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Pre-1919 Housing, Goldthorpe

Preliminary Ecological Appraisal Report

Report Ref. ER-6065-01A

10/04/2024

Barnsley Metropolitan Borough Council

Report Title:	Preliminary Ecological Appraisal Report Pre-1919 Housing, Goldthorpe
Report Reference:	ER-6065-01A
Written by:	Charlie Foreman BSc (Hons) Assistant Ecologist
Technical Review:	Christopher Shaw BSc (Hons) MCIEEM Principal Ecologist
QA:	Victoria Baker BSc (Hons) MSc ACIEEM Ecologist
Approved for Issue:	Christopher Shaw BSc (Hons) MCIEEM Principal Ecologist
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Brooks Ecological
Grounded advice

Unit A, 1 Station Road, Guiseley,
Leeds, LS20 8BX
01943 884451
admin@brooks-ecological.co.uk
www.brooks-ecological.co.uk
Registered in England Number 5351418

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Summary

This report is produced to inform Barnsley Metropolitan Borough Council of potential ecological constraints associated with their proposed development site and the need for further reporting or output to support a planning application.

This 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 March 2022.

Key Findings

The Site is of very low ecological value, with its value derived from three urban trees found in the rear yards of properties.

Biodiversity Net Gain

Details on measurement of the Site's biodiversity and the implications of complying with the requirement to provide a net gain for biodiversity are provided in our separate report ER-6065-02.

Further surveys recommended.

Bat emergence/ re-entry surveys will be required to inform any mitigation (May-August inclusive).

Introduction

1. Brooks Ecological Ltd was commissioned by Barnsley Metropolitan Borough Council to carry out a Preliminary Ecological Appraisal (PEA) of land at Co-operative Street, Goldthorpe, S63 9HN.

2. This report is produced with reference to British Standard BS:42020 'Biodiversity Code of Practice for Planning and Development' and the CIEEM (2017) Guidelines for Preliminary Ecological Appraisal.

Purpose of a PEA

3. A PEA is an *initial assessment* of the baseline for a proposed development site and establishes whether the Site is likely to be constrained by ecology, and whether more information is needed to identify the ecological baseline.

4. The subsequent Preliminary Ecological Appraisal Report (PEAR) is intended to give guidance to a developer and assist with the early stages of project planning and design. Where a site is not complex or constrained, and no additional ecological input is necessary the PEAR *may* be sufficient, and suitable to support a planning application.

5. Biodiversity Accounting metrics are used to quantify the value of a Site in Biodiversity Units - which helps in the later stage of assessing the ecological impacts of the proposed development.

6. Biodiversity Units can help to inform avoidance, or on-site mitigation levels required; or as a last resort can translate to a direct monetary value where compensation (off-site) is required. Please be aware that they *can* significantly impact on costs and viability.

The Site

7. The application site 'the Site' comprises residential properties along Co-operative Street and Victoria Street, Goldthorpe, along with associated curtilage.

8. The assessment uses a 2km area of search around the Site for records of protected and notable species and locally or nationally designated wildlife sites.

Figure 1 The Site (red line boundary).

Desk Study

Landscape

9. The Site lies within the centre of Goldthorpe, a village located c.11km east of Barnsley and c.10km west of Doncaster. It is bound to the north, east and south by residential development, with a car park previously associated with a small market to the west.

10. Beyond these immediate boundaries, the wider landscape consists of predominantly arable land, punctuated by pockets of suburban development and wooded parkland.

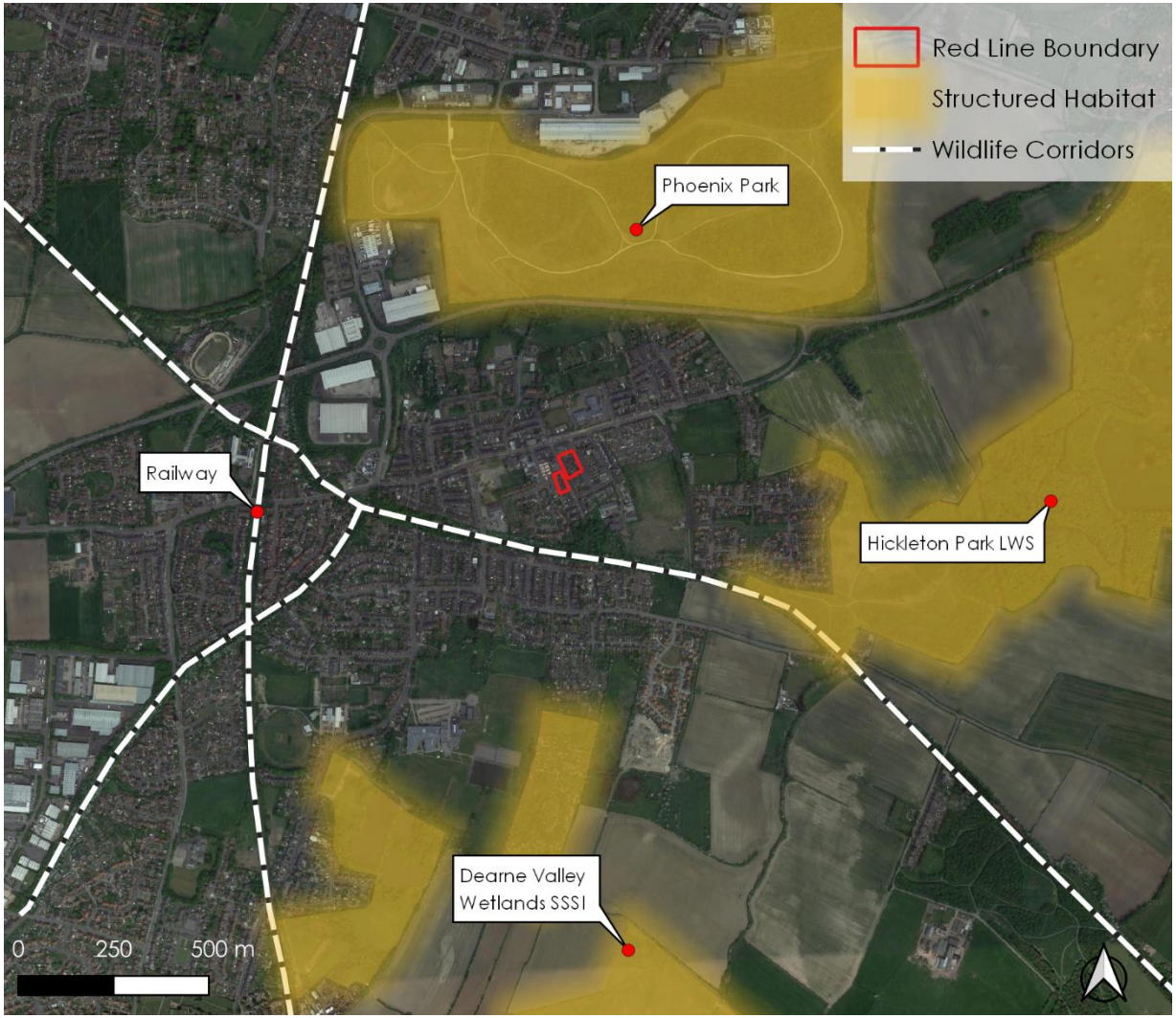
11. The Site is located upon the Pennine Middle Coal Measures Formation, giving rise to seasonally wet acid loamy and clayey soils. Due to the heavily developed nature of the Site, underlying soil conditions are unlikely to impact habitats present.

Wildlife Corridors

12. Vegetated sidings associated with several functional and defunct railway lines traverse the local landscape creating corridors between areas of better structured. These run within c.200m of the Site at its closest point, separated by residential development.

13. Hickleton and Phoenix Parks represent the most notable areas of better structured habitat located c.1km east and 500m north respectively, also separated by housing and busy roads.

Figure 2 Analysis of wildlife corridors and structured habitat visible on mapping in relation to the Site.



Designated Sites

Statutory Designations

14. A search has been made to identify any nationally designated sites within a 2km radius of the Site, or internationally designated sites within a 10km radius. The results are shown in the below table.

Table 1 Statutory Designated Sites.

Site Name	Distance from Site	Designation	Summary Interest
Dearne Valley Wetlands	1.3km south	Site of Special Scientific Interest (SSSI)	The site supports a diverse assemblage of birds during both the breeding and non-breeding seasons, as well as habitats including lowland damp grasslands, lowland scrub and a mixed assemblage of lowland open waters and their margins and lowland fen.

15. Direct and indirect impacts on the above site as a result of this development are unlikely due to the Sites separation and distance.

SSSI Impact Risk Zones (IRZs)

16. The Site lies within the 2km IRZ for the Dearne Valley Wetlands SSSI but does not fall into any of the highlighted categories which require the LPA to consult with Natural England in relation to potential impacts.

Non-Statutory Designations

17. There are four Local Wildlife Sites (LWS) and a Barnsley Wildlife Site (BWS) within the search area. The closest of which are the Hickleton Park LWS c.1km east and the Bolton on Dearne Wetland BWS c.1.4km south, both sharing only tenuous links with the Site via the local network of railways. Impacts on these sites are not expected.

18. Direct and indirect impacts on all remaining sites as a result of this development are unlikely due to the Sites separation and distance.

Nature Improvement Area

19. The Site lies within the Dearne Valley Green Heart Nature Improvement Area (NIA). The main objectives of the NIA is the creation and restoration of floodplain habitat along the River Don, along with the restoration of woodland and farmland habitats in low ecologically functioning areas. Development of the Site is unlikely to impact upon these objectives.

Wildlife Habitat Network

20. The Site does not lie within a Wildlife Habitat Network.

Granted EPSM Licenses

21. A search was made for granted EPSM (European Protected Species Mitigation) licenses within 1km of the Site. None were found.

Figure 3 Sheffield Biological Records Centre; Designated Sites.

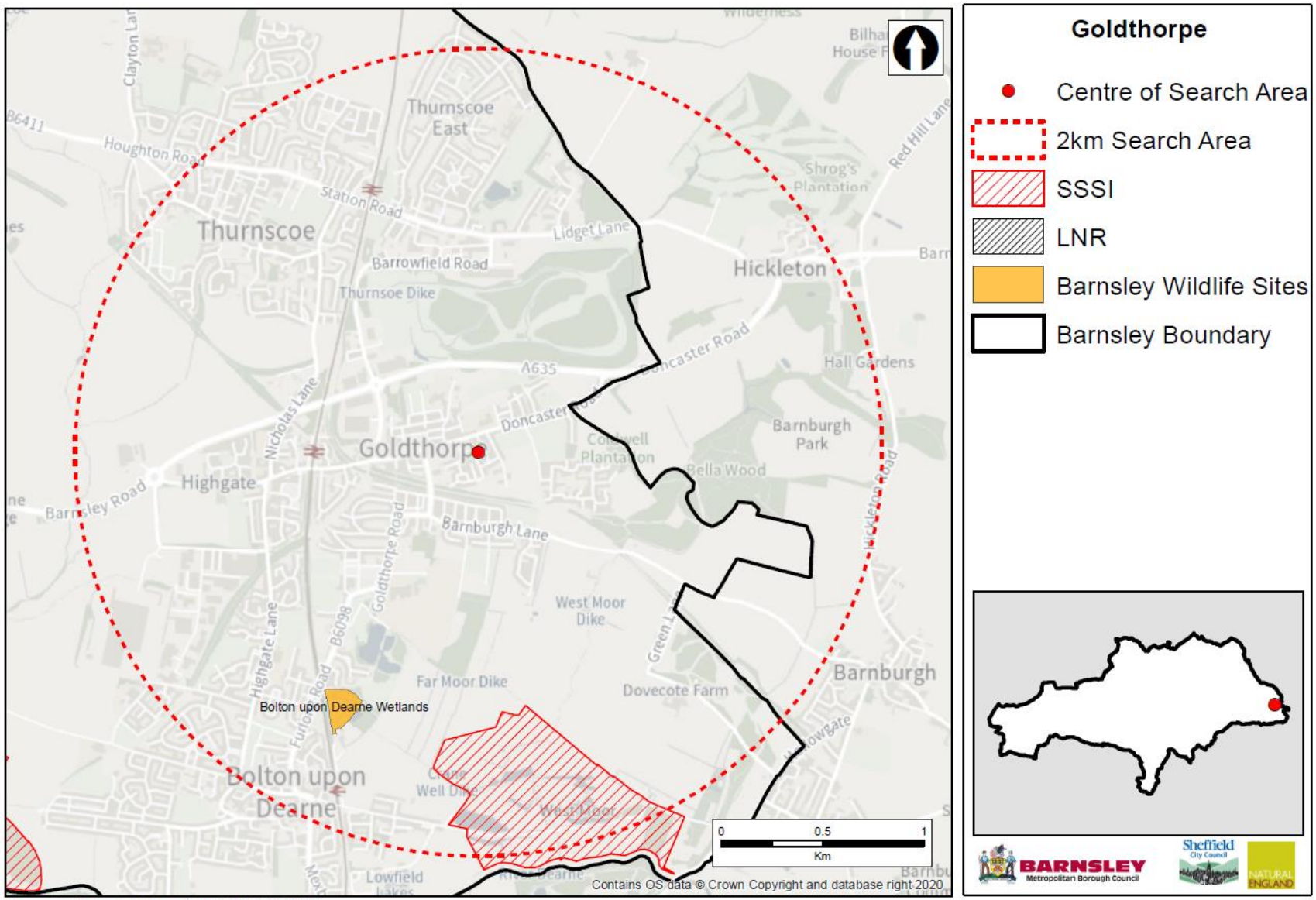
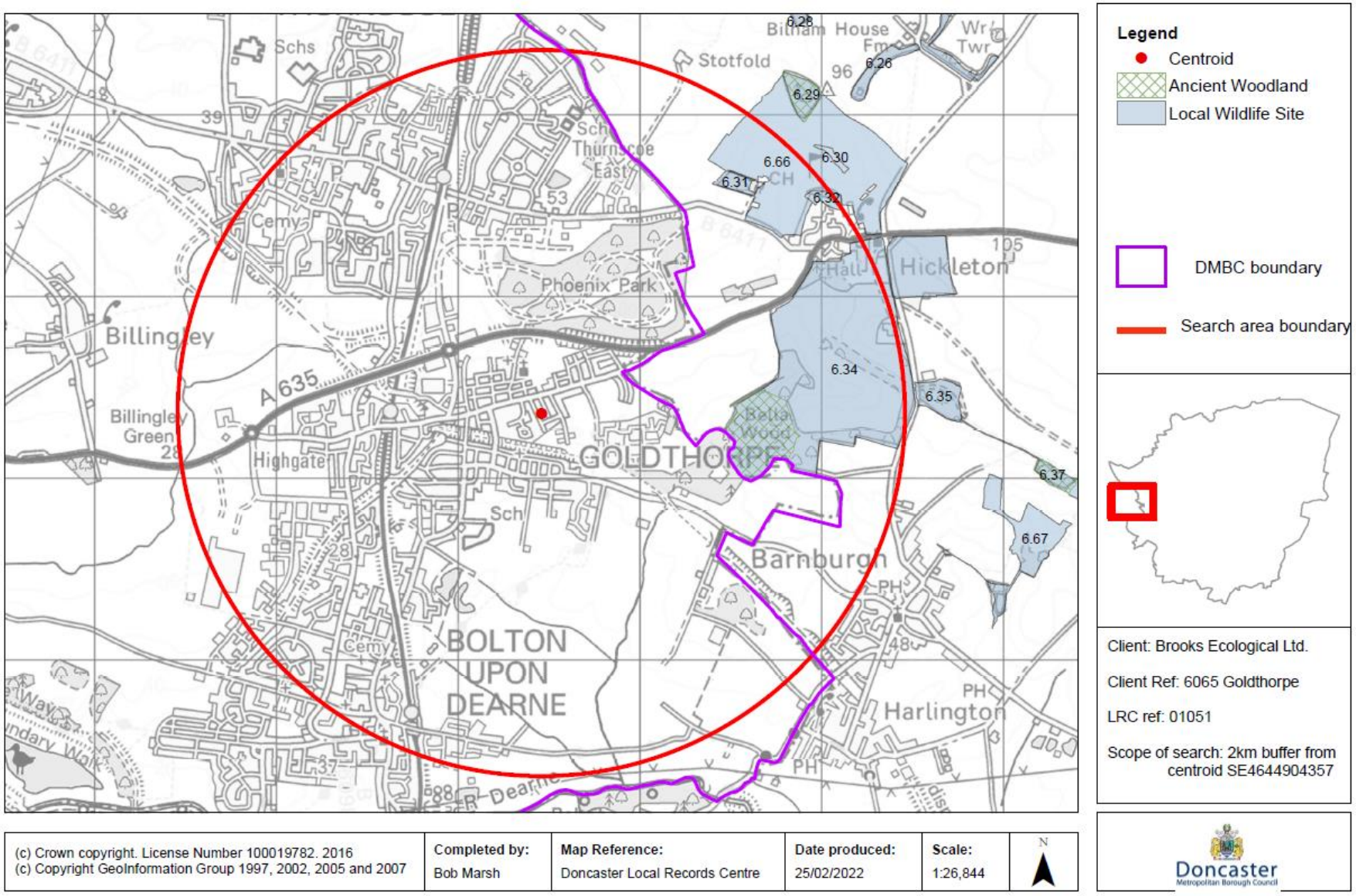


Figure 4 Doncaster Local Records Centre; Designated Sites.



Survey

Method

22. The survey was carried out during March 2022[1] and followed the principles of Extended Phase 1 Habitat Survey methodology (JNCC, 2010).

Limitations

23. Enough time was afforded the surveyor to carry out the survey. The survey was not constrained by poor weather.

24. Whilst the majority of the Site was accessible, private gardens of properties were not accessible at the time of survey, constituting at least 30% of the Site. These areas could have concealed invasive species or protected species evidence.

Habitat Appraisal

25. The Site's habitats are described in order on the following pages. In line with the requirement to provide information on Biodiversity Net Gain (BNG), habitats are named in accordance with the UK Habitats classification system. We have used the UK Habitats v2.01 guidance in identifying habitats. Habitat descriptions are divided into the 'distinctiveness' categories used in the calculations presented in the Biodiversity Gain Assessment, with more weight being afforded the more distinctive/important habitats.

26. Generally, the following apply to each tier of distinctiveness, although some authorities might highlight some lower distinctiveness habitats as having a higher importance locally. Where relevant we have highlighted these.

Very Low Distinctiveness Habitats

27. Habitats of little or no habitat value, i.e., lacking any significant native vegetation, but could still provide supporting habitat for protected or notable fauna such as birds or bats. In the context of BNG, their areas are included in calculations, but mitigation or compensation is not required.

Low Distinctiveness Habitats

28. Habitats which are ubiquitous, often which have been created or modified intentionally. They tend to lack diversity of species and structure. They are unlikely to support notable flora but could still provide supporting habitat for protected or notable fauna. In the context of BNG, they are included in calculations, but compensation/mitigation needs only to provide habitat of similar or higher distinctiveness.

Medium Distinctiveness Habitats

29. Habitats which are common but provide a higher level of structural and species diversity. Though unlikely to support more notable assemblages, species of interest could be present here and they are more likely to be important supporting habitat to fauna. In the context of BNG, mitigation needs to provide habitat of the same broad habitat type, or that of higher distinctiveness.

High Distinctiveness Habitats

30. Habitats which are more natural and contain more important assemblages of plants and potentially species which are rare in their own right. They will provide good habitat for fauna. These habitats are likely to be targeted as conservation priorities and will be the subject of additional policy guidance or legislation. In the context of BNG, whilst mitigation or compensation for loss or damage is possible, provision of more of the same type of habitat would be required, which (with a few exceptions) is likely to be difficult.

Very High Distinctiveness Habitats

31. These are the UK's rarest/best habitats. They will be present in very particular locations and a range of rare or important plant and animal species will depend on the particular conditions they provide. These habitats will be the subject of restrictive policy guidance or legislation. Whilst the BNG metric does not preclude mitigation or compensation in respect of these habitats, creation of the same habitat type would be required, and this would range between very difficult/expensive and impossible.

Irreplaceable Habitats

32. These are habitats of high biodiversity value, which are so difficult to recreate that it would be impossible to achieve the requirement to increase biodiversity on top of no net loss. These habitats have significant protection in the NPPF; any impacts from development require a strong justification and will flag as unacceptable in the Biodiversity Metric. Bespoke compensation for any loss of these habitats must be agreed with the LPA.

33. Each habitat is mapped and an area for each type is provided in the format of the Statutory Biodiversity Metric Calculation Tool. The areas can be used to

[1] This Report has been prepared during March 2022 following a visit to the site in March 2022 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.

quantify the impacts of development in an Ecological Impact Assessment if this is required by the Local Planning Authority.

Condition Assessment

34. Our condition assessment for each habitat described references where available the criteria set out in DEFRA (2023) Statutory Biodiversity Metric Condition Assessments. A completed version of this spreadsheet is provided digitally with the Biodiversity Gain Report which accompanies this report.

Habitats of Low/Very Low Distinctiveness

Figure 5 Approximate location and extent of these habitats.

Table 2 Summary – Habitats of Low / Very Low Distinctiveness.

Habitat Code / Name	Summary Description
u1b Developed land; sealed surface	The Site consists of three rows of terrace housing with yards to the rear. Typical ruderal species are found around curbs and property boundaries. Species include bristly oxtongue, shepherd's purse, and ragwort.
Gardens Un-vegetated garden / Vegetated Garden	Access to private gardens was limited. Visible areas and satellite mapping show an approximate 50:50 split between unvegetated gardens and vegetated. This has been factored into the DEFRA Metric Baseline calculation. Typical vegetated gardens include small patches of amenity grass and occasional ornamental planting. Typical species include perennial rye grass, cleavers, white clover, common mouse-ear and willowherb.

Figure 6 Example of u1b habitat.

Figure 7 Example of gardens

Habitats of Medium Distinctiveness

Figure 8 Approximate location and extent of these habitats.

Urban Trees

35. Two urban trees occur on-site in the rear yards of properties; both are mature elders. No signs of pruning. Trees appears in fine condition with no bark wounds or signs of decay. Both are located on private property behind high walls with access and view restricted.

36. The bat roost suitability of these trees is discussed in the faunal section of this report.

Figure 9 View of T2 & 3

Faunal Appraisal

37. The following pages discuss only the groups and species that could be reasonably expected to be found on the type of habitats present on, or adjacent to, the site.

Amphibians

Desk evidence

38. A single pond is visible on mapping within a 500m radius, located c.480m north of the Site within Phoenix Park. The busy A635 runs directly south of the pond acting as a barrier to dispersal south.

39. Common frog, common toad, smooth newt and great crested newt (GCN) are recorded within the search area. GCN records are concentrated around a pond located c.800m south, separated from the Site by residential development.

Field Evidence

40. The heavily developed nature of the Site provides no terrestrial habitat for GCN or other amphibian species. No suitable breeding habitat occurs within on or is connected to the Site.

Summary Evaluation

41. The Site itself provides no terrestrial habitat, and with no connected breeding habitat within 500m, the likely absence of GCN and other amphibian species can be concluded.

Further Surveys and Recommendations

42. No further surveys or precautions are considered necessary.

Figure 10 Ponds mapped in relation to the Site.

Bats

Desk evidence

43. Twenty-four records have been returned for the search area, twelve of which relate to roosts of common pipistrelle, noctule and whiskered bat. The most notable being a common pipistrelle day roost located in Goldthorpe Primary School c.170m west, since demolished (2016).

Field Evidence

Potential Roost Sites

Buildings: Three rows of terrace housing with a single outbuilding to the west. These have been assessed for potential roost features (PRF's) which are summarised in the table below with photographic evidence overleaf.

Trees: Two urban trees located in the rear yards of properties. These have been assessed for PRF's which are summarised in the table below.

Figure 11 Bat Roost Suitability Assessment.

Ref:	Notes	Suitability
Housing	Three rows of two-storey terrace housing. All housing in generally uniform condition with PRF's consistent across the Site. Slate tile pitched roofs generally poor condition with slipped and broken tiles presenting PRF's for small number of bats. Lifted flashing to set-back properties. Bargeboard running below eaves of most properties sits away from wall creating PRF. A mix of redbrick and rendered walls in generally fine condition with gaps created by weathered mortar shallow.	Low
Outbuilding	Single-storey flat roofed redbrick outbuilding located in private yard with limited access. Brickwork in poor condition with large gaps and cracks in mortar. Roofing felt appears in fine condition, sealed where visible.	Low
Trees	Both trees appear in fine condition with no PRF's noted.	Negligible

Foraging and Commuting Habitat

44. On-site habitats offer negligible foraging or commuting habitat to the local bat population.

Summary Evaluation

45. The on-site buildings provide features suitable to support roosting bats.

Further Surveys and Recommendations

46. Further survey will be required to determine the status of roosting within housing and the outbuilding. This should take the form of a single nocturnal survey (dusk emergence or dawn re-entry) carried out within the active bat season (May-August, inclusive).

Bat Roost Suitability Assessment

General view of terrace housing

Housing – broken and slipped tiles

Housing – lifted bargeboard

General view of urban trees

Housing – typical view of rear

Housing – lifted flashing

Outbuilding - damaged brickwork

General view of urban trees

Housing – broken and slipped tiles

Housing – lifted bargeboard

Outbuilding - damaged brickwork

Birds

Desk Evidence

47. A considerable number of bird records were returned for the search area, the majority of which relate to Hickleton Park LWS, RSPB Adwick Washland c.1.9km south and RSPB Dearne Valley c.3km southwest.

Field Evidence

48. Buildings on-site and vegetation within yards could support declining garden bird species, such as the red-listed house sparrow, starling and swift.

49. Birds noted during the survey include house sparrow and black-headed gull.

Summary Evaluation

50. The Site provides nesting opportunities for declining garden birds. Mitigation should be implemented into new development to compensate for this loss of habitat.

Further Surveys and Recommendations

51. No further surveys are considered necessary to demonstrate current baseline in respect of birds.

52. Standard precautions apply in respect of restrictions on clearing vegetation and building demolition during the nesting season.

53. Mitigation for the loss of garden bird habitat should be incorporated into proposals.

Invasive Non-Native Species (INNS)

54. INNS are species listed on Schedule 9 of the Wildlife and Countryside Act (1981), for which it is an offence to cause or allow it to grow in the wild. None were noted at the time of survey[2].

Survey constraints

55. This survey is highly constrained by the significant areas that were inaccessible.

56. Although no INNS have been identified in this preliminary survey it is not always possible to conclude absence from preliminary survey alone due to factors such as season, accessibility, 3rd party attempts to hide evidence or undisclosed treatment programmes. For this reason, this report should not be relied upon as definitive evidence of absence of INNS.

57. This site presents a high risk of supporting undetected INNS based on the following factors:

- Areas of site inaccessible to survey
- Suboptimal survey season
- Potential for recent earthworks or management which may have obscured viable material
- Potential for tipping of material

58. Should further assurances be needed in relations to INNS, a dedicated Invasive Weed Survey should be commissioned.

[2] Whilst our ecologists are trained in the identification of invasive species this report is not a dedicated invasive species survey. Detectability of invasive plant species can be affected by several factors, and conclusive determination status, or extent, is not possible through preliminary survey alone. As the presence of invasive species can generate significant costs to development, the client may wish to instruct a dedicated invasive species survey prior to entering into contracts.

Ecological Constraints & Opportunities

59. The usual approach to development is to minimise any net loss of biodiversity towards a gain in biodiversity value where this is possible on-Site. Our separate report on Biodiversity Gain sets out the position of the Site in terms of measured biodiversity.

60. Habitats do not impose any particular design constraints. Loss of habitat of this nature are not of the order which (outside of Biodiversity Net Gain) would require specific mitigation or compensation as they are common locally.

61. Housing across Site and an outbuilding to the west have been assessed as offering low suitability to support roosting bats. The presence of roosting here needs to be determined through further survey prior to any works impacting these buildings. Proposals should implement integral bat roosting features where possible.

62. The Site may also be of value to declining gardens birds, and suitable mitigation/ compensation should be designed into the scheme.

63. Ecological opportunities at the Site relate to:

- Potential to improve connectivity locally by introducing native planting to new POS
- Installing roosting or nesting features on new buildings.

Figure 12 Constraints and Opportunities Plan.

Conclusions and Recommendations

Planning considerations		
Recommendation	**Rationale**	**When**
R1 Additional Surveys	Bat emergence/ re-entry survey of housing and the outbuilding (as defined by this report) to determine the status of roosting.	May – August inclusive
R2 Produce a layout which minimises loss of biodiversity	Engage with the Constraints and Opportunities set out above, involve your ecologist in designs at an early stage. The proposals will need to consider the NPPF hierarchy of Avoid–Mitigate–Compensate in minimising any loss of biodiversity. Biodiversity Net Gain (BNG) policy mandates a minimum 10% Net Gain in Biodiversity Units, and the LPA may request additional gains. Your layout may need to change to accommodate your findings from R1 surveys.	During the design process
R3 Design	Make sure your design team follows ecological advice to and make sure there are no design conflicts. Produce a habitat retention plan at an early stage - which can be used to inform BNG and maximise scores. A habitat retention plan should identify areas which can be excluded from any impacts of clearance and construction. In producing a plan you should consider the need to provide (amongst other things) Site compounds, to store and move materials, to install drainage, flood storage, access and services - all with suitable easements.	During the design process
R4 Biodiversity Net Gain (BNG)	Carry out a BNG Assessment using the Statutory Biodiversity Metric Calculation Tool and accompanying Condition sheets produced by Defra.	During the design process. Baseline survey to be completed during the appropriate season.
R6 Nesting bird management	As with most sites the standard precaution in relation to birds would apply: To prevent the proposed works impacting on nesting birds, any clearance of vegetation and demolition of buildings will need to be undertaken outside of the breeding bird season which is 1st March – 31st August inclusive. Any clearance required during the breeding bird season should be preceded by a nesting bird survey to ensure that the law is not contravened through the destruction of nests and that any active nests are identified and adequately protected during the construction phase of the development.	Pre- and during -clearance

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Appendix 1 Habitats and Ecological Features

Appendix 2 List of species recorded

Bittercresses	*Cardamine spp.*
Bristly oxtongue	*Helminthotheca echioides*
Cherry laurel	*Prunus laurocerasus*
Cleavers	*Galium aparine*
Common ivy	*Hedera helix*
Common mouse-ear	*Cerastium fontanum*
Common ragwort	*Senecio jaccobea*
Creeping buttercup	*Ranunculus repens*
Daffodil	*Narcissus sp.*
Daisy	*Bellis perennis*
Dock	*Rumex sp.*
Elder	*Sambucus nigra*
Herb Robert	*Geranium robertianum*
Perennial rye grass	*Lolium perenne*
Scots pine	*Pinus sylvestris*
Shepherd's purse	*Capsella bursa-pastoris*
White clover	*Trifolium repens*
Willowherb	*Epilobium sp.*

Appendix 3 Explanatory Notes and Resources Used

Site Context

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.

Designated Sites

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 was referred to on locally designated sites.

Functional linkage with off-Site habitats

When assessing these we consider whether the Site could be functionally linked to them, considering links such as:

- Hydrological links - is the Site upstream downstream, or could ground water issues affect it?
- Physical links - is the site in close proximity and could it be directly or indirectly affected by construction and operational effects? Conversely it may be that despite proximity major barriers separate the two.
- Recreational links - do footpaths and roads make it likely that increased recreational pressure could be felt?
- Habitat links - is the site part of a network of similar habitat types in the wider area? These could be joined by linear corridors or could simply be 'stepping stones of habitat of similar form or function.

Method

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 2017).

Faunal Appraisal

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').

Records of notable species supplied from a 2km area of search by Sheffield Biological Records Centre and Doncaster Local Records Centre are used to inform this appraisal.

We discuss further only notable species or groups which could be a potential constraint due to the presence of suitable habitat and their presence (or potential presence) in the wider area. We screen out and do not present accounts of notable species or groups which do not meet these criteria – in some cases it may be necessary to explain this reasoning.

Consideration is given to the Local Biodiversity Action Plan (LBAP), which for this site is the 'Barnsley Biodiversity Action Plan'.

Species/Group	Habitat
Hedgehog	Mixed deciduous woodland
Bats	Upland oakwood
Water Vole	Wet woodland
Otter	Parkland and veteran trees
Grey Partridge	Traditional orchard
Bittern	Scrub
Kestrel	Coniferous woodland
Little Ringed Plover	Hedgerows
Lapwing	Arable field margins
Barn Owl	Acid grassland
Skylark	Neutral grassland
Tree Sparrow	Floodplain grazing marsh
Twite	Amenity grassland
Great Crested Newt	Upland heathland
Salmon	Lowland heath
Bullhead	Reedbeds
White-clawed Crayfish	Lowland fen
Glow Worm	Upland flushes, fens and swamps
Dingy Skipper	Rush pasture
Bluebell	Blanket bog
	Standing water and ponds
	Running water, rivers & streams
	Open Mosaic Habitats on Previously Developed Land
	Built environment and gardens

Appendix 4 Bat Roost Suitability Assessment

Bat roosting potential is classified according to the following criteria set out below, taken from the Bat Conservation Trust Good Practice Guidelines (2016).

Bat Roosting Suitability of Buildings and Trees

Suitability	Criteria
Negligible	Negligible habitat features on site likely to be used by roosting 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 larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Moderate	A structure or tree with one or more potential roost sites that could be used due to their size, shelter, protection, conditions, and surrounding habitat but unlikely to support a roost of high conservation status (with respect to roost type only - the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protections, conditions and surrounding habitats.

National, regional and local Status

The application Site lies within the natural range of 10 species of bat. These are summarised in the table below, together with a note on each species national status, relative abundance and status within the 1km search area.

Table A2 List of bat species known to occur in West Yorkshire, ordered in increasing level of significance to their national proportion.

Species	National Status	Within 1km radius	
		Recorded	Roosts known
Common pipistrelle, *Pipistrellus pipistrellus*	Common and increasing	Yes	Yes
Soprano pipistrelle, *P. pygmaeus*	Common and stable	-	-
Daubenton's, *Myotis daubentonii*	Common and increasing	-	-
Brown long-eared, *Plecotus auritus*	Common and stable	-	-
Natterer's, *M. nattereri*	Common and increasing	-	-
Whiskered, *M. mystacinus*	Uncommon but stable	Yes	Yes
Noctule, *Nyctalus noctula*	Uncommon but stable	Yes	Yes
Brandt's, *M. brandtii*	Uncommon but stable	-	-
Leisler's, *Nyctalus leisleri*	Uncommon, trend unknown	-	-
Nathusius' Pipistrelle, *P. nathusii*	Uncommon but stable	-	-

Evaluation

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.

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.

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

Box 1 *Legal background*

Bats are afforded full protection under The Wildlife and Countryside Act (1981) plus amendments, and the Conservation of Habitats and Species Regulations 2010. Under these Acts it is an offence among others, to recklessly kill, injure or disturb bats. It is also an offence to destroy or obstruct a roost even if bats are not in occupancy at the time of the action.

There are no defences against contravention of the Conservation of Habitats and Species Regulations 2010 which means that it is important for detailed and well-designed bat surveys to be carried out, prior to carrying out activities that may impact upon bat roosts such as demolition of buildings or removal of trees.

Where bats are found within a potential development site, a license from Natural England may need to be secured if works that could otherwise contravene legislation are to be carried out. These licences are only issued where Natural England is satisfied that works are unavoidable and would not have a negative impact on the favourable conservation status of bats. A Natural England license requires that the potential development site has full planning permission and that bats were a material consideration of the planning permission.

Box 2 *Bat roosts*

Bats roost in buildings and trees in different locations depending upon time of year and environmental factors such as position of the sun, proximity to heat sources and feeding grounds. The following types are commonly referred to:

Transitional roosts

Bats frequently gather early in the season (March to April) before dispersing to summer roosts. Bats can be found in high numbers in these roosts for a very short period. Transitional roosts can also be found shortly before hibernation in August to October when bats (depending upon species) can gather in roosts not used earlier in the season.

Maternity roosts

These are among the most important roosts and are normally occupied from May to August. Depending on the species involved, some maternity roosts can contain a very significant proportion of the local population.

Summer (non-breeding) roosts

Small groups of non-breeding female and male bats can gather in these roosts or bats from a local population may choose to roost individually. There are normally a large number of suitable locations for summer non-breeding roosts and these may be routinely used or used only on an occasional basis. Irregularly used summer roosts can be very hard to find without unreasonable survey effort.

Mating roosts

Around September bats will gather in roost to mate; these are often in different locations than summer or breeding roosts.

Hibernation roosts

As bats in hibernation roosts are highly vulnerable to disturbance and bats can be present in large numbers these are considered to be among the most important bat roosts. Many species of bats roost in large and nationally important hibernation roosts associated with underground sites, many of which are well known and protected. However, the most common bat in the UK (the common pipistrelle) is largely unaccounted for in winter but thought to disperse and roost individually or in small groups in thermally stable cracks and crevices in thick walls or trees.

Appendix 5 Bat Activity Survey Rationale

The Bat Conservation Trust Guidelines (BCTG) (Collins 2016) is now widely accepted as providing a basis and rationale for scoping and conducting bat surveys. It is acknowledged that the guidelines provide a wealth of background and are a very useful tool in standardising approaches to survey, it is also felt that an over reliance on some of the guidelines within this document can result in the provision of complicated surveys where they have significant consequences for the cost, or timescale of a large project, but could never deliver positives for bat conservation.

Taking the BCTG document as a whole, Chapter 2 helps the reader understand whether or not surveys are required, and that in the context of planning and development survey is required in relation to ensure;

- the avoidance of legal offences, and;

- the provision of a sufficient level of information - such that will allow the Local Planning Authority to make an informed decision on the proposals and their potential impacts on the Favourable Conservation Status (FCS) of bats.

Attendance at seminars presented by, and discussions with, those involved in production of the BCTG document has emphasised the point that it is within the remit of the consultant ecologist to make a decision on the necessity and scope of surveys - they will use the guidelines in doing so but are not in any way bound by them: this is reflected in Section 1.1 of the guidelines -

> *'The Guidelines do not aim to either override of replace knowledge and experience. It is accepted that departures from the guidelines (e.g. either decreasing or increasing the number of surveys carried out or using alternative methods) are often appropriate. However, in this scenario an ecologist should provide documentary evidence of (a) their expertise in making this judgement and (b) the ecological rationale behind the judgement. '*

Such decisions require a consideration of the potential of the project to impact on bat habitat, alongside analysis of the value of habitat on and around the site and of local records and the likelihood that bats might occur in significant numbers. Our reports aim to present information on how we have arrived at our decision on the Site, what assumptions we have based this on, and where further survey is recommended we indicate what the objective of this survey should be and how best this would be achieved.

The Site lacks valuable foraging or commuting habitat for this group. Activity will likely be limited to a small number of common light tolerant species foraging briefly around patches of vegetation or passing through the Site. No further survey is recommended in support of this conclusion.

Appendix 6 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 and this assessment.

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, watervole 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 form 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 / Guidance

The National Planning Policy Framework (NPPF):
The National Planning Policy Framework was updated in July 2021. The most relevant paragraphs from the NPPF are set out below.

The approach to assessing the natural environment is now embedded within the definition of what 'sustainable development' is and this falls under one of three objectives of the planning system – the 'environmental objective' applying in this case. Paragraph 8c (P8c) of the NPPF states that sustainable development should "*protect and enhance our natural, built and historic environment*", including "*improving biodiversity*". P10 sets out the Framework's presumption in favour of sustainable development.

Section 11 of the NPPF details making effective use of land. The Framework states that planning policies and decisions should *"take opportunities to achieve net environmental gains – such as developments that would enable new habitat creation"* and should "*recognise that some undeveloped land can perform many functions, such as for wildlife"* (P120).

Section 15 details conserving and enhancing the natural environment; policies and decisions should be *"protecting and enhancing valued landscape [and] sites of biodiversity […] value", "recognise the intrinsic character and beauty of the countryside*" and contribute to conserving and enhancing the natural environment and reducing pollution (P174). Allocations of land for development should, "*allocate land with the least environmental or amenity value, where consistent with other policies in this Framework"* and *"take a strategic approach to maintaining and enhancing networks of habitats"* (P175).

The Framework sets out ways to minimise the impacts on biodiversity through plans which "*identify, map and safeguard components of local wildlife rich habitats and wider ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity"* and promote the *"conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity"* (P179).

It is made clear in P180 that local planning authorities should apply a set of principles when determining planning applications. Planning permission should be refused *"if significant harm to biodiversity resulting from development cannot be avoided […], adequately mitigated, or, as a last resort, compensated for"*. Development should not normally be permitted where an adverse effect on a SSSI is likely, and "*opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity"*.

Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services.
This strategy builds on the Natural Environment White Paper (June 2011) - 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.

ODPM circular 06/05 (2005) Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System
Provides guidance to Local Authorities on their obligations to biodiversity – particularly in relation to assessing planning applications and ensuring the adequacy of information.

BSI (2013) British Standards Institute BS 42020:2013 Biodiversity – Code of Practice for Planning and Development.
Provides a standard for the biodiversity assessment and development industries and decision makers such as Local Planning Authorities to work to.