Biodiversity Report

Marehay Hall Farm,
Street Lane,
Ripley,
Derbyshire,
DE5 8NF.

Date: 20th March 2026

Introduction

This is a small site in relation to the proposed building adjacent to farm buildings and main dwelling, the buildings are surrounded by the wider countryside. The area of this development falls over the footprint of an existing lawned area on site.

This note is to provide additional information and clarification of features on the site.

Site Habitats

The habitats within the proposal site are classed as being of negligible ecological value due to the small area, lack of connection to the surrounding semi-natural habitats, lack of significant areas of vegetation and current land use (Lawned Area). The site of the proposed tennis court is dominated by grass & weeds evident on the actual site, providing very low significancy in relation to habitat

The overall property (Outside the proposed tennis court area) contains hedges and trees which will be unaffected by the proposal but maintain the habitat for wildlife

The client has planted hedges and trees to the site already to benefit wildlife

The report has been enhanced to include the areas within the red line of the planning application as requested, the only area affected by the planning application is the area for development of a tennis court, but the remaining unaltered areas are now indicated within the report for clarity

Scope of Report

This report aims to:

Establish the total number of baseline and lost habitat, hedgerow, and river units at the site of the proposed scheme.

Establish the total number habitat, hedgerow, and river units that are to be created, retained and/or enhanced under landscape and ecological mitigation proposals at the proposed works site.

Determine whether the proposed scheme will result in a net loss, no net loss, or a net gain for biodiversity.

Make further recommendations to gain the required 10% minimum net gain for biodiversity.

Biodiversity Net Gain Relevant Policies

The appraisal has been compiled with reference to the following relevant nature conservation legislation, planning policy and the UK Biodiversity Framework from which the protection of sites, habitats and species is derived in England. These are:
UK Biodiversity Action Plan (UKBAP)
The Natural Environment and Rural Communities (NERC) Act 2006
The UK Post-2010 Biodiversity Framework (2011-2020)
Biodiversity 2020: A strategy for England's wildlife and ecosystem services

The National Planning Policy Framework (NPPF) 2021
Environmental Act 2021
Local policy
A full explanation of these policies can be found within Appendix D.

Methodology

Process

The Biodiversity Net Gain Assessment has been carried out in line with CIEEM Guidelines on Good practice principles for development (2016), CIEEM A Practical Guide (2019) and BS 8683:2021 - Process for designing and implementing biodiversity net gain.

Survey of Baseline Habitats and Condition

Habitat typing and condition assessments are undertaken during a Preliminary Ecological Appraisals (PEA) or similar studies. The baseline also considers historic records for the site and local area via a desktop study desktop study (satellite imagery, previous ecological reports), as well as additional surveys to assess the presence/absence of species in certain situations. Conditions of habitats and hedgerows are assessed using the scoring systems provided in Technical Annex 1 of the Biodiversity Metric 4.0 Condition Assessment Sheet. River assessments are carried out through a MoRPH5 Pro survey and River type survey. At least one MoRPH5 is undertaken per reach on site that will be directly or indirectly impacted with a further MorPH5 undertaken upstream to record a more “natural setting” if required. This date is then processed via Cartographer to give the condition of the rivers on site.

Calculations of Baseline Habitats

Using Geographic Information Software (GIS), baseline habitats are measured in hectares (ha) using vector layer polygons. These measurements are then input into the DEFRA Statutory Biodiversity Metric Calculation Tool. Habitat condition and connectivity are then input into the calculator. The area of habitat retained is then entered into the calculation to give a final sum of baseline units and lost unit.
Each habitat has a base score of 1, this is then multiplied by the size of the habitat (ha). The habitat is then multiplied by its distinctiveness:

Very low – 0
Low – 2
Medium – 4
High – 6

The next multiplier is based on the condition of the habitat:

N/A-other/agricultural – 0
Poor – 1
Fairly poor – 1.5
Moderate – 2
Fairly good – 2.5
Good – 3

Calculations of Post-development Habitats

The calculation is informed by planning design, landscape plans, and proposed ecological mitigation. Plans are georeferenced into GIS and are similarly measured in hectares (ha)

using vector layer polygons. These measurements are then converted into input into the DEFRA Statutory Biodiversity Metric Calculation Tool. A target condition will be assigned to each new habitat following the same scores as above.
The calculator will generate a proposed time to hit this target condition and difficulty score.

Baseline Calculation and Proposed Impact

Baseline Habitats

Ref	Habitat		C. Strategic significance	Baseline results					Comments
	A. Broad Habitat	B. Habitat type		D. Total Area	E. Area retained	Total habitat units onsite	Area Lost	Units lost	User comments
	Urban	Vegetated garden	Area/compensation not in local strategy/ no local strategy	200.00	0.00	0.04	200.00	0.040	Existing Lower Garden - Area for Proposed Tennis Court
2	Urban	Vegetated garden	Area/compensation not in local strategy/ no local strategy	1200.00	1200.00	0.24	0.00	0.000	Existing Garden - Unaltered
3	Urban	Vegetated garden	Area/compensation not in local strategy/ no local strategy	300.00	300.00	0.06	0.00	0.000	Existing Lower Garden - Outside Proposed Tennis Court
4	Urban	Artificial unvegetated, unsealed surface	Area/compensation not in local strategy/ no local strategy	300.00	300.00	0.00	0.00	0.000	Existing Drive - Unaltered
5	Urban	Artificial unvegetated, unsealed surface	Area/compensation not in local strategy/ no local strategy	500.00	0.00	0.00	500.00	0.000	Existing Drive - Unaltered

Ref			Condition Assessment		D. Strategic significance	E. Total Area (m^2)	Habitat units created onsite
	A. Broad Habitat	B. Habitat type	Acceptable condition options	C. Targeted condition			
1	Woodland and forest	Other woodland; broadleaved	Moderate, Good	Good	Area/compensation not in local strategy/ no local strategy	500.00	0.1919
2	Grassland	Other neutral grassland	Moderate, Good	Good	Area/compensation not in local strategy/ no local strategy	200.00	0.1681

Survey Limitations

There were no limitations on site during the survey on the 20th March 2026.

Recommendations

The development proposals currently do not meet the recommended 10% net gain in biodiversity units. In order to meet the requirements of both national and local planning policy, the development is required to compensate for the loss of habitat areas and additionally provide a 10% biodiversity net gain.
The grassland to be re-developed will result in the loss of –0.02 habitat units. As a habitat of 'low' distinctiveness, would require compensation with the 'same distinctiveness or better habitat'.

Using the biodiversity metric, the current development proposal results in a net unit loss of -0.4 habitat units, which correlates to a –9.72% net change in habitat biodiversity with the new plans. This leads to a shortfall of -0.68 area habitat units given the minimum requirements for a 10% biodiversity net gain. Additionally, the proposal fails to meet trading rules, as the loss of the grassland is not compensated with appropriate and corresponding habitats.
However, habitat creation and enhancement measures can be implemented to achieve BNG targets and trade rules. The following measures are recommended:

On-site Habitat Creation/Enhancement:

On-site habitat creation could achieve BNG targets and trading rules on-site for the hedgerow units. The new hedgerow will be planted to the south of the tennis court as a screen and kept in good condition within the red line boundary and provide a natural scheme to the court, this would provide the 0.4 habitat units
The habitat units will be additionally enhanced by the installation of 15 trees around the exterior of the site of the entire site owned by the client (within the blue line) required to achieve 10% biodiversity net gain and comply with trading rules. These trees should be native species, for example English oak *(Quercus robur*), ash *(Fraxinus excelsior*), wych elm *(Ulmus glabra*), common pear *(Pyrus communis*) or apple *(Malus x domestica*) and should be planted into cleared, fresh topsoil at least 4m apart. These must be protected from the surrounding grazing sheep and maintained to legally ensure the habitat created is secured for 30 years post-development.

References

Bickmore, C. J. (2002). Hedgerow Survey Handbook.

DEFRA Biodiversity 2020: A strategy for England's wildlife and ecosystem services (2011).
Blakesley, D. & Buckley, P. (2010). Woodland creation for wildlife and people in a changing climate.

Environment Act 2021, c. 30. Available at:
https://www.legislation.gov.uk/ukpga/2021/30/contents

Defra (2007a) Securing a Healthy Natural Environment: an action plan for embedding an ecosystems approach. PB12853. Defra London.

Defra (2007b) An Introductory Guide to Valuing Ecosystems Services. PB12852. Defra London.

Defra (2024) The Statutory Biodiversity Metric User Guide. Defra. London.

Dietz, C., von Helversen, O. & Nill, D. (2009) Bats of Britain, Europe and Northwest Africa. London: A. C. Black.

Gunnell, K., Grant, G. and Williams, C. (2012) Landscape and urban design for bats and biodiversity. Bat Conservation Trust.

Institute of Ecology and Environmental Management, Professional Guidance Series.

Kirby, P. (2013). Habitat Management for Invertebrates. Exeter: Pelagic Publishing.
The natural choice: securing the value of nature (2011) (Natural Environment White Paper).
Treweek J. et al. (2009) Scoping study for the design and use of biodiversity offsets in an English Context.

Treweek J., Butcher B., and Temple H. (2010) Biodiversity offsets: possible methods for measuring biodiversity losses and gains for use in the UK. CIEEM In Practice.

6. Appendices

Appendix A: Existing Site Plans

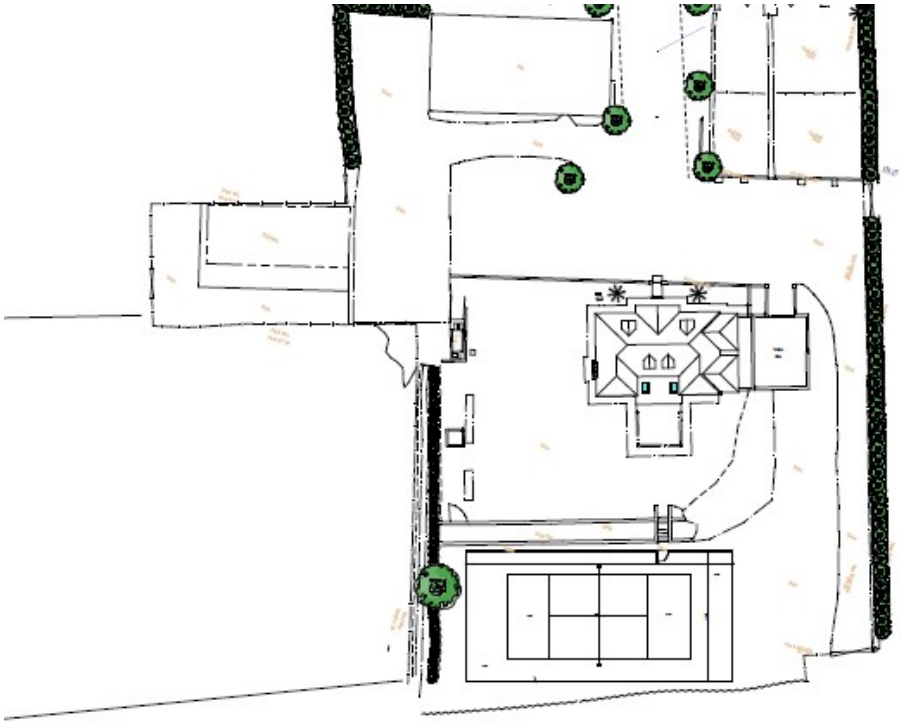

Fig.1. Existing block plan of the site.

Appendix B: Proposed Site Plans



Fig.4. Proposed habitat map of the site.

Appendix D: Biodiversity Net Gain Relevant Policies

Environmental Act 2021

Part 6 on nature and biodiversity covers all areas of biodiversity net gain across two core sections. This Act mandates that all planning meets a minimum of a 10% gain in biodiversity calculated using the appropriate Metric and that the newly created habitats are secured for at least 30 years.

National Planning Policy Framework (NPPF)

While currently not a legal obligation, biodiversity and environmental net gains are mentioned in the revised National Planning Policy Framework (NPPF) within the following paragraphs (please refer to the NPPF for the full quotations):

Achieving sustainable development

Paragraph 8 Section C. "*an environmental objective – **to protect and enhance our natural,** built and historic **environment**; including making effective use of land, **improving biodiversity**, using natural resources prudently, minimising waste and pollution, and mitigating and adapting to climate change, including moving to a low carbon economy*."

Preparing and reviewing plans

Paragraph 32. "*Local plans and spatial development strategies should be informed throughout their preparation by a sustainability appraisal that meets the relevant legal requirements. This **should demonstrate how the plan** has addressed relevant economic, social and **environmental objectives** (including **opportunities for net gains**). Significant **adverse impacts on these objectives should be avoided** and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where significant adverse impacts are unavoidable, suitable mitigation measures should be proposed (or, where this is not possible, compensatory measures should be considered)*."

Identifying land for homes

Paragraph 73 section C. "*consider the opportunities presented by existing or planned investment in infrastructure, the area's economic potential and the scope for **net environmental gains***"

Transport infrastructure:
Paragraph 104. "*Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*
*d) the environmental impacts of traffic and transport infrastructure can be identified assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for **net environmental gains.***

Planning decisions:

Paragraph 119 “Planning decisions and planning policy should a) encourage multiple benefits from both urban and rural land … and taking opportunities to achieve net environmental gains - such as developments that would enable new habitat creation.”
Conserving and enhancing the natural environment

Paragraph 174 Section 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”
Habitats and biodiversity

Paragraph 179. “To protect and enhance biodiversity and geodiversity, plans should:
*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***.”

Paragraph 180. “*When determining planning applications, local planning authorities should apply the following principles: if **significant harm to biodiversity** resulting from a development **cannot be avoided** (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then **planning permission should be refused;** development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest; development resulting in the **loss or deterioration of irreplaceable habitats** (such as ancient woodland and ancient or veteran trees) **should be refused,** unless there are wholly exceptional reasons and a suitable compensation strategy exists; and d) development **whose primary objective is to conserve or enhance biodiversity should be supported;** while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can **secure measurable net gains for biodiversity** or enhance public access to nature where this is appropriate*.”