Brooks Ecological
Grounded advice

Goldthorpe Barnsley

Preliminary Ecological Appraisal Report

Report ER-7641-01

11/06/2024

Fortitudo Property

Report reference	**ER-7641-01** – Preliminary Ecological Appraisal Report
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Authorised	Christopher Shaw BSc (Hons) MCIEEM Principal Ecologist
Date	11/06/2024
Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.

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Summary

This report is produced to inform Fortitudo Property 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 May 2024.

Key Findings

The Site is a small section of land which has been partially prepared for development through soil stripping and storage and is consequently of low ecological value. No significant constraints or high distinctiveness habitats have been found.

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-7641-02.

Further surveys

Further surveys have not been recommended.

Introduction

1. Brooks Ecological Ltd was commissioned by Fortitudo Property to carry out a Preliminary Ecological Appraisal (PEA) of land at Goldthorpe Barnsley. The survey includes land within the red line boundary shown in Figure 1, opposite.
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 separately 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. This process is set out separately in the Biodiversity Gain Report which accompanies this PEAR.

Proposals/Reason for PEA

6. The PEA has been commissioned to inform proposals to develop this site for commercial purposes.

The Site

7. The application site 'the Site' comprises a plot of land which has been largely stripped of topsoil in preparation for development sandwiched between two roads, a superstore and housing. For the purposes of metric calculations, the Site area has been measured using GIS against the provided red line boundary as 1.1ha.

Figure 1 The Site (red line boundary).

Desk Study

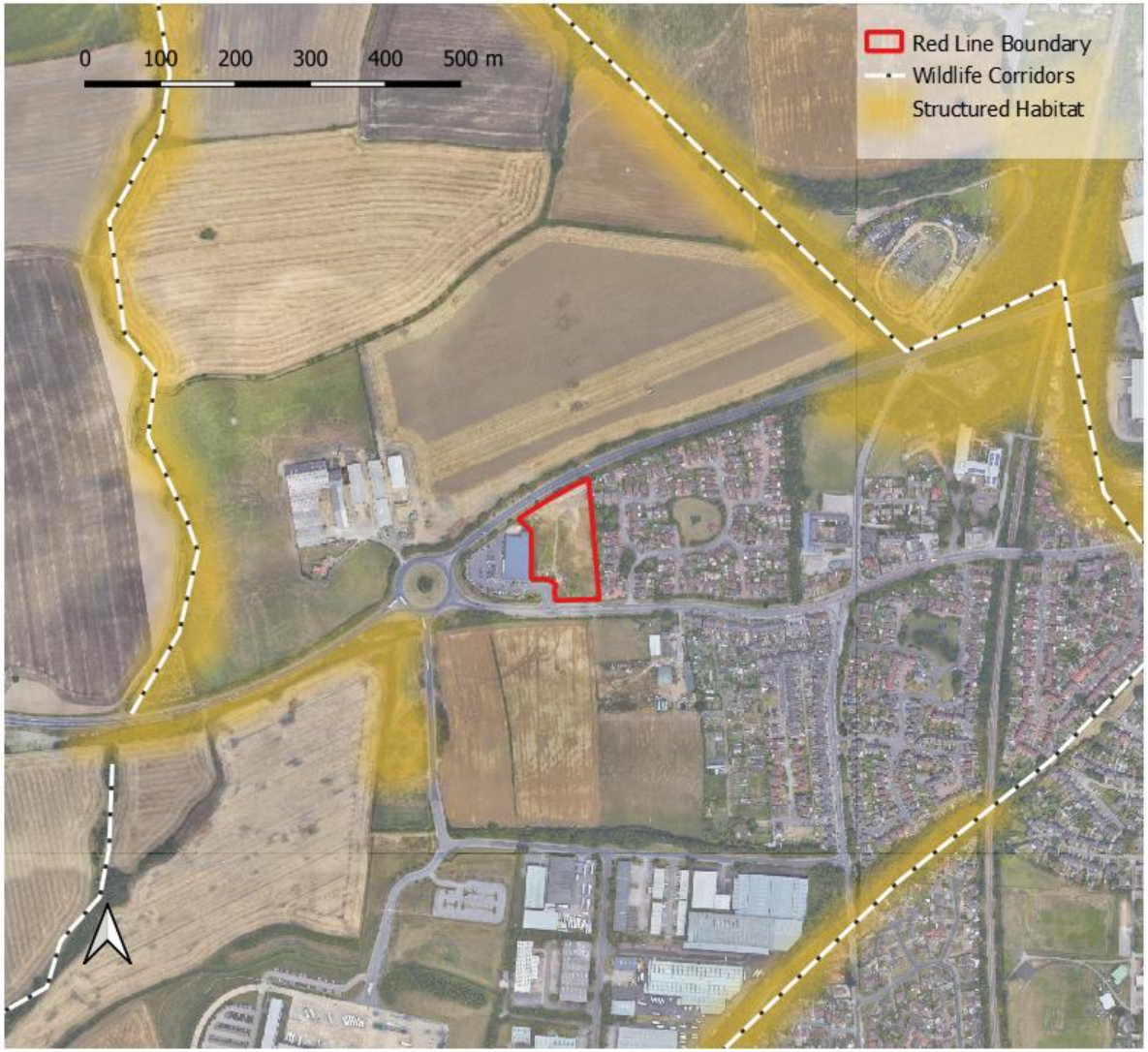
Landscape

8. The Site lies on the fringes of Goldthorpe being a logical urban extension location. The wider landscape is characterised by new and old housing and industrial and commercial developments. Beyond this the landscape comprises large arable fields with degraded hedgerow network. Structured vegetation (tree belts woods and large areas of scrub) are associated with linear features like old railways or roads and watercourses, all of which form the most significant potential wildlife corridors in the immediate vicinity of the Site.
9. The Site overlies sandstone, mudstone and siltstone of the Carboniferous-age Pennine middle coal measures formation, likely to give rise to neutral to locally acidic soil conditions. However the high degree of disturbance to the geology of the Site and surrounding land make this unlikely to majorly influence community compositions on Site.

Wildlife Corridors

10. The Site is not functionally linked to any obvious wildlife corridors, showing a degree of separation from those depicted in Figure 2, via housing, roads or arable land.
11. Development of the Site is unlikely to have an influential impact on local wildlife corridors.

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



Designations

12. 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.

Statutory Designations

13. 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	1.6km southwest and 1.8km southeast	Site of Special Scientific Interest (SSSI)	Wetlands with high value to breeding and wintering water birds and specially protected species like bittern.

14. The Site is separated from the Dearne Valley Wetlands SSSI areas by an expanse of residential, industrial and arable land and therefore direct and indirect impacts on this site, as a result of this development, are unlikely.

SSSI Impact Risk Zones (IRZs)

15. The Site lies within the IRZ for the Dearne Valley Wetlands SSSI and may fall into one or more of the highlighted categories which require the LPA to consult with Natural England in relation to potential impacts.

Non-Statutory Designations

16. There is one Local Wildlife Site in the search area. This is Bolton upon Dearne Wetlands, some 1.5km south of the Site. There is no physical or hydrological connection to this site and impacts from development can be reasonably screened out.

Nature Improvement Area

17. The Site lies within the Dearne Valley Green Heart Nature Improvement Area, the objectives of which are to 'restore and enhance the ecological networks of the river, its floodplain and its link to habitats on surrounding slopes and hills'.

18. Given the Site's degree of separation from the River Dearne, development is unlikely to have direct or indirect impacts on the objectives of the Nature Improvement Area.

Wildlife Habitat Network

19. The Site is not within any mapped Wildlife Habitat Network.

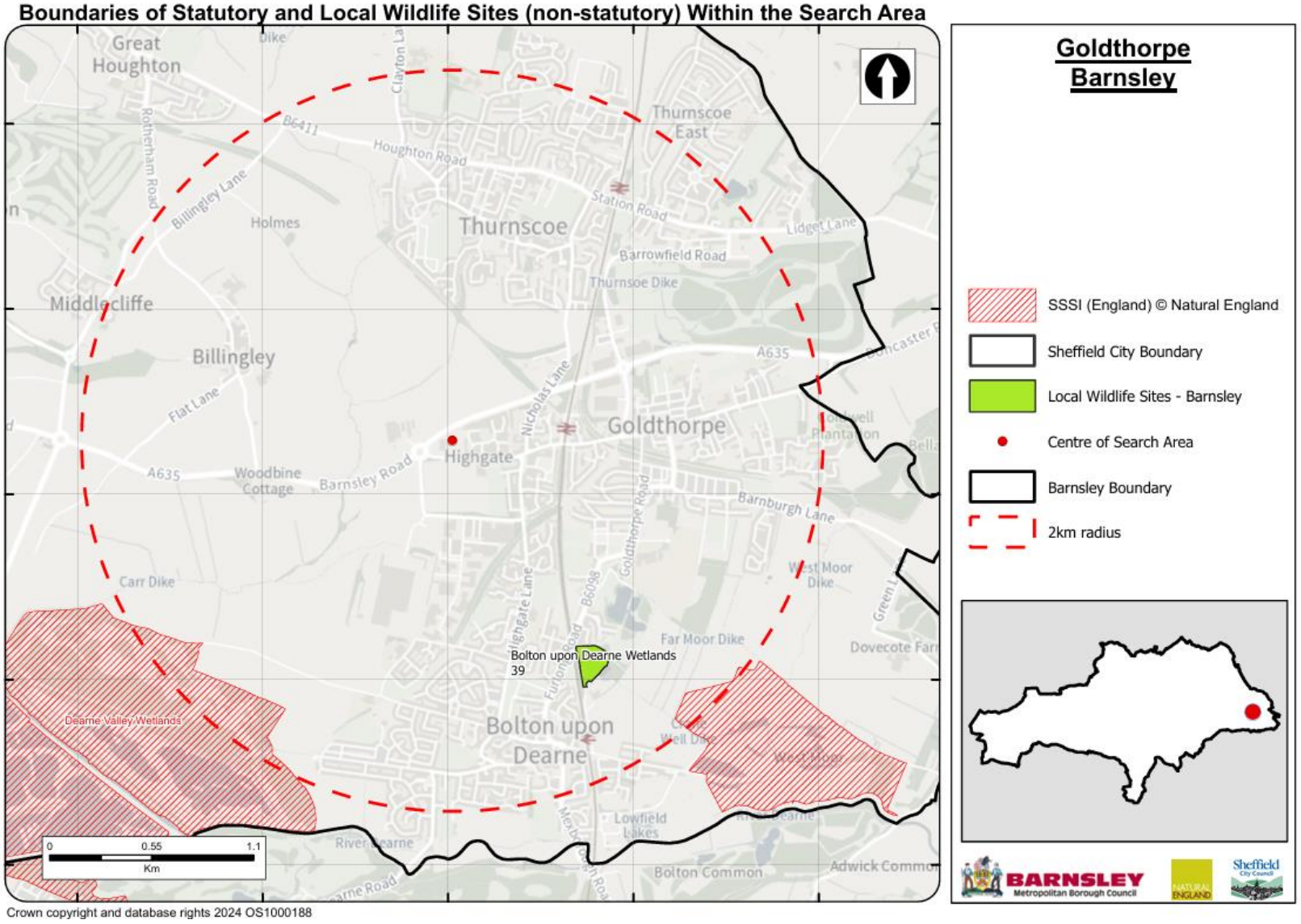
Granted EPSM Licences

20. There are no granted European Protected Species Mitigation (EPSM) licences shown within 1km of the Site.

Mapped Ancient Woodland

21. There is no mapped ancient woodland within 15 m of the site.

Figure 3 Records of designated sites and notable species within 2km of the Site;



Survey

22. The survey was carried out during May 2024[1] and followed the principles of Extended Phase 1 Habitat Survey methodology (JNCC, 2010).

23. The timing of the survey meant that it was possible to confidently classify the type and condition of habitats present on this Site.

24. Whilst the majority of the Site was accessible, at least 10% of the Site was inaccessible due to very dense vegetation, which could not be closely inspected. This 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.

Condition Assessment

Our condition assessment for each habitat described references where available the criteria set out in DEFRA (2024) Statutory Biodiversity Metric Condition Assessments. A completed version of this spreadsheet is provided digitally with the Biodiversity Gain Report which accompanies this report.

[1] This Report has been prepared during June 2024 following a visit to the Site in May 2024, 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.

Habitats of Low/Very Low Distinctiveness

Figure 4 Approximate location and extent of these habitats.

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

UK Habitats	Label Ref	Summary Description
Ruderal/ ephemeral	SV1	Recently cleared ground with over 50% bare earth. Colonising with acrocarpous mosses, black medick, smooth meadow grass, ragwort, prickly lettuce, small willowherb species, perforate St johns wort, and vipers bugloss.
Tall forb	SV2 SV3	Dense competitive vegetation growing of soil stores dominated by nettle, creeping and spear thistles, broad leaved dock, couch grass, hogweed, teasel and cow parsley.

Figure 5

Ephemeral vegetation dominates.

Figure 6

Tall forb on soil stores.

Habitats of Medium Distinctiveness

Figure 7 Approximate location and extent of these habitats.

Table 3 Summary of Medium Distinctiveness habitats.

UK Habitats	Label Ref	Summary Description
Other neutral grassland	G1	Disturbed remnants of the grassland which occupied the Site prior to site stripping. Species include soft brome, smooth meadow grass, cocksfoot and Yorkshire fog. Forbs include knapweed, daisy, white clover, cut leaved cranesbill, hogweed, ribwort plantain, white clover, willowherbs and hoary willowherb. Damaged areas with ruderal and competitive colonists. Approximately 6 species per m^2.
Mixed scrub	S1	Scrub dominated by bramble, hawthorn and goat willow intermixed and merging with competitive forbs like nettle, dock and thistle.
Bramble scrub	S2	Narrow strips of pure bramble scrub on the boundary of the site. Also intermixed and merging with competitive plants like nettle, dock couch grass and thistle.

Figure 8

Mixed scrub.

Figure 9

Neutral grassland.

Trees

Figure 10 Approximate location and extent of these habitats.

Table 4 Summary – trees.

UK Habitats	Label Ref	Summary Description
Small urban tree	N/A	Young naturally colonised sycamore, cherry and goat willows in boundary locations.

Figure 11 Sycamore trees on the eastern boundary.

Hedgerows

Figure 12 Approximate location and extent of these habitats.

Table 5 Summary – hedgerows.

UK Habitats	Label Ref	Summary Description
Native hedge with trees	N/A	Unmanaged hedge, possibly outside the Site, of hawthorn, field maple and dog rose with individual trees of ash (with dieback) and field maple. Two major gaps present.

Figure 13 Sycamore trees on the eastern boundary.

Irreplaceable Habitats

32. There are no irreplaceable habitats on or adjacent to the Site.

Ancient or veteran trees

33. There are no ancient or veteran trees on or adjacent to the Site.

Faunal Appraisal

34. 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

35. No ponds are mapped within 500m of the Site.

36. There are four records of great crested newt (GCN) returned for the area dating from 2011 and 2018. All records are well beyond the zone of influence of the development with the town and urban development of Goldthorpe intervening.

Field Evidence

37. No ponds or seasonal pools were noted within the site.

Summary Evaluation

38. The site is unlikely to be of high value to amphibians, and protected species can be reasonably discounted.

Further Surveys and Recommendations

39. No further surveys or precautions are considered necessary.

Bats

Desk evidence

40. There is a handful of records of common pipistrelle, myotid spp. and noctule bats both field records and roosts, none of these records are relevant to the Site itself.

Field Evidence (Roosting)

41. There are no buildings or trees old enough to support roosts on Site.

Field Evidence (foraging and commuting)

42. The Site presents a relatively isolated and small parcel of land, it is unlikely to contribute much to local foraging resources.

43. The Site does not form part of any apparent network of habitat which could provide key commuting habitat locally.

Summary Evaluation

44. The Site's size and location suggest that it will not be important to this group.

Further Surveys and Recommendations

45. Further surveys are not recommended. There would be opportunities to provide new roost sites in buildings at the Site.

Birds

Desk Evidence

46. There are a large number of bird records mostly associated with the Old Moor and Wath Ings LWS. No notable records come from the site itself or immediate surroundings.

Field Evidence

47. The site presents very poor potential bird habitat and proximity to sources of disturbance will make the presence of important or sensitive species very unlikely.

Summary Evaluation

48. Based on its size and habitats, the Site will not be important to local bird populations.

Further Surveys and Recommendations

49. No further surveys are considered necessary to demonstrate current baseline in respect of birds.
50. Standard precautions apply in respect of restrictions on clearing vegetation during the nesting season.

Badgers

Desk evidence

51. No records of badgers have been returned.

Field Evidence

52. The Site provides potential habitat for sett building in soil stores and hidden in inaccessible boundary vegetation; however its location makes their presence here somewhat unlikely.
53. No evidence of badger was found however access throughout the areas of tall vegetation on soil stores was not possible.

Summary Evaluation

54. Badger setts are unlikely to be present at the Site as affected by the proposals but due to access restrictions, precautions are recommended.

Further Surveys and Recommendations

55. Given that absence cannot be demonstrated at this stage a precautionary pre-works check for setts is recommended – co-ordinated with Site clearance.

Hedgehogs (NERC Act 2006/Local BAP)

Desk evidence

56. Hedgehogs are recorded within the search area.

Field Evidence

57. No evidence of hedgehogs was found on site and the site is poorly connected to nearby suitable habitat.

Summary Evaluation

58. The poor position of this site (sandwiched between busy roads), for hedgehogs makes is unlikely to support them.

Further Surveys and Recommendations

59. Hedgehogs are assessed as likely absent from the Site. No further surveys are considered necessary.

Reptiles

Desk evidence

60. There are two records of grass snake from 1.6km to the west of the site.

Field Evidence

61. The Site provides very poor potential basking and cover habitat

62. No field evidence was found.

Summary Evaluation

63. The site will not be important for reptiles due to the habitats present and the position in the landscape.

64. Reptiles are assessed as likely absent from the Site.

Further Surveys and Recommendations

65. No further surveys or precautions are considered necessary.

Invasive Non-Native Species (INNS)

66. 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.

67. No INNS were noted during survey[2].

Survey constraints

68. This survey is constrained by the presence of areas that were inaccessible due to the density of vegetation.

69. 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, third-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.

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

    - Areas of site inaccessible to survey
    - Potential for recent earthworks or management which may have obscured viable material
    - Proximity to nearby potential sources of infection
    - Potential for tipping of material

[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 and Opportunities

Habitat Value

71. 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.
72. Irrespective of the Biodiversity Gain process, development should still seek to retain what is best about the Site.
73. The plan opposite shows the Site in the context of mapped habitat distinctiveness with the aim of informing the design of any layout. It shows that there are no targets of higher distinctiveness or irreplaceable habitat which would need to be avoided by the proposals and that the Site is relatively uniform in terms of potential impact.
74. Habitats do not impose any particular design constraints. Loss of habitat of this nature is not of the order which (outside of Biodiversity Net Gain) would require specific mitigation or compensation as they are common locally.

Faunal constraints

75. Faunal constraints have not been identified.

Ecological Opportunities

76. Ecological opportunities at the Site relate to:
    - Potential to improve connectivity locally by enhancing the streetside trees with new planting.
    - Potential to improve the northern boundary hedge by planting more trees that can grow into larger hedgerow standards.
    - Installing roosting or nesting features on new buildings.

Figure 14 Distinctiveness of habitat.

Conclusions and Recommendations

Planning considerations		
Recommendation	**Rationale**	**When**
R1 Additional Surveys	None recommended	N/A
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.	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.
R5 Produce a Biodiversity Management Plan	To specify in detail how the development will cater for biodiversity on-Site and to show how habitats incorporated will be managed.	Delivery report Suitable for planning condition

Other considerations (managing legal or financial risks)		
Issue	**Rationale**	**When**
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 will need to be undertaken outside of the breeding bird season, which runs from 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.	Prior to and during clearance
R7 Pre-construction ecology checks	It is always advisable to check that protected species (e.g., badger) and invasive weeds have not colonised or become visible in the period between the date of this report and construction activities commencing.	Prior to site preparation or archaeological/geotechnical investigations.

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Appendix 5 Legislation (where not stated above)

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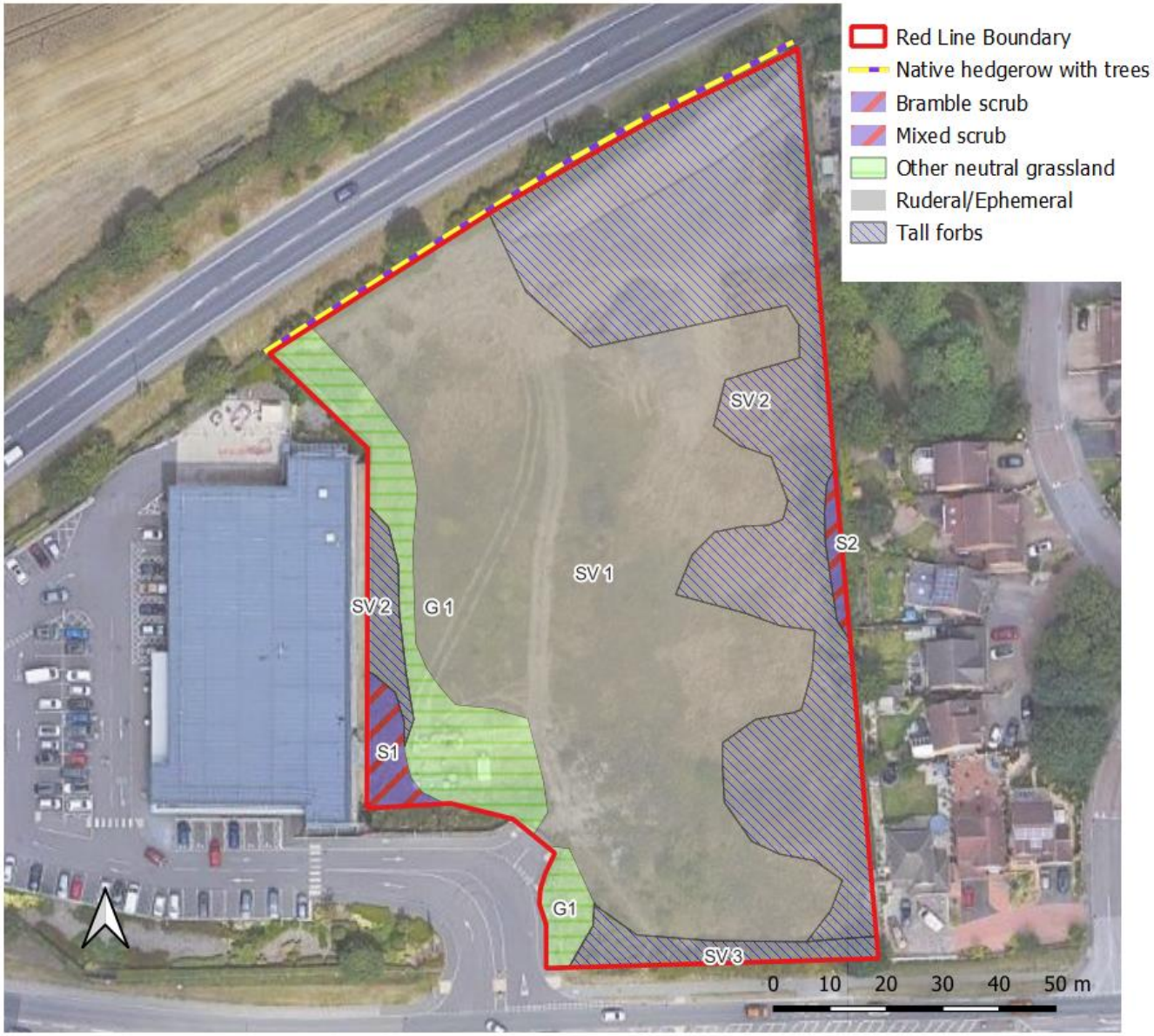
Appendix 1 Habitats and Ecological Features



Appendix 2 List of species recorded

American willowherb	*Epilobium ciliatum*
Annual meadow grass	*Poa annua*
Ash	*Fraxinus excelsior*
Black medick	*Medicago lupulina*
Bramble	*Rubus fruticosus*
Broad leaved dock	*Rumex obtusifolius*
Canadian fleabane	*Erigeron canadensis*
Cleavers	*Galium aparine*
Coltsfoot	*Tussilago farfara*
Common bent	*Agrostis capillaris*
Common fumitory	*Fumaria officinalis*
Common ivy	*Hedera helix*
Common mouse-ear	*Cerastium fontanum*
Common orache	*Atriplex patula*
Common ragwort	*Jacobaea vulgaris*
Common vetch	*Vicia sativa*
Couch grass	*Elymus repens*
Cow parsley	*Anthriscus sylvestris*
Creeping bent	*Agrostis stolonifera*
Creeping buttercup	*Ranunculus repens*
Creeping cinquefoil	*Potentilla reptans*
Creeping thistle	*Cirsium arvense*
Crested dogs tail	*Cynosurus cristatus*
Curled dock	*Rumex crispus*
Cherry	*Prunus sp.*
Daisy	*Bellis perennis*
Dandelion	*Taraxacum officinale agg.*
Dog rose	*Rosa canina*
Cock's-foot	*Dactylis glomerata*
False oat grass	*Arrhenatherum elatius*
Fescues	*Festuca spp.*
Field horsetail	*Equisetum arvense*
Field maple	*Acer campestre*
Elder	*Sambucus nigra*
Goat willow	*Salix caprea*
Groundsel	*Senecio vulgaris*
Hawthorn	*Crataegus monogyna*
Hedge mustard	*Sisymbrium officinale*
Hogweed	*Heracleum sphondylium*
Garlic mustard	*Alliaria petiolata*
Herb Robert	*Geranium robertianum*
Meadow buttercup	*Ranunculus acris*
Meadow foxtail	*Alopecurus pratensis*
Meadow grass	*Poa sp.*
Perennial sow thistle	*Sonchus arvensis*
Prickly lettuce	*Lactuca serriola*
Prickly sow thistle	*Sonchus asper*
Rat's tail/ greater plantain	*Plantago major*
Nettle	*Urtica dioica*
Ribwort plantain	*Plantago lanceolata*
Perennial rye grass	*Lolium perenne*
Smooth meadow grass	*Poa pratensis*
Spear thistle	*Cirsium vulgare*
Sweet vernal grass	*Anthoxanthum odoratum*
Sycamore	*Acer pseudoplatanus*
Teasel	*Dipsacus fullonum*
White clover	*Trifolium repens*
Yorkshire fog	*Holcus lanatus*
Vipers bugloss	*Echium sp.*
Knapweed	*Centaurea nigra*
Soft brome	*Bromus mollis*

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 [SSSIs]) 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 Barnsley Metropolitan Borough Council 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 wood pasture
Grey partridge	Traditional orchard
Bittern	Scrub
Kestrel	Hedgerows
Little ringed plover	Arable field margins
Lapwing	Acid grassland
Barn owl	Neutral grassland
Skylark	Amenity grassland and verges
Tree sparrow	Floodplain grazing marsh
Twite	Reedbeds
Great crested newt	Lowland fen
Salmon	Upland flushes, fens and swamps
Bullhead	Rush pastures
White-clawed crayfish	Blanket bog
Glow worm	Standing water and ponds
Dingy skipper	Running water, rivers & streams
Bluebell	Upland heathland
	Lowland heath
	Open mosaic habitats on previously developed land
	Built environment and gardens

Bats

Bat roosting potential is classified according to the following criteria set out below, taken from the Bat Conservation Trust Good Practice Guidelines (2023).

Bat Roosting Suitability of Buildings

Suitability	Criteria
None	No habitat features on site likely to be used by any roosting bats at any time of the year (i.e. a complete absence of crevices/suitable shelter at all ground/underground levels).
Negligible	No obvious habitat features on site likely to be used by roosting bats; however, a small element of uncertainty remains as bats can use small and apparently unsuitable features on occasion.
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically at any time of the year. 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 larger numbers of bats (i.e. unlikely to be suitable for maternity and not a classic cool/stable hibernation site, but could be used by individual hibernating bats).
Moderate	A structure with one or more potential roost sites that could be used by bats 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, such as maternity and hibernation – the categorisation described in this table is made irrespective of species conservation status, which is established after presence is confirmed).
High	A structure with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. These structures have the potential to support high conservation status roosts, e.g. maternity or classic cool/stable hibernation site.

Bat Roosting Suitability of Trees

Suitability	Criteria
None	Either no PRFs in the tree, or highly unlikely to be any.
FAR	Further assessment required to establish if PRFs are present within the tree.
PRF	A tree with at least one PRF present.

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

Appendix 4 Bat Activity Survey Rationale

The Bat Conservation Trust Guidelines (BCTG) (Collins 2023) 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 is small, not strategically located and does not contain any potential key habitat features for bats, its use by this group can be easily predicted making any requirement for additional survey disproportionate.

Appendix 5 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 the EC Habitats Directive 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 (*Reynoutria japonica*), and giant hogweed *(Heracleum mantegazzianum*).

Planning Policy/Guidance

The National Planning Policy Framework (NPPF)

The National Planning Policy Framework was updated in December 2023. 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" (P124).

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 (P180). 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" (P181).

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" (P185).

It is made clear in P186 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".

UK Biodiversity Indicators 2023; update to Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services

The UK Biodiversity Indicators 2023 provide updates to the indicators set out in Biodiversity 2020 including new species abundance targets as set out in the Environment Act 2021. Biodiversity 2020 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.