Preliminary Ecological Appraisal

Land North of Station Road, Drigg

1st April 2022

Report 0422/1

Report commissioned by;

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EXECUTIVE SUMMARY

A Habitat survey was carried out on and around the land parcel to the north of Station Road, Drigg. It is proposed that up to nine houses are built on this land, with associated access and infrastructure features.

The purpose of the survey was to identify protected and/or notable habitats and species which may be impacted by the proposed scheme, to determine the likelihood of these impacts and suggest whether further surveys are required to quantify these impacts or to propose mitigation to compensate for these impacts.

A desktop search for records and information, a field survey, and a protected species data search were undertaken to establish species and habitats present on and in the near vicinity of the land parcel.

A total of 5 broad habitat types were recorded along in the survey area, and these were mapped and described in their local context. Of notable consideration for this project was hedgerow habitat, as the hedgerows on site had reasonable diversity, features of interest and are of value in the local landscape.

There are numerous protected sites in the area, and the land parcel falls into the impact zone for several of these. Impacts on nearby protected sites are unlikely, but Natural England should be consulted as the development is on farmland extending outside an existing settlement.

Numerous records of notable and protected species were collected. Most notable of these within the context of this project were local records of badgers, and observations of singing birds during the fieldwork visit. The land is not suitable for nesting waders, and there are no nearby breeding ponds suitable for great crested newt or natterjack toad.

The features of ecological interest or concern which could be affected by the proposed works are:-

- **Hedgerows with good species richness.**
- **Nesting birds**
- **Terrestrial mammals (foraging)**
- **Nearby notable sites**

No further ecological surveys are required for these proposals.

Avoidance measures were outlined to ensure no impacts on breeding birds – as these are very likely to be present within hedgerows on the property, and are protected under UK law whilst nesting. Generic avoidance measures to protect foraging mammals (such as badger and hedgehog) have also been included.

It is recommended that the boundary hedgerows are retained, and where possible enhanced to minimise impacts of these proposals on the local ecology. Enhancements include planting up the gaps, allowing growth of 2 standard trees on each boundary and reducing the frequency of cutting to every 3-4 years.

Enhancement suggestions have been included to encourage a net gain to wildlife following completion of this project. These include installation of bat and bird boxes on at least 3 of the new build properties, and provision of access for hedgehogs through all the garden boundaries of the new houses (except the roadside boundary).

Contents

1. INTRODUCTION

1.1 The aim of the survey

The aim of the survey was to identify any habitat or protected species issues or potential ecological constraints or concerns that would result from the construction of nine residential properties on land north of Station Rd, Drigg.

The survey was carried out following technical guidelines provided by CIEEM (Chartered Institute of Ecology and Environmental Management) and mapped following UK Habitat Classification guidance (see Appendices for full references).

1.2 Proposed works

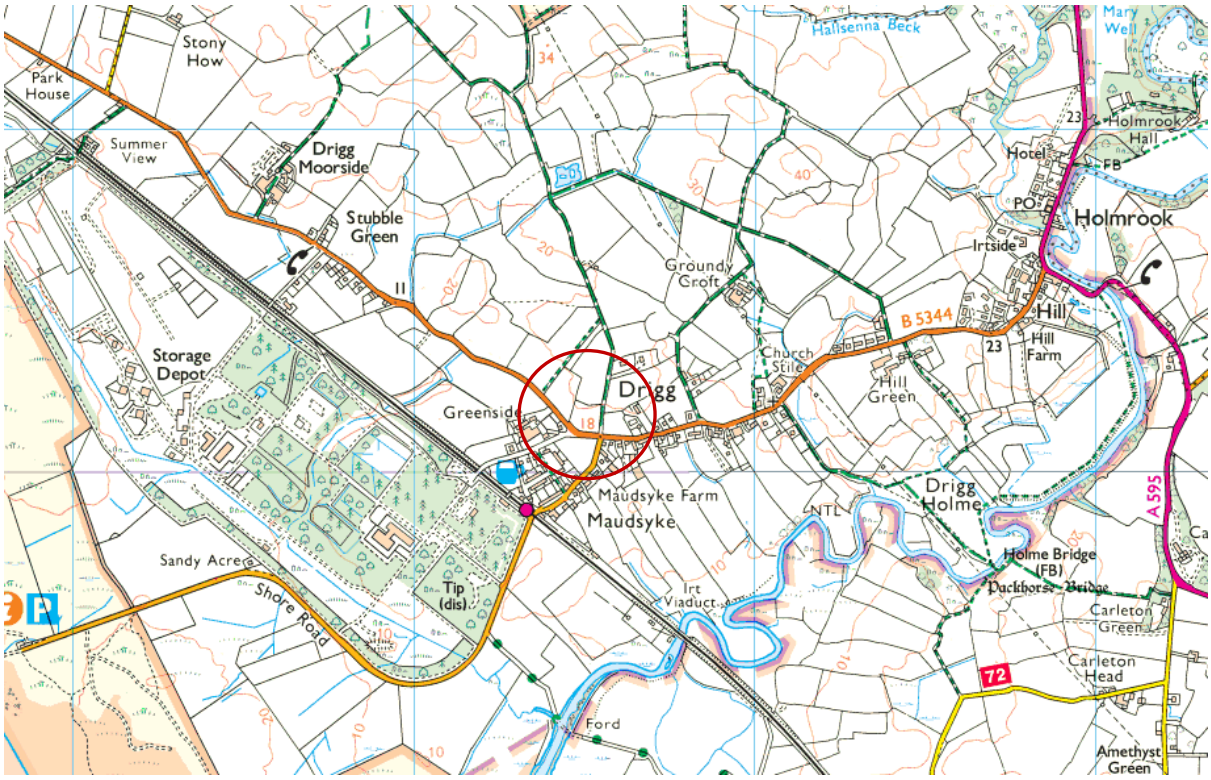
The proposed works involve construction of up to nine residential properties with associated access, infrastructure and services.

No timescale has been confirmed yet.

1.3 The survey area/ zone of influence

The habitat survey was carried out on the proposed works area (site central grid reference SD065 991) and, where possible, on all open land and field parcels defined in the buffer zone (approximately 250m from the proposed development). A zone extending to 500m from the development footprint was surveyed from public rights of way and access land to establish whether any ponds likely to support great crested newts or natterjack toads were present.

Figure 1: Location of proposed development



OS Map copied under licence (No. 100055725)

2. SURVEY METHOD

2.1 Desktop study

Aerial photographs (Google Earth) and Ordnance Survey maps were used to assess the likely habitat types in and around the site, and to search for waterbodies that could host protected species such as great crested newts. Natural England and JNCC websites were used to obtain boundaries of any statutorily designated sites in the area.

Cumbria Biodiversity Data Centre was consulted and a data search requested for protected species within 2 km radius of the centre of the site.

2.2 Habitat survey

The habitat survey was carried out by Tamsin Douglas MCIEEM (South Lakes Ecology) on March 31st 2022.

The area was walked over, and habitats within the study area were described and mapped using standard UK Habitats Classification methodology (UKHab 2020). The Professional edition of the UKHab guidance was followed, and habitats classed to level 5 of the hierarchy were applicable. Secondary codes were used with regard to land management, origin and habitat mosaics only. The minimum mappable unit was 25m², with target notes used to describe smaller features.

2.3 Protected species survey

Evidence of and potential for protected species was assessed on the site on 31st March 2022. In particular, the potential for the following species/ animal groups was assessed:-

Birds

The site was assessed for its potential to support notable bird species, or important assemblages of wintering or passage birds. In particular the habitats on site were assessed for their potential and likelihood to support breeding birds, and any evidence/ sightings noted.

Reptiles

The site was assessed for its potential to support reptiles such as common lizard, slow-worm and adder, following guidance issued in the 'Herpetofauna Workers Manual'.

Amphibians

A search of the site was made to identify and assess any possible breeding ponds for amphibians, notably natterjack toad *Epidalea calamita* and great crested newt *Triturus cristatus*. Ponds within 500m of the proposed development were assessed for suitability to host great crested newt using methods detailed by Oldham *et al* (2000). An assessment was also made of the quality of the habitat for foraging and potential for hibernation sites. Survey was carried out following guidance published in the 'Herpetofauna Workers Manual'.

Bats

The site was assessed for its suitability for roosting, foraging and commuting bats. Trees, buildings and other structures were appraised for likelihood of hosting roosting and/or hibernating bats, and topographical features of interest to commuting bats were noted. Survey followed methods described in the Bat Workers Manual.

Terrestrial mammals

The potential of the site to support other protected terrestrial mammals, notably badger *Meles meles*, otter *Lutra lutra,* hedgehog *Erinaceus europaeus* and water vole *Arvicola*

amphibius was assessed. Evidence of activity such as badger setts/ otter holts, paths, latrines, droppings/ spraints and feeding signs were noted and appropriate guidance followed.

Other species

Presence of and potential for other protected and/ or notable species was recorded.

Potential of the site to support important invertebrate assemblages was assessed following the Invertebrate Habitat Potential (IHP) rapid assessment categories and interim guidance outlined by Dobson and Fairclough (2022, awaiting publication of full toolbox). Any invertebrate sightings were recorded.

2.4 Invasive species survey

The presence of any invasive species within the survey area was recorded and mapped.

2.5 Survey constraints

The weather (sunny, cold with light NE breeze) was suitable for signs or sightings of most diurnal wildlife that is active in colder months, including most mammals. Recent daytime temperatures had been mild for mid-March with a lot of amphibian activity reported locally. The temperature on the survey date was cold (3°C), so reptiles were unlikely to be active.

The time of year was not ideal for assessing botanical quality of mires and grasslands, as many plants have not yet started to grow, and species of interest are therefore harder to define.

The bird nesting season has just started for resident species. Few migrant species have returned to breeding habitat at this early stage of the season.

The likely presence of protected species described in 2.3 above was inferred from the potential of the habitat to support them, any incidental sightings or evidence, biological records from the data search and professional judgement of the ecologist carrying out the survey.

3. BASELINE ECOLOGICAL CONDITIONS

3.1 Desktop survey results

3.1.1 Protected and statutory sites search

There are numerous statutory sites designated for their conservation interest within 5km of the proposed development. The distance from the site and primary reasons for designation are detailed in the table below.

The land parcel is within the SSSI impact zone of several sites. The nature of the development (on farmland extending outside an existing settlement) means that Natural England should be consulted by the Planning Authority with regards to this application.

The site is outside the Lake District National Park (boundary is 0.7km to the south at its nearest point).

Table 1: Protected sites within 5km of proposed development

Protected area/ site	Description of interest	Distance from land parcel
Drigg Coast SSSI	Notable habitats, flora and herptile populations (especially natterjack toad and great crested newt)	0.7km
Drigg Coast SAC	Notable habitats (sand dunes, estuaries and other coastal habitats)	0.7km
Morecambe Bay & Duddon Estuary SPA	National and international notable bird assemblages (breeding and wintering)	0.7km
Drigg Holme SSSI	Botanical	0.8km
Halsenna Moor NNR	Botanical	1.1km
Halsenna Moor SSSI	Botanical	1.1km
Drigg Dunes and Gullery LNR	Biological (natterjack toad, black-headed gull)	2.5km

3.1.2 Notable habitats search

A search was carried out for notable habitats (those listed under section 41 of the NERC Act, requiring them to be considered in all Planning Applications) within 2km of the proposed development. Eleven such habitats were found, including coastal & floodplain grazing marsh 300m from the site, and lowland meadow and deciduous woodland between 500m and 1km from the site. No notable habitats were found closer than 300m to the proposed development.

Other habitats listed that are located between 1 and 2km from the site include; sand dunes, coastal salt marsh, intertidal mudflats, lowland heath, lowland fen, wood pasture, traditional orchards and ancient woodland.

3.1.3 Protected and notable species search

Online data searches for key bird species of conservation concern yielded records for curlew *Numenius arquata* redshank *Tringa totanus* and tree sparrow *Passer montanus* within 500m of the site.

Online data searches for European protected species licenses and great crested nest records found one record for a great crested newt license 500m to the west, and one for a natterjack toad license 1.5km to the west. There were several great crested newt license returns indicating presence of this species in a cluster to the west (around the LLW plant) and to the north (Halsenna Moor).

The data search from Cumbria Biodiversity Data Centre provided detailed records of protected, rare, scarce and alien species within 2km radius of the proposed development. A total of over 4500 records were returned, the vast majority of which were bird records.

A table of key species which are of notable consideration within the context of this project is shown in Table 2 below. Notable bird species have not been included in the table below, unless they are of specific interest to this project, or have further legislative protection, as all species of bird are protected whilst nesting.

Table 2: Species of conservation concern which have been recorded within 2km of the proposed site

Species	Priority species listed under s41 of NERC Act 2006?*?	Wildlife and Countryside Act 1981 (as amended) Sch 1,5 or 8.	Proximity to site	Number of records (most recent)
Palmate newt		Yes	0.8km	25 (1999)
Smooth newt		Yes	0.8km	15 (1999)
Great Crested Newt	Yes	Yes	0.8km	35 (1999)
Common toad	Yes	Yes	0.3km	40 (2011)
Common frog		Yes	0.3km	174 (2014)
Natterjack toad	Yes	Yes	1.2km	255 (2018)
Slow worm	Yes	Yes	0.2km	2 (1991)
Common lizard	Yes	Yes	0.4km	12 (2017)
Badger**			0.1km	16 (2016)
Bats (3 named species)	Yes	Yes	0.4km	6 (2017)
Tree sparrow	Yes		Tetrad (2km square)	8 (2011)
Hedgehog	Yes		1.3km	3 (2006)
Red squirrel	Yes	Yes	0.2km	15 (2009)
Brown Hare	Yes		0.6km	4 (2016)
Wall butterfly	Yes		0.2km	50 (2019)

**Previously BAP (Biodiversity Action Plan) priority species*

***Protected under Protection of Badgers Act 1992*

The badger records were of signs and latrines in the local area. There are no records of setts.

Tree sparrow is red listed on the latest 'Birds of Conservation Concern' report (2021), meaning its' population is still in significant decline. Both curlew and redshank have been recorded in this tetrad, but the land parcel is not suitable breeding habitat for these species.

3.2 Habitat survey results

The habitats were mapped, following UKHab methodology (see methods section and references), as shown in Figure 2 in the appendices. Descriptions of the major habitats are given in section 3.2.2 below, and detailed target notes on habitats or species of interest included as appendices to this report.

Photographs of the area of the proposed works are provided at the end of the report.

3.2.1 Habitats recorded within survey area

- w1h5 Woodland – mixed coniferous and deciduous
- h2 Hedgerows
- g4 Improved pasture
- c1 Arable land
- u1 Built up areas and gardens

3.2.2 Habitat descriptions

<u>w1h5 – Woodland – mixed deciduous and coniferous</u>

Immediately to the east of the proposed development is a small area of private woodland, which could only be assessed from the roadside. There has been some recent coppicing of trees with regeneration seen. Species are varied, predominantly deciduous, but some conifers and some non-native species are present.

Lots of birdsong heard, and the area is likely to support small mammal species and foraging bats. Badger could also use the site, though no direct sign (such as paths) were found.

The woodland will not be directly affected by these proposals.

<u>h2 - Hedgerows</u>

Hedgerows (boundary line of shrubs over 20m long) are of intrinsic value, aesthetically, ecologically and functionally. They have value as stock proofing, but also for birds and small mammals as they provide food and shelter/ nesting opportunities. Hedgerows that aren't as intensively managed (not flailed annually) are of higher value as they offer more nesting potential for birds and generally produce more berries. Hedges can also form important flightlines (navigational tools) for bats, and can provide sheltered foraging areas for them. Hedgerows can also be of importance as 'wildlife corridors', linking larger areas of habitat such as woodlands.

The land parcel is surrounded by managed hedgerows (except on the southern boundary), and all have good species diversity. Dominant species are blackthorn and hawthorn, with some elder, holly, sycamore, ash, bramble, gorse and willow. Most hedges are on banks and have a woodland-type ground flora, with primrose, red campion, nettle, celandine, ivy, foxglove and violet visible at the time of survey. All hedges are flailed, but are approximately 1.5m high and 2m wide. They are broadly stock proof, but there are some large gaps on the northern hedge. There are some mammal trails under the hedges, but no clear evidence whether they were made by badger or rabbit. There are some rabbit holes on the northern hedgebank.

Adjacent fields have hedgerow boundaries, which are predominantly hawthorn/ blackthorn.

The boundary hedgerows may be lost to the development.

g4 – Modified grassland

This is grassland that is regularly and intensively managed – such as lowland grazing pasture, silage fields, or amenity grassland. Typically these grasslands are subject to frequent fertiliser and pesticide application, and have been seeded - supporting a limited diversity of widespread agricultural or amenity species. Modified grasslands such as these are usually of very limited value to wildlife, though surrounding good habitat, including hedgerows, can increase their value.

The land parcel comprises modified grassland with low species diversity. Identifiable species included rye grass, creeping buttercup, dandelion, greater plantain, Yorkshire fog grass, white clover, cocks-foot grass, common sorrel and common catsear. Herb cover is under 10%, the field is currently ungrazed and has some evidence of mole activity. There are damp corners in the north-west and south-west, but these are not likely to hold water long enough to be used by amphibians. The field is too close to mature trees to appeal to waders such as curlew.

Also affected by the proposals is the wide verge, which is regularly mown. Species diversity is slightly higher than the field, including daisy, white clover soft rush, bryophytes, creeping buttercup, dandelion, pignut, wood rush, celandine plantain and common catsear. Herb cover is less than 10%.

Surrounding pasture and silage fields all appear to be intensively managed grassland, though could not be assessed directly.

All of the land affected by these proposals is modified grassland.

c1 – Arable land (recently ploughed)

Arable land can be used by some ground nesting birds, and depending on the crop and type of management, arable fields can be of value to seed eating birds (such as sparrows and finches).

The field had been recently ploughed, so the crop type could not be determined at the time of the survey.

This field will not be impacted by the proposals.

u1 – Built up areas & gardens

The majority of the habitat to the east and south of the land holding is residential – comprising houses and gardens (as well as some commercial properties). Domestic and commercial properties can support notable wildlife species such as nesting birds and bats. Depending on their management, gardens can provide excellent habitat for small birds, bats, hedgehogs, amphibians, reptiles and invertebrates.

Records of breeding common toad and common frog were found in the vicinity of the landholding – and these originated from garden ponds from approximately 300m from the proposed development. There were two old (1991) slow worm records, also from a neighbouring residential property.

Records of red squirrel also came from gardens within 200 to 300m of the land parcel.

No gardens or surrounding properties will be directly affected by these proposals.

A summary table of the habitats described above and their importance in the context of British conservation and the legal framework is shown below (Table 3).

Table 3: Habitats of conservation concern

Habitat	Priority habitat listed under s41 of NERC Act 2006?*	Is habitat a notable consideration?
Woodland	Yes	No, not impacted by proposals
Hedgerows	Yes	Yes
Improved pasture		
Arable		
Built up areas & gardens		

***** *Previously UK Biodiversity Action Plan (BAP) habitat*

3.2.3 Ponds within 500m of the proposed development

Online aerial images and OS maps were used to identify any potential great crested newt or natterjack toad breeding ponds within 500m of the proposals. No such ponds could be found, and none were seen during the fieldwork.

3.3 Protected and notable species survey results

3.3.1 Birds

Nesting birds are likely within hedgerows on the site. Tree sparrows may use the site for foraging in winter, and could nest in the hedgerows, though there is no evidence of this. Singing house sparrow, goldfinch, chaffinch, wren and chiffchaff were heard around the hedges and adjacent woodland.

The field is not suitable for nesting waders, due to the nearby hedges and trees (they like open habitats).

3.3.2 Reptiles

The peripheral habitat (hedgebank) is broadly suitable for common lizard and slow worm, but the mown and grazed modified grasslands are not suitable and as such, reptiles are unlikely to be present on the landholding. Slow worms were known to be present in nearby residential areas, and may still be present there. Common lizard have been recorded further afield on the dunes system and moors.

3.3.3 Amphibians

No water bodies are known in the immediate area, and there are none on site. The damp corners are very unlikely to hold water long enough to be used by amphibians. It is possible that amphibians use the site for foraging, as both common frog and common toad have been recorded in the local area. All three UK native newt species have been recorded within 2km, but not within 800m of the land parcel. Natterjack toads have been recorded in the local area, but primarily near the coast on the dunes and coastal grasslands. The land parcel is currently ungrazed, and the vegetation is too long to appeal to foraging natterjack toads – and they are unlikely to be found on site. The closest known breeding area is 1.2km away.

3.3.4 Bats

There are no suitable features on site for roosting bats. They are very likely to forage over the grassland in suitable conditions, but the site is unlikely to be of key importance due to its size and lack of features of interest.

3.3.5 Terrestrial mammals

No signs of terrestrial mammals were seen, aside from some mole hills and lightly used mammal paths. There are local records of badger activity (such as latrines) within 200m of the landholding – the paths through the hedges could be used by badger (though there was no evidence to prove this). Some rabbit holes were present on the northern hedgebank, and there are local records of brown hare – which could be present in the field.

There are also local records of red squirrel and hedgehog. Red squirrels are very unlikely to use the site as there are no mature trees, though could use adjacent woodland. Hedgehogs could forage over the grassland.

3.3.6 Other species

There are some small habitat features on site (the hedgerows, banks and bare earth) that are of value to invertebrates, but these are all of minor grade and unlikely to support notable species.

3.3.7 Protected and notable species summary

Within 50m of the proposed development :

The following signs or sightings of protected or notable species were seen during the survey within 50m of the site footprint.

- Singing garden bird species, likely to nest in hedgerows: high

The potential for protected and notable species identified during the survey within 50m of the site was:-

- Potential for foraging and/or resting amphibians (widespread species): low-moderate
- Potential for foraging badger, brown hare and hedgehog: low-moderate

Within the broader survey area:

No other signs or sightings of protected species were found in the broader survey area. There is an old record of slow worm within 200m of the property (within the survey buffer zone), though it is considered unlikely that this species would be encountered on site.

3.4 Invasive species survey results

No notable invasive species were seen or recorded during the survey.

The data search provided records of grey squirrel within 100m of the property, but no invasive plant species within 500m.

4. SURVEY CONCLUSIONS

The features of ecological interest or concern which could affect, or be affected by the proposed works are:-

- **Species rich hedgerows.**

  All three hedgerows around the field have good species diversity and are important landscape features. Only the eastern hedgerow qualifies as an important hedge under the Hedgerow Regulations 1997 due to its diversity, features and proximity to a public right of way. The north and west hedges have good species diversity, but not high enough to qualify (need 6 woody species in central 30m span of the hedge). All are on small banks and provide good wildlife habitat links to the nearby woodland to other hedgerow boundaries.

  If hedges are to be removed, then permission will need to be given by the local planning authority.

- **Nesting birds**

  Birds are very likely to nest in the hedgerows. The habitat is suitable for tree sparrow, but there are no records of this species at this location.

  All bird species are fully protected whilst making a nest, incubating eggs and raising chicks, and as there is suitable habitat for breeding birds, they are a consideration for this development.

- **Terrestrial mammals**

  There are local records of badger, brown hare and hedgehog – which could all forage in the grassland. No setts were found, or notable habitat for brown hare or hedgehog. The works could result in a reduced foraging area for these species, and individual animals could be at risk of injury if precautions are not followed on site.

- **Nearby protected sites**

  The location of the development is within the impact zones of several SSSI sites. The nature of the development (on farmland extending outside an existing settlement) means that Natural England should be consulted by the Planning Authority with regards to this application. No impacts on protected sites are foreseen at his stage.

5. RECOMMENDATIONS

5.1 Recommendations for further survey

<u>Breeding birds</u>

All species of British birds are protected whilst in the process of nesting, as are their active nests and any eggs and chicks until fledged. If any hedgerow removal or trimming is to be carried out within the bird nesting season (generally accepted as 1st March until 31st July), an ecologist should assess whether any breeding birds are present in and immediately around the development footprint.

5.2 Recommended mitigation for ecological impacts not requiring further survey

Hedgerow habitat
It is recommended that all hedgerows are retained and enhanced around the periphery of the site. The hedgerows are of local value for wildlife, are an important landscape feature, and provide a visual buffer to the development. Removal of the hedgerows will greatly increase the ecological impacts of the proposed development.

General

- Ensure that no dangers are left for wildlife overnight/weekends during the works (such as holes that could trap and potentially kill small mammals and badgers).
- Ensure areas of importance to nocturnal animals are not disturbed by light – turn off all lighting overnight/ when works are not active.
- Minimise the footprint of the development, clearly marking the area in which machinery and plant is permitted.

5.3 Recommended enhancements to encourage net biodiversity gains

Following local planning guidance, measures to encourage a net gain of biodiversity should be included for all new developments.

Further enhancements to the site are recommended, including enhancement of the hedgerows, installation of boxes for birds and bats a proportion of the new build houses, and retention of access for hedgehogs.

Enhance the hedgerow by planting up gaps with native species, allowing two standard trees on each length of hedgerow, and reducing the frequency of hedgerow cutting to once every three-four years.

Bird and bat boxes should be installed on a minimum of three of the new build houses. External bat boxes could be installed on the south or west elevations at a height of above 3m, especially on those properties near the woodland, and away from the road. Bird nesting boxes (such as a sparrow terrace, robin box or tit box) could be installed on the north or east elevations between 2 and 4m high on the external walls.

Boxes can be bought or built from scratch. Full guidance can be found on Bat Conservation Trust website https://www.bats.org.uk/our-work/buildings-planning-and-development/bat-boxes or RSPB website https://www.rspb.org.uk/fun-and-learning/for-families/family-wild-challenge/activities/build-a-birdbox/ .

Access between gardens should also be retained for hedgehogs. Hedgehogs have suffered a significant decline in range and numbers over recent years, in part due to habitat loss and also from roadkill. Creating a small gap in boundary fences would allow access between gardens and surrounding habitat by hedgehogs. Roadside boundaries of properties should not have these access holes, to encourage hedgehogs to avoid the road as much as possible. The gap only needs to be 10cm x 10cm at ground level (about the size of a CD case). Further guidance, advice and ideas can be found on https://www.hedgehogstreet.org/help-hedgehogs/link-your-garden/ .

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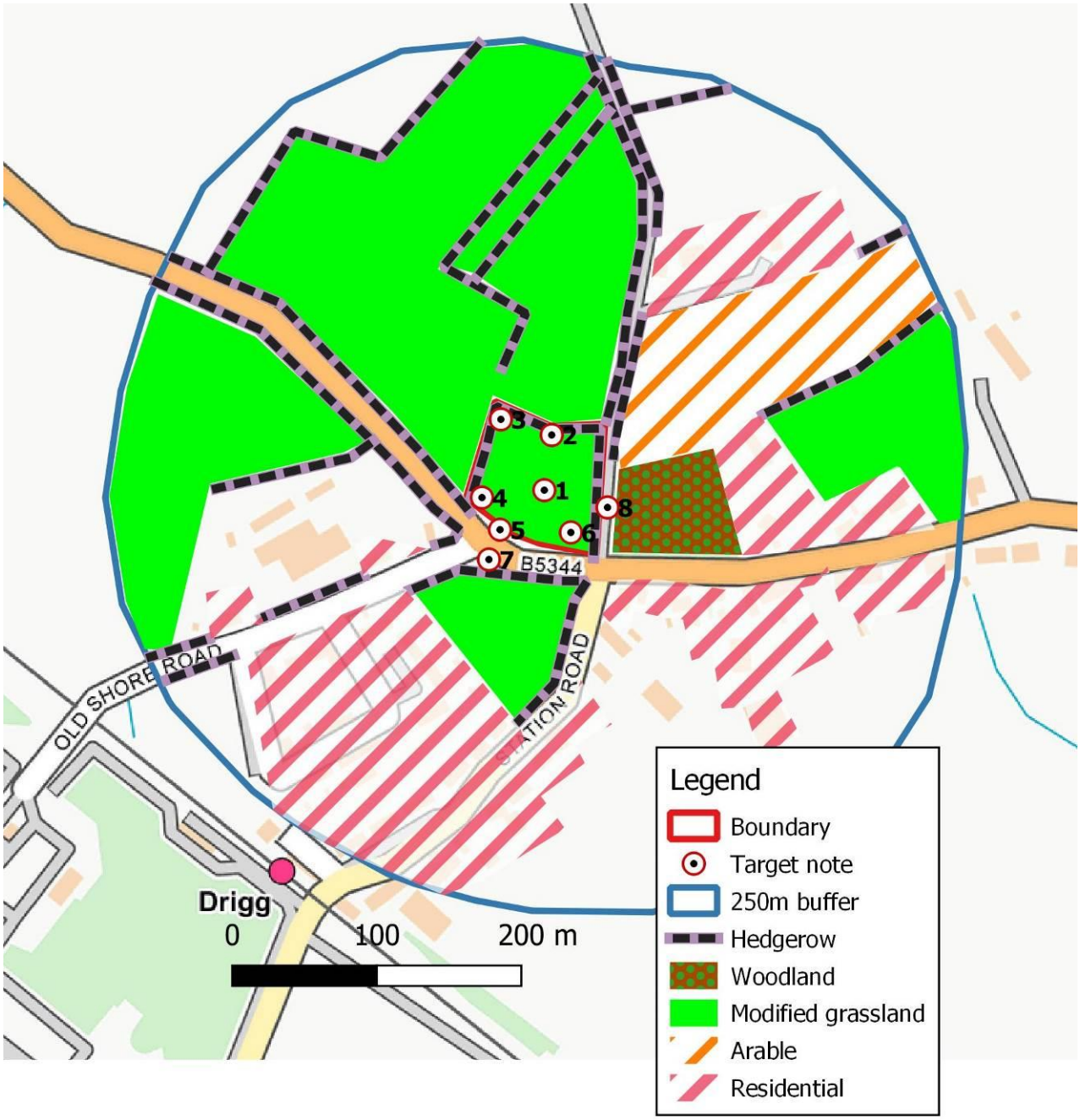
APPENDICES

Figure 3: Habitat map



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Survey target notes

Refer to figure 3 for locations of target notes.

No.	Description
1	Modified grassland, currently ungrazed but likely to have been grazed the previous season. Dominated by grasses and agricultural herbs. Species include rye grass, creeping buttercup, dandelion, plantain, Yorkshire fog grass, white clover, cocks-foot grass, common catsear and common sorrel. Lush growth, little bare ground. Some mole hills. Herb cover <10%. Not suitable waders and also unlikely to be used by skylark due to lush growth.
2	Northern hedge. On earth bank and with fencing. Some rabbit holes and mammal paths (possibly badger, but no clear sign). Gappy in places. Flailed. 1.5m high, 2m wide. Species include hawthorn, willow, sycamore, elder and gorse. Ground flora of primrose, red campion, violet and nettle (more to the east of the gaps).
3	Damp corner of the field with some standing water. No aquatic vegetation and unlikely to retain water long enough to appeal to amphibians.
4	Western hedge with good diversity. Species include ash, hawthorn, bramble, gorse, blackthorn, willow. Continuous hedge on earth bank. Flailed, 1.5m high, 2m wide. Ground flora include lesser celandine, ivy, red campion, foxglove and primrose.
5	Stock fence with wide mown verge at road edge. Higher species diversity than field, but still few herbs (<10% cover) and dominance of grass. Species include daisy, white clover, soft rush, bryophytes, creeping buttercup, dandelion, pignut, wood rush, lesser celandine, plantain and common catsear.
6	Eastern hedge. On earthbank, continuous hedge with good diversity. Gorse dominant with blackthorn, hawthorn, holly, bramble and sycamore. Flailed, 1.5m high max, 2m wide. Woodland ground flora, especially evident on eastern side, with ferns, ivy, red campion, willowherb, nettle, cow parsley and cleavers.
7	Mown grassland with planted oak tree.
8	Private woods with conifers and deciduous species present- including non-natives. Fence and bank boundary alongside the track (public right of way). Most trees maturing – no veteran type individuals noted.

Description of Wildlife Law and Legislation referred to in this document

National Planning Policy Framework (2018)
Current guidance recommends that planners ensure that all new developments:

- minimise impacts on biodiversity and protected sites
- result in a local net gain in biodiversity
- safeguard wildlife-rich habitat and wider ecological networks
- promote conservation/ restoration and enhancement of priority habitats and ecological networks
- promote protection/ recovery of priority species

Nesting birds
Under Section 1 of the Wildlife and Countryside Act 1981 (as amended), wild birds are protected from being killed, injured or captured. Under this legislation their nests and eggs are also protected from being damaged, destroyed or taken (this includes nests in the process of being built as well as those with eggs and/or chicks in).

Birds which are listed in Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are protected by special penalties at all times. Further enforcement has been provided by The Countryside and Rights of Way Act 2000.

Bats
Bats have declined in numbers dramatically across the UK and Western Europe in recent decades. Key factors linked to their decline are loss of roosting places due to building works and woodland destruction. Other factors implicated in their decline are changes in the countryside resulting in habitat loss and greater fragmentation of foraging habitats, and severing of commuting flightlines due to transport developments and hedgerow destruction.

As a consequence of these significant declines, bats and their roosts are protected under British and European law.

All bats are listed under Annexe IV of the EU Habitats Directive, and some under Annexe II. This law is transposed into English law into the Conservation of Habitats and Species Regulations (2010). Bats are also protected in the UK under the Wildlife and Countryside Act 1981 (as amended).

As a result of the above legislation it is an offence to;

- Deliberately capture, injure or kill a bat,
- Disturb a bat such that their survival, reproductive capacity, or the well being of the local population is affected
- Intentionally or recklessly disturb a roosting bat, or block access to its roost.

Reptiles
The four widespread species of reptile (common lizard, slow-worm, grass snake and adder) receive partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) in respect of Section 9(5). It is an offence to intentionally kill, injure, sell, or to advertise for sale, any of these species without an appropriate licence. Further enforcement has been provided by The Countryside and Rights of Way Act 2000.

Amphibians
The four widespread species of amphibian (common frog, common toad, smooth newt and palmate newt) receive partial protection under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) in respect of Section 9(5). It is an offence to sell or possess (dead or

alive) these species. Further enforcement has been provided by The Countryside and Rights of Way Act 2000.

Great crested newts are a European Protected Species, and their breeding sites or resting places are protected under Regulation 41 of the Conservation of Habitats and Species Regulations 2010 and Section 9 of the Wildlife and Countryside Act 1981.

It is an offence for anyone intentionally to kill, injure or disturb a great crested newt, to possess one (whether live or dead), or sell or offer for sale without a licence. It is also an offence to damage, destroy or obstruct access to any place used by great crested newt for shelter.

Red Squirrel
Red squirrels have been declining in Britain for many decades, largely as a consequence of the introduction of grey squirrel. They currently receive full protection under the Wildlife and Countryside Act 1981 (as amended).

Red squirrels and their resting places are fully protected in Britain, it is an offence to deliberately, capture, injure or kill them or to damage, destroy or obstruct their breeding or resting places; it is also an offence to disturb them in their breeding or resting places.

Badger
Badger is a protected species under the Protection of Badgers Act 1992 which makes it an offence to wilfully kill, injure, take, possess or cruelly ill-treat a badger, or to attempt to do so; or to recklessly interfere with a sett. Further enforcement has been provided by The Countryside and Rights of Way Act 2000.

Guidance as to best working practices around badger setts have been developed, to minimise disturbance to these animals.

Biodiversity Action Plans – Species and Habitats
The UK Biodiversity Action Plan (UK BAP) was published 1994, in response to the Convention on Biological Diversity (CBD), which the UK signed up to in 1992 in Rio de Janeiro. National and Local action plans were developed for the most threatened species and habitats.

The plans, and species and habitats to which they related are reviewed and updated regularly. The current lists can be found on the JNCC website. These have now been succeeded by NERC Act 2006 (see below) but are still commonly used for guidance.

Natural Environment and Rural Communities (NERC) Act 2006
Section 41 of the NERC Act 2006 requires the Secretary of State to publish a list of habitats and species which are of principal importance for the conservation of biodiversity in England. The list has been drawn up in consultation with Natural England, as required by the Act. This purpose of this list is to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.

56 habitats of principal importance are included on the S41 list. These are all the habitats in England that were identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities in the subsequent UK Post-2010 Biodiversity Framework. There are 943 species of principal importance included on the S41

list. As above, these are the species found in England which were identified as requiring action under the UK BAP and which continue to be regarded as conservation priorities under the UK Post-2010 Biodiversity Framework.

Hedgerow Regulations (1997)
These protect countryside hedgerows from being uprooted, grubbed out or otherwise destroyed. Local planning authorities need to be consulted, and an application made to remove any hedgerow (or section of a hedgerow) under these regulations.

Permission may be refused if the hedgerow concerned is deemed 'important'.
There are many criteria for designating an important hedgerow, focussing on features such as archaeological value, historical and cultural value and ecological value. To be of ecological importance the hedgerow must have a minimum number of native woody species as well as some associated features of interest and/or support certain protected species of animal or plant. Further information about the criteria can be found at: www.gov.uk/countryside-hedgerows-regulation-and-management or http://www.legislation.gov.uk/uksi/1997/1160/contents/made .

Photographs

Photo 1.
Looking west across the field.

Note lush growth and dominance of grasses

Photo 2.
Looking south towards the road and nearby housing.

Photo 3.
Looking west along the boundary fence at the roadside, showing mown amenity grassland in the foreground.

Photo 4.
Waterlogged corner in the north-west of the field. Unlikely to retain water long enough to be used by amphibians.

Photo 5.
Western hedgerow, with moderate diversity.

Photo 6.
Mammal path through hedge, probably made by badger.

Photo 7.
Gappy section of the northern hedge.

Photo 8.
Eastern dense hedgerow, adjacent public right of way and woodland.