
**ECOLOGICAL APPRAISAL WITH
IMPACT ASSESSMENT (EcIA)**

Land off Primrose Lane, Hightown, Liversedge

Jones Homes (Yorkshire) Ltd.



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

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

Report Reference & History: Document 1, V2.

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Version 1	Dr Caroline Hillier MCIEEM	24/01/2023
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EXECUTIVE SUMMARY

CONTENTS	SUMMARY
Site Location	Off Primrose Lane, Hightown, Liversedge, Kirklees, West Yorkshire. WF15 6QY
Approximate Central Grid Reference	SE 19695 24112
Proposals	Site clearance and construction of 77 new residential units.
Scope of the Survey(s)	<ul style="list-style-type: none"> Extended phase 1 habitat survey including a risk assessment for protected / notable species and invasive species. Bat activity surveys Breeding bird surveys
Designated Sites	<ul style="list-style-type: none"> There are no statutory sites of nature conservation interest within the 2km search area. There are no non-statutory sites of nature conservation interest within the 2km search area. The site partly lies within the Kirklees Wildlife Habitat Network. The woodland to the north and north-east of the survey area makes up part of the Wildlife Habitat Network. The north-western part of the woodland is within an area of Green Belt (Liverpool, Manchester & West Yorkshire Green Belt, Kirklees District [B]). This Green Belt covers an area of 2824.2ha in its entirety.
Priority Habitats	<p>The site supports the following priority habitats:</p> <ul style="list-style-type: none"> Broadleaved woodland, and Hedgerows.
Protected / Priority Species	<p>The site supports, or has the potential to support the following protected and priority species:</p> <ul style="list-style-type: none"> Bats (foraging and commuting); Nesting birds; Foraging birds (fieldfare & redwing – woodland and hedgerow only), and Hedgehog.
Recommendations for Further Survey	<ul style="list-style-type: none"> Arboricultural survey and Arboricultural Impact Assessment.
Reasonable Avoidance Measures	<ul style="list-style-type: none"> Avoid undertaking vegetation clearance during the bird nesting season (March to end August inclusive). Avoid root damage to trees being retained within the site, implement measures to prevent root damage to these features as per the Arboricultural Impact Assessment; Implement a sensitive lighting regime. Avoid illuminating peripheral/adjacent habitat (residential gardens, woodland edges etc.) within or adjacent to the site as it could disrupt bat commuting and foraging areas and other nocturnal wildlife; and Contractors to be made aware of the potential presence of hedgehogs, which if encountered should be carefully moved to a 'safe area' (Method Statement).
Recommendation for enhancements to the site	<ul style="list-style-type: none"> Measurable Biodiversity Net Gain (Local Plan Policy LP30, Kirklees BNG Technical Advice Note, June 2021) +2.25% site habitat units achieved; +143.91 % Hedgerow units achieved; BAP priority habitat (hedgerow & woodland) should be retained (where possible) and enhanced in the landscaping scheme;

	<ul style="list-style-type: none"> • Creation of habitats in the landscaping scheme that provide foraging habitat for bats, birds and small mammals and nesting habitat for the local breeding bird assemblage; • Use of native plants which bear berries / seeds where possible (particularly useful for overwintering birds); • Bird boxes and roosting pouches to be erected in the woodland / sparrow terraces incorporated into a proportion of the dwellings (~10%); • Bat boxes: Habitat / birdbrickhouses or similar to be incorporated into a proportion of the dwellings (~10%); • Provision of a hedgehog house within the landscaped area; • Hedgehog highways consisting of 15 x 15cm gaps will be incorporated into the peripheral fences of the property to allow hedgehogs to forage across the gardens, and • Erection of hedgehog crossing signs on access roads leading to and through the residential estate.
Other recommendations	Production of a Landscape and Ecological Management Plan (LEMP) to be conditioned to ensure habitats proposed for BNG are delivered and managed appropriately to achieve their target condition.
Conclusions	There are no significant negative impacts anticipated as a result of the development proposals. The residual impacts of the development are either of moderate benefit, minor benefit or of negligible impact.

* The whole of the report must be read as other sections of the report may contain information which puts the findings in any executive summary into context.

1.0 INTRODUCTION

BACKGROUND

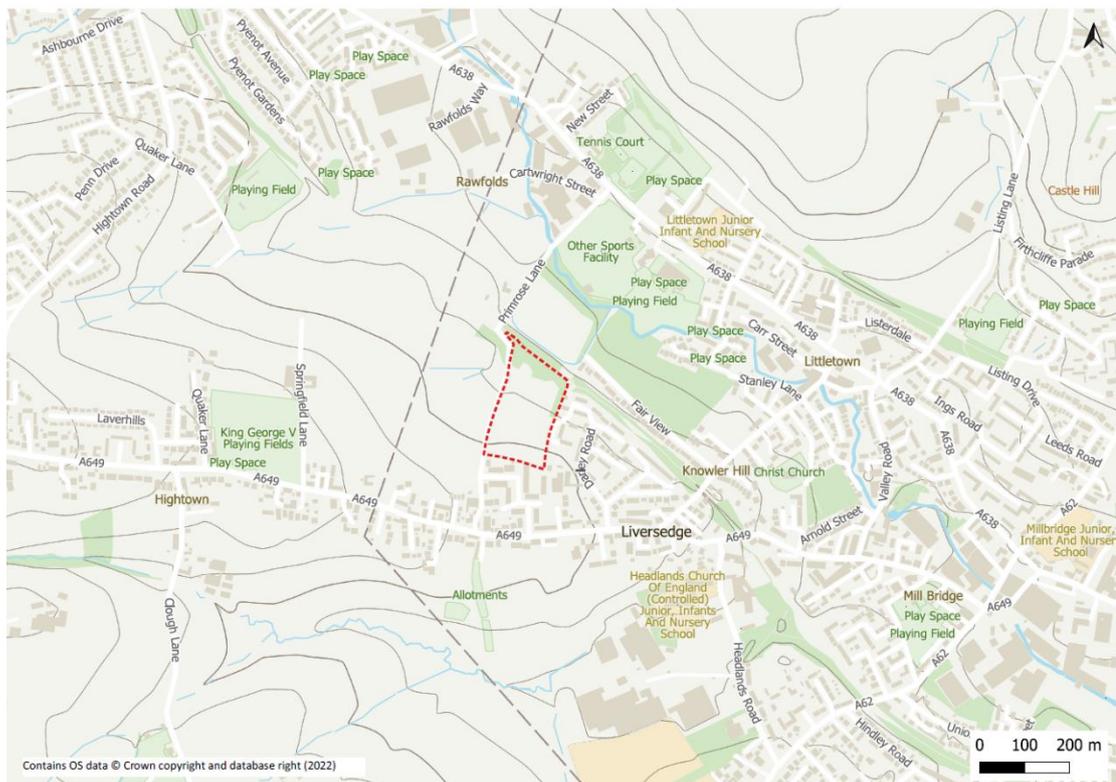
- 1.1 Applied Ecological Services Ltd. was commissioned by Jones Homes (Yorkshire) Ltd. to undertake an extended phase 1 habitat survey including a protected species risk assessment and additional species-specific surveys on an area of land off Primrose Lane, Hightown, Liversedge, Kirklees, West Yorkshire, WF15 6QY. The data gathered has been used to inform an ecological appraisal of impacts (EclA) of the proposed development by identifying, quantifying and evaluating the potential effects of development-related or other proposed actions on habitats, species and ecosystems in order to provide sufficient information to enable planning officers to assess the proposals against biodiversity policy and legislation.
- 1.2 The site is located between Heckmondwike and Cleckheaton and is accessed from Halifax Road (A469). The site is within a semi-rural area approximately 0.5km south-east of Cleckheaton. The approximate centre of the site is located at OS grid reference SE 19695 24112. Land use surrounding the site is primarily agricultural land, to the west, woodland and agricultural land to the north and residential areas to the south and east. The agricultural fields are delineated by a combination of fences, hedgerows and stone walls. The River Spen is located 0.16km to the north of the site boundary.

2.0 THE PROPOSED DEVELOPMENT

SITE DETAILS

- 2.1 The survey area covers an area of 3.12ha (7.71acres). The approximate central point of the site is at grid reference SE 19695 24112.
- 2.2 The location of the proposed development area is identified by the red line boundary illustrated on **Figure 1**.

Figure 1: Site Location



DEVELOPMENT PROPOSALS

- 2.3 It is understood that an application is being made for the clearance of the site and construction of 77 new residential units.

3.0 SURVEY & SITE ASSESSMENT METHODS

DESKTOP STUDY

- 3.1 In order to compile existing baseline information, relevant ecological information was requested from the following organisations which for the purposes of this report, included:
- West Yorkshire Ecological Services (WYES);
 - Multi Agency Geographic Information for the Countryside (Magic) website.
- 3.2 A 2km radius was searched for sites within the National Site Network of International nature conservation importance, such as Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) and RAMSAR sites, which are not part of the National Site Network. A 2km radius was searched for statutory sites of national, regional and local importance, such as Sites of Special Scientific Interest (SSSIs) or National Nature Reserves (NNR), Local Nature Reserves (LNRs), and for non-statutory designated sites such as Local Wildlife Sites (LWS) and also for records of protected and notable species.
- 3.3 Further inspection, using colour 1:25,000 OS base maps (www.ordnancesurvey.co.uk) and aerial photographs from Google Earth (www.maps.google.co.uk), was also undertaken in order to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.

FIELD SURVEY

HABITATS / FLORA

- 3.4 A habitat survey, protected / priority species risk assessment and search for invasive non-native species was undertaken on 27th August, 2021, by Dr Caroline Hillier MCIEEM. Caroline is senior ecologist at Applied Ecological Services Ltd. (AES-LTD) and an experienced field biologist. Caroline holds Natural England Survey licences for both bats (2015-155181-CLS-CLS) and great crested newt (2015-16700-CLS-CLS). The habitat survey was undertaken using the standard Extended Phase 1 Habitat Survey methodology (JNCC, 2010)¹ as recommended by Natural England to identify specific habitats of ecological interest. Target notes were used to record features of interest or specific habitats and species identified during the survey. Notes on flora were also undertaken throughout the 2022 field season as appropriate. Whilst a species list

¹ JNCC, (2010), Handbook for Phase 1 habitat survey - a technique for environmental audit

should not be regarded as exhaustive, sufficient information was gained during the surveys to enable classification and assessment of major habitat types. In anticipation of the adoption of DEFRA's Biodiversity Metric 3.1 we also considered the UK Habitat Classification descriptions in addition to the long established JNCC codes. These habitat classifications and 'the metric' are work in progress and could be subject to future change.

Condition Assessment

- 3.5 A condition assessment for each habitat described references, where available, the criteria set out in The Biodiversity Metric, Natural England and other parties (2022)².
- 3.6 Any habitats suitable for, or features with the potential to support, protected or notable species were also assessed and recorded as was any field sign indicative of their presence.

BIODIVERSITY METRICS

- 3.7 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. Accurate habitat survey is essential for a quantitative method of demonstrating BNG.

SURVEY LIMITATIONS

- 3.8 There are no limitations associated with the survey.

FAUNA

- 3.9 Surveys have been undertaken for protected / priority species using standard guidance. The full methodology and results of which are presented in separate reports.
- Bats activity surveys (transects & static detector surveys) - Bat surveys followed Collins (2016)³;
 - Breeding Birds - The Breeding Bird Survey was based on Common Bird Census (CBC) methodology (Bibby *et al.*, 2000⁴; Gilbert, *et al.*, 1998⁵ and Marchant, 1983⁶).

² Natural England and other Parties (2021). *The Biodiversity Metric 3.0. Auditing and accounting for biodiversity*. Technical Supplement. Natural England Joint Publication JP039. ISBN 978-1-78354-952-8.

³ Collins, J. (ed.) (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London, UK.

⁴ Bibby, C.J., Burgess, N.D., Hill, D.A. and Mustoe, S.H. (2000) *Bird census techniques*. Academic Press, London

⁵ Gilbert, G., Gibbons, D.W., & Evans, J. (1998) *Bird Monitoring Methods: A Manual of Techniques for UK Key Species*. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.

⁶ Marchant, J.H. (1983) *BTO Common Birds Census instructions*. BTO, Tring.

ECOLOGICAL APPRAISAL OF THE SITE

- 3.10 In order to assess the impacts of the development on flora and fauna, it is first necessary to identify the nature and geographical extent of likely impacts and identify the component ecological interest features of the receiving environment. The valuation of ecological features utilises current guidance produced by Chartered Institute for Ecology & Environmental Management (CIEEM, 2018). This process assesses the geographical scale of importance of habitats and species that may be impacted by the development proposals. It also identifies legal issues, including habitats and species with legal protection, or with specific requirement for control (i.e. invasive alien species).
- 3.11 The EclA assessment process, which should cover all phases of any project will involve the following:
- determine the importance of ecological features affected, through survey and/or research and with reference to available contextual information;
 - assess impacts potentially affecting important features;
 - characterise the impacts, e.g. extent, magnitude, duration, reversibility, timing and frequency;
 - identify cumulative impacts, and
 - identify significant effects of impacts in the absence of any mitigation.
- 3.12 The legislative and Policy Framework is set out in **Appendix 2**.

4.0 RESULTS

DESKTOP STUDY

National Site Network

- 4.1 The desktop assessment indicates that there are no sites of Nature Conservation interest within 2km of the survey area.
- 4.2 There are no non-statutory sites of nature conservation interest within the 2km search area, such as Local Wildlife Sites.
- 4.3 The site partly lies within the Kirklees Wildlife Habitat Network. The woodland to the north and north-east of the survey area makes up part of the Wildlife Habitat Network.
- 4.4 The north-western part of the woodland is within an area of Green Belt (Liverpool, Manchester & West Yorkshire Green Belt, Kirklees District [B]). This Green Belt covers an area of 2824.2ha in its entirety.

National Character Area

- 4.5 **NCA Profile: 37 Yorkshire Southern Pennine Fringe (NE490)** - The Yorkshire Southern Pennine Fringe National Character Area (NCA) is a transitional landscape from the upland areas of the Southern Pennines NCA in the west through to the low-lying land of the Nottinghamshire, Derbyshire and Yorkshire Coalfield NCA to the east. The most striking aspect of the landscape is the mingling of predominantly 'gritstone' industrial towns and villages with the strong valley forms and pastoral agriculture of the Pennine foothills. The gritstone industrial buildings and settlements bring a sense of visual unity to the landscape. The landscape is dominated by industrial buildings and structures such as factories, chimneys, railways and canals. Travellers crossing the NCA from west to east experience a change from pastoral treeless hill tops, where drystone walls are the predominant field boundary, to wooded valleys, where large urban settlements such as Bradford, Huddersfield and Sheffield are focused in the valleys and were built up around the former industries such as coal mining, steelmaking and the woollen industry. The World Heritage Site of Saltaire stands as an example model town built with the wealth produced by the industries prevalent in this area. In the east, settlements are separated by areas of arable farming with hedgerows and lowland meadows.

- 4.6 The NCA is characterised by steep slopes that are cut through by narrow rivers, notably the Don, the Calder, the Hebble Brook and the Colne in the north and the Sheaf, the Rivelin and the Loxley in the south near Sheffield, which open up into valleys on lower land. The river corridors provide links through the NCA from the uplands into the towns and cities in the valleys, supplying not only water for the large population in these areas but also opportunities for people to access and enjoy the natural environment and for species movement through the landscape.

ECOLOGICAL RECORDS

- 4.7 Ecological Records within 2km were returned by ERIC NE on 14th September, 2021. There was a total of 181 records, these data were filtered to include only protected or priority species, and records relating to the last fifteen years, leaving 110 records. None of the records relate to the site.

Protected species

Herptiles

- 4.8 WYES did not provide any amphibian or reptile records within the 2km search area within the last 10 years.

Birds

- 4.10 WYES provided 56 bird records comprising 21 species, four of which were offered additional protection under Schedule 1 part 1 of the WCA (1981) (as amended).
- **Fieldfare** *Turdus pilarus*;
 - **Kingfisher** *Alcedo attis*;
 - **Redwing** *Turdus iliacus*, and
 - **Ruff** *Philomachus pugnax*.
- 4.11 The closest records are of fieldfare and redwing, for which there are records for the 1km grid square which is located a minimum of 0.69km to the north of the site.

Mammals

Bats

- 4.12 WYES provided 47 bat records within the 2km search area. Four of the records related to bat roosts, none of which were within 0.5km of the site. The nearest roost record was a colony of common pipistrelle 0.74km to the east south east in Mill Bridge. The other roosts are both common pipistrelle bats and include two records at the same location 1.51km to the north and roost 1.61km to the north west. The remainder of the records are of bats, foraging or in flight and include records of **common pipistrelle**, **soprano pipistrelle**, **Leisler's bat**, **noctule**, and **Myotis bats** *Myotis spp.*
- 4.13 A search for granted European Protected Species licenses on Magic website (14.09.2021, 03.04.2023) found no granted EPS licences relating to bats within the 2km search area.

Plants

- 4.14 There are no records of protected plant species listed on Schedule 8 of the wildlife & Countryside Act within the 2km search area.

Priority species

Birds

- 4.15 WYES provided 56 bird records comprising 21 species, 17 species of which are either UK BAP priority species, listed on NERC S.41 or are a local (LBAP) priority species within Kirklees or West Yorkshire (WYBAP):
- **Bullfinch** *Pyrrhula pyrrhula** (UKBAP, NERC S.41, LBAP);
 - **Dunnock** *Prunella modularis** (UKBAP, LBAP);
 - **Goldfinch** *Carduelis carduelis** (LBAP);
 - **House martin** *Delichon urbica* (WYBAP);
 - **House sparrow** *Passer domesticus** (UK BAP, NERC S.41);
 - **Kestrel** *Falco tinnunculus* (WYBAP, LBAP);
 - **Lapwing** *Vanellus vanellus* (NERC S.41, WYBAP, LBAP);
 - **Linnet** *Carduelis cannabina** (NERC S.41, WYBAP, LBAP);
 - **Reed bunting** *Emberiza schoeniclus* (UKBAP, NERC S.41, WYBAP & LBAP);
 - **Skylark** *Alauda arvensis* (UKBAP, NERC S.41, WYBAP & LBAP);
 - **Song thrush** *Turdus philomelos** (UKBAP, NERC S.41, WYBAP & LBAP);

- **Starling** *Sturnus vulgaris* (UKBAP, NERC S.41, WYBAP & LBAP);
- **Swallow** *Hirundo rustica* (WYBAP, LBAP);
- **Swift** *Apus apus* (WYBAP);
- **Tree sparrow** *Passer montanus* (UKBAP, NERC S.41, WYBAP & LBAP);
- **Willow tit** *Parus montanus* (UKBAP, NERC S.41, WYBAP, LBAP), and
- **Yellowhammer** *Emberiza citrinella* (UK BAP, NERC S.41, LBAP).

4.16 The nearest records are for dunnock and swift, recorded 0.76km to the east. Six of the priority bird species above are marked with an asterisk *, these species are recorded within the survey area during the breeding bird survey and their breeding status is illustrated on the Breeding Bird Territory Plan (Drawing 1) within the breeding Bird Survey Report (AES-LTD, December 2022).

Mammals

4.17 WYES provided two records of **hedgehog** *Erinaceus europaeus* within the 2km search area, the nearest record was 0.76km to the east.

Invertebrates

4.18 WYES did not return any records of terrestrial or aquatic invertebrate records.

Flowering Plants

4.19 WYES did not return records of any flowering plants of nature conservation interest within the 2km search area including BAP species or Red Data Book Plants.

Invasive/non-native species (INNS)

4.20 Plants and/or animals listed in Schedule 9, Parts 1 or 2 of the Wildlife & Countryside Act (as amended) recorded in the search area include **Indian Balsam** (Himalayan balsam) *Impatiens glandulifera* and **giant hogweed** *Heracleum mantegazzianum*, the nearest record for both lies 0.76km to the east.

FIELD SURVEY

GENERAL SITE DESCRIPTION - HABITATS

- 4.21 The site comprises improved pasture (modified grassland) grazed by horses and ponies to the north and cut for hay in the south, broadleaved plantation woodland, a native hedgerow with hedgerow trees and a field of grassland which is not actively managed and is now dominated by tall herb and dense scrub. Fields within the site are divided by post and wire fences and mobile horse fencing (electric fence) whilst the periphery is delineated by a combination of post and wire fences, stone walls, a retaining stone wall and post and rail fence together. Photographs of the site are provided in **Appendix 1**.

BASELINE HABITATS

- 4.22 The habitats within the site are illustrated on **Drawing 2**. Habitats onsite are described as follows:
- 4.23 **Modified grassland** - Improved pasture grazed by horses and ponies (2.2954ha). The modified grassland to the south (T1a) being grazed at the time of the survey. The sward typically comprised abundant perennial rye-grass *Lolium perenne*, locally frequent false oat-grass *Arrhenatherum elatius* (typically nearer field edges), frequent cock's-foot *Dactylis glomerata*, occasional common bent *Agrostis capillaris* and rare tufted hair-grass *Deschampsia cespitosa*. Herbaceous species included locally abundant greater plantain *Plantago major* near to heavily trampled areas near gates, creeping buttercup *Ranunculus repens*, and nettle *Urtica dioica* near field edges and adjacent to the bridle way along the southern site boundary. Other species included locally frequent yarrow *Achillea millefolium*, ribwort plantain *Plantago lanceolata* and white clover *Trifolium repens*, with occasional broad-leaved dock *Rumex obtusifolius*, dandelion *Taraxacum officinale* agg., common chickweed *Stellaria media*, red clover *Trifolium pratense*, common ragwort *Jacobaea vulgaris*, common knotgrass *Polygonum aviculare*, meadow buttercup *Ranunculus acris* and creeping thistle *Cirsium arvense*. The fields of modified grassland to the north (T1b) are slightly more species diverse and contain additional species such as occasional Yorkshire fog *Holcus lanatus*, annual meadow-grass *Poa annua*, shepherd's-purse *Capsella bursa-pastoris*, red dead-nettle *Lamium purpurea* and locally frequent dove's-foot crane's-bill *Geranium molle*. An area previously used to store horse manure (T1c) at the south of the woodland was characterised by locally abundant fat-hen *Chenopodium album*, locally frequent nettle, frequent ribwort and greater plantain,

broad-leaved dock with occasional redshank *Persicaria maculosa*, and rare nipplewort *Lapsana communis*. Along the retaining wall associated with the bridle path there were linear areas of dense scrub comprising bramble *Rubus fruticosus agg.* and suckering cherry *Prunus sp.*

- 4.24 **Broadleaved woodland** -There is 0.65ha of broadleaved woodland to the north of the site (T3). The eastern linear strip is dominated by sycamore *Acer pseudoplatanus*, in the remainder of the woodland sycamore is abundant. Other constituents of the canopy include locally frequent silver birch *Betula pendula*, occasional goat willow *Salix caprea* and wild cherry *Prunus avium* with rare common alder *Alnus glutinosa*, apple *Malus sp.*, Scots pine *Pinus sylvestris*, horse chestnut *Aesculus hippocastanum*, English oak *Quercus robur*, false acacia *Robinia pseudoacacia* and suckering wild cherry *Prunus avium*. Scrub species include locally abundant bramble, locally frequent blackthorn *Prunus spinosa*, occasional hawthorn *Crataegus monogyna* and rare elder *Sambucus nigra*. Climbers included hedge bindweed *Calystegia sepium* and honeysuckle *Lonicera periclymenum*. Ground flora typically comprised locally abundant nettle, ivy *Hedera helix*, cleavers *Galium aparine* and at the edges false oat-grass. Wood avens *Geum urbanum* was locally frequent and great willowherb *Epilobium hirsutum*, hogweed *Heracleum sphondylium* and common dog-violet *Viola riviniana* were occasional.
- 4.25 **Native hedgerow with hedgerow trees** – (T4) 89.52m length of hedgerow, height 2.5m, width 2.0m, canopy 0.15m. Herbaceous vegetation either side of the hedgerow <0.9m. The hedgerow is dominated by hawthorn *Crataegus monogyna* with occasional sycamore and bramble and rare elder. The understorey vegetation typically comprises locally frequent creeping thistle, with frequent nettle, cow parsley *Anthriscus sylvestris*, false oat-grass and Yorkshire fog. Occasional species included wood avens, woody nightshade *Solanum dulcamara*, herb robert *Geranium robertianum* and cock's-foot *Dactylis glomerata*.
- 4.26 **Neglected Modified grassland** – (T2) 0.14ha area of modified grassland not actively managed which now comprises tall herb vegetation and dense scrub (0.04ha) with scattered trees. Scrub species include locally abundant bramble with rare elder, sycamore, goat willow *Salix caprea* and hawthorn. There is a semi-mature sycamore tree in the north west corner a mature hawthorn and a goat willow that will be classified as an urban trees in the BNG

calculator. Tall herbaceous species typically include nettle, cleavers and rosebay willowherb *Chamerion angustifolium* with frequent creeping thistle.

- 4.27 **Built linear features-** These include a combination of post and wire fences, stone walls, retaining stone wall and post and wire fence along the bridle path and the bridle path itself, stone wall and post and rail fence together. The fields of improved grassland were sub-divided with mobile horse fencing (electric fencing).

FAUNA

- 4.28 Fauna noted during the surveys included **grey squirrel** *Sciurus carolinensis* and **meadow brown** *Maniola jurtina*.

5.0 SITE ASSESSMENT & EVALUATION

NATIONAL SITE NETWORK

- 5.1 The desktop assessment indicates that there are no international or national sites of Nature Conservation interest that form part of the National Site Network within 2km of the survey area.
- 5.2 There are no non-statutory sites of nature conservation interest within the 2km search area, such as Local Wildlife Sites.
- 5.3 There is no anticipated impact on any sites within the National Site Network as a result of the proposed housing development.
- 5.4 The site partly lies within the Kirklees Wildlife Habitat Network. The woodland to the north and north-east of the survey area makes up part of the Wildlife Habitat Network.
- 5.5 The north-western part of the woodland is within an area of Green Belt (Liverpool, Manchester & West Yorkshire Green Belt, Kirklees District [B]). This Green Belt covers an area of 2824.2ha in its entirety. The north-western part of the woodland is within an area of Green Belt. The Kirklees green belt forms part of a larger interwoven area of Green Belt (covering an area of 2824.02ha) that spans West and South Yorkshire and encompasses the major Yorkshire conurbations of Leeds, Bradford, Huddersfield, Wakefield and Halifax. It serves to prevent these cities and large towns from merging both with each other and with the greater Manchester metropolitan area to the west. The proposed development therefore retains the area of Green Belt, in line with National Planning Policy, which attaches great importance to protecting green belt land so no negative impact is anticipated.
- 5.6 There is likely to be a minor negative impact on woodland habitat as 0.06ha of broadleaved plantation woodland (dominated by sycamore *Acer pseudoplatanus*) will be permanently lost to provide access from Darley Road. A water pipe will be installed through the woodland along an existing desire line used by the general public. The remaining woodland (0.5862ha) will be enhanced to bring it into good condition by improving the structural diversity and sub-canopy. This will include managing the area where the waterpipe will be laid and associated

easement area as a woodland ride with shade tolerant species-rich grassland and underplanting with mixed scrub. BNG does not replace species-specific surveys and these have been undertaken to inform the planning application (bat survey, breeding bird survey) to determine the potential for any likely impact on faunal groups of ecological importance. Any enhancements of the woodland would be a minor positive impact on the Liverpool, Manchester & West Yorkshire Green Belt. Any enhancement to retained woodland within the Kirklees Wildlife Habitat Network would also be a minor positive impact on the Wildlife Habitat Network.

PROTECTED AND PRIORITY SPECIES

Plants/Habitats

- 5.7 There are no protected or Priority Species of plants recorded within the proposed development site.
- 5.8 There are two UK BAP, NERC S. 41 or Local BAP (Kirklees Local Habitats of principal importance) habitats within the application area:
- **Broadleaved woodland** (UK BAP, NERC S.41), and
 - **Hedgerow** (UK BAP, NERC S. 41 & LBAP)
- 5.9 Hedgerows are Kirklees Habitats of Principal Importance, and a UK BAP priority habitat, therefore the habitat creation proposed within the development area is in line with biodiversity action plan targets. The Woodland to the north forms part of the Kirklees Wildlife Habitat Network, its retention and enhancement would therefore positively contribute to the functioning of the woodland as a habitat corridor. Direct habitat loss due to vegetation clearance to facilitate the development will result in minor losses of BAP priority habitats in the absence of mitigation.
- 5.10 There were no invasive/non-native plant species recorded in the survey area at the time of the surveys.

PROTECTED SPECIES

Bats

- 5.11 WYES provided 47 bat records within the 2km search area. Four of the records related to bat roosts, none of which were within 0.5km of the site. The nearest roost record was a colony

of common pipistrelle 0.74km to the east south-east in Mill Bridge. The other roosts are both common pipistrelle bats and include two records at the same location 1.51km to the north and roost 1.61km to the north west. The remainder of the records are of bats, foraging or in flight and include records of **common pipistrelle, soprano pipistrelle, Leisler's bat, noctule, and Myotis bats** *Myotis spp.* A search for granted European Protected Species licenses on Magic website no granted EPS licences relating to bats within the 2km search area.

- 5.12 There are no buildings within the survey area and there are no mature trees within the site that have any roosting opportunities for bats. The woodland edge and grassland does provide suitable foraging and commuting habitat for bats and foraging and commuting bats are considered an ecological constraint for the development and there could be minor negative impacts on foraging and commuting bats due to additional disturbance and lighting during the construction and operational phase of the development. The results of the bat survey report indicate that there are low levels of bat activity across the site, the majority of bats that forage and commute around the site are common pipistrelle bats, with low numbers of soprano pipistrelle, Daubenton's bats, Nathusius' pipistrelle, noctule and whiskered/Brandt's bats.

Birds

- 5.13 WYES provided 56 bird records comprising 21 species. Four species of bird which are offered additional protection under Schedule 1 part 1 of the WCA (1981) (as amended) are recorded within the 2km search area; **fieldfare, kingfisher, redwing and ruff.**
- 5.14 The closest records are of fieldfare and redwing, for which there are records for the 1km grid square which is located a minimum of 0.69km to the north of the site. There is no suitable habitat for kingfisher or ruff, but the woodland and hedgerows could provide foraging habitat for overwintering fieldfare and redwing. Overwintering birds aren't offered additional protection under Schedule 1. There could be a minor positive impact on foraging birds as a result of the landscape proposals. There are no Schedule 1 birds, offered additional protection from disturbance at the nest, recorded breeding within the site boundary during the breeding bird surveys.

Priority species

Birds

- 5.15 WYES provided records of 17 bird species which are either UK BAP priority species, listed on NERC S.41 or are a local (LBAP) priority species within Kirklees or West Yorkshire (WYBAP): There is no suitable habitat for breeding lapwing, skylark, swallow, swift or willow tit, and none were recorded during the breeding bird survey.
- 5.16 The Breeding Bird Territory Plan indicates there are no nesting birds associated with the pasture. Of the Priority Bird species recorded within the 2km search are bullfinch, dunnock, goldfinch, house sparrow and linnet were either confirmed, probable or possible breeders within or in close proximity of the site boundary. Within the site boundary there was one confirmed pair of breeding dunnock on the southern boundary of the woodland in the north of the site, this habitat will be retained within the development proposals with some minor disturbance possible during the construction phase. Probable breeders included one pair of linnet within the western hedgerow. The western hedgerow will be retained within the development proposals again with some minor disturbance possible during landscaping works. The breeding bird assemblage within and immediately adjacent to the site is of local ecological interest and in the absence of mitigation will be negatively impacted upon due to direct habitat loss (common and widespread species) and increased disturbance.

Hedgehog

- 5.17 WYES provided two records of **hedgehog** *Erinaceus europaeus* within the 2km search area, the nearest record was 0.76km to the east. The site does provide habitat suitable for hedgehogs and they are likely to utilise the site once it is a residential area as gardens also provide suitable habitat for hedgehogs. Hedgehogs have the potential to be killed or injured during site clearance, a minor negative impact. An increase in traffic could also have a potential minor negative impact due to an increase in mortality on the residential roads. There is likely to be a minor positive impact on hedgehogs during the operational phase due to the residential gardens.

Invasive/non-native species (INNS)

- 5.18 Plants and/or animals listed in Schedule 9, Parts 1 or 2 of the Wildlife & Countryside Act (as amended) recorded in the search area include **grey squirrel**, which were recorded in the woodland to the north of the site running along the fence during the habitat survey.

BIODIVERSITY NET GAIN

Biodiversity Net Gain - baseline

- 5.19 The baseline area habitat, linear hedgerow data and information regarding the areas or lengths or retained and enhanced habitats were entered into the Biodiversity Metric 3.0 auditing and accounting for biodiversity calculation tool for BNG. A feasibility study was undertaken early in the planning stage and advice given to the client and landscape architect on how to achieve the best outcomes for biodiversity in line with Local Plan Policy LP30, NPFF and The Environment Act 2021, identifying target habitats with references to the Kirklees Local Biodiversity Action Plan whilst also considering the mitigation hierarchy. The headline results indicate that BNG on the site is feasible with a **+2.25% net change in habitat units** and **+143.91% change in hedgerow units**. Trading rules are not met due to the loss of a small area of bramble scrub, however in addition to the provision of native mixed scrub, woodland understorey planting will be undertaken as part of the woodland enhancement.
- 5.20 The above BNG has been calculated in regard to the design of the site and its future management to maximise benefits to biodiversity:
- 0.5862 ha of woodland to be enhanced;
 - 1.3344ha of built development (residential units) and 0.5381ha roads & pavements (also built development) feature to be created;
 - 0.5719ha of vegetated garden to be created;
 - 0.009ha of other neutral grassland to be created;
 - 0.1203ha of urban trees to be planted;
 - 0.0084ha of mixed scrub to be created;
 - 0.0165ha of modified grassland to be created;
 - 0.0063ha of introduced shrub to be created
 - 0.0092ha of paths to be created
 - 86m of hedgerow to be retained and enhanced, and
 - 67.0m of native species-rich hedgerow to be created

- 5.21 The woodland will be enhanced through management to good condition by improving the structural diversity and sub-canopy. This will include managing the area where the waterpipe will be laid and associated easement area as a woodland ride with 734m² (0.0734ha) shade tolerant species-rich grassland, 520m² (0.052ha) other neutral grassland and underplanting with 188m² (0.018ha) mixed scrub.

POTENTIAL IMPACTS OF THE DEVELOPMENT

Construction phase

- 5.22 Potential impacts of the proposed development during the construction phase include the following:
- Habitat loss – direct effect during vegetation clearance in the pre-construction, including the loss of 2.38ha of modified grassland, 0.06ha of broadleaved woodland (also forms part of the Kirklees Wildlife Habitat Network) and 3.0m of hedgerow;
 - Potential disturbance/compaction of root protection zone for all hedgerows and trees being retained;
 - Disturbance to foraging and commuting bats (and other nocturnal or crepuscular species) due to increased lighting;
 - Disturbance to foraging and commuting bats due to habitat loss and changes in the local landscape;
 - Loss of nesting habitat and increased human disturbance due to site clearance and construction works;
 - Potential of killing or causing injury to hedgehogs during the site clearance and construction phase. Hedgehogs are particularly vulnerable during hibernation, and
 - Loss of foraging habitat for hedgehog.

Operational Phase

- 5.23 Potential impacts of the proposed development during the operational phase include the following:
- Increase in public pressure on the woodland
 - Potential disturbance of local foraging pattern due to new streetlighting and domestic lighting;
 - Increased disturbance/predation to breeding birds due to increased urbanisation;

- Potential of killing or causing injury to hedgehogs during the operational phase due to an increase in vehicles, and
- Potential increase in suitable habitat for hedgehogs due to the creation of residential gardens.

Cumulative and In-combination effects

- 5.24 Currently AES-LTD have no information regarding developments in the local area. There are no sites within the National Site Network, Ramsar sites (not included in the National Site Network) or non-statutory sites of nature conservation importance within the 2km search area.
- 5.25 The woodland to the north of the site is both a BAP habitat of principal importance and is a constituent of the Kirklees Wildlife Habitat Network. A small area, 0.06ha of this woodland needs to be removed to facilitate the development. AES-LTD are not aware of any other developments which could potentially impact on this woodland causing any cumulative or in-combination effects.

6.0 SUMMARY & RECOMMENDATIONS

SUMMARY

- 6.1 Applied Ecological Services Ltd. was commissioned by Jones Homes (Yorkshire) Ltd. to undertake an ecological appraisal of an area of land off Primrose Lane, Hightown, Liversedge, Kirklees, West Yorkshire, WF15 6QY.
- 6.2 The survey area covered an area of 3.12ha (7.71acres). The approximate central point of the site is at grid reference SE 19695 24112. The site is located between Heckmondwike and Cleckheaton and is accessed from Halifax Road (A469). The site is within a semi-rural area approximately 0.5km south east of Cleckheaton. Land use surrounding the site is primarily agricultural land, to the west, woodland and agricultural land to the north and residential areas to the south and east. The agricultural fields are delineated by a combination of fences, hedgerows and stone walls. The River Spen is located 0.16km to the north of the site boundary.
- 6.3 It is understood that an application is being made for the clearance of development area and construction of 77 new residential units, associated services and infrastructure and soft landscaping.
- 6.4 The site comprises improved pasture (modified grassland) grazed by horses and ponies to the north and cut for hay in the south, broadleaved plantation woodland, a native hedgerow with hedgerow trees and a field of grassland which is not actively managed and is now dominated by tall herb and dense scrub. Fields within the site are divided by post and wire fences and mobile horse fencing whilst the periphery is delineated by a combination of post and wire fences, stone walls, a retaining stone wall and post and rail fence together.
- 6.5 The desktop assessment indicates that there are no international or national sites of Nature Conservation interest that form part of the National Site Network within 2km of the survey area.
- 6.6 There are no non-statutory sites of nature conservation interest within the 2km search area, such as Local Wildlife Sites.

- 6.7 There is no anticipated impact on any sites within the National Site Network as a result of the proposed housing development.
- 6.8 The site partly lies within the Kirklees Wildlife Habitat Network and the north western part of the woodland is within an area of Green Belt (Liverpool, Manchester & West Yorkshire Green Belt, Kirklees District [B]). There is likely to be a minor negative impact on woodland habitat as 0.06ha of broadleaved plantation woodland (dominated by sycamore *Acer pseudoplatanus*) will be lost to provide access from Darley Road. A water pipe will be installed through the woodland along an existing desire line used by the general public. The remaining woodland (0.5862ha) will be enhanced to bring it into good condition by improving the structural diversity and sub-canopy. This will include managing the area where the waterpipe will be laid and associated easement area as a woodland ride with shade tolerant species-rich grassland and underplanting with mixed scrub. A grassy path for the public will be provided. Any enhancements of the woodland would be a minor positive impact on the Liverpool, Manchester & West Yorkshire Green Belt. Any enhancement to retained woodland within the Kirklees Wildlife Habitat Network would also be a minor positive impact on the Wildlife Habitat Network. It is not anticipated that there would be a significant increase in public pressure on the woodland due to the proposed residential development as there is an existing tarmac path running through the woodland used by cyclists and walkers and a grassy path will be provided where there is already a desire line in the area of enhancement.
- 6.9 There are no protected or Priority Species of plants recorded within the proposed development site.
- 6.10 There are two UK BAP, NERC S. 41 or Local BAP (Kirklees Local Habitats of principal importance) habitats within the application area:
- **Broadleaved woodland** (UK BAP, NERC S.41); and
 - **Hedgerow** (UK BAP, NERC S. 41 & LBAP).
- 6.11 There is some potential for protected/priority species to be present. These include:
- **Bats** (foraging and commuting);
 - **Breeding/nesting birds** (1 pair confirmed breeding dunnock);
 - **Foraging birds** (redwing and fieldfare), and
 - **Hedgehog**.

6.12 Protected species licences will not be required.

RECOMMENDATIONS

- 6.13 It is recommended that any vegetation clearance be undertaken outside of the bird breeding season. This includes all ground level vegetation. The bird breeding season can extend from March until August (inclusive), weather and species depending, but generally birds have completed breeding by the end of July. If the works are not undertaken outside of the bird breeding season all site areas will be subject to a thorough walkover survey by a suitably qualified ecologist prior to any clearance or disturbance work being undertaken.
- 6.14 Site clearance has the potential to impact on hedgerows, plantation woodland and individual trees where they are being retained. Adhering to the guidelines in British Standard BS 5837: 2012 Trees in relation to design, demolition and construction is recommended in situations such as this, in particular implementing measures to prevent root damage, for example, protective measures to prevent heavy plant vehicles etc. from entering the root protection area. An Arboricultural survey and Impact Assessment has therefore been recommended.
- 6.15 A suite of protected / priority species surveys have been undertaken to inform the application and specific recommendations including reasonable avoidance measures and site enhancements are detailed with each of the survey reports to include:
- Production of method statements for protected and priority species detailing reasonable avoidance measures and mitigation to ameliorate potential impacts, for example timing of works, fencing construction compound etc.
 - Implementation of a sensitive lighting strategy;
 - Enhancement of bat roosting and bird nesting facilities;
 - Retention of BAP priority habitat where possible, all retained habitats should be enhanced through implementation of an appropriate landscape scheme and habitat management; and
 - Habitat enhancement will be undertaken using native species of local provenance wherever possible.

- 6.16 The headline results indicate that BNG on the site is feasible with a **+2.25% net change in habitat units** and **+143.91% change in hedgerow units**, trading rules are not satisfied due to the loss of a small area of bramble scrub, however woodland understorey (mixed scrub) will be planted to enhance the woodland.
- 6.17 Use of native plants of local provenance which bear berries / seeds where possible. This in-built mitigation will provide suitable foraging habitat for birds and small mammals and overwintering birds.
- 6.18 Provision of a Landscape Ecological Management Plan (LEMP) to be conditioned to ensure habitats proposed for BNG are delivered and managed appropriately to achieve their target condition. For the management of created and retained habitat, details shall include the identification of management objectives; annual work programmes; and monitoring.
- 6.19 Introduction of bird boxes and roosting pouches in the retained woodland for the benefit of nesting birds and integrated sparrow terraces in 10% of the properties of suitable aspect and location.
- 6.20 Provision of a method statement and tool box talk for contractors to make them aware of the potential presence of hedgehog during the site clearance and construction works construction works and how to safeguard any animals encountered.
- 6.21 Provision of a hedgehog house within the landscaped area and the provision of hedgehog highways consisting of 15 x 15cm gaps will be incorporated into the peripheral fences of the residential area to allow hedgehogs to forage across the site/gardens.
- 6.22 Hedgehog crossing signs will be erected on access roads leading to and through the residential estate to encourage more considerate driving.
- 6.23 Provision of integrated bat roosting facilities in 10% of the properties of suitable aspect and location (as detailed in the bat survey report (AES-LTD, December, 2022)).



- 6.24 A summary of all potential effects of the development and proposed mitigation and enhancement measures and residual impacts of the development is provided in **Table 1**.
- 6.25 In conclusion, there are **no significant negative impacts** anticipated as a result of the development proposals. The residual impacts of the development are either of moderate benefit, minor benefit or of negligible impact (see **Table 1**).

Table 1: Summary of Effects, mitigation/enhancement and residual effects

Ecological Interest Features	Geographical Context of Importance***	Representation in application area	Description of Potential Impacts (Effects)	Potential Impact on Site Integrity or Conservation Status	Nature of effect*	Sensitivity Value**	Magnitude of Effect**	Significance of Effects****	Mitigation / Enhancement Measures	Residual Effects
CONSTRUCTION										
Kirklees Wildlife Habitat Network	Borough/District	0.65ha of broadleaved woodland	Loss of 0.060ha	Habitat loss / discontinuity due to habitat removal to facilitate the development. Not likely to be significant	Permanent / Direct	Not Applicable	Minor	Minor negative	Habitat enhancement including understorey planting and woodland edge planting to provide structural diversity within the woodland.	Minor beneficial
Broadleaved Woodland	Local	0.65ha	Loss of 0.060ha	Moderate negative impact, loss of a 0.06ha of BAP priority habitat. Unlikely to be significant	Permanent / Direct	Not Applicable	Minor	Minor negative	Habitat enhancement including understorey planting and woodland edge planting to provide structural diversity within the woodland.	Minor beneficial
Hedgerows	Local	89.52m	Loss of 3.0m to provide footpath.	Minor negative impact, unlikely to be significant.	Permanent / Direct	Not Applicable	Minor	Minor negative	Planting of 61m of native hedgerow	Minor beneficial
	Local	89.52m	Disturbance/compaction within root protection zones	Moderate negative impact, loss of a BAP priority habitat. Likely to be significant.	Temporary / Direct	Not Applicable	Minor	Minor negative	Adhering to the guidelines in British Standard BS 5837: 2012 Trees in relation to design, demolition and construction. Implement measures to prevent root damage, such as fencing to prevent heavy plant vehicles etc. from entering the root protection area.	Negligible
Bats	Local	Local assemblage of foraging and commuting bats (common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Daubenton's and whiskered/Brandt's)	Disturbance to foraging and commuting bats due to lighting	No significant impact on the conservation status of any component species in the survey area. Minor potential positive impact due to landscape scheme.	Temporary / Direct	Not Applicable	Minor	Minor negative	Implementation of a sensitive lighting regime. Works only undertaken during daytime hours. Method Statement.	Negligible
			Disturbance to foraging and commuting bats due to habitat loss		Temporary / Indirect					
Nesting birds	Local	Local breeding bird assemblage.	Loss of nesting habitat for common & widespread species due to felling of small area of woodland and potential increased disturbance due to construction works	Minor negative impact, unlikely to be significant.	Temporary / Direct	Not Applicable	Minor	Minor negative	Avoid undertaking vegetation clearance during the bird nesting season (March to end of August inclusive). Method Statement.	Negligible

Ecological Interest Features	Geographical Context of Importance***	Representation in application area	Description of Potential Impacts (Effects)	Potential Impact on Site Integrity or Conservation Status	Nature of effect*	Sensitivity Value**	Magnitude of Effect**	Significance of Effects****	Mitigation / Enhancement Measures	Residual Effects
Dunnock	Local	1 pair of confirmed breeders	Potential disturbance.	Minor negative impact, unlikely to be significant.	Temporary / Indirect	Not Applicable	Minor	Minor negative	Avoid undertaking vegetation clearance during the bird nesting season (March to end of August inclusive). Method Statement.	Negligible
Linnet	Local	1 probable territory	Potential disturbance	Minor negative impact, unlikely to be significant.	Temporary / Indirect	Not Applicable	Minor	Minor negative	Avoid undertaking vegetation clearance during the bird nesting season (March to end of August inclusive). Method Statement.	Negligible
Hedgehog	Local	Suitable habitat onsite	Killing / injury	Minor negative impact, unlikely to be significant.	Temporary / Direct	Not Applicable	Minor		Method Statement to protect hedgehog during the construction phase.	Negligible
			Loss of foraging habitat	Minor negative impact, unlikely to be significant.	Temporary / Direct	Not Applicable	Minor	Minor negative	Landscape scheme which includes habitats suitable for foraging hedgehog and residential gardens.	Moderate beneficial
OPERATION										
Broadleaved Woodland	Local	0.5862	Public pressure	No significant impact	Permanent / Indirect	Not Applicable	Negligible	Negligible	Improve the condition of the woodland, included a grassy path through the enhanced area of woodland	Minor beneficial
Bats	Local	Local assemblage of foraging and commuting bats (common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, noctule, Daubenton's and whiskered/Brandt's)	Disturbance of local foraging patterns due to lighting	No significant impact on the conservation status of any component species in the survey area.	Permanent / Indirect	Not Applicable	Minor	Minor negative	Implementation of a sympathetic lighting strategy which avoids strong illumination of the hedgerows, trees, scrub/woodland habitat and any newly created suitable habitat. Creation of roosting opportunities in 10% of residential units of suitable aspect.	Minor beneficial
Nesting birds	Local	Local breeding bird assemblage.	Disturbance / predation due to increase in urbanisation	Minor negative impact, unlikely to be significant.	Permanent / Indirect	Not Applicable	Minor	Minor negative	In-built mitigation to create additional areas suitable for nesting within the landscape scheme.	Negligible
			Loss of breeding habitat for common & widespread species	Minor negative impact, unlikely to be significant.	Permanent / Direct	Not Applicable	Minor	Minor negative	Roosting pouches and nest boxes erected in woodland & sparrow terraces to be integrated into 10% of residential units of suitable aspect	Minor beneficial

Ecological Interest Features	Geographical Context of Importance***	Representation in application area	Description of Potential Impacts (Effects)	Potential Impact on Site Integrity or Conservation Status	Nature of effect*	Sensitivity Value**	Magnitude of Effect**	Significance of Effects****	Mitigation / Enhancement Measures	Residual Effects
Hedgehog	Local	Local population	Killing / injury	Minor negative impact, unlikely to be significant.	Permanent/ Indirect	Not Applicable	Minor	Minor negative	Hedgehog crossing signs to raise awareness.	Negligible
			Increase in suitable foraging habitat.	Improvement in habitat quality for foraging hedgehogs	Permanent / Direct	Not Applicable	Moderate	Moderate positive	Provision of hedgehog highways and a hedgehog house.	Moderate beneficial

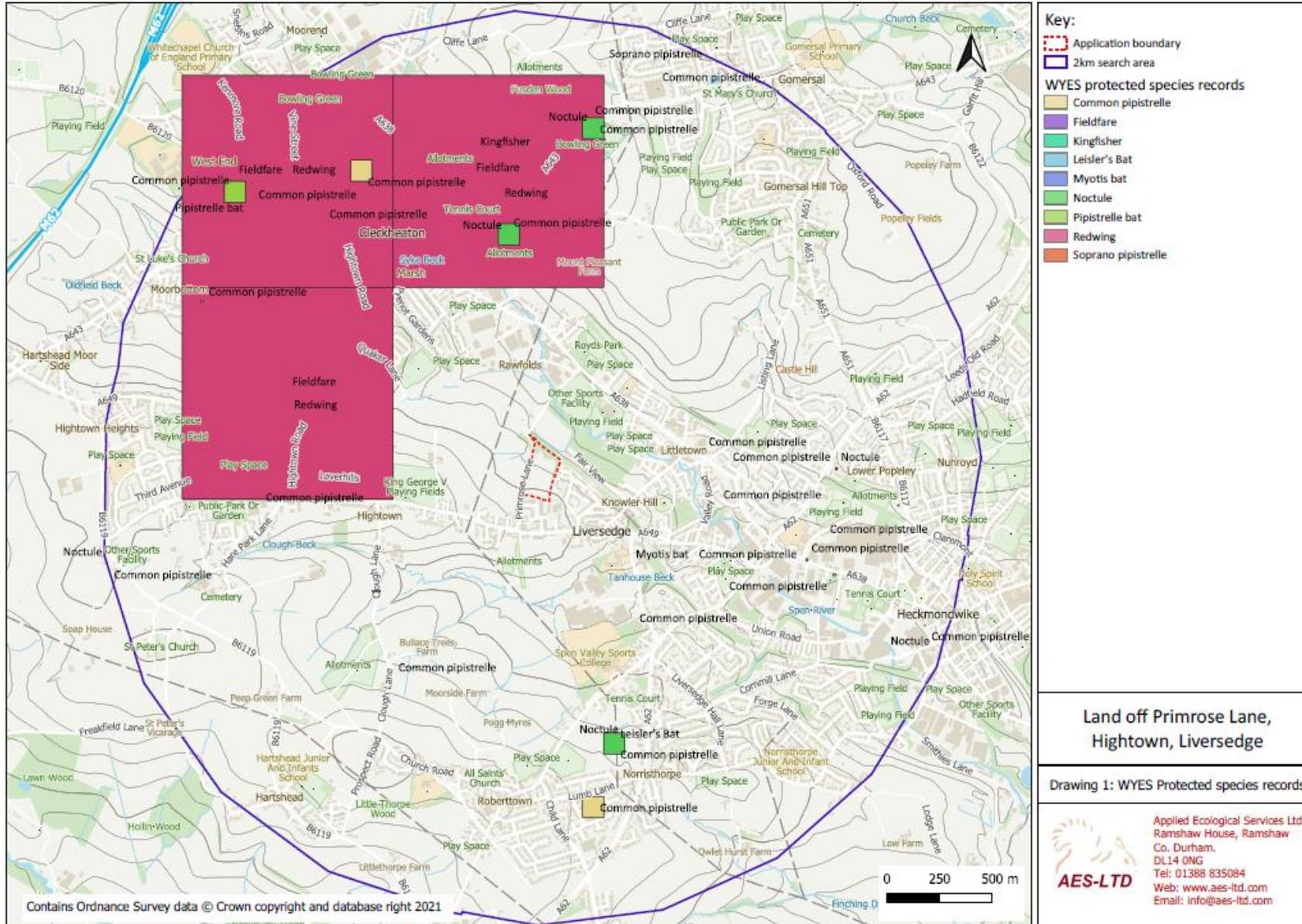
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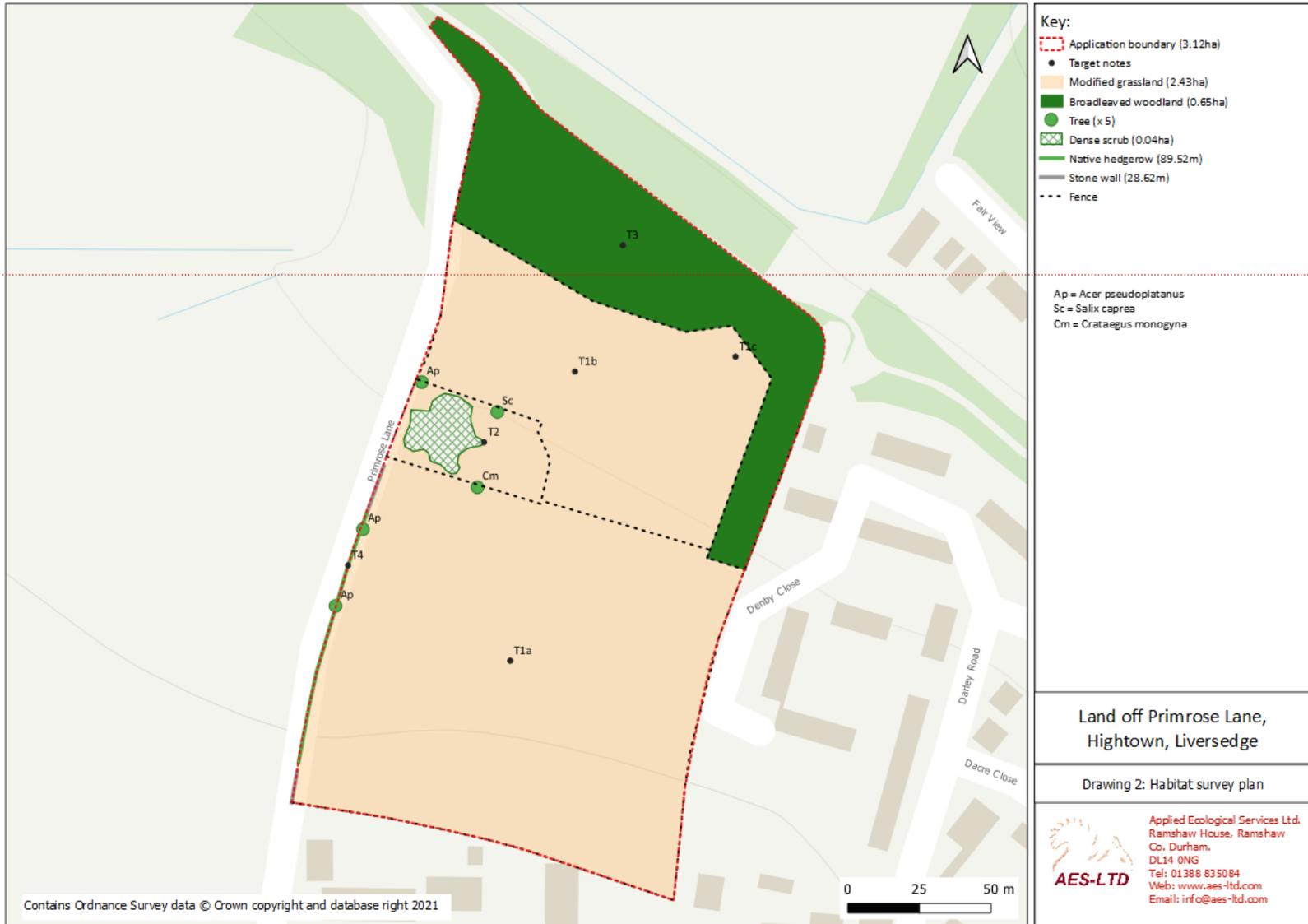
* Enter either: Permanent or Temporary / Direct or Indirect

** Only enter a value where a sensitivity v magnitude effects has been used - otherwise 'Not Applicable'

*** Enter either: International, European, United Kingdom, Regional, County, Borough/District or Local

**** Enter either: Major / Moderate / Minor / Negligible AND state whether Beneficial or Adverse (unless negligible)





APPENDIX 1: PHOTOGRAPHS



Photograph 1: Modified grassland (T1b) and broadleaved woodland (T3).



Photograph 2: Modified grassland (T1a).



Photograph 3: Native hedgerow with hedgerow trees (T4) and dry stone wall along Primrose Lane.



Photograph 4: Dense scrub and tall herb vegetation (T2) with scattered trees/scrub associated with unmanaged field bound by a post and wire fence. Modified grassland (T1a) in foreground.



Photograph 5: Right of photograph shows scattered scrub along retaining wall associated with the bridleway that runs along the south of the site (outwith the site).

APPENDIX 2: LEGISLATION & POLICY

LEGISLATION

Habitat Regulations

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

The main changes to the 2017 Regulations are:

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

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

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

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

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

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

It is an offence to deliberately capture, kill or disturb⁷ wild animals listed under Schedule 2) of the Regulations (such as all bat species and great crested newts). It is also an offence to damage or destroy a breeding site or resting place of such an animal (even if the animal is not present at the time). The prohibited methods of capturing and killing wild animals, which are listed in the main body of the Regulations, are transferred into new schedules to allow for future amendments. Any proposed changes will be subject to public consultation and will be made using statutory instruments.

Changes to Annex IV of the Habitats Directive and Schedules 2 (list of European Protected Species of animal) or 5 (list of European Protected Species of plant) of the Regulations will require an affirmative statutory instrument and be debated by Parliament or Senedd Cymru. This will ensure appropriate scrutiny of the changes and replicates procedures formerly undertaken by the European Commission.

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

⁷ Disturbance, as defined by the Conservation of Habitats and Species Regulations 2010, includes in particular any action which impairs the ability of animals to survive, breed, rear their young, hibernate or migrate (where relevant); or which affects significantly the local distribution or abundance of the species.

Wildlife & Countryside Act

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

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

The Bern Convention

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

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

The UK Government ratified the Bern Convention in 1982. The obligations of the Convention are transposed into UK law by means of the Wildlife and Countryside Act (1981 as amended), Nature Conservation (Scotland) Act 2004 (as amended), Wildlife (Northern Ireland) Order 1985, and the Nature Conservation and Amenity Lands (Northern Ireland) Order 1985.

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

POLICY

National Planning Policy Framework

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

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

The Framework is guidance for local planning authorities on the content of their Local Plans but is also a material consideration in determining planning applications. The NPPF and revised NPPF has replaced much existing planning policy guidance, including Planning Policy Statement 9: Biological

and Geological Conservation. However, the government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and their Impact within the Planning System, which accompanied PPS9 remains valid.

Biodiversity Action Plans / Biodiversity 2020

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

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

Local Development Plans

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

Kirklees Planning Policies (adopted 27th February 2019)

Relevant policies in the Kirklees Local Plan are as follows:

Policy LP7 - Efficient and effective use of land and buildings

To ensure the best use of land and buildings, proposals:

- a. should encourage the efficient use of previously developed land in sustainable locations provided that it is not of high environmental value;
- b. should encourage the reuse or adaptation of vacant or underused properties;
- c. should give priority to despoiled, degraded, derelict and contaminated land provided that it is not of high environmental value;
- d. will allow for access to adjoining undeveloped land so it may subsequently be developed.

Housing density should ensure efficient use of land, in keeping with the character of the area and the design of the scheme:

- a. developments should achieve a net density of at least 35 dwellings per hectare, where appropriate;
- b. higher densities will be sought in principal town centres and in areas close to public transport interchanges.

Policy LP30 - Biodiversity & Geodiversity

The council will seek to protect and enhance the biodiversity and geodiversity of Kirklees, including the range of international, national and locally designated wildlife and geological sites, Habitats and Species of Principal Importance and the Kirklees Wildlife Habitat Network.

South Pennine Moors

Proposals which may directly or indirectly compromise achieving the conservation objectives of a designated or candidate European protected site will not be permitted unless the proposal meets the conditions specified in Article 6 (3) - (4) of the Habitats Directive.

Statutory Designated Sites

Statutory designated sites, including the South Pennine Moors Special Protection Area (SPA) and Special Area for Conservation (SAC) and Sites of Special Scientific Interest, are already highly protected through existing laws and legislation. In accordance with legislation, the Council will seek to ensure that harmful impacts to these areas as a result of development proposals are avoided.

Development proposed within or outside a designated Site of Special Scientific Interest, likely to have an adverse effect on the site's special nature conservation features, will not normally be permitted.

Exceptionally development will be allowed where the benefits of the development clearly outweigh the impacts on the site's special conservation features and measures are provided to mitigate harmful impacts.

The Dark Peak Nature Improvement Area

Proposals that contribute to the aims and objectives of the Dark Peak Nature Improvement Area will in principle be supported, subject to other policies in this plan. Development likely to have an adverse impact on the aims and objectives of the NIA will not be permitted.

Local Designated Sites & Important Local Ecological Features

Proposals having a direct or indirect adverse effect on a Local Wildlife Site or Local Geological Site, Ancient Woodland, Veteran Tree or other important tree, will not be permitted unless the benefits of the development can be clearly shown to outweigh the need to safeguard the local conservation value of the site or feature and there is no alternative means to deliver the proposal. In all cases, full compensatory measures would be required and secured in the long term.

Habitats and Species of Principal Importance

Proposals will be required to protect Habitats and Species of Principal Importance unless the benefits of the development clearly outweigh the importance of the biodiversity interest, in which case long term compensatory measures will need to be secured.

Biodiversity and Development

Development proposals will be required to:-

- (i) result in no significant loss or harm to biodiversity in Kirklees through avoidance, adequate mitigation or, as a last resort, compensatory measures secured through the establishment of a legally binding agreement;
- (ii) minimise impact on biodiversity and provide net biodiversity gains through good design by incorporating biodiversity enhancements and habitat creation where opportunities exist;
- (iii) safeguard and enhance the function and connectivity of the Kirklees Wildlife Habitat Network at a local and wider landscape-scale unless the loss of the site and its functional role within the network can be fully maintained or compensated for in the long term;
- (iv) establish additional ecological links to the Kirklees Wildlife Habitat Network where opportunities exist; and
- (iv) incorporate biodiversity enhancement measures to reflect the priority habitats and species identified for the relevant Kirklees Biodiversity Opportunity Zone.

Policy LP31 - Strategic Green Infrastructure Network

Within the Strategic Green Infrastructure Network identified on the Policies Map, priority will be given to safeguarding and enhancing green infrastructure networks, green infrastructure assets and the range of functions they provide. Development proposals within and adjacent to the Strategic Green Infrastructure Network should ensure:-

- (i) the function and connectivity of green infrastructure networks and assets are retained or replaced;
- (ii) new or enhanced green infrastructure is designed and integrated into the development scheme where appropriate, including natural greenspace, woodland and street trees;
- (iii) the scheme integrates into existing and proposed cycling, bridleway and walking routes, particularly the Core Walking and Cycling Network, by providing new connecting links where opportunities exist;
- (iv) the protection and enhancement of biodiversity and ecological links, particularly within and connecting to the Kirklees Wildlife Habitat Network.

The council will support proposals for the creation of new or enhanced green infrastructure provided these do not conflict with other Local Plan policies.

Policy LP33 - Trees

The Council will not grant planning permission for developments which directly or indirectly threaten trees or woodlands of significant amenity.

Proposals should normally retain any valuable or important trees where they make a contribution to public amenity, the distinctiveness of a specific location or contribute to the environment, including the Wildlife Habitat Network and green infrastructure networks.

Proposals will need to comply with relevant national standards regarding the protection of trees in relation to design, demolition and construction. Where tree loss is deemed to be acceptable, developers will be required to submit a detailed mitigation scheme.

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

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

WILDLIFE LEGISLATION

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

Overview of Key Legislation

Legislation	Relevance
The Conservation of Habitats and Species Regulations 2017 (as amended)	<p>This transposes the EC Habitats Directive 1992 (<i>Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Flora and Fauna</i>) and the EC Birds Directive 1979 (<i>Council Directive 79/409/EEC on the protection of wild birds</i>) into UK law.</p> <p>Annexes I and II of the Habitats Directive list (respectively) habitats and species for which member states are required to establish and monitor SACs. The EC Birds Directive provides a similar network of sites (SPAs) for all rare or vulnerable species listed in Annex I and all regularly occurring migratory species, with particular focus on wetlands of international importance. Together with SACs, SPAs form a network of pan-European protected areas known as 'Natura 2000' sites.</p> <p>The Habitats Regulations also make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4.</p>
The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979)	The Bern Convention continues to ensure conservation and protection of all wild plant and animal species and their natural habitats (listed in Appendices I and II of the Convention), to increase cooperation between contracting parties, and to afford special protection to the most vulnerable or threatened species (including migratory species).
The Wildlife and Countryside Act (WCA) 1981 (as amended)	The WCA is the primary UK mechanism for statutory site designation (Sites of Special Scientific Interest, SSSIs) and the protection of individual species listed under Schedules 1, 2, 5 and 8 of the Act, each subject to varying levels of protection
The Countryside and Rights of Way Act 2000	This legislation strengthens the provision of the 1981 WCA (as amended), both in respect of statutory sites such as SSSIs and protected species. It also places a statutory obligation on Local Authorities and other public bodies to further conservation of biodiversity in the exercise of their functions, thus providing a statutory basis to the Biodiversity Action Plan (BAP) process, which began in 1994. Section 74 of the Act lists the habitat types and species of principal importance in England.
Hedgerow Regulations 1997	The Hedgerow Regulations 1997 are intended to protect important countryside hedges from destruction or damage in England and Wales.
Natural Environment and Rural Communities Act 2006	The 'NERC' Act makes provision in respect of biodiversity, pesticides harmful to wildlife, protection of birds and invasive non-native species. Section 40 of the act also introduced a new duty on public bodies to have regard to the purpose of conserving biodiversity in the exercise of their functions.

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

Key Legislation for protected species

Species	Key legal protection
Bats (all species)	<p>All European species of bat are listed on Annex IV of the EC Habitats Directive as being in need of “strict protection”. This is implemented in Britain under The Conservation of Habitats and Species Regulations 2017 (as amended). All British bats are included on Schedule 5 of the WCA (1981) and the whole of Section 9 of The Act applies to European bat species. In summary, the above legislation collectively prohibits the following:</p> <ul style="list-style-type: none"> • Deliberately or recklessly capturing, injuring, taking or killing of a bat; • Deliberately or recklessly harassing a bat; • Intentionally or recklessly disturbing of a bat in its place of rest (roost), or which is used for protection or rearing young; • Deliberately or recklessly damaging, destroying or obstructing access to any resting place or breeding area used by bats; • Deliberately or recklessly disturbing a bat in any way which is likely to significantly affect the local populations of the species, either through affecting their distribution or abundance, or affect any individuals ability to survive, reproduce or rear young; • Possession or advertisement/sale/exchange of a bat (dead or alive) or any part of a bat. <p>In England, licences are issued by Natural England for any actions that may compromise the protection of a European protected species, including bats, under the Habitats Regulations 2017 (as amended). This includes all developments, regardless of whether or not they require planning permission. Bats are also protected by the Wild Mammals (Protection) Act 1996 and selected species are listed on the UK Biodiversity Action Plan (BAP) and Local Biodiversity Action Plans (LBAP).</p>
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Otter	<p>Otter are protected under European and British law and receive the same level of protection as bats (see above.) The species is listed under Annex II and IV of the Habitats Directive, which is implemented in Britain under The Conservation of Habitats and Species Regulations 2017 (as amended). Otter are also protected under Schedules 5 and 6 of the WCA 1981, The Wild Mammals (Protection) Act 1996 and are listed as a priority species in Appendix II of the Bern Convention. The species is also listed on the UK and Local BAPs.</p>
Water Vole	<p>Water vole is protected under Schedule 5 of the WCA 1981 (as amended). This makes it an offence to:</p> <ul style="list-style-type: none"> • Intentionally kill, injure or take water voles; • Possess or control the species; • Damage or destroy any place used by water vole for shelter or protection; • Disturb water vole while they occupy such places of shelter; • Sell, possess or transport water vole for the purpose of sale; and

Species	Key legal protection
	<ul style="list-style-type: none"> • Advertise the buying or selling of water vole. <p>The species is also protected under the Wild Mammals (Protection) Act 1996 and listed on the UK and Local BAPs.</p>
Birds	<p>The majority of bird species, with the exception of some species listed on Schedule 2, are protected under the WCA 1981 (as amended). This makes it an offence to intentionally or recklessly:</p> <ul style="list-style-type: none"> • Kill, injure or take any wild bird; • Take, damage or destroy any nest which is in use or being built; and • Take, damage or destroy the eggs of any such bird. <p>Additional protection against disturbance whilst at the nest is also afforded to any bird species, whether an adult bird or their dependant young, which is listed on Schedule 1 of the Act.</p> <p>Council Directive 2009/147/EC on the conservation of wild birds (the ‘Birds Directive’) provides for the conservation and management of all wild bird species naturally occurring in the European Union, their nests, eggs and habitats. The Birds Directive bans activities that directly threaten birds (e.g. deliberate killing and destruction of nests and young), regulates hunting of selected species, bans non-selective and large scale killing of birds, and promotes research for bird conservation and management.</p> <p>Article 4(4) of the Birds Directive requires that member states “should strive to avoid pollution or deterioration of habitats.” The Conservation of Habitats and Species (Amendment) Regulations 2012 provide a fuller transposition of the Birds Directive into English law. Regulation 8 introduces a new Regulation 9A to the Habitats Regulations for duties of appropriate authorities in relation to wild bird habitat. Regulation 9A(3) addresses the transposition of Article 2 of the Birds Directive, while Regulation 9A(8), requiring competent authorities to “use all reasonable endeavours” to “avoid any pollution or deterioration of habitats of wild birds.”</p> <p>Certain species are also listed as being of priority conservation importance on the UK and Local BAPs.</p>
Reptiles	<p>All common reptile species (common lizard, slow-worm, grass snake and adder) are partially protected under Sections 9(1) and 9(5) of Schedule of the Wildlife and Countryside Act 1981 (as amended). This legislation protects these animals from:</p> <ul style="list-style-type: none"> • intentional killing and injury; • selling, offering for sale, possessing or transporting for the purpose of sale or publishing advertisements to buy or sell a protected species. <p>The more threatened species of reptile, smooth snake and sand lizard are fully protected under Schedule 5 (Section 9) and under schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended), which designate them ‘European protected species’. It is an offence to capture, possess, disturb, kill, injure, or trade in individuals of</p>

Species	Key legal protection
	these species. In addition, it is an offence to damage or destroy the places they use for breeding or resting.
White-clawed crayfish	<p>This species is listed under the European Union’s (EU) Habitat and Species Directive 2017 (as amended) and is therefore a European Protected Species. It is also listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). It is also classified as Endangered in the IUCN Red List of Endangered Species and included as a Priority Species under the Bern Convention. It is also a priority under the UK Biodiversity Action Plan (BAP) and Local BAPS.</p> <p>As a result of this and other relevant crayfish legislation such as the Prohibition of Keeping of Live Fish (Crayfish) Order 1996, a series of licences are needed for working with white-clawed and non-native crayfish.</p>

INVASIVE SPECIES

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

There is an extensive list of plants (currently 42) which are set out in section 14(2) of the WCA 1981 (as amended) which states that *‘if any person plants or otherwise causes to grow in the wild any plant which is included in Part II of Schedule 9, he shall be guilty of an offence.’*

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