



Preliminary Ecological Appraisal

Land off Lidgett Lane, Pilley, South Yorkshire

Report reference: R-2463-01
January 2016

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The information which we have prepared and provided is true and has been prepared and provided in accordance with the CIEEM's Code of Professional Conduct. We confirm that the opinions expressed are our true and professional bona fide opinions. This report does not constitute legal advice.



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Introduction

1. Brooks Ecological Ltd was commissioned by Wortley Group to carry out a Preliminary Ecological Appraisal of the Land off Lidgett Lane in Pilley, Tankersley, South Yorkshire (SE 337 004).
2. This report is produced with reference to British Standard BS42020 'Biodiversity Code of Practice for Planning and Development'. The Site has been subject to a previous ecological appraisal carried out by Absolute Ecology in 2013 to which this report forms an update.

Scope

3. The application site 'the Site' encompasses an area of pasture land within the village of Pilley.
4. The 'Study Area' includes a 2km area of search around the Site for records of protected and notable species and locally or nationally designated wildlife sites.

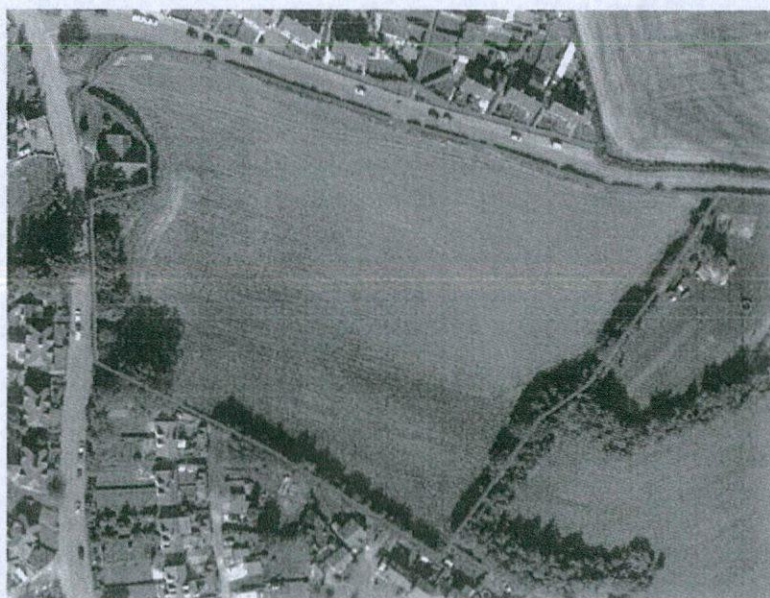


Figure 1

Scope of study

Proposals

5. Draft proposals have been received – these show 42 detached units with gardens and associated access roads / paths. This plan is shown below.

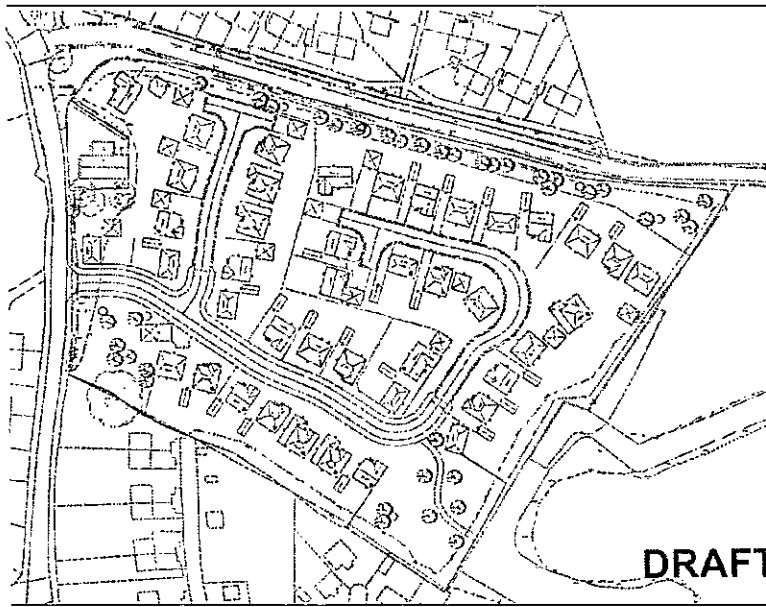


Figure 2

Current stage draft
proposals

Site context

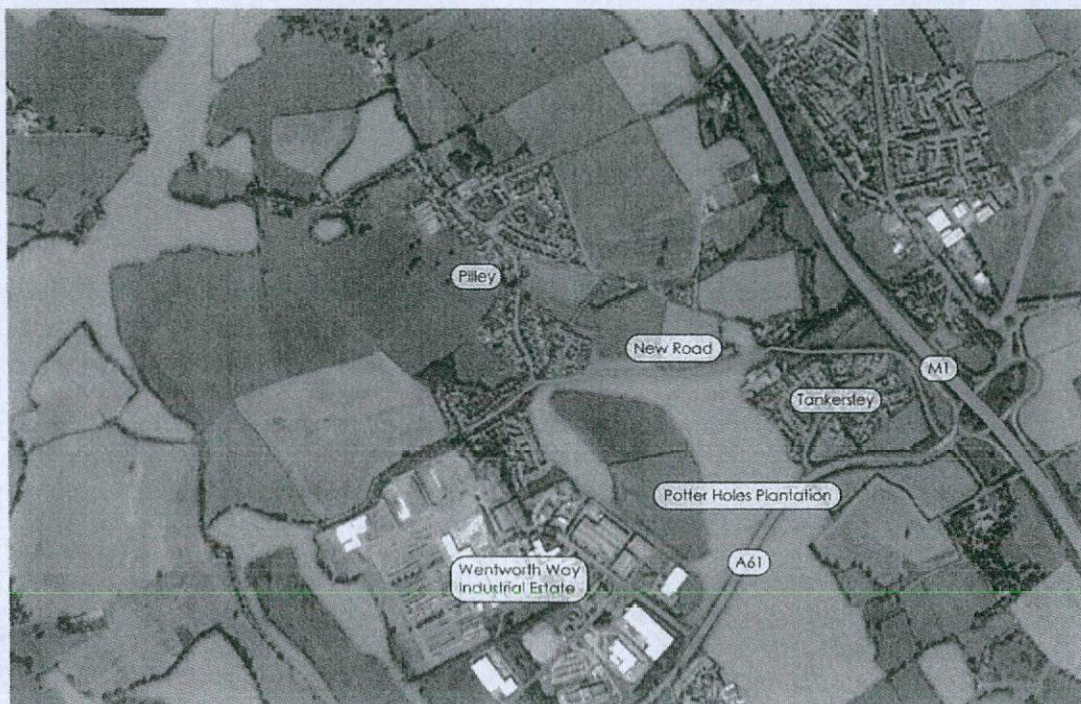
6. The Site is found within the village of Pilley; to the north, a small but frequently used road separates the Site from an area of semi-detached housing which forms part of Pilley village.
7. A small church is found to the west of the site before another small, but frequently used road encloses the parcel of land. A small number of detached properties and a small coppice woodland are found beyond this before open pasture is reached.
8. A residential area lies to the south which forms the rest of Pilley village. At the south and eastern boundaries, a line of trees and associated vegetation makes up the Site boundary – to the east, this encloses a small area of amenity grass space. For the most part, beyond these habitats lies open countryside comprised of either pasture or arable land, with areas of woodland also making up part of the landscape patchwork. Settlements are mostly restricted to small villages especially to the west, with larger towns and villages and the M1 found to the east.
9. Geological deposits in the area comprise of Diamaction Till and Alluvium Clay – this landscape is part of the characteristic foothills of the South Pennines, with the main Pennines found some 15km west.



Wildlife corridors

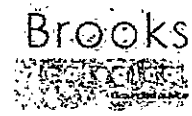
10. The tree line that runs along the Sites southern and eastern boundaries, passing south past adjacent housing and then connecting to a large area of woodland provides a small scale corridor through the landscape. However, the connectivity provided by this corridor is limited by an absence of higher value habitat to the north and by New Road to the south, which bisects the corridor before the main woodland block is reached. Though the presence of woodland at each side of this road and the lack of walls and other significant barriers reduce the road's barrier effect.
11. To the south of New Road, the woodland is associated with a small watercourse, which is only partially shown on mapping. This watercourse doesn't provide much with regard to habitat connectivity due to being culverted under housing to the west, and the M1 to the east.
12. The woodland itself is partially connected to other, larger areas of woodland to the south and east, though there appear to be higher levels of separation caused by more major roads such as the A61.
13. Figure 3 shows an analysis of wildlife corridors in relation to the Site as viewed from aerial photography. Further consideration of wildlife corridors will be assessed later in the report following field work.

Figure 3 Connectivity plan. The Site is shown in red and connected higher value habitat is highlighted in orange.



Water bodies

14. A single still water body was shown on mapping within 500m; located c.200m south of the sites boundary, as shown on Figure 4 below. This was investigated during the walkover and found in a garden and used by waterfowl.



Non-technical Summary

Purpose of report

This report is produced to present an initial assessment of the potential ecological constraints and opportunities relating to the Site off Lidgett Lane, Pilley, Tankersley to inform the Site's potential for development.

Methodology

The report is based on a desk study of designated wildlife sites and records of protected or notable species, and an extended Phase 1 Habitat Survey carried out in December 2015.

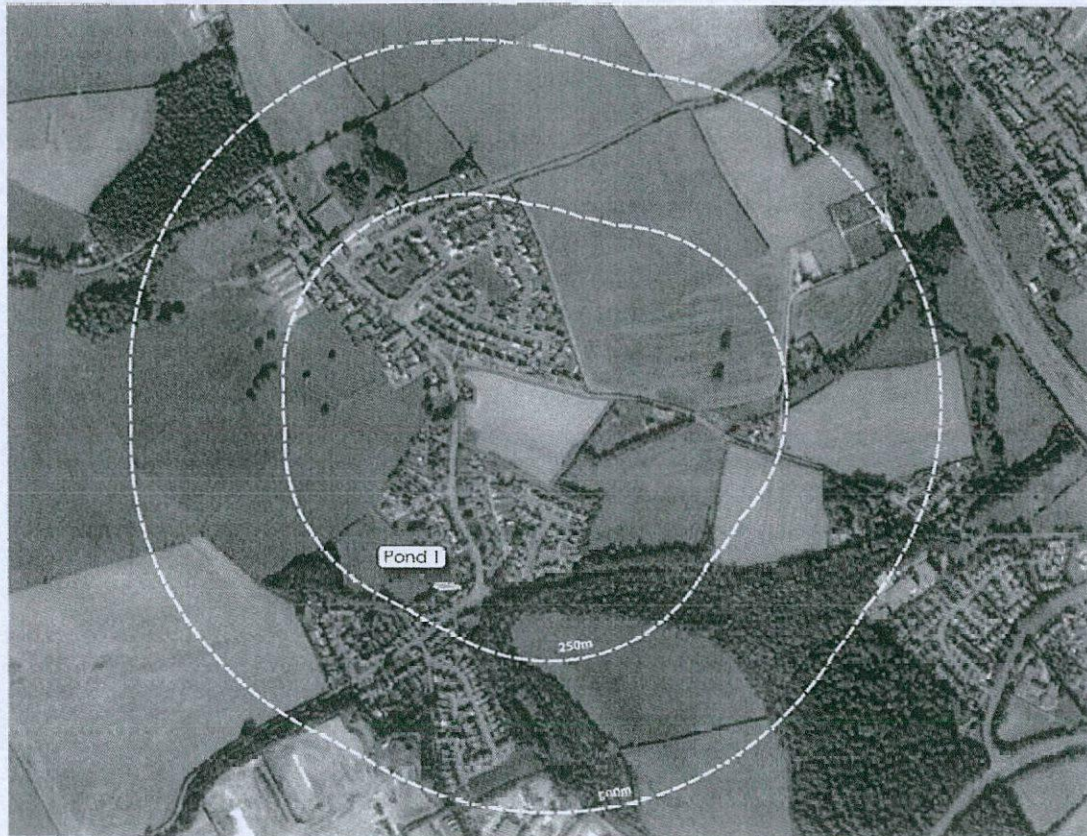
Key issues

The vast majority of the Site supports species-poor grassland with few constraints to development.

Boundary habitats represent the features with highest wildlife value; recommendations are made for these to be retained and protected, or else mitigation for their loss put in place.

Standard precautions are advised with regard to nesting birds in surrounding vegetation.

Figure 4 Pond plan.



Designated Sites

Statutory Designations

15. The only statutory designation within the 2km search area is Potter Holes Plantation Local Nature Reserve (LNR), c.460m to the southeast, which is designated on the basis of semi-ancient and younger woodland.
16. An increase in housing in close proximity to the LNR may lead to raised levels of footfall by dog walkers and other residents; potentially contributing to a decrease in the value of the woodland ground layer due to disturbance by dogs and people leaving paths, especially to avoid muddy areas.
17. It is worth noting that the LNR is already subject to some disturbance and is not likely to be highly sensitive to these potential impacts.

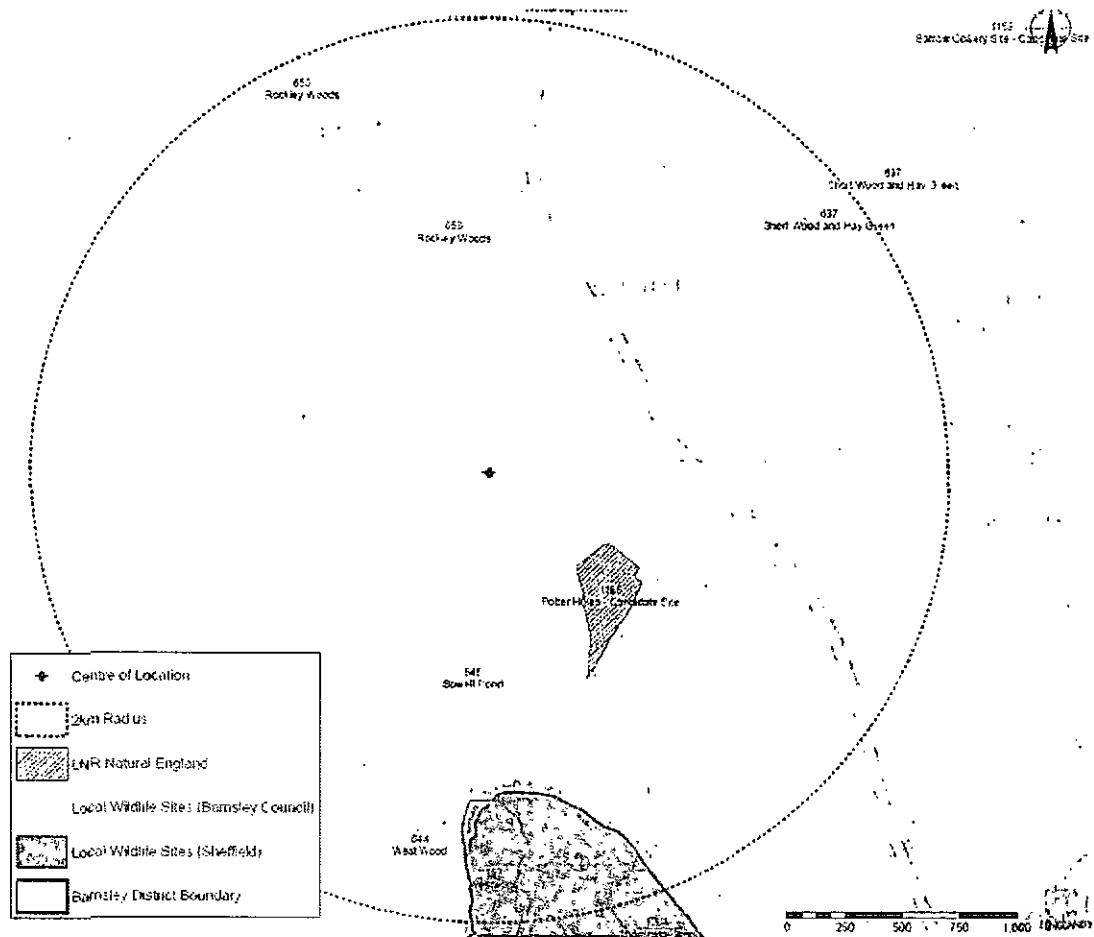
SSSI Impact Risk Zones

18. The Site does not fall within any SSSI impact risk zones.

Non-Statutory Designations

19. Details of eight Local Wildlife Sites (LWS) were returned for the 2km search radius; of these, five are over a kilometre from the application Site and disconnected by urban development and main roads (such as the M1 and A61). As such, these sites are not considered further in this assessment.
20. The three closer sites are described below:
- Potter Holes Plantation LNR is also registered as a LWS, and is discussed above.
 - The closest area of Rockley Woods LWS is found c.660m to the north, separated from the Site by open arable land and Pilley Lane.
 - Sowell Pond LWS is found c.800m to the south of the application Site; it is separated from higher value habitat to the north and east by Wentworth Industrial Park.
21. None of these sites (excluding Potter Holes Plantation, as discussed) are assessed as being functionally linked to the application Site with regard to movement of wildlife, and no further consideration is required.

Figure 5 Locally designated sites.



Extended Phase 1 Habitat Survey

Method

22. The survey was carried out during December 2015¹ and followed Phase 1 habitat survey methodology (JNCC, 2010).

Limitations

23. The survey was carried out in December when many plant species have died back however the highly improved nature of the grassland and limited range of additional habitats allowed the surveyor to make a clear assessment of the Site.
24. Sufficient time was afforded the surveyor to carry out the survey. The survey was not constrained by poor weather.

Results

25. The Site comprises a parcel of undeveloped grassland and boundary habitats sloping from the northwest to southeast. The habitats found on Site are all characterised as species-poor and much affected by the recent and on-going activities of man.
26. The following habitats were identified within the Site and on its immediate boundaries:
- Improved neutral grassland
 - Hedgerow
 - Scrub
 - Trees

Neutral grassland

27. This habitat occupies the vast majority of the Site, and has clearly been improved for agriculture through seeding with a typical perennial rye-grass (*Lolium perenne*) based mix and likely fertiliser application. At present, the field looks to be used for

¹ This Report has been prepared during January 2016 following a visit to the site in December 2015 and our findings are based on the conditions of the site that were reasonably visible and accessible at that date. We accept no liability for any areas that were not reasonably visible or accessible, nor for any subsequent alteration, variation or deviation from the site conditions which affect the conclusions set out in this report.

silage cropping, but may on occasion be stocked with livestock. Other grasses scattered amongst the sward, include Yorkshire fog (*Holcus lanatus*) and fescues (*Festuca* sp.). Forbs make up a small component of the grassland, with common forbs / ruderal species such as dandelion (*Taraxacum officinale* agg.), ragwort (*Senecio jacobaea*), american willowherb (*Epilobium ciliatum*), prickly sow thistle (*Sonchus asper*), common sorrel (*Rumex acetosa*) and speedwell (*Veronica* sp.).



Figure 6

Improved neutral grass

28. During the walkover, the ground was found to be saturated in several areas, especially at the south-eastern end of the Site where it levels off; this was due largely to recent heavy rainfall, though additional species through the sward suggest this area is periodically inundated. In addition to those species already listed, the following grasses and forbs were noted; creeping buttercup (*Ranunculus repens*), great willowherb (*Epilobium hirsutum*), annual meadow grass (*Poa annua*) and rough meadow grass (*Poa trivialis*), and the pleurocarpous moss *Kindbergia praelonga*.



Figure 7

Area of waterlogged ground to the southeast.

29. Along the boundaries, a range of coarser grasses have become established. This is dominated by a mix of false oat grass (*Arrhenatherum elatius*) and yorkshire fog with abundant perennial rye-grass as found throughout the Site. Frequent ruderal species such as nettle (*Urtica dioica*), broad-leaved dock (*Rumex obtusifolius*), cleavers (*Galium aparine*) and cow parsley (*Anthriscus sylvestris*) are also present.



Figure 8

Rank grass border

Hedgerow

30. The northern Site boundary is marked by a section of intact hedgerow (see above figure), comprising of blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), holly (*Ilex aquifolium*), elder (*Sambucus nigra*) and dog rose (*Rosa canina*), with some sections almost entirely covered by mature ivy (*Hedera helix*). In addition, a short section of garden privet (*Ligustrum ovalifolium*) marks the Site boundary at the far south-western corner. No distinct ground layer is evident, with rough neutral grassland and scrub growing right up to the base.

Scrub

31. A few small patches of bramble (*Rubus fruticosus* agg.) scrub have become established in corners where tree shading reduces ground quality, and vegetation management would be more difficult.



Figure 9

Scrub at the west of the Site.

Trees

32. The eastern, southern and western field boundaries are all marked by treelines. For the most part this habitat is comprised of young to early mature ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*), with more occasional silver birch (*Betula pendula*) hawthorn, elder and oak (*Quercus* sp.).



Figure 10

Trees along the eastern Site boundary.

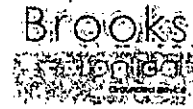
Faunal appraisal

Bats

33. 170 records of bats were provided for the study area dating between 1996 and 2012. None of these records relate to the Site, with the closest found c.590m north; making note of a common pipistrelle roost recorded in 2006. The next closest is c.710m south and notes a single soprano pip at Wentworth Industrial Park.
34. The Site has been subject to bat activity surveys carried out in 2013 by Absolute Ecology. Activity on Site was found to be very low, restricted to occasional passes of common and widespread species, including common pipistrelle, soprano pipistrelle and brown long eared bat.
35. The Site has no potential to support roosting bats due to the lack of man-made structures or suitable mature trees.
36. No updating of activity surveys is considered necessary given the sites evident lack of importance to bats.

Amphibians

37. There are records of common frog, common toad, smooth newt and the protected great crested newt (GCN) in the Study, area but not the Site.
38. 134 amphibian records were returned from the search radius, of these, 19 were excluded due to being older than 20 years, leaving a relevant study size of 115 records.
39. The single pond identified within 500m of the application site was considered to be of negligible value for GCN on the basis of steep banks at all sides, and the presence of waterfowl. Typically, ornamental garden ponds such as this are used to keep fish, and as such they are poor amphibian foraging habitat and entirely unsuitable for breeding. From aerial mapping, the pond has been measured at a direct distance of 200m to the southeast of the Site, however due to the presence of housing and Pilley Green (road), the actual distance a newt would need to travel would be over 250m, over poor terrestrial habitat. On this basis and the basis of the pond's poor suitability, it is considered highly unlikely that a GCN population is present or that individuals would make their way onto the Site.
40. No other ponds were identified within 500m of the application Site, and in support of this, no amphibian records were returned within this distance.



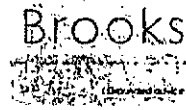
41. Other amphibian records including those for GCN are found to the south, west and east of Wentworth Industrial park and were recorded between 2002 and 2012.
42. Suitable amphibian habitat and amphibian records are separated from the Site by Wentworth Industrial Park and the southern end of Pilley village.
43. As such, likely absence of GCN can be concluded and no further work is required in respect of this group.

Reptiles

44. The site supports suboptimal habitat for this group, there are no local records and the absence of reptiles is concluded.

Birds

45. Records were returned for 727 birds this was filtered to only include species found within the last 20 years, which reduced bird numbers to 647 comprising of 60 species. These are primarily garden, woodland and farmland birds, with occasional wetland species.
46. For the most part this Site is of low value to most of these species, with very few finding any potential habitat on Site – given the absence of suitable habitat and proximity to disturbance associated with development to the north and south.
47. The Site supports some limited value habitat for ground foraging species such as blackbird, and potentially for some aerial foragers, with most of the Site's value being attributed to nesting opportunities within trees and hedgerows at the Site boundaries.
48. There is some potential for the Site to support farmland UKBAP or red/amber list species such as yellowhammer and dunnoek, however the heavily managed state of the hedgerow as noted during the walkover and its position along Lidgett Lane has likely reduced this value when compared with other potential locations in the area.
49. The Site is unlikely to be of value as a roosting or mustering Site for wintering or passage birds due to the lie of land (poor sight lines) and proximity of footpaths, roads and disturbance by humans.



Brown Hare

50. Though this species is known in the wider area (recent records from 2009 and 2012), the application Site currently contains pasture which does not provide quality habitat for this group; furthermore, it is enclosed by roads and housing on two of three sides, leaving only the eastern boundary open to countryside.
51. Due to disturbance created by human presence and associated cats / dog walkers, it is highly unlikely that brown hare would have any dependence on the application Site, and there is much better habitat for this group in the area.

Badger

52. No paths, burrows, footprints, latrines, snuffle holes, scratches or any other suspected signs were noted, and vegetation was at a low enough level that many of these signs would have been clear.

Invasive Species

53. No invasive species listed on Schedule 9 of the Wildlife and Countryside Act (1981) were identified. Although the survey was carried out during mid-winter, no signs of skeletal or early sprouting invasive plants were noted. As such, it is not thought that any Schedule 9 species are likely to be found on the application Site.



Evaluation and Recommendations

Key Findings

54. The Site is a single field of improved grass which is considered to be of little ecological value. Some value can be attributed to the Site boundaries, though this is reduced due to the presence of human disturbance associated with roads, housing and pets. Due to the size and simplicity of habitats surveyed, it is not felt that further survey is required in support of this assessment.
55. It is thought that if vegetation associated with the southern and eastern boundaries can be retained, most of the limited ecological value associated with the Site can be retained, this appears to be the case on the draft layout.

Additional surveys

56. The only additional recommendation in terms of surveys relate to the need to carry out pre-clearance nesting bird surveys if vegetation is cleared during the bird nesting season (March to September).



Enhancement

57. Although the tree belts and hedges currently represent the best habitats on Site there is significant opportunity to enhance these areas. The hedgerow along the north is relatively species poor, and has a number of large gaps. Species such as wild privet, hornbeam, field maple and guelder rose could be used to improve the diversity of species and structure of the hedgerow, meanwhile, the hedgerow understorey could be planted with a combination of a hedgerow seed-mix (such as EH1 provided by EmorsGate Seeds) and bulb plants such as bluebell and snowdrop.
58. Bird boxes suitable for garden birds such as swift, house sparrow and starling can be erected within the structure of buildings, or affixed to the walls of buildings. Bat roosting opportunities can be easily, cheaply and subtly included within the construction of buildings. Bird boxes should not be situated on a south facing wall, though bat boxes should be situated on a range of elevations to encourage roosting at different times of year – these should all be as high on the building as possible and away from security lighting.

Appendices

1. Extended Phase 1 Habitat Plan D-2463-01
2. Explanatory Notes and Resources
3. Information on legislation / protection

References

Absolute Ecology Extended Phase 1 Habitat Survey Pilley, Lower, Tankersley March 2013.

Absolute Ecology Transect Activity Survey for Bats Pilley, Lidget Lane Tankersley June 2013.

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JNCC (2004) *The Bat Workers Manual*. 3rd Edition.

ODPM circular 06/05 (2005) Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System
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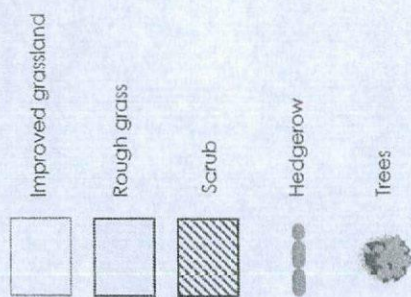
Conservation of Habitats and Species Regulations 2010
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H. L. Andrews (2011) *A habitat key for the assessment of potential bat roost features in trees*.

Ratcliffe, D.A. (1977) *A Nature Conservation Review*, Cambridge University Press

Hedgerow Regulations (1997)
<http://www.legislation.gov.uk/uksi/1997/1160/contents/made>

Appendix 1 – Extended Phase 1 Habitat Plan



Project: Land off Lidgett Lane,
Pitley

Title: Ecological Features Plan

Drawing Number: D-2463-01.1

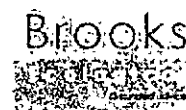
Scale: Do not scale Date: January 2016

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Appendix 2 – Explanatory Notes and Resources Used

Site context

59. Aerial photographs published on commonly used websites were studied to place the site in its wider context and to look for ecological features that would not be evident on the ground during the walkover survey. This approach can be very useful in determining if a site is potentially a key part of a wider wildlife corridor or an important node of habitat in an otherwise ecologically poor landscape. It can also identify potentially important faunal habitat (in particular ponds) which could have a bearing on the ecology of the application site. Ponds may sometimes not be apparent on aerial photographs so we also refer to close detailed maps that identify all ponds issues and drains. We use Promap Street + scale maps for this purpose.

Designated Sites

60. A search of the MAGIC (Multi-Agency Geographic Information for the Countryside) website was undertaken. The MAGIC site is a Geographical Information System that contains all statutory (e.g. Sites of Special Scientific Interest [SSSI's]) as well as many non-statutory listed habitats (e.g. ancient woodlands and grassland inventory sites). It is a valuable tool when considering the relationship of a potential development site with nearby important habitats. In addition, information from the local record holders (Sheffield City Ecology Unit) was referred to on locally designated sites.

Functional linkage

When assessing functional linkage we consider whether the site could be linked:

- Hydrologically: is the Site upstream down or stream could ground water issues affect it?
- Physically is the site in close proximity and could it be directly or indirectly affected by construction and operational effects.
- Do footpaths and roads make it likely that increased recreational pressure could be felt.
- Is the site part of a network of similar habitat types in the wider area.

Method

61. Phase 1 habitat survey methodology (JNCC, 2010). This involves walking the site, mapping and describing different habitats (for example: woodland, grassland, scrub). The survey method was "Extended" in that evidence of fauna and faunal habitat was also recorded (for example droppings, tracks or specialist habitat such as ponds for breeding amphibians). This modified approach to the Phase 1 survey is in accordance with the approach recommended by the Guidelines for Baseline Ecological Assessment (IEA, 1995) and Guidelines for Preliminary Ecological Appraisal (CIEEM 2012).

Faunal appraisal

62. This section first looks at the types of habitat found on Site or within the sphere of influence of potential development, then considers whether these could support protected, scarce or NERC Act 2006 section 41 species (referred to collectively as 'notable species').
63. Records of notable species supplied from a 2km area of search by Sheffield City Ecology Unit are used to inform this appraisal.
64. We refer only to species which could be found on sites with potentially suitable habitat. We screen out and do not present accounts of the likely absence of species for which there is no suitable habitat or have been assessed and not being a potential constraint to development.

Evaluation

65. In evaluating the site the ecologist will take into account a number of factors in combination, such as;
 - the baseline presented above,
 - the site's position in the local landscape,
 - its current management and
 - its size, rarity or threats to its integrity.
66. There are a number of tools available to aid this consideration, including established frameworks such as Ratcliffe Criteria or concepts such as Favourable Conservation Status. Also of help is reference to Biodiversity Action Plans in the form of the Local BAP and Section 41 of the NERC Act (2006) to determine if the site supports any Priority habitats or presents any opportunities in this respect.

67. The assessment of impacts considers the generic development proposals from which potential effects include:
- Vegetation and habitat removal
 - Direct effects on significant faunal groups or protected species
 - Effects on adjacent habitats or species such as disturbance, pollution and severance
 - Operation effects on wildlife such as noise and light disturbance
68. Consideration is given to the Local Biodiversity Action Plan (LBAP), which for this site is the '**Barnsley Biodiversity Action Plan**'.

Species Action Plans

Species/group

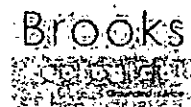
Hedgehog
Bats
Water Vole
Otter
Grey Partridge
Bittern
Kestrel
Little Ringed Plover
Lapwing
Barn Owl
Skylark
Tree Sparrow
Twite
Great Crested Newt
Salmon
Bullhead
White-clawed Crayfish

Glow Worm
Dingy Skipper
Bluebell

Habitat Action Plans

Habitat

Upland Oakwood
Lowland Mixed Deciduous Woodland
Wet Woodland
Wood Pasture and Parkland
Hedgerows
Arable Field Margins
Floodplain Grazing Marsh
Lowland Meadows
Lowland Dry Acidic Grassland
Lowland Heathland
Upland Heathland
Blanket Bog
Purple Moor Grass and Rush Pasture
Reedbeds
Ponds
Rivers
Open Mosaic Habitats on Previously Developed Land



Appendix 3 Wildlife Legislation, Policy and Guidance

This is not an exhaustive list but sets out briefly the relevance of Legislation, Policy and Guidance in terms of planning applications.

Legislation

Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (EC Habitats Directive).

Provides framework at an international (EU) level for the consideration / protection of European Protected Species (EPS), and habitats through the designation of sites.

Council Directive 79/409/EEC on the Conservation of wild birds (EC Birds Directive) and The Ramsar Convention on Wetlands of International Importance (1971)

Provides framework at an international (EU) level for the consideration / protection of important bird populations and the sites on which they are dependant.

The Conservation of Habitats and Species Regulations (2010)

This transposes 1) into UK law and provides the basis on which all EPS are protected and impacts on them can be licensed in the UK.

The Wildlife and Countryside Act (1981) as amended

This provides the basis on which UK species are legally protected or restricted and confers protection on Sites of Special Scientific Interest SSSIs. It contains annexes of plants and animals which are legally protected as well as those which are considered to be invasive or harmful. It provides the basis on which impacts on such species can be licensed in the UK and provides controls on work on or near SSSIs.

The Countryside and Rights of Way Act 2000 (CRoW)

Provides a statutory basis for nature conservation, strengthens the protection of SSSIs and UK protected species and requires the consideration of habitats and species listed on the UK and Local Biodiversity Action Plans (UKBAP / LBAP).

Natural Environment and Rural Communities Act 2006 (NERC)

Sets out the responsibilities of Local Authorities in conserving biodiversity. Section 41 of the Act requires the publishing of lists of habitats and species which are "of principal importance for the purpose of conserving biodiversity". At present these largely reflect those making up the UKBAP lists.

Hedgerows Regulations (1997)

Define and provide protection for Important Hedgerows.

Protection of Badgers Act (1992)

Protects badgers from persecution, this includes excavation / development in the proximity of setts.

Protected Sites

Statutory EU / International Protected Sites

Special Areas of Conservation (SACs); and Special Protection Areas (SPAs) and Ramsar Sites contain examples of some of the most important natural ecosystems in Europe. Work on or near these sites is strictly protected and Local Authorities will be expected to carry out 'Appropriate Assessment' of development in proximity of them. In this case there is often an increased burden on the developer in relation to provision of information and assessment.

Statutory UK Protected Sites

Local Nature Reserves (LNRs); National Nature Reserves (NNRs); Sites of Special Scientific Interest (SSSIs) all receive strict protection under UK legislation. Work in or in proximity to these sites would be restricted with any needing to be agreed with Natural England. Natural England now provide guidance on the nature of development which could impact on SSSIs through Impact Risk Zones.

Locally Protected Sites

Local Authorities have a variety of protected wildlife sites designated at a local or regional level. These are gradually being brought under the banner of Local Wildlife Sites (LWS) but at present a plethora of different designations exist - all subject to local policy.

Protected Species

European Protected Species

A number of species (most relevantly bats, great crested newts (GCN), and otters) receive strict protection from killing, injury and disturbance under The Conservation of Habitats and Species Regulations (2010). Protection is also conferred on the habitats on which they rely such as roost space in the case of bats and ponds and fields etc. in the case of GCN.

UK Protected Species

A number of species (including bats, GCN, water vole and white clawed crayfish) are strictly protected under The Wildlife and Countryside Act (1981) as amended, from killing, injury, disturbance and damage or destruction of their resting places etc. Certain species (such as reptiles) and some birds (such as barn owl) receive partial protection e.g. at certain times of the year or from certain activities only. All nesting bird species are protected from damage or destruction of their nests - whilst active.

Invasive species

Schedule 9 of the Wildlife and Countryside Act (1981) as amended, lists these species and makes it an offence to cause or allow their spread in the wild. This often has impacts on development and planning in relation to the presence of invasive plant species such as: himalayan balsam (*Impatiens glandulifera*), japanese knotweed (*Fallopia japonica*) and giant hogweed (*Heracleum mantegazzianum*).

Planning Policy

The National Planning Policy Framework (NPPF)

The National Planning Policy Framework was published in 27 March 2012 replacing the majority of previous Planning Policy Guidance notes (PPGs) and Planning Policy Statements (PPSs). The most relevant paragraphs from the NPPF are set out below.

The general approach to assessing the natural environment is now embedded within the definition of what 'sustainable development' is. Paragraph 7 (P7) of the NPPF states that sustainable development should "contribute to protecting and enhancing our natural environment" and "help to improve biodiversity". There is also a need for positive inclusion of the natural environment in development design and "moving from a net loss of bio-diversity to achieving net gains for nature" (P9). P14 sets out the Frameworks presumption in favour of sustainable development.

The natural environment is stated within the NPPF core principles: development should "recognise the intrinsic character and beauty of the countryside" and contribute to conserving and enhancing the natural environment and reducing pollution. Allocations of land for development should, "prefer land of lesser environmental value, where consistent with other policies in this Framework" (P17).

Section 11 of the NPPF details the approach to the natural environment. The Framework states that development should "minimise impacts on biodiversity and provide net gains in biodiversity, where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures" (P109).

The Framework sets out ways to minimise the impacts on biodiversity through "promoting the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets" (P117).

The NPPF requires the consideration of the impacts of development on the natural environment: the Framework also encourages "opportunities to incorporate biodiversity in and around developments" (P118). Importantly this paragraph (P118) sets out the hierarchy of avoiding, mitigating and compensating harm from development - plans should ensure that they can demonstrate engagement with this hierarchy when required.

Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services.

This strategy builds on the Natural Environment White Paper (June 2011) - The Natural Choice: securing the value of nature. Setting out the current UK Government's approach to nature conservation. It promotes a more coherent and inclusive approach to conservation and the valuing in economic and social terms of economic resources.

The strategy promotes initiatives such as Biodiversity Offsetting, Nature Improvement Areas and a focus on well-connected natural networks and introduces the concept of securing a 'no net loss' situation with regard to UKBAP / Section 41 habitats and species.