is reaching the Net Zero climate target by 2050.

Targets set out in the Environmental Improvement Plan (EIP) to be reviewed every five years and each target must be achieved in a minimum of 15 years with the government reporting annually towards meeting the targets in the EIP.

Statements and reports about environmental protection

The Bill will include a UK Environmental Protections policy which will allow for greater transparency and strengthened scrutiny for Parliament regarding future environmental legislation.

Ministers will be required to make a statement to Parliament setting out the impact of new primary environmental legislation on existing levels of environmental protection. These statements will be published and open to scrutiny by Parliament, environmental stakeholders and the broader public.

The Office for Environmental Protection

The Environment Bill is to establish the Office for Environmental Protection (OEP) (an environmental watchdog), a new independent regulator that will hold the government to account, including through the courts if necessary. Anyone who believes that a public body is not adhering to environmental protection regulations can approach the OEP, confident in the knowledge that it will independently investigate, offer advice and take enforcement action when necessary.

The OEP will work closely alongside the Committee on Climate Change on these issues, ensuring that their individual roles complement and reinforce each other.

Waste and resource efficiency

A strategy will be set out on how to preserve material resources by minimising waste, promoting resource efficiency and moving towards a circular economy.

At the same time, there's a need to minimise the damage caused to our natural environment by reducing and managing waste safely and carefully, and by tackling waste crime.

- The Environment Bill will allow authorities to deliver consistent and frequent recycling collections across England, ending the current postcode lottery.
- The Bill will ensure councils operate weekly separate food waste collections, preventing food waste from going to landfill or being incinerated
- It will allow the government to introduce clearer labelling on certain products so consumers can easily identify whether products are recyclable or not.

- It will allow the government to expand the use of charges on single-use plastics, following the successful introduction of the carrier bag charge and will introduce a deposit return scheme on drinks containers, subject to consultation.
- Powers in the Environment Bill to introduce new extended producer responsibility schemes will allow us to make producers responsible for the full net costs of managing their products when they are ready to be thrown away.

Air quality

Air pollution is the single most significant environmental public health concern. The air quality part of the Bill:

- introduces a duty to set a legally-binding target for fine particulate matter, the pollutant of most concern for human health, in addition to at least one further long-term air quality target. These will deliver significant public health benefits
- establishes a clear framework for local action and collaboration on air pollution
- creates a simpler mechanism for local authorities to tackle smoke emissions – a source of fine particulate matter
- provides the government with new powers to enforce environmental standards for vehicles

Objectives for targets under consideration:

- reducing the annual mean level of fine particulate matter (PM2.5) in ambient air (as required by the Environment Bill)
- in the long-term, reducing population exposure to PM2.5.

The recall of products that fail to meet environmental standards

One area this will impact is on the environment recall of motor vehicles. The measure would enable the Government to compel manufacturers of vehicles and Non-Road Mobile Machinery (NRMM) to recall their products for reasons of environmental failure or non-conformity.

The Government will also be able to require the manufacturer to achieve a minimum recall level to ensure that the manufacturer fully complies with the recall requirement and that high completion rates are achieved.

Water

The Environment Bill will ensure that we have clean and plentiful water resources, which are better managed in our changing climate. It will help us ensure water is taken from the environment in a sustainable way, to prevent environmental damage and protect our precious rivers and streams.

- This Environment Bill will mean more collaboration between water companies to deliver the infrastructure needed to ensure clean and plentiful water now and for the decades to come.
- It will ensure that water users whose licence to remove water is amended or revoked to prevent environmental damage are no longer compensated.
- It will allow monitoring and tackling of the most harmful substances in our water to keep pace with the latest scientific and technical knowledge.
- It will allow for the creation of new, or expansion of existing, internal drainage boards, local organisations to manage water levels, where this is needed and supported locally.

Nature and biodiversity

A major part of the Bill with big implications for developers covers biodiversity net gain and local nature recovery strategies (LNRSs).

This policy mandates biodiversity net gain through the use of a specified biodiversity metric to development in the scope of the Town and Country Planning Act 1990.

Mandatory Biodiversity Net Gain – key points:

- England only
- Amends the Town and Countryside Planning Act
- Be a minimum 10% biodiversity net gain requirement on new development (which is believed will be become mandatory in spring 2023, this allows for a two year transition period).
- Based on Biodiversity Metric 2.0/3.0
- Delivered, on-site, locally off-site or via biodiversity credits
- BNG register for off-site land
- Does not change existing legal protections
- Nationally Significant Infrastructure Projects (NSIP) or Marine are out of the scope of the mandatory requirements in the Bill.

It's estimated there will be a direct cost of £199.0m per year (2017 prices) for developers to deliver on and off-site habitat creation. In addition, familiarisation costs to developers are estimated to be £6.3m in the first year only. Benefits of avoided habitat loss are estimated to be £11.4bn over 10 years.

Local Nature Recovery Strategies are a new system of spatial strategies for nature, covering the whole of England.

Each strategy will, for the area that it covers:

- map the most valuable existing habitat for nature
- map specific proposals for creating or improving habitat for nature and wider environment goals
- agree priorities for nature's recovery

LNRSs will guide smooth and effective delivery of biodiversity net gain and other nature recovery measures by helping developers and planning authorities avoid the most valuable existing habitat and focus habitat creation or improvement where it will achieve the most.

The introduction of a new Species Conservation Strategy to safeguard the future of particular species at greatest risk. This builds on the process developed for the District Level Licences (DLL) an approach taken for great crested newts.

Section 40 of the Natural Environment and Rural Communities Act 2006 (NERC) will amend or replace the duty on public bodies to have regard to the purpose of conserving biodiversity. This now strengthens the NERC Act for public authorities 'to further' the conservation and enhancement of biodiversity.' This policy also has an expectation on public authorities to look strategically at their policies and operations from time to time (at least every 5 years).

Under the Bill, there is a duty for local authorities to consult with local communities before felling street trees unless the tree qualifies for certain exemptions. This will give communities an opportunity to understand why a tree is being felled in their local area and, if they wish, to raise concerns to the local highway authority regarding the felling of trees. This will increase transparency around decisions over these green assets.

<u>Conservation covenants</u>

This measure plans to help leave the environment in a better condition for future generation through the use of conservation covenants, as recommended by the Law Commission.

Defra defines a conservation covenant as a 'private voluntary agreement between a landowner and a "responsible" body, such as a conservation charity, government body or local authority. It delivers lasting conservation benefit for the public good. A covenant sets out obligations in respect of the land which will be legally binding not only on the landowner but on subsequent owners of the land.

Regulation of chemicals

The Environment Bill gives the Secretary of State the power to amend two pieces of legislation regulating the use of chemicals in the UK – REACH and REACH enforcement regulations. This will allow the Secretary of State to take further steps where necessary to ensure a smooth transition to a UK chemicals regime following the UK's exit from the EU. It will also make it possible to keep the legislation up to date and respond to emerging needs or ambitions for the effective management of chemicals.

Habitat Regulations

The Conservation of Habitats and Species Regulations 2017 has been amended by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. The 2017 Regulations are one of the pieces of domestic law that transposed the land and marine aspects of the Habitats Directive (Council Directive 92/43/EEC) and certain elements of the Wild Birds Directive (Directive 2009/147/EC (known as the Nature Directives) in England and Wales.

The main changes to the 2017 Regulations are:

- the creation of a national site network within the UK territory comprising the protected sites already designated under the Nature Directives, and any further sites designated under these Regulations
- the establishment of management objectives for the national site network (the 'network objectives');
- a duty for appropriate authorities to manage and where necessary adapt the national site network as a whole to achieve the network objectives;
- an amended process for the designation of Special Areas of Conservation (SACs);
- arrangements for reporting on the implementation of the Regulations, given that the UK no longer provides reports to the European Commission;
- arrangements replacing the European Commission's functions with regard to the imperative reasons of overriding public interest (IROPI) test where a plan or project affects a priority habitat or species;

- arrangements for amending the schedules to the Regulations and the annexes to the Nature Directives that apply to the UK.

The 2017 Regulations (Regulation 9(1)), as amended by the 2019 Regulations, require the Secretary of State and Welsh Ministers to secure compliance with the requirements of the Nature Directives. Any new powers in the 2019 Regulations must be exercised in line with the Directives and retained EU case law up to 1 January 2021.

SACs and Special Protection Areas (SPAs) in the UK no longer form part of the EU's Natura 2000 ecological network. The 2019 Regulations have created a national site network on land and at sea, including both the inshore and offshore marine areas in the UK. The national site network includes:

- existing SACs and SPAs
- new SACs and SPAs designated under these Regulations

Any references to Natura 2000 in the 2017 Regulations and in guidance now refers to the new national site network.

Designated Wetlands of International Importance (known as Ramsar sites) do not form part of the national site network. Many Ramsar sites overlap with SACs and SPAs, and may be designated for the same or different species and habitats. All Ramsar sites remain protected in the same way as SACs and SPAs.

It is an offence to deliberately capture, kill or disturb[5] wild animals listed under Schedule 2) of the Regulations (such as all bat species and great crested newts). It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time). The prohibited methods of capturing and killing wild animals, which are listed in the main body of the Regulations, are transferred into new schedules to allow for future amendments. Any proposed changes will be subject to public consultation and will be made using statutory instruments.

Changes to Annex IV of the Habitats Directive and Schedules 2 (list of European Protected Species of animal) or 5 (list of European Protected Species of plant) of the Regulations will require an affirmative

[5] Disturbance, as defined by the Conservation of Habitats and Species Regulations 2010, includes in particular any action which impairs the ability of animals to survive, breed, rear their young, hibernate or migrate (where relevant); or which affects significantly the local distribution or abundance of the species.

statutory instrument and be debated by Parliament or Senedd Cymru. This will ensure appropriate scrutiny of the changes and replicates procedures formerly undertaken by the European Commission.

As statutory nature conservation bodies, Natural England, NRW and JNCC will provide technical or scientific advice to the Secretary of State and Welsh Ministers on any proposed amendments.

Wildlife & Countryside Act

The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act (CRoW) 2000 and the Natural Environment and Rural Communities Act (NERC) 2006, consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention), making it an offence to:

- Intentionally kill, injure or take any wild animal listed under Schedule 5 to the Act; intentionally or recklessly damage, destroy or obstruct any place used for shelter or protection by any wild animal listed under Schedule 5 to the Act; intentionally or recklessly disturb certain Schedule 5 animal species while they occupy a place used for shelter or protection; and
- Pick or uproot any wild plant listed under Schedule 8 of the Act. Sites of Special Scientific Interest (SSSI) are designated under this Act.

The Bern Convention

The Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention) was adopted in Bern, Switzerland in 1979, and came into force in 1982. It is a binding international legal instrument for nature conservation that covers the natural heritage of the European continent and some African states.

The principal aims of the Convention are to ensure conservation and protection of wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase co-operation between contracting parties, and to regulate the exploitation of migratory species listed in Appendix III. To this end the Convention imposes legal obligations on contracting parties, protecting over 500 wild plant species and more than 1,000 wild animal species.

The UK Government ratified the Bern Convention in 1982. The obligations of the Convention are transposed into UK law by means of the Wildlife and Countryside Act (1981 as amended), Nature

Conservation (Scotland) Act 2004 (as amended), Wildlife (Northern Ireland) Order 1985, and the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985.

The Wildlife and Countryside Act 1981 is also amended post Brexit to ensure that species of wild birds found in or regularly visiting either the UK or the European territory of a Member State will continue to be protected.

POLICY

National Planning Policy Framework

The Government revised the National Planning Policy Framework (NPPF) in July 2021. This revised document replaces the previous National Planning Policy Framework published in March 2012 and revised in July 2018 and 19th February 2019. This sets out new guidance for local authorities, focusing on helping to produce planning policies that are clear and easier to understand. The NPPF is effective immediately; however, the local plans are still valid, for the time being, even if they have been produced prior to the revised NPPF. There is emphasis on the need for economic growth through designing planning policies which are in favour of development but this will not be achieved in isolation from social and environmental development.

Section 11 sets out policies to promote an effective use of land in meeting the needs for homes and other uses, whilst safeguarding and improving the environment and ensuring safe and healthy living conditions. Section 11 states that strategic policies should be clearly set out that makes as much use as possible of previously-developed or brownfield land. Section 13 requires the protection of green belt land, the fundamental aim of which is to prevent urban sprawl by keeping land permanently open. Section 15 (para 174-182) are most pertinent and set out the requirements for conserving and enhancing the natural environment. The NPPF asks that valued landscapes are protected and enhanced. Sites of biodiversity or geological value and soils are protected commensurate with their statutory status or identified quality in the local development plan. The document also requires the recognition of the intrinsic character and beauty of the countryside, maintaining the character of the undeveloped coast whilst improving public access to it where appropriate and most importantly minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures. It also asks that new and existing development is prevented from contributing to, or being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air water or noise pollution or land instability. It is demanded that 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. Finally, it requires that where appropriate remediating and mitigation of despoiled, degraded, derelict, contaminated and unstable land is carried out.

The Framework is guidance for local planning authorities on the content of their Local Plans but is also a material consideration in determining planning applications. The NPPF and revised NPPF has replaced much existing planning policy guidance, including Planning Policy Statement 9: Biological and Geological Conservation. However, the government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System, which accompanied PPS9 remains valid.

Biodiversity Action Plans / Biodiversity 2020

The UK Biodiversity Action Plan (UKBAP) (Anon, 1995) was organised to fulfil the Rio Convention on Biological Diversity in 1992, to which the UK is a signatory. A list of national priority species and habitats has been produced with all listed species/habitats having specific action plans defining the measures required to ensure their conservation. Regional and local BAPs have also been organised to develop plans for species/habitats of nature conservation importance at regional and local levels.

The 'UK Post-2010 Biodiversity Framework', published in July 2012, succeeds the UK BAP and 'Conserving Biodiversity – the UK Approach', and is the result of a change in strategic thinking following the publication of the CBD's 'Strategic Plan for Biodiversity 2011–2020' and its 20 'Aichi Biodiversity Targets', at Nagoya, Japan in October 2010, and the launch of the new EU Biodiversity Strategy (EUBS) in May 2011. The Framework demonstrates how the work of the four countries and the UK contributes to achieving the Aichi Biodiversity Targets, and identifies the activities required to complement the country biodiversity strategies in achieving the targets. The UKBAP is no longer an active strategy, and has been replaced by biodiversity strategies in England, Northern Ireland, Scotland and Wales. While the UKBAP is no longer an active policy, species listed on the UKBAP have been incorporated into the new biodiversity strategies for each country. In England under Biodiversity 2020: A strategy for England's wildlife and ecosystem services and undersection 41 of The Natural Environment and Rural Communities (NERC) Act 2006, where UKBAP species were recognised as of principal importance for the conservation of biodiversity. Section 40 of the NERC Act 2006 requires all public bodies to have regard for biodiversity conservation when carrying out their function. This is commonly referred to as the 'biodiversity duty'.

Local Development Plans

County, District and Local Councils have Structure Plans and other policy documents that include targets and policies which aim to maintain and enhance biodiversity. These are used by Planning Authorities to inform planning decisions.

Natural Environment and Rural Communities (NERC) Act (2006)

Public authorities have a duty to conserve biodiversity under the Natural Environment and Rural Communities (NERC) Act, which came into force in 2006. This states that 'any public body or statutory undertaker in England and Wales must have regard to the purpose of conservation of biological diversity in the exercise of their function and that decisions of public bodies work with the grain of nature and not against it' (Part 3, Paragraph 60). The Act also includes a range of measures to strengthen the protection of wildlife and habitats.

WILDLIFE LEGISLATION

In addition to the above, a range of legislation is in place to ensure that habitats and species of conservation importance are protected from harm, either directly or indirectly. A summary of this legislation is given in **Table 3**.

Table 3: Overview of Key Legislation

Legislation	Relevance
The Environment Act (2021)	A Bill to make provision about targets, plans and policies for improving the natural environment; for statements and reports about environmental protection; for the Office for Environmental Protection; about waste and resource efficiency; about air quality; for the recall of products that fail to meet environmental standards; about water; about nature and biodiversity; for conservation covenants; about the regulation of chemicals; and for connected purposes. **A major part of the Bill with big implications for developers covers biodiversity net gain and local nature recovery strategies (LNRSs).** **This policy mandates biodiversity net gain through the use of a specified biodiversity metric to development in the scope of the Town and Country Planning Act 1990.**
The Conservation of Habitats and Species Regulations 2017 (as amended)	This transposes the EC Habitats Directive 1992 (*Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna)* and the EC Birds Directive 1979 (*Council Directive 79/409/EEC on the protection of wild birds*) into UK law. Annexes I and II of the Habitats Directive list (respectively) habitats and species for which member states are required to establish and monitor SACs. The EC Birds Directive provides a similar network of sites (SPAs) for all rare or vulnerable species listed in Annex I and all regularly occurring migratory species, with particular focus on wetlands of international

	importance. Together with SACs, SPAs form a network of pan-European protected areas known as 'Natura 2000' sites. The Habitats Regulations also make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4.
The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979)	The Bern Convention comtinues to ensure conservation and protection of all wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to afford special protection to the most vulnerable or threatened species (including migratory species).
The Wildlife and Countryside Act (WCA) 1981 (as amended)	The WCA is the primary UK mechanism for statutory site designation (Sites of Special Scientific Interest, SSSIs) and the protection of individual species listed under Schedules 1, 2, 5 and 8 of the Act, each subject to varying levels of protection
The Countryside and Rights of Way Act 2000	This legislation strengthens the provision of the 1981 WCA (as amended), both in respect of statutory sites such as SSSIs and protected species. It also places a statutory obligation on Local Authorities and other public bodies to further conservation of biodiversity in the exercise of their functions, thus providing a statutory basis to the Biodiversity Action Plan (BAP) process, which began in 1994. Section 74 of the Act lists the habitat types and species of principal importance in England.
Hedgerow Regulations 1997	The Hedgerow Regulations 1997 are intended to protect important countryside hedges from destruction or damage in England and Wales.
Natural Environment and Rural Communities Act 2006	The 'NERC' Act makes provision in respect of biodiversity, pesticides harmful to wildlife, protection of birds and invasive non-native species. Section 40 of the act also introduced a new duty on public bodies to have regard to the purpose of conserving biodiversity in the exercise of their functions.

Due to its location the site may have the potential to support or provide habitat for a number of those species protected by the various pieces of legislation summarised in **Table 3**. A summary of the key legislation for protected species is given in **Table 4**.

Table 3: Key Legislation for protected species

Species	Key legal protection
Bats (all species)	All European species of bat are listed on Annex IV of the EC Habitats Directive as being in need of "strict protection". This is implemented in Britain under The Conservation of Habitats and Species Regulations 2017 (as amended). All British bats are included on Schedule 5 of the WCA (1981) and the whole of Section 9 of The Act applies to European bat species. In summary, the above legislation collectively prohibits the following: • Deliberately or recklessly capturing, injuring, taking or killing of a bat*;* • Deliberately or recklessly harassing a bat; • Intentionally or recklessly disturbing of a bat in its place of rest (roost), or which is used for protection or rearing young; • Deliberately or recklessly damaging, destroying or obstructing access to any resting place or breeding area used by bats; • Deliberately or recklessly disturbing a bat in any way which is likely to significantly affect the local populations of the species, either through affecting their

Species	Key legal protection
	distribution or abundance, or affect any individuals ability to survive, reproduce or rear young; • Possession or advertisement/sale/exchange of a bat (dead or alive) or any part of a bat. In England, licences are issued by Natural England for any actions that may compromise the protection of a European protected species, including bats, under the Habitats Regulations 2017 (as amended). This includes all developments, regardless of whether or not they require planning permission. Bats are also protected by the Wild Mammals (Protection) Act 1996 and selected species are listed on the UK Biodiversity Action Plan (BAP) and Local Biodiversity Action Plans (LBAP).
Great crested newt	Great crested newts are protected under European and British law, having the same level of protection as bats (see above). Licenses are issued by Natural England for any actions that may compromise the protection of this species, under the Habitat Regulations 2017 (as amended). This includes all developments, regardless of whether or not they require planning permission. The species is also listed on the UK and Local BAPs.
Otter	Otter are protected under European and British law and receive the same level of protection as bats (see above.) The species is listed under Annex II and IV of the Habitats Directive, which is implemented in Britain under The Conservation of Habitats and Species Regulations 2017 (as amended). Otter are also protected under Schedules 5 and 6 of the WCA 1981, The Wild Mammals (Protection) Act 1996 and are listed as a priority species in Appendix II of the Bern Convention. The species is also listed on the UK and Local BAPs.
Water Vole	Water vole is protected under Schedule 5 of the WCA 1981 (as amended). This makes it an offence to: • Intentionally kill, injure of take water voles; • Possess or control the species; • Damage or destroy any place used by water vole for shelter or protection; • Disturb water vole while they occupy such places of shelter; • Sell, possess or transport water vole for the purpose of sale; and • Advertise the buying or selling of water vole. The species is also protected under the Wild Mammals (Protection) Act 1996 and listed on the UK and Local BAPs.
Birds	The majority of bird species, with the exception of some species listed on Schedule 2, are protected under the WCA 1981 (as amended). This makes it an offence to intentionally or recklessly: • Kill, injure or take any wild bird; • Take, damage or destroy any nest which is in use or being built; and • Take, damage or destroy the eggs of any such bird. Additional protection against disturbance whilst at the nest is also afforded to any bird species, whether an adult bird or their dependant young, which is listed on Schedule 1 of the Act. Council Directive 2009/147/EC on the conservation of wild birds (the 'Birds Directive') provides for the conservation and management of all wild bird species naturally occurring in the European Union, their nests, eggs and habitats. The Birds Directive bans activities that directly threaten birds (e.g. deliberate killing and destruction of nests and young), regulates hunting of selected species, bans non-selective and large scale killing of birds, and promotes research for bird conservation and management. Article 4(4) of the Birds Directive requires that member states "should strive to avoid pollution or deterioration of habitats." The Conservation of Habitats and Species

Species	Key legal protection
	(Amendment) Regulations 2012 provide a fuller transposition of the Birds Directive into English law. Regulation 8 introduces a new Regulation 9A to the Habitats Regulations for duties of appropriate authorities in relation to wild bird habitat. Regulation 9A(3) addresses the transposition of Article 2 of the Birds Directive, while Regulation 9A(8), requiring competent authorities to "use all reasonable endeavours" to "avoid any pollution or deterioration of habitats of wild birds." Certain species are also listed as being of priority conservation importance on the UK and Local BAPs.
Badger	Badger are protected under the Protection of Badgers Act 1992, which makes it an offence to: • Knowingly kill, capture, injure or disturb any individual; • Intentionally damage or destroy a badger sett, or any part thereof; • Obstruct access to an area which is used for breeding, resting or shelter; and • Disturb a badger while it is using any place used for breeding, resting or shelter. The species is also protected by the Wild Mammals (Protection) Act 1996.
Reptiles	All common reptile species (common lizard, slow-worm, grass snake and adder) are partially protected under Sections 9(1) and 9(5) of Schedule of the Wildlife and Countryside Act 1981 (as amended). This legislation protects these animals from: • intentional killing and injury; • selling, offering for sale, possessing or transporting for the purpose of sale or publishing advertisements to buy or sell a protected species. The more threatened species of reptile, smooth snake and sand lizard are fully protected under Schedule 5 (Section 9) and under schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended), which designate them 'European protected species'. It is an offence to capture, possess, disturb, kill, injure, or trade in individuals of these species. In addition, it is an offence to damage or destroy the places they use for breeding or resting.
White-clawed crayfish	This species is listed under the European Union's (EU) Habitat and Species Directive 2017 (as amended) and is therefore a European Protected Species. It is also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is also classified as Endangered in the IUCN Red List of Endangered Species and included as a Priority Species under the Bern Convention. It is also a priority under the UK Biodiversity Action Plan (BAP) and Local BAPS. As a result of this and other relevant crayfish legislation such as the Prohibition of Keeping of Live Fish (Crayfish) Order 1996, a series of licences are needed for working with white-clawed and non-native crayfish.

INVASIVE SPECIES

Invasive species are plant and animal species which are prohibited from release into the wild.

Section 14(1) relates to the introduction of new animal species (currently 61 listed), where any person who releases or lets escape from captivity of any animal to a place outwith its native range is guilty of an offence.

There is an extensive list of plants (currently 63) which are set out in section 14(2) of the WCA 1981 (as amended) which states that '*if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence*.'

The most widespread of these are Japanese knotweed *Fallopia japonica* and giant hogweed *Heracleum mantegazzianum* which are also is covered by several pieces of legislation. The Environmental Protection Act 1990 (as amended) is a broad ranging piece of legislation that singles out Japanese knotweed and giant hogweed for special mention. The Act places a 'Duty of Care' on the producer and anyone they employ to dispose of soil or other material contaminated with Japanese knotweed or giant hogweed, such material becomes a controlled waste, which can only be taken to licensed landfill and must be dealt with in an appropriate way.

Natural England Impact Risk Zones

The Impact Risk Zones (IRZs) developed by Natural England allow a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on European/Ramsar sites. Local planning authorities (LPAs) have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI. The SSSI IRZs can be used by LPAs to consider whether a proposed development is likely to affect a SSSI and determine whether they will need to consult Natural England to seek advice on the nature of any potential SSSI impacts and how they might be avoided or mitigated.