

Old Biggin' Farm, New Mill
Biodiversity Net Gain Assessment



September 2025



Report Title: Old Biggin' Farm, New Mill
Biodiversity Net Gain Assessment

Report to: Stephenson Architects
1 Park Darm Court
Farnley Tyas
Huddersfield
HD4 6EG

Version: V1.0

Issue Date: September 2025

Prepared by:

Joe Travis BSc (Hons), MSc ACIEEM
Ecology Team Manager

Date: 20.09.2025

**Reviewed and
Approved by:**

Nick Birkinshaw BSc (Hons), MSc, ACIEEM
Managing Director

Date: 25.09.2025

Prepared by:

Habitat Works, Suite 12, Westleigh House, Denby Dale, Huddersfield HD8 8QJ

Version History	Author	Description	Date
V1.0	Joe Travis	Final Version for Issue	25.09.2025

Works carried out by Habitat Works on behalf of the client in accordance with the agreed terms of contract and/or written agreement establish the agreed Services. The Services were performed by Habitat Works with the skill and care ordinarily exercised by a reasonably qualified Consultant at the time the Services were performed. Further, the Services were performed by Habitat Works considering the limits of the scope of works required by the client, the time scale involved, and the resources agreed between Habitat Works and the client.

Other than that, expressly contained in the paragraph above, Habitat Works provides no other representation or warranty whether express or implied, in relation to the Services.

This report is produced exclusively for the purposes of the client. Habitat Works is not aware of any interest of or reliance by any party other than the client in or on the Services. Unless expressly provided in writing, Habitat Works does not authorise, consent or condone any party other than the client relying upon the services provided. Any reliance on the services or any part of the services by any party other than the client is made wholly at that party's own risk and Habitat Works disclaims any liability to such parties.

This report is based on Site conditions, regulatory or other legal provisions, technology or economic conditions at the time of the Service provision. These conditions can change with time and reliance on the findings of the Services under changing conditions should be reviewed. The recommended lifetime of the report is detailed within the report text.

Habitat Works accepts no responsibility for the accuracy of any third-party data used in this report.

Contents

EXECUTIVE SUMMARY	IV
1. INTRODUCTION	1
1.1 BACKGROUND.....	1
1.2 BIODIVERSITY NET GAIN ASSESSMENT	1
1.3 RELEVANT LEGISLATION AND POLICY	2
2. METHODOLOGY	3
2.1 BACKGROUND.....	3
2.2 BIODIVERSITY METRIC INPUTS	3
3. BIODIVERSITY METRIC CALCULATIONS	6
3.1 BACKGROUND.....	6
3.2 TRADING RULES.....	6
3.3 ASSUMPTIONS AND LIMITATIONS	7
4. FINDINGS AND EVALUATION	8
4.1 BASELINE HABITATS	8
4.2 POST-DEVELOPMENT HABITATS	9
4.3 NET CHANGE IN BIODIVERSITY	10
5. DISCUSSION AND RECOMMENDATIONS	11
5.1 SUMMARY OF BIODIVERSITY NET GAIN DELIVERY	11
5.2 HABITAT MANAGEMENT AND MONITORING	11
5.3 BNG GOOD PRACTICE PRINCIPLES.....	11
6. REFERENCES	12
FIGURE 1. BASELINE HABITATS MAP	14
FIGURE 2. POST-DEVELOPMENT HABITATS MAP	16
APPENDIX 1. BNG GOOD PRACTICE PRINCIPLES	18
APPENDIX 2. BIODIVERSITY METRIC CALCULATIONS SUMMARY	20

Executive Summary

Habitat Works Limited (Habitat Works) was commissioned in July 2025 by Stephenson Architects to undertake a biodiversity Net Gain Assessment (BNGA) for the land at Old Biggin' Farm, Cold Hill Lane, New Mill, HD9 7DN (central Ordnance Survey National Grid Reference (OS NGR) SE 16577 09737), hereafter referred to as 'the Site' and as displayed in Figure 1.

This BNGA has been carried out to determine the potential change in biodiversity value of the Site based upon the proposed development and associated post development habitats, using the Department for Environment, Food & Rural Affairs (DEFRA) '*Statutory Biodiversity Metric User Guide*' (SBM) (February, 2024). The Site boundary is detailed within the Stephenson Architects drawing '*Proposed Site Plan*' (Dwg No. OBF-IVI-XX-ZZ-DR-A-90-002 Revision P01 Dated 11/09/18). The BNG is required to inform proposals for the renovation of the existing house.

The total area of the Site has been calculated at 0.84 ha and baseline area-based habitats recorded for the Site comprise '*Woodland and forest – Other woodland; mixed*'; '*Grassland – Other neutral grassland*'; '*Heathland and shrub – Mixed scrub*'; '*Heathland and shrub – Bramble scrub*'; '*Urban – Vegetated garden*'; and '*Urban – Developed land; sealed surface*' (see Figure 1).

The current proposals result in a biodiversity value of 2.80 HU, representing a net change of +0.76 HU equating to a +37.42% gain, achieving and exceeding the 10% net gain requirement for HU.

The production of a Habitat Management and Monitoring Plan (HMMP) is recommended to ensure that the Site habitats deliver the habitat scores listed within the final design stage BNGA, to be agreed with the LPA, which will also serve to support protected and notable species. This includes management of post-development habitats to the condition required to deliver the BNG score specifies in accordance with the condition assessment methodology.

1. Introduction

1.1 Background

- 1.1.1 Habitat Works Limited (Habitat Works) was commissioned in July 2025 by Stephenson Architects to undertake a Biodiversity Net Gain Assessment (BNGA) for the land at Old Biggin' Farm, Cold Hill Lane, New Mill, HD9 7DN (central Ordnance Survey National Grid Reference (OS NGR) SE 16577 09737), hereafter referred to as 'the Site' and as displayed in Figure 1.
- 1.1.2 This BNGA has been carried out to determine the potential change in biodiversity value of the Site based upon the proposed development and associated post development habitats, using the Department for Environment, Food & Rural Affairs (DEFRA) '*Statutory Biodiversity Metric User Guide*' (SBM) (February, 2024).
- 1.1.3 The Site boundary is detailed within the Stephenson Architects drawing '*Proposed Site Plan*' (Dwg No. OBF-IVI-XX-ZZ-DR-A-90-002 Revision P01 Dated 11/09/18). The BNG is required to inform proposals for the renovation of the existing house.
- 1.1.4 This report details the results of the BNGA using biodiversity metric calculations which have been completed based upon a site Walkover undertaken on 22nd July 2025 by Ecology Team Manager Joe Travis BSc (Hons) MSc ACIEEM and calculations of the post-development habitats taken from the '*Proposed Site Plan*'. The methodologies employed and all survey findings are described along with an evaluation and assessment of the biodiversity value of the Site. Any recommendations regarding ensuring Biodiversity Net Gain (BNG) are also detailed where required.

1.2 Biodiversity Net Gain Assessment

- 1.2.1 Under the Environment Act 2021, and enforceable since February 2024, developments are required to achieve a minimum 10% BNG to ensure that biodiversity value of habitats post-development is greater than pre-development habitats. BNG calculations are conducted through assessing the condition of habitats present on a site and comparing with the anticipated changes based upon the proposals for the site development. A mitigations hierarchy is followed during a BNGA, which states that everything possible must be done to firstly avoid, secondly minimise and thirdly restore/rehabilitate losses of biodiversity on a site. Only failing these steps should any losses in biodiversity be compensated via habitat creation off-site, whether this be either additional land under the landowner's ownership or paying a financial sum to a third party offset provider. BNGA reports should adhere to the BNG good practice principles (Appendix 1).
- 1.2.2 BNGAs account for biodiversity losses, which previously might not be fully assessed or mitigated for via legal and planning systems. While some species and habitats are afforded legislative protection, many

and most habitats are not, resulting in developments being 'legally compliant' whilst simultaneously resulting in significant biodiversity losses. BNGAs guard against this, enabling developments to contribute towards national and global targets of halting biodiversity loss (DEFRA, 2011) and towards local and national strategies for conserving an enhancing wildlife. BNGAs allow stakeholders to demonstrate adherence to national legislation and local planning policy surrounding biodiversity.

1.3 *Relevant Legislation and Policy*

1.3.1 Under the Environment Act 2021, and enforceable since February 2024, developments are required to achieve a minimum 10% BNG to ensure that biodiversity value of habitats post-development is greater than pre-development habitats. This BNGA has been compiled with reference to the following relevant nature conservation legislation, planning police, and UK Biodiversity Framework from which the protection of habitats and species is derived in England including:

- UK Government's 25 Year Environment Plan (DEFRA, 2018);
- Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services (DEFRA, 2011);
- National Planning Policy Framework (NPPF) (DLUHC, 2023);
- The Nature Environment and Rural Communities (NERC) Act (HMSO, 2006), and
- The Environment Act (DEFRA, 2021).

2. Methodology

2.1 Background

2.1.1 This BNGA uses the industry recognised best practice methodology within the (DEFRA) '*Statutory Biodiversity Metric: User Guide*' (SBM) (February, 2024).

2.1.2 The SBM uses habitat features as a measure for their importance and value to nature. The following information on each habitat are required for the metric input:

- Habitat type;
- Irreplaceable habitat;
- Area/length;
- Habitat distinctiveness (automatically calculated);
- Habitat condition; and,
- Strategic significance.

2.2 Biodiversity Metric Inputs

Habitat Type

Baseline

2.2.1 The Site was surveyed on 22nd July 2025 by Ecology Team Manager Joe Travis BSc (Hons) MSc ACIEEM.

2.2.2 The Site visit included an ecological walkover survey using the UK Habitat Classification (UKHab) system (Butcher *et al.*, 2020). The habitats present on the Site were identified and classified according to the UKHab system which closely aligns with the SSM. The baseline habitats are displayed in Figure 1.

2.2.3 The SBM uses a classification system based mainly on the UKHab with inputs from other systems including the Water Framework Directive (WFD) Lakes Typology (UKTAG, 2003); the European Nature Information System (EUNIS) habitat type hierarchical view (EEA, 2109; and Natura 2000 Annex I habitats (JNCC, 2019) in addition to further habitats specific to the SBM.

Post-Development

2.2.4 Proposals for the Site have been assessed and habitats present post-development have been based upon the '*Proposed Site Plan*' and using best knowledge of the likely habitats to be created/retained/lost.

2.2.5 The post-development habitats were classified according to the habitat classification system used by the SBM.

Irreplaceable Habitats

- 2.2.6 Irreplaceable habitats are outlined and described within the DEFRA '*The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024*' (February, 2024). This document was reviewed to assess whether baseline habitats meet any of the criteria and assessed as such within the SBM calculator respectively.

Habitat Area/Length

- 2.2.7 The area/length of each baseline and post-development habitat type was mapped using QGIS 3.40.4 '*Bratislava*' Geographical Information System (GIS). Area habitats are recorded in hectares (ha) and linear habitats are recorded in kilometres (km) as per the SBM calculator.

Habitat Distinctiveness

- 2.2.8 The distinctiveness of all habitats (both baseline and post-development) is automatically calculated within the SBM.

Habitat Condition

- 2.2.9 The condition of a habitat is the measure of the biological 'working order' of a habitat judged against the perceived ecological optimum for that particular habitat. The condition assessments were undertaken using the '*Statutory Biodiversity Metric – Technical Annexe 1: Condition Assessment Sheets and Methodology*' spreadsheet (February, 2024).

Baseline

- 2.2.10 Following the UKHab ecological walkover survey at the Site, the condition of each habitat was assessed and either calculated as 'Good', 'Moderate' or 'Poor', where appropriate. Within the SBM, some habitats are not suitable for condition assessment, and as such are automatically calculated as either '*Condition Assessment N/A*' or '*N/A – Other*'.
- 2.2.11 If a habitat type varied in condition within the Site, these habitats were mapped and recorded separately to allow this distinction

Post-Development

- 2.2.12 The condition that post-development habitats have been assigned is based upon reasonable and the likely habitat condition in line with the condition assessment criteria. The condition of each habitat was assessed and either calculated as 'Good', 'Moderate' or 'Poor', where appropriate. Within the SBM, some habitats are not suitable for condition assessment, and as such are automatically calculated as either '*Condition Assessment N/A*' or '*N/A – Other*'.
- 2.2.13 If a habitat type varied in condition within the Site, these habitats were mapped and recorded separately to allow this distinction.

Habitat Strategic Significance

2.2.14 The SBM accounts for whether the habitats are situated within an area locally identified as significant for nature conservation.

2.2.15 Data on the areas and habitats locally identified as significant for nature conservation were obtained from the following sources:

- Multi-Agency Geographical Information for the Countryside (MAGIC) website for mapped statutory designated sites (<https://magic.defra.gov.uk/MagicMap.aspx>); and,
- Habitats listed within the Doncaster Biodiversity Action Plan.

3. Biodiversity Metric Calculations

3.1 Background

- 3.1.1 Biodiversity metric calculations provide a numerical score for the value of existing habitats on the Site and their likely value post-development in Habitat Units (HU), Hedgerow Units (HeU) and Watercourse Units (WU) (where present and applicable), to quantitatively assess the impact of the proposed development.
- 3.1.2 Using the SBM, habitat values are calculated via the criteria described within Sections 2.1 and 2.2. This results in individual scores for each habitat, and subsequently baselines for HU, HeU and WU (where present and appropriate).
- 3.1.3 Individual trees are classified as either 'Urban Tree' or 'Rural Tree', depending on the extent of urbanisations surrounding them. The size of an individual tree is dependent on the diameter of the trunk at breast height (centimetres), and categorised as either 'Small', 'Medium', 'Large' or 'Very Large'. A biodiversity metric area equivalent in hectares is automatically calculated within the SBM dependant on the number of trees and their individual sizes. This area is a separate measurement to other habitat areas and as such, is not included within the total habitat area of the Site.
- 3.1.4 The post-development value can also be calculated for habitats where factors including time to target condition and difficulty of creation/enhancement are also taken into consideration. The values for area habitats and linear habitats are calculated separately. This provides an overall picture of the biodiversity net gain or loss as a result of a development. To achieve BNG, all three of HU, HeU and WU are treated individually, and individual gains cannot be combined to form an overall gain for the Site.

3.2 Trading Rules

- 3.2.1 The SBM considers distinctiveness as described earlier and using this data, SBM applies trading rules that require that any habitat loss is replaced on a 'like for like' or 'like for better' basis. The trading rules are detailed below in Table 1.

Table 1 – Trading Rules within the SBM

Distinctiveness Group	Trading Rules
Very High	Bespoke compensation likely to be required
High	Same habitat required
Medium	Same broad habitat or a higher distinctiveness habitat required
Low	Same distinctiveness or better habitat requires
Very Low	Compensation not required

3.3 Assumptions and Limitations

- 3.3.1 For strategic significance, all habitats on the Site (both baseline and post-development) have been considered '*Area/compensation not in local strategy/no local strategy*' as they do not qualify as priority habitats and are not identified on any strategic plans.
- 3.3.2 An area of land to the Site within the developer's ownership is available for habitat creation in the event that the a 10% gain cannot be achieved on the Site. As such, the calculations have been undertaken within the SBM rather than the Small Sites Metric (SSM) as the SSM does not have the functionality to include off-site habitat changes, even though the development meets the criteria to use the SSM.
- 3.3.3 The quantification of biodiversity is one of several factors to be considered when assessing the impact of the proposed development on biodiversity. Note that this BNGA does not cover potential impacts of the proposed development on protected species and designated sites.
- 3.3.4 Due to the survey being undertaken outside of the optimal survey period, sufficient information to characterise the habitats present to assess their likely contribution to the biodiversity interest of the area is usually not possible for all habitats. However, due to the nature of the habitats present, it is considered that this is a valid and fair representation of the habitats present.
- 3.3.5 The information contained within this report is considered valid for a period of 24 months from the date of the survey visit (CIEEM, 2019). If the development has not commenced by July 2027, it is recommended that the Site is fully re-surveyed to determine if there have been any significant changes to baseline habitats within that timeframe.

4. Findings and Evaluation

4.1 Baseline Habitats

4.1.1 Baseline area-based habitats recorded for the Site comprise 'Woodland and forest – Other woodland; mixed'; 'Grassland – Other neutral grassland'; 'Heathland and shrub – Mixed scrub'; 'Heathland and shrub – Bramble scrub'; 'Urban – Vegetated garden'; and 'Urban – Developed land; sealed surface' (see Figure 1).

4.1.2 The total area of the Site has been calculated at 0.84 ha. The habitat type, irreplaceability, distinctiveness, condition, area and HU of the area-based habitats are provided within Table 2. Baseline area-based habitats have a biodiversity value of 2.04 HU.

Table 2 – Site Baseline Area-based Habitats and Habitat Units

Habitat Type	Irreplaceable Habitat?	Distinctiveness	Condition	Area (ha)	Habitat Units (HU)
Woodland and forest – Other woodland; mixed	No	Medium	Poor	0.18	0.72
Grassland – Other neutral grassland	No	Medium	Poor	0.16	0.64
Heathland and shrub – Mixed scrub	No	Medium	Poor	0.04	0.16
Heathland and shrub – Bramble scrub	No	Medium	Condition Assessment N/A	0.03	0.12
Urban – Vegetated garden	No	Low	Condition Assessment N/A	0.20	0.40
Urban – Developed land; sealed surface	No	V. Low	N/A - Other	0.23	0.00
Total Habitat Units (HU)					2.04

4.2 Post-development Habitats

- 4.2.1 The following calculations present a version of the completed feasibility biodiversity metric calculations based upon the post-development proposals as shown in the 'Proposed Site Plan'. A summary of the calculations is provided in Appendix 2.
- 4.2.2 It is anticipated that the proposals will see the partial loss of 'Woodland and forest – Other woodland; mixed'; the complete loss of 'Urban – Vegetated garden'; and 'Urban – Developed land; sealed surface'; the retention of 'Heathland and shrub – Mixed scrub' and 'Heathland and shrub – Bramble scrub'; the enhancement of 'Woodland and forest – Other woodland; mixed'; and the creation of 'Grassland – Other neutral grassland', 'Individual trees – Urban tree', 'Urban – Vegetated garden', 'Urban – Developed land; sealed surface' and 'Urban – Artificial unvegetated; unsealed surface'.
- 4.2.3 The predicted area-based habitat type, distinctiveness, condition, area and HU of the area-based habitats are provided within Table 3. The post-development area-based habitats estimated a biodiversity value of 2.80 HU and are displayed within Figure 2.

Table 3 – Post-development Area-based Habitats Condition and Habitat Units

Habitat Type	Distinctiveness	Condition	Area (ha)	Habitat Units (HU)
Lost				
Woodland and forest – Other woodland; mixed	Medium	Poor	-0.05	-0.20
Urban – Vegetated garden	Medium	Poor	-0.20	-0.40
Urban – Developed land; sealed surface	Medium	Condition Assessment N/A	-0.23	-0.00
Retained				
Grassland – Other neutral grassland	Medium	Poor	0.16	0.64
Heathland and shrub – Mixed scrub	Medium	Poor	0.04	0.16
Heathland and shrub – Bramble scrub	Medium	Condition Assessment N/A	0.03	0.12

<i>Enhanced</i>				
Woodland and forest – Other woodland; mixed	Medium	Moderate	0.13	0.88
<i>Created</i>				
Grassland – Other neutral grassland	Medium	Poor	0.05	0.19
Individual trees – Urban tree	Medium	Moderate	0.1018	0.31
Urban – Vegetated garden	Medium	Poor	0.26	0.50
Urban – Developed land; sealed surface	V. Low	N/A - Other	0.11	0.00
Urban – Artificial unvegetated, unsealed surface	V. Low	N/A - Other	0.06	0.00
Total Habitat Units (HU)				2.80

4.3 Net Change in Biodiversity

- 4.3.1 Considering the reasonable assumptions and estimates made within this report, the construction of the proposed development is predicted to result in a net unit change of +0.76 HU which is a net percentage change of +37.42%, as detailed in Table 4.

Table 4 – Summary of Biodiversity Net Gain Calculations

Habitat Type	Baseline Units	Post-development Units	Change in Units	% Change in Units
Habitat Units (HU)	2.04	2.80	+0.76	+37.42

5. Discussion and Recommendations

5.1 *Summary of Biodiversity Net Gain Delivery*

5.1.1 The current proposals result in a biodiversity value of 2.80 HU, representing a net change of +0.76 HU equating to a +37.42% gain, achieving and exceeding the 10% net gain requirement for HU.

5.2 *Habitat Management and Monitoring*

5.2.1 The production of a Habitat Management and Monitoring Plan (HMMP) is recommended to ensure that the Site habitats deliver the habitat scores listed within the final design stage BNGA, to be agreed with the LPA, which will also serve to support protected and notable species. This includes management of post-development habitats to the condition required to deliver the BNG score specifies in accordance with the condition assessment methodology.

5.3 *BNG Good Practice Principles*

5.3.1 Appendix 1 details the BNG Good Practice Principles (CIEEM, CIRIA & IEMA, 2016) which should be adhered to when undertaking BNGAs in association with proposed developments. The actions within Appendix 1 should be considered throughout the design stage of a development at this Site.

6. References

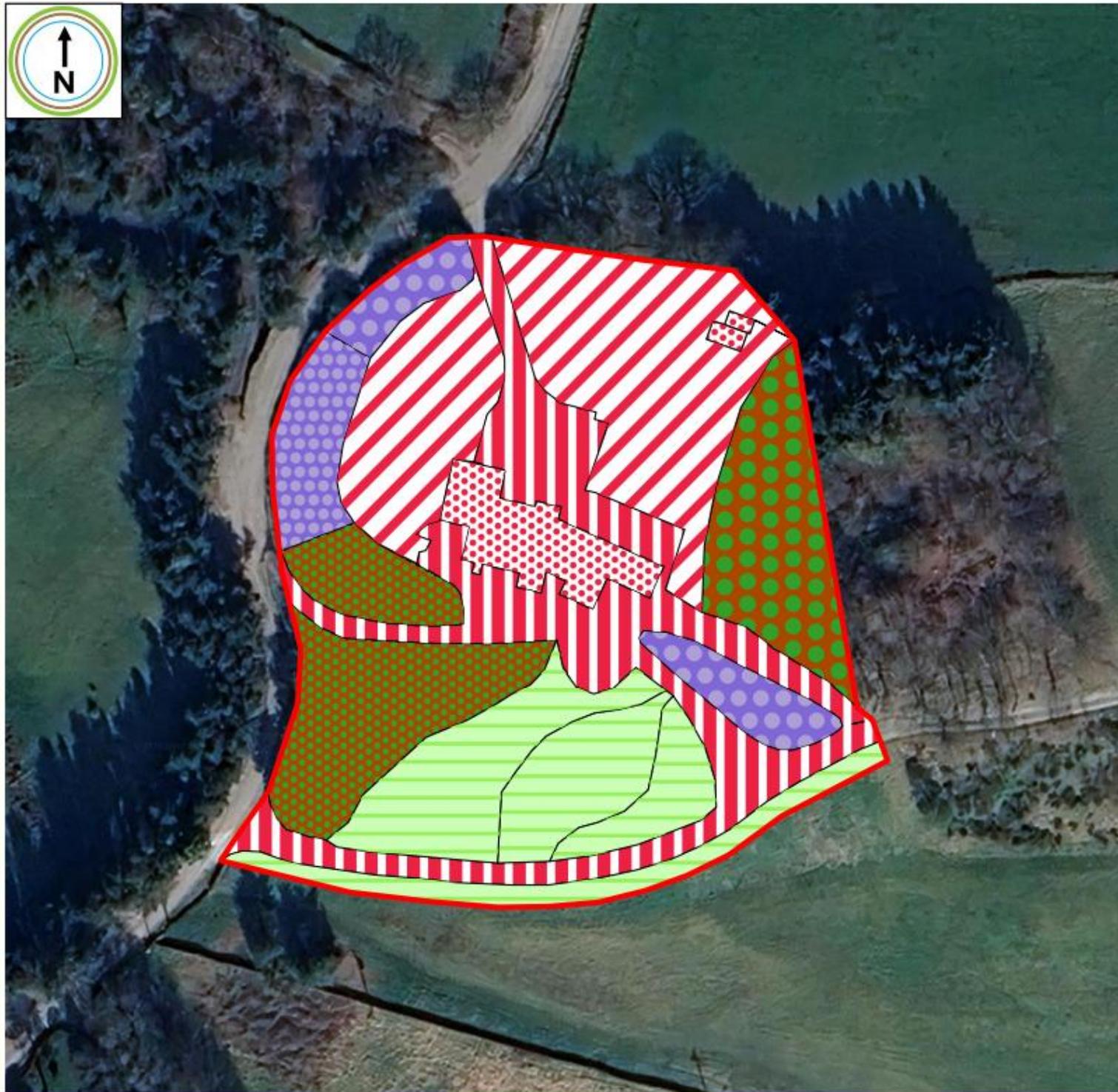
- CIEEM (2019). 'Advice Note: On the Lifespan of Ecological Reports and Surveys'. Chartered Institute of Ecology and Environmental Management, Winchester. Available: <https://cieem.net/wp-content/uploads/2019/04/Advice-Note.pdf>
- CIEEM, CIRIA & IEMA (2016). 'Biodiversity Net Gain – Good practice principles for development'. Available: <https://cieem.net/wp-content/uploads/2019/02/Biodiversity-Net-Gain-Principles.pdf>
- DEFRA (2011). 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services'. Available: <https://assets.publishing.service.gov.uk/media/5a78c263ed915d04220651ea/pb13583-biodiversity-strategy-2020-111111.pdf>
- DEFRA (2018). 'A Green Future: Our 25 Year Plan to Improve the Environment'. Available: https://assets.publishing.service.gov.uk/media/65fd713d65ca2f00117da89e/CD1.H_HM_Government_A_Green_Future_Our_25_Year_Plan_to_Improve_the_Environment.pdf
- DEFRA (2024) 'The Statutory Biodiversity Metric: User Guide'. Available: https://assets.publishing.service.gov.uk/media/669e45fba3c2a28abb50d426/The_Statutory_Biodiversity_Metric_-_User_Guide_23.07.24_.pdf
- Department for Levelling Up, Housing & Communities (DLUHC) (2023). 'National Planning Policy Framework'. Available: https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf
- European Environment Agency (EEA) (2023). 'Eunis habitat distribution plots (spatial data)'. Available: <https://www.eea.europa.eu/en/datahub/datahubitem-view/ce3e4bf4-e929-404a-88c7-37f2c614fd1d>
- DEFRA (2011). 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services. Available: <https://assets.publishing.service.gov.uk/media/5a78c263ed915d04220651ea/pb13583-biodiversity-strategy-2020-111111.pdf>
- His Majesty's Stationery Office (HMSO) (2006). 'Natural Environment and Rural Communities Act 2006'. Available: https://www.legislation.gov.uk/ukpga/2006/16/pdfs/ukpga_20060016_en.pdf
- HMSO (2024). 'The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024'. Available: https://www.legislation.gov.uk/uksi/2024/48/pdfs/uksi_20240048_en.pdf
- Joint Nature Conservation Committee (JNCC) (2019). 'Annex I Habitats List'. Available: <https://sac.jncc.gov.uk/habitat/>

Natural England (2024). '*The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology*'. Available: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>

UKHab Ltd (2023). '*The UK Habitat Classification: Version 2.0*'. Available: <https://www.ukhab.org>

UK Technical Advisory Group (UKTAG) on the Water Framework Directive (2003). '*Guidance on Typology for Lakes for the UK*'. Available: https://www.wfduk.org/sites/default/files/Media/Characterisation%20of%20the%20water%20environment/Lakes%20typology_Final_010604.pdf

Figure 1. Baseline Habitats Map



Legend

 Red Line Boundary

Baseline Habitats

 Grassland - Other neutral grassland

 Heathland and scrub
- Bramble scrub

 Heathland and shrub
- Mixed scrub

 Urban - Developed land;
sealed surface

 Urban - Developed Land;
sealed surface (buildings)

 Urban - Vegetated garden

 Woodland and forest -
Other woodland; mixed

0 10 20 30 40 m



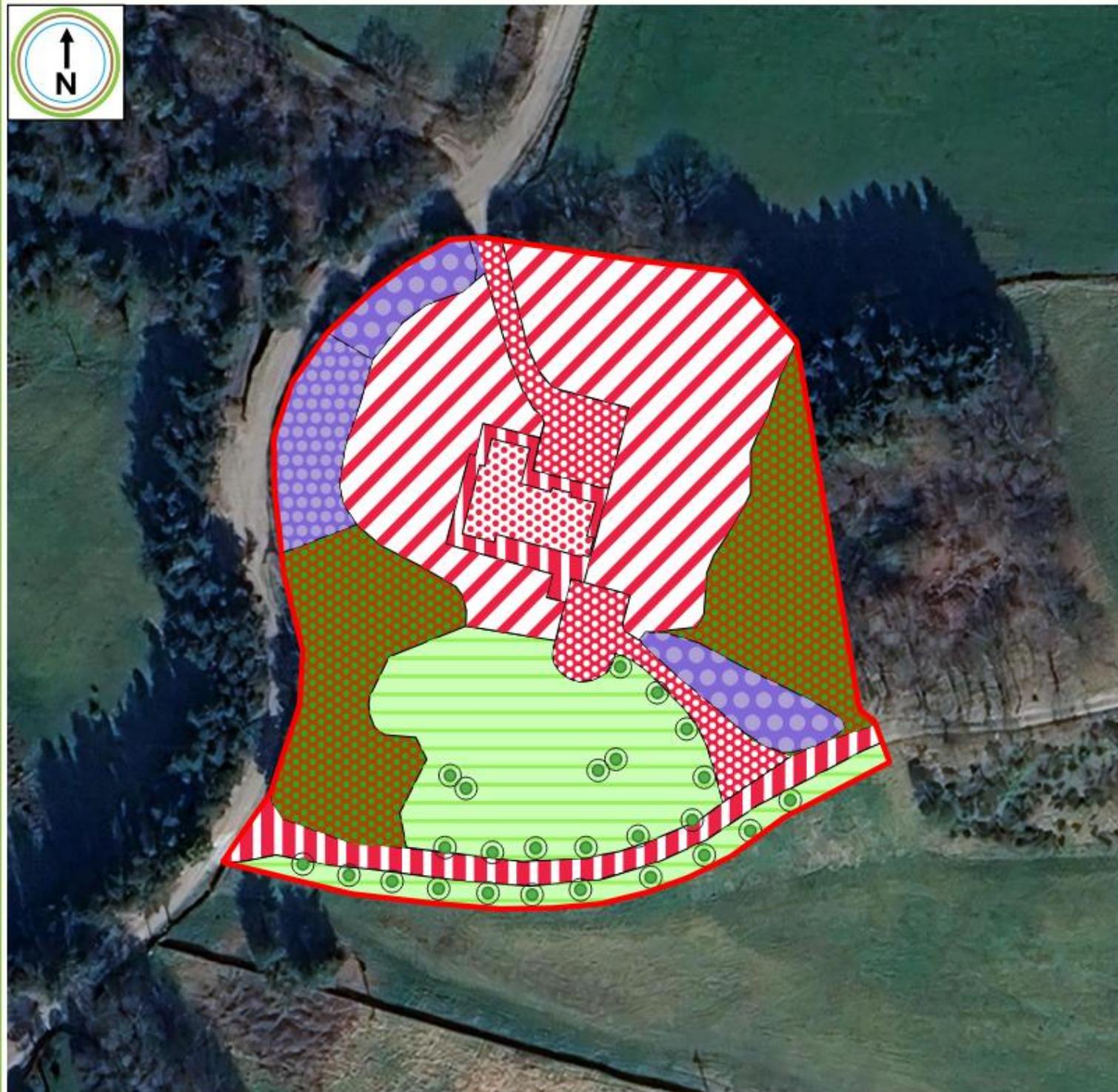
HABITAT WORKS

Stephenson Architects

Old Biggin' Farm, New Mill

Figure 1
Baseline Habitats Map

Figure 2. Post-Development Habitats Map



Legend

-  Red Line Boundary
- Post-Development Habitats
 -  Grassland - Other neutral grassland
 -  Heathland and scrub
 - Bramble scrub
 -  Heathland and shrub
 - Mixed scrub
 -  Urban - Artificial unvegetated; unsealed surface
 -  Urban - Developed land; sealed surface
 -  Urban - Developed Land; sealed surface (buildings)
 -  Urban - Vegetated garden
 -  Woodland and forest - Other woodland; mixed
 -  Individual trees - Urban tree

0 10 20 30 40 m



HABITAT WORKS

Stephenson Architects

Old Biggin' Farm, New Mill

Figure 2
Post-Development Habitats Map

Appendix 1. BNG Good Practice Principles

The BNG Good practice principles for development are based upon issued joint guidance from the Chartered Institute for Ecology and Environmental Management (CIEEM), the Construction Industry Research and Information Association (CIRIA) and the Institute for Environmental Management and Assessment (IEMA) (CIEEM, CIRIA & IEMA, 2019).

The Good practice principles for development outlines 10 principles which should be followed to ensure that BNG is undertaken in the most beneficial and appropriate manner possible. These principles are outlined in the table below.

Principle	Description
Principle 1. Apply the Mitigation Hierarchy	Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere	Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain.
Principle 3. Be inclusive and equitable	Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders.
Principle 4. Address risks	Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.
Principle 5. Make a measurable Net Gain contribution	Achieve a measurable, overall gain ¹ for biodiversity and the services ecosystems provide while directly contributing to wards nature conservation priorities. <small>¹ – Net Gain has been described as a measurable target for development projects where impacts on biodiversity are outweighed by a clear mitigation hierarchy approach to first avoid then minimise impacts, including through restoration and / or compensation. Adhering to these Net Gain principles (i.e. pursuing all principles together) will help in under-pinning good practice for achieving and sustaining Net Gain.</small>
Principle 6. Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when: <ul style="list-style-type: none"> • Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses • Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation

	<ul style="list-style-type: none"> • Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels • Enhancing existing or creating new habitat • Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity
Principle 7. Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).
Principle 8. Create a Net Gain legacy	<p>Ensure Net Gain generates long-term benefits by:</p> <ul style="list-style-type: none"> • Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity² • Planning for adaptive management and securing dedicated funding for long-term management • Designing Net gain for biodiversity to be resilient to external factors, especially climate change • Mitigating risks for other land uses • Avoiding displacing harmful activities from one location to another • Supporting local-level management of Net Gain activities <p><small>² – Biodiversity compensation should be planned for a sustained Net Gain over the longest possible timeframe. For development in the UK, the expectation is that compensating sites will be secured for at least the lifetime of the development (e.g. often 25-30 years) with the objective of Net Gain management continuing in the future.</small></p>
Principle 9. Optimise sustainability	Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.
Principle 10. Be Transparent	Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

Appendix 2. Biodiversity Metric Calculations Summary

Old Biggin' Farm		Return to results menu			
Headline Results					
Scroll down for final results ▲					
On-site baseline	Habitat units	2.04			
	Hedgerow units	0.00			
	Watercourse units	0.00			
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	2.80			
	Hedgerow units	0.00			
	Watercourse units	0.00			
On-site net change <small>(units & percentage)</small>	Habitat units	0.76	37.42%		
	Hedgerow units	0.00	0.00%		
	Watercourse units	0.00	0.00%		
Off-site baseline	Habitat units	0.00			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	Habitat units	0.00			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Off-site net change <small>(units & percentage)</small>	Habitat units	0.00	0.00%		
	Hedgerow units	0.00	0.00%		
	Watercourse units	0.00	0.00%		
Combined net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	0.76			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Spatial risk multiplier (SRM) deductions	Habitat units	0.00			
	Hedgerow units	0.00			
	Watercourse units	0.00			
FINAL RESULTS					
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	0.76			
	Hedgerow units	0.00			
	Watercourse units	0.00			
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	Habitat units	37.42%			
	Hedgerow units	0.00%			
	Watercourse units	0.00%			
Trading rules satisfied?	Yes ✓				
Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	2.04	2.24	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	0.00	0.00	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓