



Biodiversity Net Gain: Baseline & Feasibility Report

Site: Moorcot, Nickey lane, Mellor BB2 7HF

Client: Mr J Makinson via AW&A architects

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SUMMARY

A baseline Biodiversity Net Gain calculation was required to meet the National Planning Policy Framework (NPPF, 180(d)2023), Statutory Biodiversity Net Gain requirements and LPA Core Strategy Key Statement. The proposed development site baseline condition is of moderate ecological value, consisting of mature trees and garden areas, with a non-native hedgerow to the roadside boundary. The DEFRA Statutory BNG Metric Tool (published 02/2024) was used to calculate the baseline habitats, to support a planning application and for comparison with those of the final proposed development & final % net gain/loss.

The baseline assessment of the site shows a total of 1.12 units including the areas to be retained under the current proposals. The proposals represented in AW+A drawing no. PL07 equates to a **LOSS of 5.82%**. Achieving a gain will be difficult within the red line boundary of the site due to the size of the plot & proposed dwelling.

Purchase of .12 BNG units of either enhanced grassland or mixed scrub at a local site is recommended.

Headline results shown at Appendix 1, full site Habitat Baseline Plan is included at Appendix 2, site photos as Appendix 3, proposed plan at Appendix 4.

1. INTRODUCTION

1.1 Background

An assessment was required to determine the Biodiversity Net Gain baseline habitats and units of the site to support a planning application for an additional dwelling on the site at Moorcot, Nickey Lane, Mellor.

1.2 Scope of the Report

The assessment takes into consideration the local and national planning policy and strategy relevant to the site, the baseline ecological condition of the site, and the proposed development plans and the enhancement plan, and to meet the requirements of The National Planning Policy Framework (2023) and standards set in the CIEEM/CIRIA *Biodiversity Net Gain. Good Practice Principles for development a practical guide*.

2 METHODOLOGY

2.1 Desk and Field study methods

- Habitats are described using the UK Habitat Classification System methods and codes (converted from JNCC Phase 1 codes where necessary), and condition assessed using the Statutory Biodiversity Net Gain Metric - Auditing and Accounting for Biodiversity Condition Assessment Sheets.
- Areas were measured using QGIS, Google Earth and/or the clients own landscape plans.
- Surveys and assessment were carried out by C Edmondson MSc MRSB, Principal ecologist with 12yrs field survey experience and Natural England Class 2 bat licence holder.

- Site Survey methods used were as described in the UKHabs User Guide (2022). The data collected during the survey have been used to inform this report.
- BNG Metric tree helper was used to calculate the unit value of any single trees.

2.2 Approach to BNG

BNG Principles: BNG is achieved through 10 principles, the first of which is the Mitigation Hierarchy. This Hierarchy will be followed at each stage of the development.

The DEFRA Statutory Biodiversity Net Gain Metric aims to:

- Assess the biodiversity unit value of the area of land.
- Demonstrate biodiversity net gains or losses in a consistent way.
- Measure and account for direct impacts on biodiversity.
- Compare proposals for the site - such as creating or enhancing habitat on-site or off-site.
- The metric assesses existing habitats and planned new habitats created by a development or land change.

2.3 Limitations

There were no limitations to this report.

3. BASELINE SITE CONDITIONS

Site Description

A site survey was carried out on 19th May 2024. The site includes an existing residential dwelling, with mature gardens, shrubs and trees. The roadside boundary includes a non-native hedgerow, which will be removed to create the new site entrance. The mature trees onsite will be retained (although three large trees have been felled in the last few months. Further details in the design and access statement).

A bat survey concluded that no bats will likely be harmed or disturbed by the removal of a small summerhouse (*Ark Ecology, May 2024*).

Important Ecological Features:

- There were no Priority Habitats or protected species recorded on site.

Baseline Metric Calculations

Using the Statutory Metric BNG Calculation tool, the development shows a baseline habitat unit total of 1.12 (Headline results at Appendix.1) and is made up of the habitats listed at table 1.

A full site Habitat Baseline Plan is included at Appendix 2, site photos as Appendix 3, proposed plan at Appendix 4.

Table 1. Habitats at baseline calculation

Site Features:	Code (UKHabs)	Area ha/length/no.	BNG units
Rural tree (4 x mature trees)		0.0814	0.97
Vegetated garden	u1, 827	0.0729	0.15
Developed land; sealed surface	u1b	0.0296	0
		Total baseline units	1.12
Hedgerow (1)	h2b	14m	0

4. BNG GOOD PRACTICE PRINCIPLES FOR DEVELOPMENT

BNG is achieved through 10 principles, the first of which is the Mitigation Hierarchy. This Hierarchy will be followed at each stage of the development.

Principle 1: Mitigation Hierarchy

- 1: Avoid Biodiversity Loss e.g. Finding alternative sites, changing development plans etc
- 2: Minimise any loss
- 3: Mitigate for any loss
- 4: Compensate

Table 2: Hierarchy measures to obtain the target net gain

1: Avoidance The CSBI defines avoidance as 'Measures taken to anticipate and prevent adverse impacts on biodiversity before actions or decisions are taken that could lead to such impacts'.	The results of the UKHabs assessment show that there were no priority habitats present within the site boundaries. - Habitats present: garden/mature trees - Condition: good - Distinctiveness: Medium Measures to avoid pollution to local sites will be implemented according to current EA Pollution Prevention Guidance.
2. Minimise	The development will contain the works within the footprint to avoid impact on a larger area.
3. Mitigation	Potentially purchase/create offsite habitat units
4. Compensation	Additional units required to make up to 10% BNG

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.

- No Priority Habitats or Irreplaceable habitats are present on site.
- Trading Rules for irreplaceable habitats will not apply.

Principle 3: Be Inclusive and Equitable

Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Biodiversity Net Gain. Achieve net gain in partnership with stakeholders where possible and share the benefits fairly among stakeholders.

- Further stakeholders could be engaged at the design stage.

Principle 4: Address Risk

- This is addressed within the metric and methodology set out within the survey methodology.

Principle 5: Make a measurable Net Gain Achievement

- This will be achieved through the landscape plan and Biodiversity Enhancement Plan.

Principle 6: Achieve the best outcomes for biodiversity.

- Purchasing off-site units in the local area will create a more diverse habitat in the landscape suited to a wide variety of invertebrates and birds.

Principle 7: Be additional.

- This proposal aims to achieve a greater BNG than the required 10%.

Principle 8: Create a net gain legacy.

To be achieved through the “Next steps”:

- Biodiversity Net Gain Management and Monitoring Plan.

Principle 9: Optimise sustainability & prioritise biodiversity.

- Retaining mature trees and shrubs where possible on site

Principle 10: Be transparent

- Communicate all Biodiversity Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

5. PROPOSED DESIGN & POTENTIAL NET GAIN

The potential net gains have been calculated from the AWA Drawing No.PL07 which shows the habitats listed in Table 3 below.

The proposals currently show the plot divided with some garden retained in the original plot and mature shrubs in the new plot. The new plot has been further split 70:30 building to garden for the purpose of the calculation.

Table 3: proposed habitats

Site Features:	Code (UKHabs)	Area ha/length/no.	BNG units
Developed land (New build)	u1b	.0329ha	0
Vegetated garden	u1, 827	.0141ha	0.28
		Potential final units	0.28
Retained areas of mature shrub		.0266ha	.06

5.1 Biodiversity Net Gain Feasibility

The current proposal are unlikely to be able to achieve a biodiversity net gain, due to the area of garden being replaced by the new dwelling. A 14m privet hedge to the roadside will be removed for the new entrance. The BNG unit value of this hedge is 0, due to the species composition, however a 10% gain will be required for the development.

The outcome of the calculation on the proposed habitats listed in table 3 shows a potential net loss of -5.82%. This could be offset by:

- Off-site habitat creation or purchase of .12 units. **The units could consist of grassland or mixed scrub to satisfy the trading rules.**
- Adding in a length of hedge will give the required net gain on the lost hedgerow e.g. 5m of native hedge will provide 19.5% net gain on the hedgerow habitat.

BIBLIOGRAPHY

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- National Planning Policy Framework, 2023
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF2023.pdf
- UKHab Classification Guide v2.0 2023 <https://ukhab.org/>

Appendix 1 Potential Net Gain Example : Purchase of scrub units

Moorcot	Return to results menu		
Headline Results			
Scroll down for final results ▲			
On-site baseline	Habitat units	1.12	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	1.06	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	-0.07	-5.82%
	Hedgerow units	0.00	19.55%
	Watercourse units	0.00	0.00%
On-site net gain is less than target set ▲			
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.19	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.19	N/A
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Zero baseline units - % cannot be calculated			
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.12	
	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 (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.12	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	10.89%	
	Hedgerow units	19.55%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Appendix 2: Baseline habitats & potential enhancement areas





PROPOSED SITE BLOCK PLAN 1:200

aw+a architects

From Architects | Planners | Engineers | Interiors

arb

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MR J MAKINSON

Proposed Dwelling & Associated Site Works, Moorcot, Mellor

Proposed Site Curtilage Plan

Scale	Author	Working Date
1:200	AZ	PLANNING
24-009	AW	AW
Plot	A	A

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