

PRELIMINARY ECOLOGICAL APPRAISAL

Brown Hill Farm, Old Lane, Birkenshaw
BD11 2JL

Issued: 14/04/25

Project No: EE02

Preliminary Ecological Appraisal at Brown Hill Farm, Old Lane, Birkenshaw, BD11 2JL
Project number: EE02

Project reference	EE02
Project site	Brown Hill Farm
Client	Jim Granger
Report title	Preliminary Ecological Appraisal
Report version	1
Report author(s)	Joe Earnshaw
Final draft date	14/04/2025

To achieve the study objectives stated in this report, we were required to base our conclusions on the best information available during the period of the investigation and within the limits prescribed by our client in the agreement. Where information is provided by others, Earnshaw Ecology shall bear no liability in respect of any advice given on the basis of that information. No investigative method can completely eliminate the possibility of obtaining partially imprecise or incomplete information. Thus, we cannot guarantee that the investigations (date, work, interpretation of that data or work) completely defined the degree or extent of e.g. species abundances, habitat management efficacy, conservation credit calculations and hence credit requirements, described in the report. Nor does Earnshaw Ecology accept any liability for any decisions made by the CLIENT on the basis of the information, consultancy or advice provided by Earnshaw Ecology.

Executive Summary

Earnshaw Ecology (EE) has been commissioned by **Jim Granger** to undertake a Preliminary Ecological Appraisal (PEA) at **Brown Hill Farm, Old Lane, Birkenshaw BD11 2JL** (hereafter referred to as the 'Site') to inform a planning application for the demolition of existing barns and erection of four detached dwellings ('the Proposed Development').

The aim of the Appraisal is to describe the key ecological features of the Site, which, by virtue of their status in UK legislation or planning policy, are likely to be a material consideration for the proposed development.

The PEA included an ecological desk study to identify statutory and non-statutory sites, as well as records of protected, notable and invasive species in close proximity to the Site. A field visit was also carried out to classify and map the main habitats present and identify habitat opportunities for protected or notable species.

Recommendations for further survey, avoidance, mitigation and enhancement – where appropriate - have been made and are summarised in **Table 1** on the following page and are detailed in full in **Section 6** of this report.

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1. Introduction

1.1 Purpose of the Report

- 1.1.1 Earnshaw Ecology (EE) has been commissioned by **Jim Granger** to undertake a Preliminary Ecological Appraisal (PEA) at **Brown Hill Farm, Old Lane, Birkenshaw, BD11 2JL** (hereafter referred to as the 'Site') to inform a planning application for the demolition of existing barns and erection of four detached dwellings ('the Proposed Development').
- 1.1.2 The aim of the PEA is to describe the key ecological features of the Site, which, by virtue of their status in UK legislation or planning policy, are likely to be a material consideration for the proposed development. The assessment comprises a desk study review of existing ecological data for the Site and an ecological walkover to map and describe the habitats present and identify the presence or potential presence of protected/notable species. A review of potential ecological impacts, together with recommended measures to achieve a net gain for biodiversity, in accordance with national planning policy, is also included in **Section 6**.
- 1.1.3 Biodiversity Metric Baseline Assessment – condition scoring the habitats on-Site and assigning each habitat a numerical value. This calculation is done in an excel worksheet (see accompanying spreadsheets).

1.2 Site Description and Context

- 1.2.1 The Site is located at Ordnance Survey (OS) National Grid Reference SE 20742 28577, with nearby postcode BD11 2JL. The Site is bordered on all sides by agricultural land.

2. Methodology

2.1 Desk Study

2.1.1 A desk study was carried out to identify records of any statutory and non-statutory nature conservation sites, priority habitats and protected and notable species within a defined radius of the Site. Consultees for the data search were:

- DEFRA - Multi-Agency Geographical Information System (MAGIC);
- Biological information Centre for Birkenshaw (West Yorkshire Ecology Service (WYES));
- Satellite imagery to record any potentially notable habitats; and,
- OS mapping to record potentially notable habitats (including ponds).

2.1.2 The desk study search radius for sites of international importance was 5 km from the Site boundary and 2 km for other UK statutory sites using MAGIC; with the WYES data search results consulted for non-statutory sites and protected and notable species on and within 1 km of the Site and within the last ten years (this excluding bat roosts, for which all records are included).

2.2 Field Survey

2.2.1 The field survey comprised an ecological walkover of the Site in accordance with the UK Habitat Classification methodology (Butcher et al. 2020), to classify and map the extent of the main habitats present, where access permitted. The survey utilises the UKHab Professional edition, mapping primary habitats to Level 4 (where possible) and using a limited subset of secondary codes for 'mosaic' and 'origin' features to differentiate habitat attributes.

2.2.2 The Site was inspected for evidence of, and its potential to support, protected or notable species, especially those listed under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019, the Wildlife & Countryside Act (WCA) 1981 (as amended), including those given a higher level of legal protection under the NERC Act 2006 and Countryside & Rights of Way (CRoW) Act 2000, and those listed on the LBAP. The following species were considered:

- Invertebrates (including white-clawed crayfish *Austropotamobius pallipes*);
- Great crested newt *Triturus cristatus* freshwater habitat potential within 500m of the Site;

- Reptile habitat within the Site;
- Nesting and foraging habitat for birds within the Site;
- Bat roost potential and foraging habitat within the Site;

- Otters *Lutra lutra* and suitable habitat within 30m of the Site, where accessible;
- Water vole *Arvicola amphibius* habitat within 20m of the Site, where accessible;
- Eurasian beaver *Castor fiber* habitat within 30m of the Site, where accessible;
- Other notable species; and,
- Invasive species.

2.3 Baseline Statutory Biodiversity Metric

2.3.1 For each on-Site habitat, a condition assessment was carried out using condition criteria detailed in the Statutory Biodiversity Metric User Guide (Version 23.07.24) [GOV.UK guidance \[15\]](#). The criteria is based on characteristic attributes for each habitat and assigns a value of 'Good', 'Moderate' or 'Poor' depending on the number of criteria met.

2.3.2 The Statutory Biodiversity Metric provides a way of measuring and accounting for biodiversity losses and gains resulting from development or land management change. The first calculation of the metric (included in this report) assigns a baseline numeric value for biodiversity units present on-Site pre-development. A full metric would then determine whether the Proposed Development meets the target increase in biodiversity units.

2.3.3 To comply with the planning policy of Kirklees Council, developments are required to ensure a biodiversity net gain of at least 10%, which will be determined from the baseline biodiversity units calculated in this report. Should the development fall short of the required 10% biodiversity net gain, further enhancement and mitigative measures will be necessary.

2.4 Survey limitations

- 2.4.1 The survey did not attempt to determine the status of protected, notable or invasive species on-Site, rather just note their presence from incidental sightings or identify the potential opportunities for these species based on habitat characteristics and features and connectivity within the surrounding landscape. Where opportunities for these species are recorded on-Site, further species-specific survey work has been recommended in **Section 6**.
- 2.4.2 The optimum time of year for completing the survey is between March and October, as many plant species have a seasonal expression in spring and summer only. The survey was undertaken on 04/04/25. Weather conditions on the date of the survey are provided below in **Table 2**.

Table 2. Field survey weather conditions.

Date	Weather Conditions			
	Temp (°C)	Wind Speed	Cloud Cover	Precipitation
04/04/2025	12	F1	5%	No

- 2.4.3 The survey was carried out at the optimum time of year and in ideal weather conditions. The timing of the survey and conditions encountered on-Site do not pose a constraint to the survey.
- 2.4.4 The baseline conditions described in this report were accurate at the time at which the survey was undertaken. Should at least 18 months pass by, and/or conditions on-Site/Site usage change prior to the commencement of works, an update survey should be undertaken.

3. Desk Study

3.1 Introduction

3.1.1 The data search for statutory sites was completed by the Earnshaw Ecology on 09/04/2025 and for non-statutory sites and protected and notable species by WYES on 09/04/2025. All desk study data was reviewed and ecological records relevant to the assessment is summarised in Sections 3.2 - 3.5 below.

3.2 Statutory Designated Sites

3.2.1 The desk study identified no sites of international importance for nature conservation within 5 km radius of the Site.

3.2.2 The desk study identified two sites of national importance for nature conservation within a 2 km radius of the Site. The sites of national importance are listed in **Table 2** below together with its proximity to the Site and an overview of the features for which the site is designated as a site of national importance.

Table 2. Sites of national importance for nature conservation within a 2 km radius of the Site.

Site Name	Designation	Distance (m) from the Site	Designated Feature(s)
Tong Moor	LNR	745	Unimproved acid grassland
Oakwell Park	LNR	1590	Various trees, plants and fungi. Also insects, butterflies and small mammals
<u>Key</u> LNR – Local Nature Reserve			

3.3 Non-Statutory Designated Sites

3.3.1 The desk study identified three sites of local importance for nature conservation within a 1 km radius of the Site. **Table 3** summarises these sites together with their proximity to the Site and an overview of the features for which they were designated as a site of local importance.

Table 3: Sites of local importance for nature conservation within a 1 km radius of the Site

Site Name	Designation	Designated Feature(s)	Distance from the Site
Tong Moor	LWS	Gr4 - Species rich acid grassland Vanl2 - Local Nature Reserve	736m
Oakwell Park	LWS	Vanl2 - LNR Mh2 – Mixed habitats	1417m
Park Wood, Tong	LWS	Wd3 - species rich wet and acid woodland Wd4 - over mature trees Wd5 - native bluebell cover	1671m
<u>Key</u> LWS – Local Wildlife Site			

3.4 Section 41 of NERC Act 2006 Priority Habitat Inventory

3.4.1 The desk study identified five areas recorded under the Priority Habitat Inventory on MAGIC within 1 km of the Site’s boundary. These parcels primarily consist of three parcels of good quality semi-improved grassland and two parcels of deciduous woodland. No parcels of ancient woodland were identified.

3.5 Protected/Notable Species

3.5.1 MAGIC revealed no European Protected Species (EPS) licence applications.

3.5.2 The desk study identified a total of 19 records of species within a 1 km radius of the Site. **Table 4** summarises the subset of records for protected and/or notable species, together with the number of records within 1 km of the Site and an overview of their protected or conservation status. The remaining species records consisted of common species, with no protected status afforded to them. As a result, they have not been further summarised within this report;

Table 4: Protected and notable species within a 1 km radius of the Site.

Species Name	Common Name	Date of most recent record	Records within 1 km	Designation/ Conservation Status
Mammal				
<i>Erinaceus europaeus</i>	Hedgehog	2024	2	NERC S41; WYBAP; KBAP
<i>Nyctalus leisleri</i>	Leisler's bat	2021	2	Sch 5 WCA; EPS; WYBAP; KBAP
<i>Pipistrellus pipistrellus</i>	Common pipistrelle	2022	6	Sch 5 WCA; EPS; WYBAP; KBAP
Bird				
<i>Tyto alba</i>	Barn owl	2021	2	Sch 1 WCA; WYBAP; KBAP
<i>Linaria cannabina</i>	Linnet	2015	1	KBAP
Invertebrates				
<i>Satyrrium w-album</i>	White-letter hairstreak	2020	1	Sch 5 WCA; NERC S41; WYBAP
<i>Hepialus humuli</i>	Ghost moth	2018	1	NERC S41; WYBAP
<p>Key Badger Act - Species listed under the Badger Act 1992. BCC - Species listed under Birds of Conservation Concern (RSPB) - Red, Amber EPS - European Protected Species: Species listed under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. IUCN GRL - Species listed under the IUCN Global Red List – Vulnerable, Near Threatened NERC S41 - Species listed under Section 41 of the Natural Environment and Rural Communities Act 2006. Schedule 2 CR - Species listed under Schedule 2 of The Conservation of Habitats and Species Regulations 2017. Schedule 1 WCA - Species listed under Schedule 1 of the Wildlife and Countryside Act 1981 (as amended). Schedule 5 WCA - Species listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). Schedule 8 WCA - Species listed under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). UK BAP PS - Species listed under UK BAP Priority Species. WYBAP - West Yorkshire Biodiversity Action Plan species. KBAP - Kirklees Biodiversity Action Plan species.</p> <p style="text-align: center;">For full details of legislation please see Appendix 4.</p>				

3.6 Invasive Species

3.6.1 The desk study identified a total of 1 records of non-native and invasive species that are listed on Schedule 9 of the WCA within a 1 km radius of the Site; Japanese knotweed *Fallopia japonica*, was recorded in 2019 and located approximately 925 m from the Site.

4. Field Survey

4.1 Habitats

4.1.1 A summary of the habitats found on or immediately adjacent to the Site during the survey are listed in **Table 5**. below. A drawing showing the location and extent of these habitat is included in **Appendix 1**.

Table 5: Summary of habitats present within the Site

Habitat code	Habitat Type	Condition	Strategic significance	Area (ha)
g4	Modified grassland	Poor	Not in local strategy	0.007
g4	Modified grassland	Poor	Not in local strategy	0.005
u1b5	Buildings	N/A	Not in local strategy	0.085
u1b	Developed land; sealed surface	N/A	Not in local strategy	0.163

4.1.2 Parcel 1: g4 Modified grassland

4.1.3 Yorkshire fog *Holcus lanatus* (A), perennial ryegrass *Lolium perenne* (D), dandelion *Taraxacum officinale* (O), clover *Trifolium* sp. (F), square-stalked willowherb *Epilobium tetragonum* (R), bush vetch *Vicia sepium* (R), nettle *Urtica dioica* (O), little robin *Geranium purpureum* (R) and spear thistle *Cirsium vulgare* (R).

4.1.4 Parcel 2: g4 Modified grassland

4.1.5 Yorkshire fog (A), perennial ryegrass (D), nettle (F), cleavers *Galium aparine* (O), dandelion (O), buttercup *Ranunculus* sp. (R) and broad-leaved dock *Rumex obtusifolius* (F)

4.1.6 u1b Developed land; sealed surface

4.1.7 The majority of the Site is comprised of hard standing in the form of the driveway to the farmyard and the areas around the buildings.

4.1.8 U1b5 Buildings

There are 5 buildings on-Site (see Appendix 1). **Table 6** below details building descriptions.

Table 6: Descriptions of the buildings on-Site.

Building Number	Location	Description
1	SE 20732 28578	Agricultural building. Single skin red brick walls. Pitched roof covered with profiled sheeting.
2	SE 20751 28596	Agricultural building. Single skin red brick walls. Pitched roof covered with profiled sheeting.
3	SE 20759 28581	Agricultural building. Single skin red brick walls. Pitched roof covered with profiled sheeting.
4	SE 20752 28574	Agricultural building. Single skin red brick walls. Pitched roof covered with profiled sheeting.
5	SE 20752 28574	Agricultural building. Single skin breeze block walls. Pitched roof covered with profiled sheeting.

4.2 Protected and Notable Species

4.2.1 Flora

There are no records of notable flora within 1 km of the Site. The Site is predominantly hard standing. The habitats on-Site are heavily managed and unlikely to support notable flora. Flora will not be mentioned further in this report.

4.2.2 Invertebrates (including white-clawed crayfish)

Records of two notable invertebrates were received. The food plant of ghost moth is present on-Site but in low abundance and there is ample foraging for this species that will not be impacted by the development. Invertebrates will not be mentioned further in this report.

4.2.3 Fish

There are no records of notable fish within 1 km of the Site. There is no habitat on-Site or within influencing distance to support fish species. Fish will not be mentioned further in this report.

4.2.4 Amphibians

There are no records of notable amphibians within 1 km of the Site. There is no habitat on-Site or within influencing distance to support amphibians. Amphibians will not be mentioned further in this report.

4.2.5 Reptiles

There are no records of notable reptiles within 1 km of the Site. There is no habitat on-Site or within influencing distance to support reptile species. Reptiles will not be mentioned further in this report.

4.2.6 Birds

Records of two notable bird species were received, including barn owl. There is suitable habitat on-Site to provide shelter for barn owl, though breeding is unlikely. Furthermore, a pair of pigeons *Columba livia* were seen roosting within Building 3. The climbing plant Japanese climbing hydrangea *Hydrangea anomala* was found covering much of the southern elevation of Building 5 and smaller passerines may nest within the foliage.

4.2.7 Bats

Records of two bat species were received. The Site offers no suitable habitat for roosting bats and only low suitability for foraging and commuting bats. Bats will not be mentioned further in this report.

4.2.9 Otters

There are no records of otter within 1 km of the Site. There is no habitat on-Site or within influencing distance to support this species. Otter will not be mentioned further in this report.

4.2.10 Water Voles

There are no records of water vole within 1 km of the Site. There is no habitat on-Site or within influencing distance to support this species. Water vole will not be mentioned further in this report.

4.2.11 Beaver

There are no records of beaver within 1 km of the Site. There is no habitat on-Site or within influencing distance to support this species. Beaver will not be mentioned further in this report.

4.2.12 Other Notable Species

Records of hedgehog within 1 km of the Site were received. There is no habitat on-Site to support nesting hedgehog, but it is likely that this species commutes and forages on-Site.

4.2.13 Invasive Species

One record of an invasive species was received but this was at considerable distance from the Site. No invasive species were found during the survey. Invasive species will not be mentioned further in this report.

5. Evaluation and Discussion

5.1 Statutory Sites

- 5.1.1 Two statutory protected sites were identified within 5 km of the Site. These sites are designated for the presence of regionally important habitats and species.
- 5.1.2 Due to the distance between the proposed development and the statutory sites, it is considered unlikely for there to be any direct impacts.

5.2 Non-statutory Sites

- 5.2.1 Two statutory protected sites were identified within 5 km of the Site. These sites are designated for the presence of regionally important habitats and species.
- 5.2.2 Due to the distance between the proposed development and the statutory sites, it is considered unlikely for there to be any direct impacts.

5.3 Habitats

- 5.3.1 The Site contains only habitats of low conservation value in poor condition.
- 5.3.2 The development will however result in a change in the type, extent and condition of the remaining habitats on-Site. To determine the effects of these changes on the Site's habitat value, a Biodiversity Accounting Assessment has been instructed. The assessment, which uses the Statutory Biodiversity Metric calculator tool, will be applied to the ongoing design of the development proposals to identify opportunities to further minimise losses in habitat value and ensure, if possible, that a biodiversity net gain can be achieved. No further recommendations regarding habitat values are given at this stage.

5.4 Protected and Notable Species

5.4.1 Birds

Barn owl is known to occur in the vicinity of the Site and pigeons were noted roosting in a building on-Site. It is an offence to disturb barn owl and to destroy an active nest of any wild bird.

5.4.3 Other Notable Species

Hedgehog is known to occur in the vicinity of the Site. Hedgehogs are likely to be found on-Site foraging at night.

6. Recommendations

6.1 Protected and Notable Species

Recommendation 1 – Further Ecological Surveys

The PEA identified opportunities for hedgehogs. In accordance with the Wildlife and Countryside Act 1981 (as amended), further survey works will need to be undertaken to establish the presence of these species and the extent to which they might be affected by the proposed development. The recommended surveys are as follows:

- A nesting bird survey of the buildings on-Site and the climbing vegetation on Building 5 no more than 24 hours before demolition begins.

The results of these surveys will assist with identifying the potential impacts of these species and any avoidance/mitigation measures that may be required to ensure there are no effects on status of any local population. All survey works should be carried out by a suitably qualified ecologist in accordance with best practice guidelines.

Recommendation 2 – Safe Working Methods

The preliminary ecological appraisal identified that badgers and hedgehogs are likely to be present on-Site.

It is recommended that during construction:

- All excavations must be covered at night to prevent animals becoming trapped. If covering excavations is not feasible, a means of escape, such as a plank placed in the excavation at a 45o angle or a sloped side to the excavation, must be included to allow animals to climb out.

Recommendation 3 – Site Design

- Include hedgehog holes in all boundary treatments to facilitate the free movement of this species;
- Incorporate opportunities for nesting birds, roosting bats and invertebrates within the development;
- Design landscaping to include plant species of native origin, with high value for pollinating insects;

the Site, or (in the case of bats) directly above/within the Site. These include minimising lighting and noise, particularly at night, directional lighting (downward and away from the commuting features), and/or cowled lighting, and in line with current guidance (BCT and ILP, 2018); BCT, 2014; Stone, E.L. (2013).

Recommendation 4 – Biodiversity Accounting Assessment

To ensure best practise and to align with the upcoming Royal assent of the Environment Bill, a Biodiversity Accounting Assessment (BAA) will be undertaken to quantify the net impact of the development on the biodiversity on-Site, and to inform off-Site compensation, as required. It is recommended that this assessment is instructed upon the outline of the initial development design and landscaping proposals, to ensure the assessment is accurate and up to date.

7. References

Guidelines for surveys and report writing:

British Standards Institute (BSI), (2013) *BS 42020:2013, Biodiversity - Code of practice for planning and development*. London.

Chartered Institute of Ecology and Environmental Management (CIEEM), (2015) *Guidelines for Ecological Report Writing*. Winchester.

Joint Nature Conservation Committee (JNCC), (2010) *Handbook for Phase 1 habitat survey: A technique for environmental audit*.

Websites:

Advice on protected species is consolidated at:

Environmental management: Wildlife and habitat conservation - GOV.UK (2016) *Gov.uk*. Available at: <https://www.gov.uk/topic/environmental-management/wildlife-habitat-conservation>

Magic Map Application (2016) *Magic.defra.gov.uk*. Available at: <http://magic.defra.gov.uk/MagicMap.aspx>

The RSPB (2016). Available at: <http://www.rspb.org.uk/>

Surveys and mitigation plans: protected species - Detailed guidance (2015) *Gov.uk*. Available at: <https://www.gov.uk/guidance/surveys-and-mitigation-plans-protected-species>

Within this detailed guidance on surveys and mitigation information is available on the following protected species:

- Bats
- Natterjack toads
- Otters
- Reptiles
- Water voles
- White-clawed crayfish
- Wild birds
- Hazel dormice
- Great crested newts
- Badgers

Wildlife licences: when you need to apply - Detailed guidance (2014) *Gov.uk*. Available at: <https://www.gov.uk/guidance/wildlife-licences>

Within this detailed guidance on licensing information is available on licences for the following protected species:

- Bats
- Natterjack toads
- Otters
- Reptiles
- Water voles
- White-clawed crayfish
- Wild birds
- Hazel dormice
- Great crested newts
- Badgers

As well as:

- Non-native Bumblebee species
- Deer
- Freshwater fish
- Invertebrates
- Mink, coypu, muskrat and grey squirrel
- Plants

UK Hab (2022) The UK Habitat Classification System. Available at: <http://ukhab.org/>

Species Specific Information:

Badgers:

Natural England, (2007) Badgers and Development: A Guide to Best Practice and Licensing.

Competencies for Species Survey: Badger, Chartered Institute of Ecology and Environmental Management CIEEM, 2013

Bats:

Bat Conservation Trust, (2007) Bats, Development & Planning in England. London.

Bat Conservation Trust and Institute of Lighting Professionals (2018) Guidance Note 08/18: Bats and artificial lighting in the UK. ILP, Rugby

Collins, J. (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines. 3rd edition. Bat Conservation Trust, London.

Mitchell-Jones, A.J. & McLeish, A.P. (2012) The Bat Workers' Manual. Pelagic Publishing, Exeter.

Bats: surveys and mitigation for development projects, <https://www.gov.uk/guidance/bats-surveys-and-mitigation-for-development-projects> Accessed 2018-06-21

Dormice:

Bright, P., Morris, P. and Mitchell-Jones, A. (1996) The dormouse conservation handbook. Peterborough: English Nature.

Great Crested Newts:

Langton, T., Beckett, C. and Foster, J. (2001) Great Crested Newt Conservation Handbook. Halesworth: Froglife. pdf

Advice note 4 (revised) - Amphibian Disease Precautions, A Guide for UK Fieldworkers, Amphibian and Reptile Conservation trust, 2017. Accessed 2018-06-21

Otters: *Natural England, (2007) Species Information Note SIN006, Otter: European protected species.*

Reptiles and Amphibians:

Baker, J., Beebee, T., Buckley, J., Gent, T. and Orchard, D. (2011) Amphibian Habitat Management Handbook. 1st ed. Bournemouth: Amphibian and Reptile Conservation.

Edgar, P., Foster, J. and Baker, J. (2010) Reptile Habitat Management Handbook. 1st ed. Bournemouth: Amphibian and Reptile Conservation.

English Nature, (2004). Reptiles: guidelines for developers. Peterborough.

Gent, T. and Gibson, S. (ed.) (2003) Herpetofauna Workers Manual. Bournemouth: JNCC.

Water Voles:

Natural England, (2008) Water voles - the law in practice. Guidance for planners and developers.

Water Vole Conservation and Management: Lessons From Four Case Studies, Jemma Louise Gaskin, 2016

Stoddart, D.M. (1970), Individual range, dispersal in a population of water voles (Arvicola terrestris (L.)). Journal of Animal Ecology 39, 403-425.

Strachan, R. (2009), Populations and Persistence – Developing a Strategy for Conserving Water Voles in the UK, Presentation to Warwickshire Wildlife Trust, 2nd April 2009, Environment Agency, Wales

Strachan, R. and Holmes-Ling, P (2003), Restoring water voles and other biodiversity to the wider countryside. Wildlife Conservation Research Unit, Oxford.

Strachan, R., Moorehouse, T. and Gelling, M. (2011), Water Vole Conservation Handbook, 3rd Edn, WILDCRU

White-clawed Crayfish:

Peay, S. (2002) Guidance on Habitat for White-clawed Crayfish and its Restoration. Kendal: English Nature

Biodiversity Metric Guidance:

DEFRA (2024) *The Statutory Biodiversity Metric User Guide* [online] Available at: https://assets.publishing.service.gov.uk/media/669e45fba3c2a28abb50d426/The_Statutory_Biodiversity_Metric_-_User_Guide__23.07.24_.pdf

Natural England. A – Natural England, B – Environment Agency, C – Department for Environment, Food and Rural Affairs, D – Treweek Environmental Consultants Ltd, E – eCountability Ltd

Relevant Legislation:

Wildlife and Countryside Act 1981, (c. 69) (as amended). Available at: <http://www.legislation.gov.uk/ukpga/1981/69>

Countryside and Rights of Way Act 2000 (c.37). Available at: <http://www.legislation.gov.uk/ukpga/2000/37/contents>

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019. Available at: <https://www.legislation.gov.uk/ukdsi/2019/9780111176573>

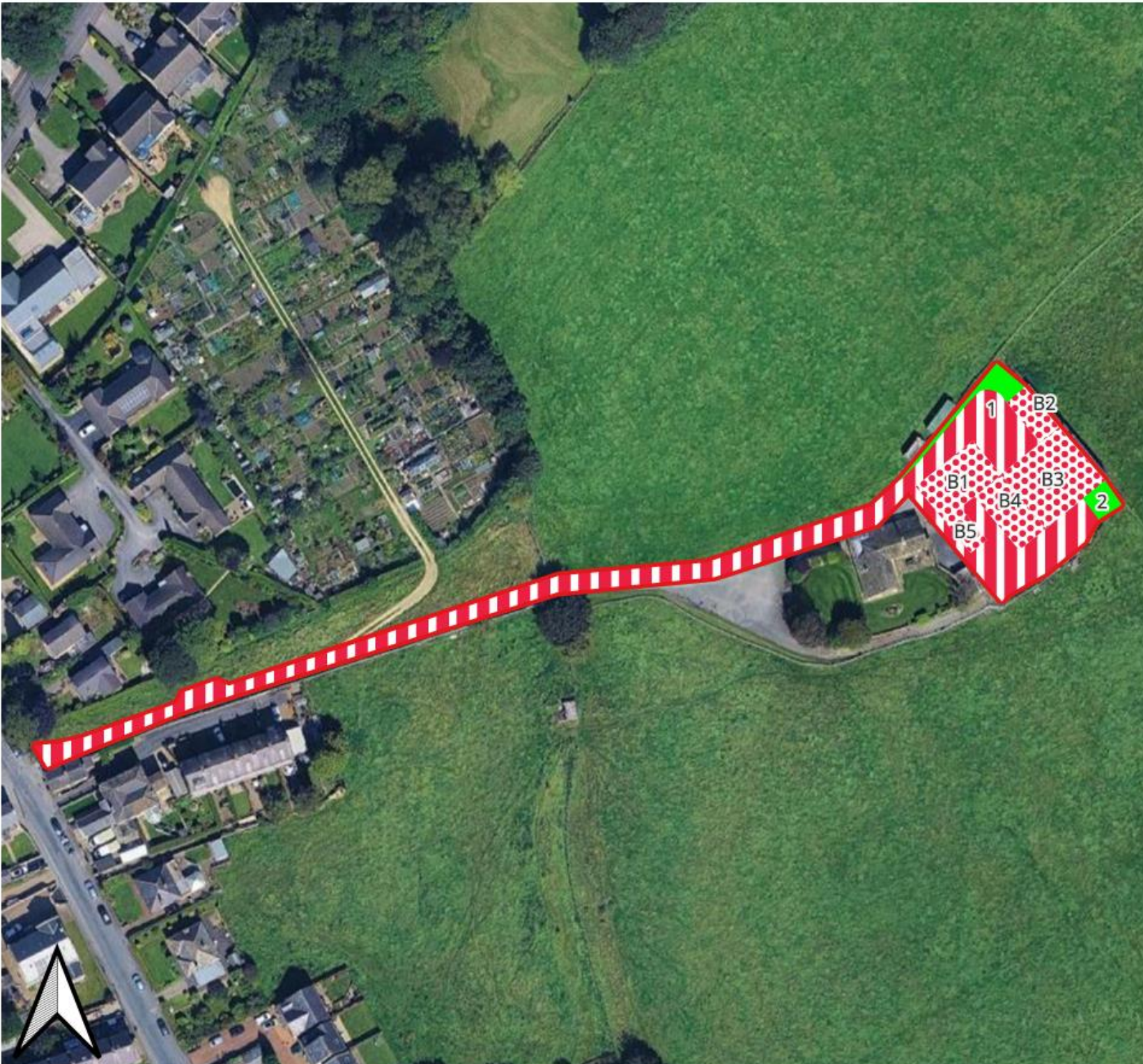
Conservation of natural habitats and of wild fauna and flora Council Directive (92/43/EEC) (The Habitats Directive) (as amended) Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31992L0043>

Protection of Badgers Act 1992 (c. 51). Available at: <http://www.legislation.gov.uk/ukpga/1992/51/contents>

The Hedgerow Regulations 1997 (No. 1160). Available at: <http://www.legislation.gov.uk/uksi/1997/1160/contents/made>

Appendices

Appendix 1: UKHab Survey



**Brown Hill Farm, Old Lane, Birkenshaw
BD11 2JL**

Key	
	u1b5 - Building
	u1b - Developed land; sealed surface
	g4 - Modified grassland
	Red Line Boundary

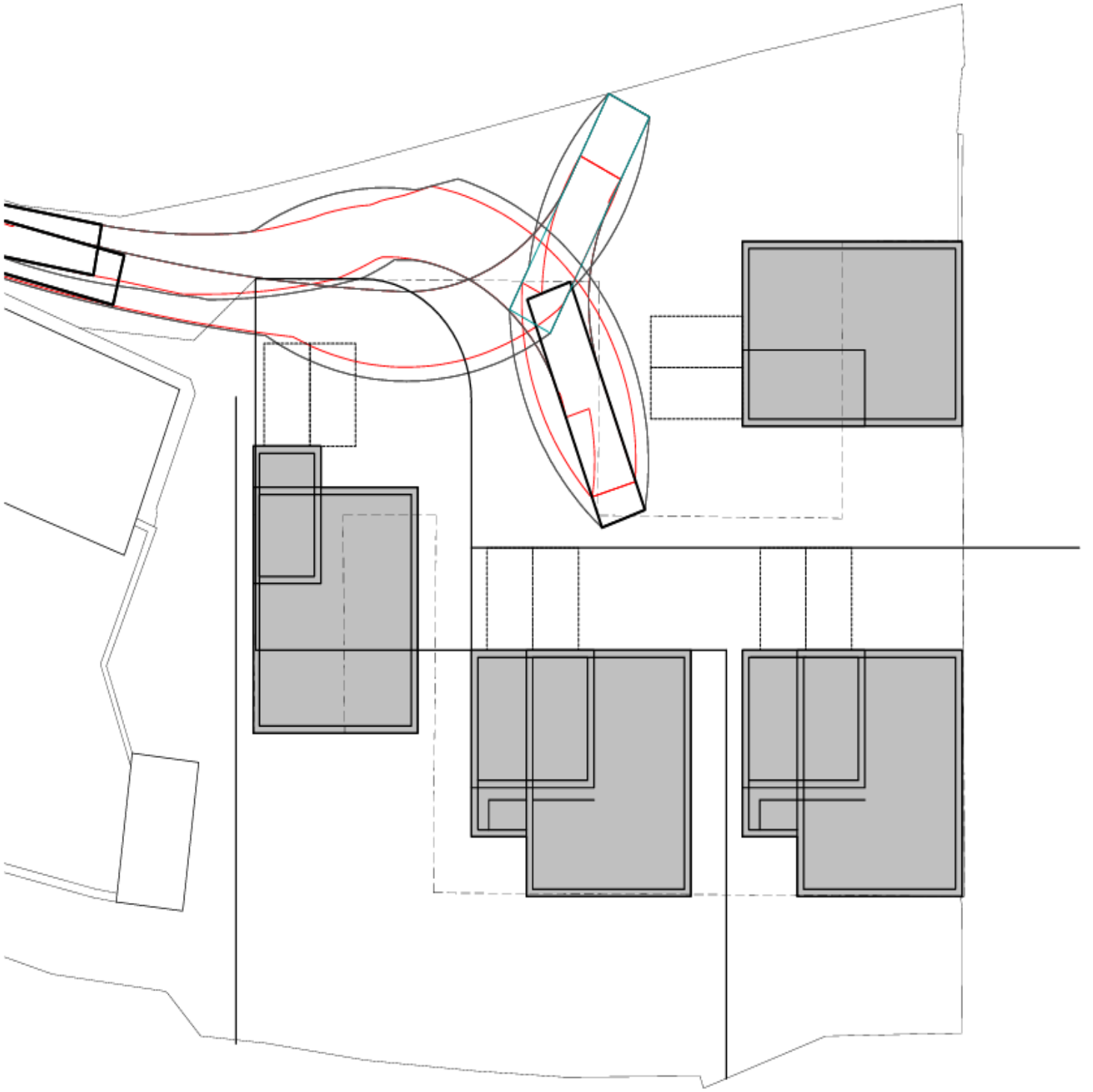
0.1 0 0.1 0.2 0.3 km



Site Brown Hill Farm, Old Lane, Birkenshaw BD11 2JL	Client Jim Granger
Plan UKHAB Map	Author JE
Plan ref 01	Revision 01

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Appendix 2: Proposed Development Plan



Appendix 3: Photographic Evidence



Photo 1: Building 1



Photo 2: Building 2



Photo 3: Building 3



Photo 4: Building 4



Photo 5: Building 5



Photo 6: Driveway at the entrance to the site



Photo 7: Modified grassland (parcel 1)



Photo 8: Modified grassland (parcel 2)



Photo 9: Hardstanding in the farmyard

Appendix 4: Protected Species Legislation

The following species are fully protected in UK law, under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019:

- All UK bat species
- Dormouse
- Great Crested Newt and Natterjack Toad
- Large Blue Butterfly
- Otter
- Pine Marten
- Polecat
- Scottish Wild Cat
- Smooth Snake and Sand Lizard
- Various aquatic and plant species

These species are afforded the highest protection in the UK. Under this protection it is an offence to; deliberately capture, injure or kill any wild animal of a European protected species; deliberately disturb wild animal of any such species; deliberately take or destroy the eggs of such an animal, or damage or destroy a breeding site or resting place of such an animal.

In addition to this it is an offence to be in possession of, or to control, transport, sell or exchange, or to offer for sale or exchange, a European Protected species.

The following species are protected under UK law, such as the Wildlife and Countryside Act 1981 (as amended):

- Badger
- Nesting birds
- Red Squirrel
- Reptiles (Adder, Common lizard, Grass snake, Slow worm)
- Water Vole
- White Clawed Crayfish
- Various bird species i.e. Barn Owl
- Various plant species

Therefore under this protection it is an offence to; kill, injure or take any of the above species.

Nesting birds are only protected during the breeding season whilst on their nest. In addition to the adults being protected, the eggs, young and nest itself whilst in use are protected.

The Wildlife and Countryside Act 1981 also contains measures to prevent the establishment of non-native species which may be detrimental to native wildlife, prohibiting the release of animals and planting of plants listed in Schedule 9 in England and Wales (e.g. Japanese Knotweed and Himalayan Balsam).

Badgers are protected under The Protection of Badgers Act 1992. Under this legislation it is an offence to; take, injure, kill, or cruelly ill-treat a badger; interfere with a badger sett; sell or possess a live badger; or mark or ring a badger.

The following habitat types are protected under UK Law:

- Habitats that are used by protected species
- Habitats that fall within designated sites
- Hedgerows
- Individual trees/woods can be protected under Tree Preservation Orders