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ENVIRONMENT

Homes by Honey Ltd
Barnburgh Lane
Goldthorpe
Ecological Impact Assessment

www.bwbconsulting.com

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Homes by Honey Ltd
Barnburgh Lane
Goldthorpe
Ecological Impact Assessment

Birmingham
Livery Place, 35 Livery Street, Colmore Business District, Birmingham, B3 2PB
T: 0121 233 3322

Cambridge
14-16 High Street, Histon, Cambridge
CB24 9JD
T: 01223 235 173

Leeds
Whitehall Waterfront, 2 Riverside Way, Leeds
LS1 4EH
T: 0113 233 8000

London
11 Borough High Street
London, SE1 9SE
T: 0207 407 3879

Manchester
11 Portland Street, Manchester, M1 3HU
0161 233 4260

Market Harborough
12a Woodcock House, Compass Point Market Harborough, Leicestershire, LE16 9HW
T: 01858 455020

Nottingham
Waterfront House, Station Street, Nottingham NG2 3DQ
T: 0115 924 1100

February 2023

DOCUMENT ISSUE RECORD

Document Number:	BLG-BWB-ZZ-XX-RP-LE-0001_Ecological Impact Assessment
BWB Reference:	232197_Ecological Impact Assessment

Revision	Date of Issue	Status	Author:	Checked:	Approved:
P01	22/02/2023	S2	Ben McLean BSc (Hons) MCIEEM	Amy Dowers BSc (Hons) ACIEEM	Jim MacQueen BA (Hons)

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EXECUTIVE SUMMARY

This Ecological Impact Assessment (EcIA) has been undertaken on behalf of Honey by Homes Ltd in respect of the Site at Barnburgh Lane, Goldthorpe. It has been produced to accompany the Planning Application for 95 no. residential properties at the Site.

The Site is located at Barnburgh Lane, Goldthorpe, South Yorkshire. The Site itself comprises an arable field, with a small area of scrub within the eastern corner of the Site to the east of the village of Goldthorpe. The Site is approximately 3.1 hectares (ha) in extent.

At the time of writing, BWB have received no records back from the record centres, and Doncaster Local Record Centre is closed until 15th March. As such, records are not provided within this report, but will be submitted on receipt. Given the size of the Site, habitats present and review of ecological reports relating to adjacent development projects, it is unlikely that any such records will affect the impacts of the proposed development.

Based on the desk-based study by SLR (2020) with a site 180m south-west of the Site, and a review of MAGIC, Impacts to Designated sites are considered unlikely due to the nature of the works, distance between designated sites and the application Site and the presence of intervening habitats.

The Site habitats comprise an arable field, with marginal modified grassland, a small area of scrub, ditches (which were mostly dry and considered to be dry throughout spring and summer), and short sections of managed hedgerow. The arable land, modified grassland, scrub and section of dry ditch will be lost due to the development.

The Site was considered to provide some limited suitability for badgers, bats, birds, common and widespread species of invertebrates, hedgehogs, fox and rabbit, with other species potentially present within the wider areas including otter and common reptiles.

The development proposals have the potential to impact foraging and commuting bats as well as potential injury to badgers, birds, hedgehogs and other mammals during the Site clearance and construction phases of the development. Mitigation measures are recommended to include good working practices during construction, a sensitive lighting scheme, a pre-works check for badger setts and a development specific Biodiversity Enhancement and Management Plan (BEMP) to detail all mitigation and enhancement measures.

Additional enhancement measures are recommended to provide opportunities for a range of species including bat, bird and invertebrate boxes as well as a hedgehog friendly design across the development.

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1. INTRODUCTION

Instruction

1.1 This Ecological Impact Assessment (EcIA) has been undertaken on behalf of Honey by Homes Ltd in respect of the Site at Barnburgh Lane, Goldthorpe. It has been produced to accompany the Planning Application for 95 no. residential properties at the Site.

Site Description

1.2 The Site is located at Barnburgh Lane, Goldthorpe, South Yorkshire. The Site itself comprises an arable field, with a small area of scrub within the eastern corner of the Site. The Site is approximately 3.1 hectares (ha) in extent and is centred on grid reference SE 46905 03975. The land is generally flat with a slight upward incline to the west and situated approximately between 39 and 33 metres above ordnance datum (m AOD).

1.3 The location of the Site is shown below in **Figure 1.1**.



Figure 1.1: Site Location Plan

The Project

1.4 Current proposals are for a full planning application for residential development of the Site including the development of 95 dwellings.

Objectives

1.5 The primary purpose of this assessment is to provide a baseline of all ecological considerations and associated impacts relating to the development proposals. This will include mitigation and enhancement as appropriate.

Scope of Works

1.6 The ecological appraisal was informed by a desk-based study and a Site survey. The approach to this EcIA follows best practice published by the Chartered Institute of Ecology and Environmental Management (CIEEM, 2019) and the British Standards Institution (BSI, 2013). Further details are provided later in this report.

Legislation and Planning Policy

1.7 The following legislation relates to species and habitats that could potentially occur in association with the Site:

- The Conservation of Habitats and Species Regulations 2019 (as amended);
- The Wildlife and Countryside Act 1981 (as amended);
- The Countryside and Rights of Way (CRoW) Act 2000;
- Natural Environment and Rural Communities (NERC) Act 2006;
- The Protection of Badgers Act 1992;
- Wild Mammals (Protection) Act 1996; and
- The Hedgerow Regulations 1997.

1.8 Further information on the legislation relevant to this Site is provided in **Appendix 1**.

1.9 Consideration has also been given in this report to relevant National and Local Planning Policy as summarised below.

1.10 The National Planning Policy Framework (NPPF) guides Local Planning Authorities (LPAs) when developing their planning policies and considering planning applications affecting protected habitats, sites and species.

1.11 In respect of the natural environment, the NPPF states under Paragraph 170 that:

"Planning policies and decisions should contribute to and enhance the natural and local environment by:

a) Protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);

b) Recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

c) *Maintaining the character of the undeveloped coast, while improving public access to it where appropriate;*

d) *Minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;*

e) *Preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. 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; and*

f) *Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate."*

1.12 The NPPF also states under Paragraph 174 that:

"To protect and enhance biodiversity and geodiversity, plans should:

a) *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; wildlife corridors and stepping stones that connect them; and areas identified by national and local partnerships for habitat management, enhancement, restoration or creation; and*

b) *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."*

1.13 Additionally, the most relevant Policy from Barnsley Local Plan (2019) states the following:

Policy GI1 Green Infrastructure

"We will protect, maintain, enhance and create an integrated network of connected and multi functional Green Infrastructure assets that:

- *Provides attractive environments where people want to live, work, learn, play, visit and invest;*
- *Meets the environmental, social and economic needs of communities across the borough and the wider City Regions;*
- *Enhances the quality of life for present and future residents and visitors;*
- *Helps to meet the challenge of climate change;*
- *Enhances biodiversity and landscape character;*
- *Improves opportunities for recreation and tourism;*
- *Respects local distinctiveness and historical and cultural heritage;*
- *Maximises potential economic and social benefits; and*

- *Secures and improves linkages between green and blue spaces;*

At a strategic level Barnsley's Green Infrastructure network includes the following corridors which are shown on the Green Infrastructure Diagram:

- *River Dearne Valley Corridor. River Dove Valley Corridor.*
- *River Don Valley Corridor. Dearne Valley Green Heart Corridor.*
- *Historic Landscape Corridor.*

The network of Green Infrastructure will be secured by protecting open space, creating new open spaces as part of new development, and by using developer contributions to create and improve Green Infrastructure.

We have produced a Green Infrastructure Strategy for Barnsley which is informed by the Leeds City Region and South Yorkshire Green Infrastructure Strategies."

Policy BIO 1 Biodiversity and Geodiversity

"Development will be expected to conserve and enhance the biodiversity and geological features of the borough by:

- *Protecting and improving habitats, species, sites of ecological value and sites of geological value with particular regard to designated wildlife and geological sites of international, national and local significance, ancient woodland and species and habitats of principal importance identified via Section 41 of the Natural Environment & Rural Communities Act 2006 (for list of the species and habitats of principal importance) and in the Barnsley Biodiversity Action Plan;*
- *Maximising biodiversity and geodiversity opportunities in and around new developments;*
- *Conserving and enhancing the form, local character and distinctiveness of the borough's natural assets such as the river corridors of the Don, the Dearne and Dove as natural floodplains and important strategic wildlife corridors;*
- *Proposals will be expected to have followed the national mitigation hierarchy (avoid, mitigate, compensate) which is used to evaluate the impacts of a development on biodiversity interest;*
- *Protecting ancient and veteran trees where identified; and*
- *Encouraging provision of biodiversity enhancements."*

"Development which may harm a biodiversity or geological feature or habitat, including ancient woodland and aged or veteran trees found outside ancient woodland, will not be permitted unless effective mitigation and/ or compensatory measures can be ensured.

Development which adversely effects a European Site will not be permitted unless there is no alternative option and there are imperative reasons of overriding public interest (IROPI)."

2. METHODS

Zone of Influence (ZOI)

2.1 The search area for biodiversity information was related to the significance of sites and species and potential zones of influence, as follows:

- 5km around the Site for sites of International Importance (e.g. Special Area of Conservation [SAC], Special Protection Area [SPA], Ramsar site);
- 2km around the Site for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest [SSSI] and Local Nature Reserves [LNR]); and
- 2km around the Site for sites of County Importance (e.g. Sites of Importance for Nature Conservation [SINC]/Wildlife Sites and species records (e.g. protected, UK BAP or notable species).

2.2 The 'zone of influence' for a project is the area over which ecological features may be affected by biophysical changes as a result of the proposed project and associated activities. This is likely to extend beyond the project Site, for example where there are ecological or hydrological links beyond the Site boundaries. For this project, the zone of influence was unlikely to extend beyond the Site boundaries.

Consultation

2.3 As part of the process, the following record centres have been contacted to request records of any locally designated sites and/or protected species from the Site and land within a 2km radius: Doncaster Local Records Centre (DLRC), Sheffield Biological Record Centre (SBRC), South Yorkshire Bat Group (SYBG) and South Yorkshire Badger Group (SYB).

2.4 At present, BWB have received no records back from these record centres, and DLRC is closed until 15th March with the records from SYB also unavailable until the start of March. As such, records are not provided within this report, but will be submitted on receipt and this report updated accordingly.

2.5 In addition, the data sources listed below were also searched to gather additional ecological data of relevance to the project, including the identification of non-designated ecologically sensitive habitats such as vegetation corridors, woodlands, watercourses and standing water.

- Multi-Agency Geographic Information for the Countryside (MAGIC);
- Ordnance Survey 1:25,000 mapping; and
- Aerial imagery – Google Earth imagery (dated 2002 - 2022).

2.6 A summary of these consultations is contained in **Table 2.1**.

Table 2.1: Outcome of Consultations

Consultee and Date of Correspondence	Non-Statutory or Statutory	What was the Consultation Regarding	Outcome of Consultation	Method of Communication
DLRC, SBRC, SYBG and SYB. – not yet received	Non-Statutory	The location of non-statutory and statutory sites and the presence of protected and notable species within 2km radius	Data not yet received	Via email
Multi Agency Geographic Information for the Countryside (MAGIC) – February, 2023	Statutory	The location of statutory sites	Identification of one National, Regional or County designated site within 2km. No International designated sites within 5km.	Website
Google Earth – 2002 - 2022	Non-Statutory	Historic land use and habitats	Identification of historic land use from 2002	N/A

Site Survey

2.7 A Site survey was undertaken on 13th February by Ben McLean BSc (Hons) MCIEEM. Ben has extensive experience in survey and site assessment for protected species and is appropriately qualified for the surveys based on the CIEEM competencies for species surveys (CIEEM, 2017). Ben is registered to use Class 1 survey licence for Great Crested Newts (GCN) *Triturus cristatus* and Class 2 survey licence for bats.

2.8 The visit was completed using Phase 1 habitat survey techniques (JNCC, 2016) and UK HAB habitat survey techniques (UK HAB, 2020) as defined in their best practice.

2.9 The aim of the visit was to gather sufficient baseline information on the habitats within the Site in order to allow an interpretation of the ecological value of the land.

2.10 In addition, the methodology was extended to include a search for incidental evidence of protected/notable fauna and an assessment of the Site's potential to support protected/notable fauna. Specific consideration was given to the following species:

- Birds;
- Bats;
- Amphibians, including great crested newts (GCN);
- Reptiles;
- Badgers Meles meles; and

- Priority Species, such as hedgehog Erinaceus europaeus.

2.11 Standard methodologies were used where applicable.

2.12 Habitats adjacent to the Site were viewed, where possible, from the Site boundaries in order to assess their potential to support protected species that could be utilising the survey Site.

Survey Comments

2.13 In line with standard guidance, the results and recommendations within this report are valid for up to two years from the date of survey, assuming there are no significant changes to the survey Site or its immediate surroundings. Updated survey work may be required to support any future planning applications outside of this time period.

2.14 At present, BWB have received no records back from the record centres, and DLRC is closed until 15th March with a similar situation with SYB records not availbe until the start of March. As such, local records are not provided within this report, but will be submitted on receipt. Given the size of the Site, habitats present and review of ecological reports relating to adjacent development projects, it is unlikely that any such records will affect the impacts of the proposed development.

2.1 The survey was undertaken outside of the optimal period for habitat surveys (April to October); however, given the nature of the habitats present, it is considered that sufficient botanical information was collected to categorise the habitats and identify potential features of value. Sufficient information was also gathered on protected / notable species in terms of the likelihood of occurrence at the Site (as far as is reasonably possible during any Preliminary Ecological Appraisal survey).

Assessment

2.2 The Ecological Impact Assessment has been undertaken following guidelines provided by CIEEM (CIEEM, 2019).

2.3 In order to assess the significance of effects, Important Ecological Features that could potentially be affected by the development have been identified and described and the potential effects quantified using a range of parameters (e.g. extent, magnitude and duration).

2.4 For the purposes of this assessment, a 'significant effect' is an effect that either supports or undermines biodiversity conservation objectives for 'important ecological features' or for biodiversity in general. Conservation objectives may be specific (e.g. for a designated site) or broad (e.g. national/local nature conservation policy) or more wide-ranging (enhancement of biodiversity) (CIEEM, 2019).

2.5 Only where significant effects are predicted have mitigation measures been proposed, although it should be noted that a number of precautionary measures have been included and these are detailed within this document for completeness.

2.6 The potential for mitigation and enhancement measures were then considered to avoid, reduce or compensate for any significant adverse effects, where possible.

2.7 The current guidelines identify various characteristics that can be used to identify ecological resources or features likely to be important in terms of biodiversity. These include:

- naturalness;
- animal or plant species, sub-species or varieties that are rare or uncommon, either internationally, nationally or more locally, including those that may be seasonally transient;
- ecosystems and their component parts, which provide the habitats required by important species, populations and/or assemblages;
- endemic species or locally distinct sub-populations of a species;
- habitats that are rare or uncommon;
- habitats that are effectively irreplaceable;
- habitat diversity;
- size of habitat or species population;
- habitat connectivity and/or synergistic associations;
- habitats and species in decline;
- rich assemblages of plants and animals;
- large populations of species or concentrations of species considered uncommon or threatened in a wider context;
- plant communities (and their associated animals) that are considered to be typical of valued natural / semi-natural vegetation types, including examples of naturally species-poor communities; and
- species on the edge of their range, particularly where their distribution is changing as a result of global trends and climate change.

Significance Criteria

2.8 Current guidelines propose the following frame of reference for defining geographic context, which should be adapted to suit local circumstances:

- International and European;
- National;
- Regional;
- Metropolitan, County, vice-county or other local authority-wide area; and
- Local.

3. BASELINE CONDITIONS

3.1 There is one statutory designated site present within 2km of the site boundary and no European designated sites within 5km of the site, including:

- Dearne Valley Wetlands SSSI located approximately 860 m south of the Site.

  "*Dearne Valley Wetlands SSSI is situated in South Yorkshire and comprises a network of 22 wetland, scrub and woodland areas that extends through the catchment of the River Dearne.*

  Dearne Valley Wetlands SSSI is of special interest for the following nationally important features:

  - *Breeding gadwall Mareca strepera, shoveler Spatula clypeata, garganey Spatula querquedula, pochard Aythya ferina, bittern Botaurus stellaris, black-headed gull Chroicocephalus ridibundus and willow tit Poecile montanus klienschmidti.*
  - *Non-breeding gadwall Mareca strepera and shoveler Spatula clypeata.*
  - *Diverse assemblages of breeding birds of Lowland damp grasslands, Lowland scrub and a mixed assemblage of Lowland open waters and their margins and Lowland fen. General description: The site lies within the local authority areas of Barnsley, Rotherham and Doncaster and is within the Dearne Valley Green Heart Nature Improvement Area."*

3.2 The Site is within a SSSI risk zone. The development type is not included within a risk category i.e., the Site is below 100 units within an existing settlement/urban area.

3.3 As discussed, at the time of writing, the results from the Local Record Centres have not yet been received. However, following a review of adjacent Planning Applications, an adjacent application was submitted for the development of 68 dwellings, with the land approximately 180 m south-west of the Site surveys (Planning Application 2020/1439). As part of this application, SLR produced ecological surveys and reports to inform the development (SLR, 2020). Based on these reports, it is understood that the closest Local Wildlife Site (LWS) is Hickleton Park LWS, which is located over 400m north-east of the Site.

Habitats and Botanical Species

Overview

3.4 The UK HABS Habitat Survey Results Map with Target Notes (TNs) is provided in **Appendix 2** with accompanying habitat descriptions below. Relevant photographs are shown in **Appendix 3**. Botanical species nomenclature follows Stace (2019).

C1C7 Other Cultivated Crops

3.5 The majority of the Site comprised of an arable field which showed signs of active management and appears to recently have been ploughed. A review of historic

mapping confirmed that the arable land within the Site has been managed for arable practices as far back as 2002 and likely prior this.

3.6 A presumed unofficial footpath runs through the arable field along the northern boundary, which was actively used by dog walkers during the survey.

G4 Modified Grassland

3.7 There is a narrow margin of modified grassland running along the arable field boundary, measuring no more than 1 to 2m. The margin appears to be actively managed, being of a short sward and homogenous height. Cock's-foot *Dactylis glomerata* was dominant within the modified grassland, with perennial ryegrass *Lolium perenne*, cleavers *Galium aparine* and cow parsley *Anthriscus sylvestris* also being abundant, and red fescue *Festuca rubra*, creeping thistle *Cirsium arvense*, rosebay willowherb *Chamaenerion angustifolium*, broad-leaved dock *Rumex obtusifolius*, ivy *Hedera helix* and creeping buttercup *Ranunculus repens* being occasional.

3.8 Where the runoff from the arable field enters the ditch to the south-east corner (due to the slope of the Site), there is also a small pocket of more marsh grassland with Typha *Typha latifolia* and hard rush *Juncus infelxus*.

H3D Bramble Scrub and H3H Mixed Scrub

3.9 There is a small area of bramble scrub and mixed scrub to the south east corner of the Site, with species discussed within Section G4 Modified Grassland also present within this area.

3.10 Aside from the dense bramble, which is dominant within this area, there is a smaller section of mixed scrub which supported young ash *Fraxinus excelsior*, hawthorn *Crataegus monogyna* and dog rose *Rosa canina*.

H2A Hedgerows (Priority Habitat)

3.11 Two sections of managed hedgerow run along the southern boundary of the Site, with a pavement and Barnburgh Lane to the opposite side. Both sections of hedgerow run along the southern boundary, but they have been separated for the purpose of this assessment as they are not connected with a gap of approximately 160m between them.

3.12 Hedgerow 1 (the hedgerow along the west of the southern boundary) is 'gappy' and heavily managed to approximately 2m high. Hawthorn and blackthorn *Prunus spinosa* were dominant within this hedgerow, with ash, dog rose and elder *Sambucus nigra* being occasional.

3.13 Hedgerow 2 (the hedgerow along the east of the southern boundary) is 'gappy' and heavily managed to approximately 2m high. This hedgerow supports blackthorn, hawthorn and elder with dense ivy throughout. A single tree was located within the hedgerow, being an early mature ash, covered in dense ivy. The tree is approximately 5m high with a diameter at breast height (DBH) of 44 cm.

Ditches

3.14 The Site is bound by drainage ditches along the majority of the north, east and south of the Site, to allow runoff from the arable field. The ditches are narrow and no more than 0.5 m deep. The vast majority of the ditches were dry during the survey, with a section at the south-east corner (approx. 80m in length), the lowest part of the Site, holding water which was between 10cm to 30cm deep. The water quality appeared to be poor, with dumped litter, mattresses etc within the ditch. This area supports the wet/damp associated species named above, being Typha and hard rush.

3.15 Two early mature English oak *Quercus robur* are located within the dry ditch along the north of the Site, both having a DBH of 21 cm.

3.16 Considering the minimal water that the ditches are holding over winter months with recent heavy rainfalls, the ditches are not considered to hold water for more than four months of the year. Subsequently, they have not been mapped as R1 Standing Water and Open Canals.

Adjacent Habitats

3.17 The Site is immediately bordered by a disused railway embankment along the north and east of the Site. The embankment supports mixed scrub and early mature trees with species including ash, hawthorn, blackthorn, willow *Salix sp*, bramble and dogrose, with occasional English oak and elder. Railway ballast and similar materials are present within the embankment and disused railway corridor. The wider railway corridor supports similar habitat and provides a large linear connective wildlife corridor to the wider area and larger tracts of woodland. Footpaths are present along the railway corridor, with dogwalkers actively using the paths during the survey.

3.18 The south of the Site is bordered by a footpath, Barnburgh Lane and then arable fields and residential properties.

3.19 The west of the Site is directly bordered by a public footpath, with a small hedgerow and horse grazed fields to the west of that, and the village of Goldthorpe to the west of the fields.

Protected / Notable Species

Amphibians

3.20 Based on the data presented by SLR (2020) on the adjacent Site, there were two records of great crested newts *Triturus cristatus* within 2km. One of the records relates to an unverified record dating from 2018 from a property located approximately 140m south-west of the Site (at grid ref. SE 46647 03854) and was reported as a '4-5 inch in size' female outside the back door of a domestic property. The second record was historic (1970) and over 1km from the Site.

3.21 The Site is located within the Green Zone within the District Level Licensing (DLL), with an Amber Zone to the north-east of the Site.

3.22 Following a search on MAGIC for GCN EPS licence returns between 2017 and 2019, and GCN Class Survey Licence Returns, no records of these were provided within 2km of the Site.

3.23 No true waterbodies are present within the Site. The Site is currently holding water within a section of ditch to the south-east corner of the Site, with approximately 80m of the ditch holding between 10cm to 30cm of water in February 2023. This ditch is considered highly unlikely to hold water through spring and summer, and is subsequently, not considered to be suitable for breeding GCN.

3.1 The habitats present on-Site were considered to be largely unsuitable for GCN due to the dominance of arable crop. The scrub to the east and railway embankment outside of the Site was considered to offer the most suitable terrestrial habitat for foraging and commuting GCN, with the Site lacking in suitable refugia and breeding habitat for this species.

3.2 Outside of the Site, OS Maps identified two waterbodies approximately 400m – 420m south of the Site. These waterbodies are on private land and were not accessible during the field survey; however, based on satellite imagery (Google earth, 2022), one of these ponds appears to be no longer present, and the other appears to be dry. This is further supported by survey work undertaken by SLR (SLR, 2022), which appears to refer to these ponds, which are 150m adjacent to their study site, as being 'either dry, or simply no longer present, on the 1st of June 2021'. Although not shown on OS Maps, a further water body is visible via satellite imagery, located approximately 440m south of the Site. This waterbody, as well as the adjacent Flat Moor Dyke, were subject to GCN eDNA surveys by SLR in spring 2021 (SLR, 2020 & 2022) and both tested negative for GCN eDNA. No further waterbodies have been recorded within 500m of the Site.

3.3 Given the above, GCN were considered highly unlikely to be present within the Site and therefore will not be considered further in this report.

Badgers

3.1 No evidence of badgers such as hairs, latrines, footprints, or setts was identified on-Site at the time of the survey, with the habitats generally considered unsuitable for sett excavation due to the flat, exposed nature. The Site was considered to offer some suitable foraging habitat for badgers, due to its arable nature and it cannot be ruled out that they may cross the Site periodically.

3.2 A targeted badger survey was undertaken within 30m of suitable habitat adjacent to the Site, namely, the railway embankment. During the survey, no evidence of badgers (including setts) was located on the embankment. The embankment does offer a slope which is often used for sett excavation; however, the ballast and associated materials from the disused railway are likely to reduce the ease of tunnelling into the embankment, and the high levels of dogwalkers may also be a limiting factor. However, the disused railway does provide a well-connected wildlife corridor, and is likely to be used by foraging and commuting badgers and therefore the occasional presence of badgers within the Site cannot be discounted.

Bats

3.3 No buildings were recorded within or immediately adjacent to the Site.

3.4 The early mature ash on the southern boundary is covered in dense ivy, however, the tree was in good condition and no evidence of potential roost features were present. In addition, the ivy was not of an age to provide thick pockets to provide suitable bat roost potential features. As such, this tree was considered to be of negligible bat roost potential.

3.5 All other trees within and immediately adjacent to the Site were relatively young and did not exhibit potential roost features suitable for roosting bats and were assessed as being of negligible bat roost potential.

3.6 The intensively managed arable land dominating the Site was considered unlikely to attract an abundance of invertebrate required to support important assemblages of bats. In addition, the gappy small sections of hedgerow are also unlikely to offer little value for foraging bats. These habitats are also likely to receive levels of light from streetlights and adjacent properties, which will reduce there value further for light sensitive species of bats.

3.7 The linear scrub/young woodland habitat associated with the railway embankment offers optimal foraging and commuting habitat, particularly considering its linkage to the wider area and retention as a dark corridor.

Birds

3.8 Three black-headed gulls *Chroicocephalus ridibundus* were recorded flying over the Site, with great tit *Parus major*, goldfinch *Carduelis carduelis*, robin *Erithacus rubecula*, blackbird *Turdus merula*, long-tailed tit *Aegithalos caudatus*, blue tit *Cyanistes caeruleus*, chaffinch Fringilla *coelebs* and wren *Troglodytes troglodytes* recorded within the scrub on the embankment.

3.9 Given the size, location, human disturbance and intensively managed nature of the arable field, the Site is considered to offer sub-optimal habitat for ground nesting species, and it is considered highly unlikely to be of value for an important assemblage of birds.

3.10 The hedgerows and mixed scrub within the Site offered some opportunities for nesting passerines, with the adjacent scrub/young woodland to the north of the Site offering good quality nesting potential.

Reptiles

3.11 No reptiles or evidence of reptiles were recorded on-Site during the survey. The Site was sub-optimal for reptiles in nature, lacking in refugia, as well as the majority of the Site being intensively managed and lacking in structure or diversity.

3.12 In addition, the previously mentioned development approximately 180m south-west of the Site undertook full reptile surveys in 2020 as it contained good quality reptile habitat, and no evidence of reptiles was recorded (SLR, 2020).

3.13 The railway embankment and associated habitat does provide good quality habitat for reptiles, particularly considering its connectivity to high quality habitats within the wider area, however, given the negligible value of the habitats on the Site, it is highly unlikely reptiles would hunt or commute within the Site boundary.

3.14 As such, reptiles were considered highly unlikely to be present within the Site and therefore will not be considered further in this report.

Water Voles and Otter

3.15 No evidence of water voles was recorded during the survey. The vast majority of the ditches within the Site were dry during the survey, with a section at the south-east corner (approx. 80m in length) holding some water between 10cm to 30cm deep. The water quality appeared to be poor, with dumped litter, mattresses etc within the ditch. This ditch is considered unlikely to hold water through spring and summer, and is subsequently, highly unlikely to be used by water voles and of no potential for otters.

3.16 West Moor Dike is located approximately 32m east of the Site. The watercourse is considered to offer potential for water voles and possibly for commuting otters; however, given the associated distance from the Site, and lack of suitable habitats within the Site, impacts to potential water voles or otter from the proposed development are considered as negligible.

3.17 As such, water voles and otters were considered highly unlikely to be present within the Site or within features 15m from the Site, and therefore will not be considered further in this report.

Hedgehogs

3.18 The habitats on-Site were generally considered sub-optimal for this species, however the adjacent habitats along the disused railway corridor provide suitable sheltering, foraging and commuting habitat. This species is therefore considered likely present within wider area and may enter the Site on occasion to forage.

Other Species

3.19 The Site was considered to provide some limited suitable habitat for fox *Vulpes vulpes* and rabbit *Oryctolagus cuniculus*. No evidence of these species was found during the surveys.

Invasive Flora

3.20 No Schedule 9 invasive flora species were recorded within the Site during the survey.

4. ASSESSMENT OF EFFECTS

4.1 This section identifies the effects on habitats and species during different stages of the development, prior to any mitigation measures.

Designated Sites

4.2 Based on the desk-based study by SLR (2020) on LWS and a review of MAGIC, Impacts to Designated sites are considered unlikely due to the nature of the works, distance between designated sites and the application Site and the presence of intervening habitats. In conjunction, the nature of the application is considered unlikely to result in increased pollution such as noise or dust. No further consideration for designated sites is considered necessary at this stage.

Habitats

4.3 The other cultivated crops and modified grassland is of limited ecological value and widespread within the wider area and as such is considered as being of ecological value within the immediate zone of influence of the Site only.

4.4 The small area of scrub within the Site is also of relatively low ecological value and considered as being of value at the local level only.

4.5 Native hedgerows are recognised as a Priority Habitat under the NERC Act 2006. However, those on Site are small in nature, heavily managed and with limited diversity and considered as being of value at the local level only. Based on the plans for the Site, these areas of habitat will be retained as part of the development.

4.6 The majority of the ditches are dry, with a small section containing 10cm to 30cm of water when surveyed in February, and considered highly likely to be dry through spring and summer. Based on the plans for the Site, most of the ditches will be retained as part of the development, including the section of ditch currently holding water. Given the nature of the ditches (mostly dry), they are considered as being of value at the local level only.

Protected Species

Badgers

4.7 It cannot be ruled out that badgers may periodically cross the Site and become injured in open excavations during the construction phase. This would be a minor adverse effect at the local level.

4.8 In addition, badgers are mobile animals and can excavate setts over short periods of time. Subsequently, potential future setts could be disturbed or destroyed during the construction period. This would be a major adverse effect at the local level.

Bats

4.9 The Site itself was considered to offer limited foraging and commuting opportunities for bats. However, the disused railway corridor to the north of the Site provides excellent foraging and commuting value for all species of bats within the local range. Any lighting implemented as part of construction or operational phase has the potential to disturb bats which may forage or commute along the boundary habitats. Regarding the Site, this would be a minor adverse effect at the local level. However, with regards to the disused railway corridor, and its connectivity to the wider area, this may be a moderate effect at the county level.

Birds

4.10 The habitats within the Site were considered to offer some limited suitable nesting and foraging habitat for birds. Therefore, there is the potential for birds to be disturbed or harmed during any vegetation clearance, including ground clearance of these areas. This would be considered a moderate adverse effect at the local level.

Other Species

4.11 It cannot be ruled out that fox and rabbit may utilise the Site and become injured in open excavations during the construction phase. This would be a minor adverse effect at the local level.

Nature Conservation Evaluation

4.12 The valuation of the nature conservation interest of the ecological features present on the Site and whether or not they require consideration of mitigation measures and further assessment is summarised in **Table 4.1**.

Table 4.1: Nature Conservation Evaluation

Receptor	Important Ecological Feature	Potential for Impact	Scale of Potential Impact	Subject to Further Consideration
SITES				
Internationally Designated Sites	Designated for their value at a national level.	No – distance and lack of connectivity	No Impact	No
Nationally Designated Sites	Designated for their local value.	No – distance and lack of connectivity	No Impact	No
Non-statutory Sites	Designated for their local value.	No – distance and lack of connectivity (based on the current understanding of the Site)	No Impact	No

Receptor	Important Ecological Feature	Potential for Impact	Scale of Potential Impact	Subject to Further Consideration
HABITATS				
Other cultivated grassland, modified grassland, scrub	No – common and widespread habitat	Yes – habitat will be removed during construction phase	Minor adverse impact at the local level	No
Hedgerows	Yes - Habitat of Principal Importance – Section 41 of NERC Act 2006 also provides habitat for birds and bats.	No - retained as part of the development	No Impact	No
Ditches	No – mostly dry during the survey and likely to be dry in spring and summer	Yes - most of the ditches will be retained as part of the development, including the section of ditch currently holding water	Minor adverse impact at the local level	No
SPECIES				
Amphibians	Yes – priority and protected species	No – unlikely present on-Site	Negligible impacts	No
Badgers	Yes – priority and protected species	Yes – during construction	Minor to major adverse impact at the local level	Yes
Bats	Yes – European protected species.	Yes – during construction / post-construction	Minor adverse impact at the local level on Site. With regards to the disused railway corridor, and its connectivity to the wider area, this may be a moderate effect at the county level.	Yes

Receptor	Important Ecological Feature	Potential for Impact	Scale of Potential Impact	Subject to Further Consideration
Birds	Yes – some suitable habitats and protected during nesting.	Yes – loss of nesting and foraging habitat	Minor adverse impact at the local level	Yes
Reptiles	Yes – protected species	No – unlikely present on-Site	Negligible impacts	No
Water Vole and Otter	Yes – protected species	No – unlikely present on-Site	Negligible impacts	No
Hedgehogs	Yes – priority and protected species	Yes – potential for harm during construction phase, loss of habitat	Minor adverse impact at the local level	Yes
Other Species	Yes – protected species	Yes – may be injured during construction phase	Minor adverse impact at the local level	Yes

4.13 Therefore, the ecological receptors which require further consideration are as follows:

- Badgers;
- Bats;
- Birds;
- Hedgehogs, and,
- Other species.

[1] Listed as a Species of Principal Importance on Section 41 of the NERC Act 2006
[2] Protection of Wild Mammals Act 1996

5. MITIGATION MEASURES

General

5.1 A specific Biodiversity Enhancement and Mitigation Plan (BEMP) should be produced for the Site. The BEMP will detail measures by which to protect retained habitats, enhance and create habitats, habitat management and species-specific enhancements.

5.2 A Biodiversity Net Gain Assessment will be undertaken at the Site and issued as a separate report. The report will detail areas of habitat for retention, enhancement and recreation and, where necessary, will detail requirements for off-Site compensation.

Badgers

5.3 As a matter of good practice, any trenches dug as part of construction work should be covered over at night, or left with a ramp or sloping end, to prevent mammals from falling in and becoming trapped. Similarly, any pipes over 200mm in diameter should be capped off at night.

5.4 Badgers are highly mobile animals and can excavate setts over short periods of time. Given the sloped embankment and as there is potential for sett excavation on the Site, and as there may be a prolonged period between the Site survey and the actual development, it is recommended that an update badger walkover is undertaken prior to the commencement of any ground works. As a purely precautionary and standard measure, in the unlikely event that a badger sett is found during the development process, work must stop immediately, and advice sought from a suitably qualified ecologist.

Bats

5.5 Any new lighting associated with the development should follow best practice guidelines outlined in Bats and Artificial Lighting in the UK (2018) to maintain suitable foraging habitats, particularly within areas of woodland (on or off-Site). In particular, light spill must not fall onto the railway embankment to the north of the Site, and this will be maintained as a dark corridor (also for other light sensitive species as well as bats).

5.1 Where security lighting is required, it should be on short timers and positioned to minimise any spill onto retained and boundary habitats. New lighting schemes for the development should be submitted for review by an ecologist prior to implementation on-Site.

Birds

5.2 As all species receive legal protection during nesting, it is advised to conduct vegetation clearance outside of the breeding bird season of March to August (inclusive). Work outside of this period should still be preceded by a nesting bird survey carried out by contractors, as some species can nest all year round. If it is necessary to conduct Site clearance within this period, it should be preceded by a nesting bird check conducted

by an ecologist. Active nests found at any time will remain unaffected until all chicks have fledged.

Hedgehogs

5.3 The measures outlined to protect badgers will serve to protect foraging and commuting hedgehogs which may cross the Site during the construction phase.

Other Species

5.4 As with badgers, any trenches dug as part of construction work should be covered over at night, or left with a ramp or sloping end, to prevent hedgehogs from falling in and becoming trapped. Similarly, any pipes over 200mm in diameter should be capped off at night.

6. RESIDUAL EFFECTS

6.1 With the mitigation measures suggested and outlined above, no residual effects are envisaged.

7. COMPENSATION AND ENHANCEMENT MEASURES

General

Biodiversity Net Gain

7.1 Biodiversity Net Gain was written into the NPPF in 2019 and is currently being written into a number of Local Plans. The landscaping scheme should be designed to maximise the biodiversity present on the Site post-development, through the use of native plant species and a variety of habitat types, with the area of green space maximised within the constraints of the development. Where net gain cannot be achieved on-Site, it may be necessary to also allow for off-Site mitigation on other areas of land within the Client's ownership and/or financial contribution to a third party such as the Environment Bank to fund off-Site mitigation.

Habitats

7.2 To maximise opportunities for a range of species it is recommended that new species-rich hedgerows and tree belts are incorporated into the Site layout. This is recommended to be located along the north-eastern site boundary to provide a corridor for wildlife. The hedgerows and/or tree belts are recommended to contain at least seven native species. The following species are recommended (please note that this is not an exhaustive list and other native species can be used):

- Native honeysuckle *Lonicera periclymenum*
- Hawthorn
- Blackthorn
- Elder
- Hazel *Corylus avellana*
- Holly *Ilex aquifolium*
- Rowan *Sorbus aucuparia*
- Field maple *Acer campestre*
- Beech *Fagus sylvatica*
- Hornbeam *Carpinus betulus*
- Dog rose
- Crab apple *Malus sylvestris*

Bats

7.3 Opportunities for roosting bats should be incorporated into the final development. These should be integrated into at least 10% of the new buildings, wherever possible. These should be positioned as close to the eaves as possible positioned in locations sheltered from strong winds and away from direct sunlight for a significant proportion of the day, usually south to south-west.

7.4 The BEMP should provide specific details of the bat boxes including number, types and locations.

Birds

7.5 Opportunities for nesting birds should be incorporated into the final masterplan. These should be integrated into at least 10% of the new buildings. Bird boxes should be installed two to four metres above ground on the buildings and should offer unobstructed fly-in access. The boxes should face between north and east, thus avoiding full sun and prevailing wind.

7.6 A range of different bird boxes should be installed, including general purpose boxes as well as boxes focussing on those species whose populations are declining and are most likely to be associated with the built environment. The BEMP should provide specific details of the bird boxes including number, types and locations.

Hedgehogs

7.7 To provide new habitats for hedgehogs and other species, it is recommended that a hedgehog friendly layout is achieved through the following provisions:

- Shrub planting along the edges/boundaries of the development to provide connectivity for hedgehogs and other species through and around the Site to the wider habitats
- Creation of a hedgehog 'highway' - any fencing to have 13cm by 13cm holes cut in strategic places to allow hedgehogs and other species to move in and out of the Site. In addition, hedgerows or fencing with gaps at the bottom/railings could be used instead of close board fencing; and,
- Brash and log piles could be created in landscaped/planted areas to provide refuge and hibernation habitats for hedgehogs and other species.

7.8 It is recommended that further details of how the development will be hedgehog friendly is provided within the BEMP. The BEMP is recommended to include a plan showing suitable locations of the hedgehog highway holes and/or connectivity, brash/log piles, shrub planting and dropped kerbs.

8. CUMULATIVE EFFECTS

8.1 The outcome of the Ecological Impact Assessment is that there will likely be no Residual Effects. Therefore, the proposed works will not contribute to any impacts from related/nearby proposed developments and Cumulative Effects are not relevant.

9. SUMMARY

9.1 **Table 9.1** contains a summary of the likely significant effects of the development relating to the construction phase, the completed development and cumulative effects.

Table 9.1: Summary

Receptor	Potential Effect	Significance of Effect Without Mitigation	Mitigation Measures	Residual Effects
SITES				
Internationally Designated Sites	None – distance and lack of connectivity	No impact or effect	N/A	No impact or effect
Nationally Designated Sites	None – distance and lack of connectivity	No impact or effect	N/A	No impact or effect
Non-statutory Sites	None – distance and lack of connectivity	No impact or effect	N/A	No impact or effect
HABITATS				
Other cultivated cereal, modified grassland, scrub hedgerows and ditch	Loss of some habitats and potential impacts to habitats during construction	Minor adverse impact at the Site level	Plus 10% BNG as part of BNG assessment. Protection during construction as well as additional enhancements of the habitat.	Positive impact at the local level
SPECIES				
Amphibians	None – not likely to be present	No impact or effect	N/A	No impact or effect
Badgers	Potential injury during construction phase	Minor adverse impact at the local level	Good practice measures during construction	Negligible
Bats	Impacts on foraging and commuting routes	Site - Minor impact at the local level Railway corridor – Moderate at the county level.	Avoid any light spill on northern and eastern boundary and all lighting to follow best practice guidelines. New roosting opportunities.	Positive impact at the local level

Receptor	Potential Effect	Significance of Effect Without Mitigation	Mitigation Measures	Residual Effects
Birds	Disturbance or harm to nesting birds	Minor impact at the local level	Timing of vegetation clearance to outside of the nesting bird season and replacement / new nesting opportunities	Positive impact at the local level
Reptiles	None – not likely to be present	No impact or effect	N/A	No impact or effect
Water Voles and Otters	None – not likely to be present	No impact or effect	N/A	No impact or effect
Hedgehogs	Potential injury during construction phase	Minor impact at the local level	Good practice measures during construction. New habitat creation through landscaping schemes. Ensuring connectivity for hedgehogs.	Positive impact at the local level
Other Species	Potential injury during construction phase	Minor impact at the local level	Precautionary methods. Good practice measures during construction	Negligible

10. REFERENCES

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APPENDICES

Appendix 1: Relevant Legislation

The following text provides information on the key legislation, which is applicable to this survey.

The main wildlife legislation relevant in the UK is as follows:

European Legislation

The relevant sections of the EC Directives and international conventions are summarised below:

- EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitat Directive 1992) as amended (92/43/EEC)

The Directive requires Member States to introduce a range of measures including the protection of species listed in the Annexes. The 189 habitats listed in Annex I of the Directive and the 788 species listed in Annex II, are to be protected by means of a network of sites. Once adopted, these are designated by Member States as Special Areas of Conservation (SACs), and along with Special Protection Areas (SPAs) classified under the EC Birds Directive. The Habitats Directive introduces the precautionary principle; that disturbance to the designated sites can only be permitted having ascertained no adverse effect on the integrity of the Site.

- EC Directive on the Conservation of Wild Birds (Birds Directive 1979) as amended (79/409/EEC)

The main provisions of the Directive includes; the maintenance of the favorable conservation status of all wild bird species across their distributional range.

- Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)

The Convention imposes legal obligations on contracting parties, protecting over 500 wild plant species and more than 1000 wild animal species.

UK Legislation

The sections of UK legislation considered to be of relevance include:

- The Conservation (Natural Habitats, and c.) Regulations (Amendment) (EU Exit) 2019 (as amended)

This transposes the Habitats Directive into national law. The Regulations provide for the designation and protection of 'European sites', and the protection of 'European protected species.

- The Wildlife and Countryside Act 1981 (as amended) (WCA)

This consolidates and amends existing national legislation to implement the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) and Council Directive 79/409/EEC on the Conservation of Wild Birds (Birds Directive) in Great Britain.

- The Countryside and Rights of Way Act 2000 (CRoW)

This act strengthens wildlife enforcement legislation.

- The Protection of Badgers Act 1992

This act affords protection to badgers and their setts including the destruction or obstructing access to a sett.

- Wild Mammals Protection Act 1996

This act provides protection to all wild species of mammal in the UK and is more related to mammal welfare but is directly applicable during any site clearance or other works to a site which could harm mammals.

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

This act formed Natural England which places a duty on all public authorities, including local planning authorities to consider biodiversity. This Act also requires s list of species of habitats composed by the Secretary of State to help provide specific conservation targets. These species are known as Priority Species or Species of Principal Importance (SPI). These habitats are know as Priority habitats or Habitats of Principal Important (HPI). Both SPI and HPI are listed under Section 41 of this Act. The NPPF also affords protection to these HPI's and SPI's.

- UK Post-2010 Biodiversity Framework

In addition, species and habitats listed on the UK Post-2010 Biodiversity Framework (formally the UK BAP) are also considered. Details on these species and habitats can be found at: http://jncc.defra.gov.uk/page-5705.

Species-Specific Legislation

Species specific legislation is provided in the Table below:

Species-Specific Wildlife Legislation

Plants	Sch. 8 Wildlife and Countryside Act 1981 (as amended) Some species are SPI - Section 41 NERC Act.	• Pick; • Uproot; • Trade; • Possess (for trade) any wild plant listed.
Breeding birds	Wildlife and Countryside Act 1981 (as amended).	• Kill; • Injure; • Take; any wild bird, their eggs or nest (with the exception of those on Sch. 2).
Specially protected birds	Sch. 1 Wildlife and Countryside Act 1981 (as amended).	As above but includes: • Disturbing birds at their nest, or their dependent young.

Badgers	The Protection of Badgers Act 1992.	• Wilfully kill, injure, take, or cruelly ill-treat a badger, or attempt to do so; • Possess any dead badger or any part of, or anything derived from, a dead badger; • Intentionally or recklessly interfere with a sett by disturbing badgers whilst they are occupying a sett, damaging or destroying a sett, causing a dog to enter a sett, or obstructing access to it. A badger sett is defined in the legislation as "any structure or place, which displays signs indicating current use by a badger".
Bats	Sch. 5 Wildlife and Countryside Act 1981 (as amended). Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 (as amended).	• Intentionally or deliberately kill, inure or capture (or take) bats: • Deliberately disturb bats (whether in a roost or not); • Recklessly disturb roosting bats or obstruct access to their roosts; • Damage or destroy bat roosts.
Common reptiles	Sch. 5 Wildlife and Countryside Act 1981 (as amended). Countryside and Rights of Way Act 2000.	Deliberate or reckless: • Killing; • Injuring • Sale.
Common amphibians	Sch. 5 and Sch. 9 Wildlife and Countryside Act 1981 (as amended). Countryside and Rights of Way Act 2000.	• Sell; • Transport; and • Advertise for sale.
Great crested newt	Sch. 5 Wildlife and Countryside Act 1981 (as amended). Conservation of Habitats and Species Regulations (Amendment) (EU Exit) 2019 (as amended).	• Kill; • Injure; • Disturb • Destroy or obstruct access to any place used for rest or shelter.
Hedgehogs	SPI – Section 41 NERC Act Wild Mammals Protection Act 1996.	Protection from harm, injury Intent to harm.
Other mammals	Wild Mammals Protection Act 1996.	Protection from harm, injury Intent to harm.
Invasive species (animal and plant)	Sch. 9 Wildlife and Countryside Act 1981 (as amended).	Release of any animal, plant or microorganism not native to the UK. Sale. Cause or allow to spread.

Protected Sites

A network of protected sites, at varying levels, have been put in place across the UK. Further details are provided below;

International Importance

- Natura 2000

Natura 2000 is the name of the European Union-wide network of nature conservation-sites established under the EC Habitats and Birds Directives. This network will comprise Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

- Special Areas of Conservation (SAC)

SACs are designated under the EC Habitats Directive. The Directive applies to the UK and the overseas territory of Gibraltar. SACs are areas which have been identified as best representing the range and variety within the European Union of habitats and (non-bird) species listed on Annexes I and II to the Directive. SACs in terrestrial areas and territorial marine waters out to 12 nautical miles are designated under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). New and/or amended Habitats Regulations are shortly to be introduced to provide a mechanism for the designation of SACs and SPAs in UK offshore waters (from 12-200 nm).

National Importance

- Sites of Special Scientific Interest (SSSI)

The SSSI series has developed since 1949 as the national suite of sites providing statutory protection for the best examples of the UK's flora, fauna, or geological or physiographical features. Most SSSIs are privately-owned or managed; others are owned or managed by public bodies or non-government organisations. The SSSIs designation may extend into intertidal areas out to the jurisdictional limit of local authorities, generally Mean Low Water in England and Northern Ireland; Mean Low Water of Spring tides in Scotland. In Wales, the limit is Mean Low Water for SSSIs notified before 2002, and, for more recent notifications, the limit of Lowest Astronomical Tides, where the features of interest extend down to LAT. There is no provision for marine SSSIs beyond low water mark. Originally notified under the National Parks and Access to the Countryside Act 1949, SSSIs have been renotified under the Wildlife and Countryside Act 1981. Improved provisions for the protection and management of SSSIs were introduced by the Countryside and Rights of Way Act 2000 (in England and Wales) and the Nature Conservation (Scotland) Act 2004.

Regional/Local Importance

- Wildlife Sites

Local authorities for any given area may designate certain areas as being of local conservation interest. The criteria for inclusion, and the level of protection provided, if any, may vary between areas. Most individual counties have a similar scheme, although they do vary.

These sites, which may be given various titles such as 'Listed Wildlife Sites' (LWS), 'County Wildlife Sites' (CWS), 'Local Nature Conservation-sites' (LNCS), 'Sites of Importance for Nature Conservation' (SINCs), or Sites of Nature Conservation Importance' (SNCIs), together with statutory designations, are defined in local and structure plans under the Town and Country Planning system and are a material consideration when planning applications are being determined.

Appendix 2: UK HABS Habitat Plan



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Notes

1.Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.

2.This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.

3.All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.

4.Any discrepancies noted on site are to be reported to the engineer immediately.

Key

- Site boundary

Habitats

- g4 - modified grassland
- h3 - dense scrub
- c - cropland
- Hedgerow (priority)

Ditches

- Dry
- Wet

Rev	Date	Details of issues/ revision	Drw	Rev
P01	21.02.2023	PRELIMINARY ISSUE	AD	BMcL

Issues & Revisions

BWB
A CAF GROUP COMPANY

Birmingham | 0121 233 3322
Leeds | 0113 233 8000
London | 0207 407 2879
Manchester | 0161 233 4260
Nottingham | 0115 924 1100
www.bwbconsulting.com

Client

Honey Developments ?

Project Title

Barnburgh Lane Goldthorpe

Drawing Title

UK HABS Habitat Plan

Drawn:	AD		Reviewed:	BMcL	
BWB Ref:	232197	Date:	21.02.2023	Scale@A3:	1:2000

Drawing Status

Final

N

Project - Originator - Zone - Level - Type - Role - Number	Status	Rev
BLG-BWB-ZZ-XX-DR-LE-0001	S2	P01

Appendix 3: Site Photographs



Photograph 1: View east to west across the Site



Photograph 2: View west to east across the Site



Photograph 3: Scrub to east of Site



Photograph 4: Example of dry ditch



Photograph 5: Section of ditch currently holding water to the east corner of the Site



Photograph 6: Hedgerow 1



Photograph 7: Hedgerow 2



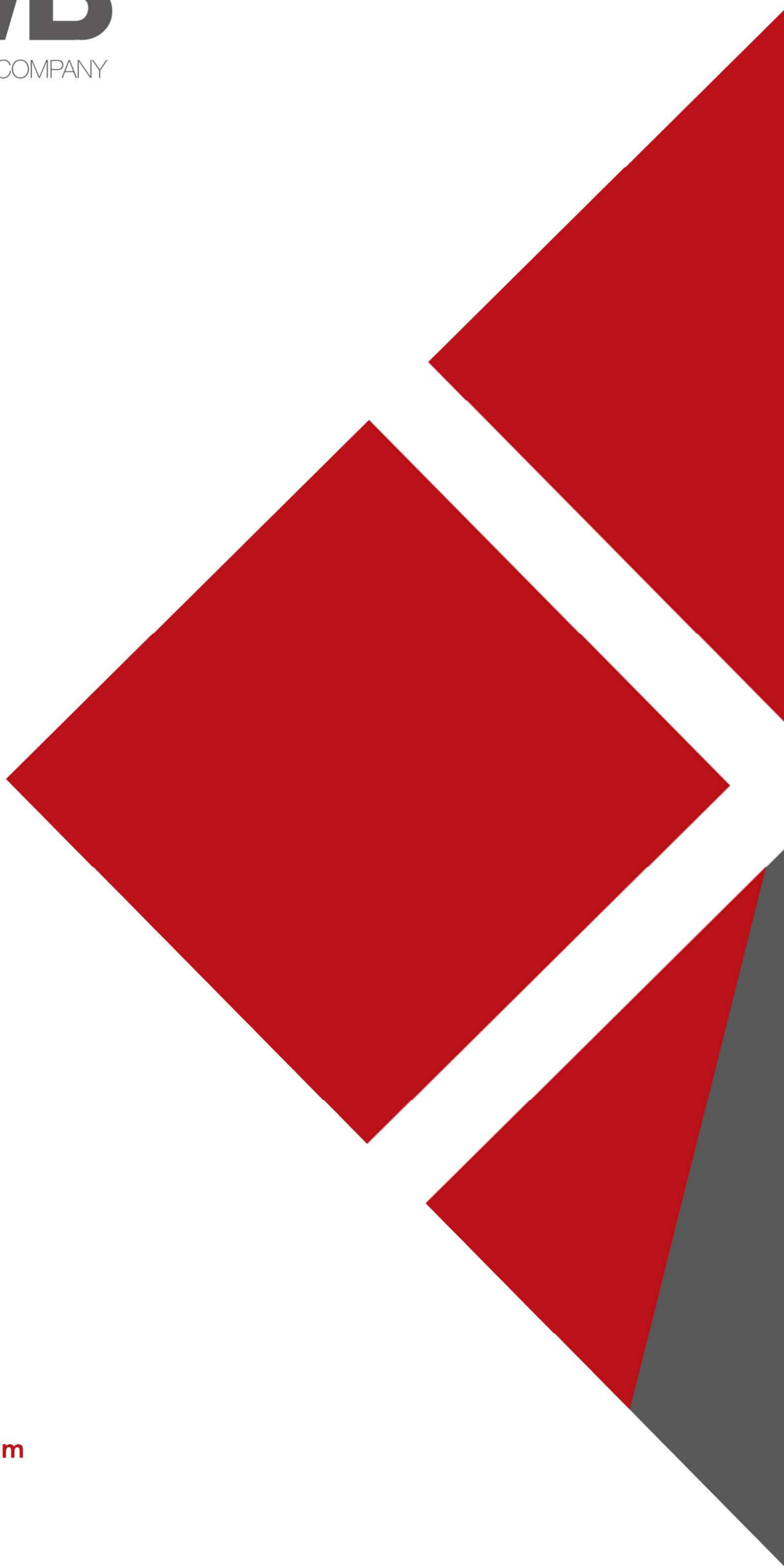
Photograph 8: Railway embankment to north of the Site



Photograph 9: Barnburgh Lane to the south of the Site

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