

Westburn Grange, Market Weighton

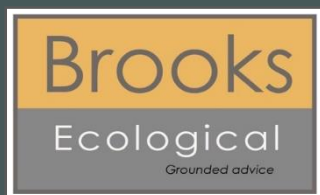


Biodiversity Net Gain Assessment (Baseline)

Report Ref. ER-7054-02

12/12/2023

Mr and Mrs Metcalfe c/o Persimmon Homes



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Date	12/12/2023
Report duration	In accordance with CIEEM (2019), unless otherwise stated the findings of this report remain valid for a period of 18 months. After this period advice should be sought on the scope of any updating work required.



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Introduction

1. Brooks Ecological Ltd was commissioned by Mr and Mrs Metcalfe c/o Persimmon Homes to carry out a Biodiversity Net Gain (BNG) Assessment of the proposed development Site at Westburn Grange, Market Weighton.
2. The assessment applies to the parcel of land shown in Figure 1 opposite.
3. The assessment is informed by a Preliminary Ecological Appraisal of the Site detailed in our report ER-7054-01.
4. Biodiversity Accounting metrics are used to quantify the value of a site in Biodiversity Units, which helps in assessing the ecological impacts of the proposed development on the Site.
5. Biodiversity Units can help to inform avoidance, or on-Site mitigation levels required; or as a last resort can translate to a direct monetary value where compensation (off-Site) is required.

Figure 1 Extent of BNG assessment (red line boundary).



Part 1

Pre-development baseline

Habitats identified

- 6. Habitats present on-Site are outlined in Table 1, opposite. These are shown in relation to location and extent in Figure 2 overleaf.

Condition Assessment

- 7. Habitat condition has been assessed as part of the Preliminary Ecological Appraisal of the Site.
- 8. Information on condition assessments is provided in the Excel spreadsheet CA-7054-01, provided alongside this report.

Biodiversity Metric

- 9. Habitat types, conditions, and areas have been entered into the DEFRA Biodiversity Metric 4.0 Calculation Tool, alongside information on their strategic significance.
- 10. The DEFRA Biodiversity Metric 4.0 Calculation Tool is provided alongside this assessment, in Excel spreadsheet BM-7054-01, and may be useful in investigating design options for the Site.

Table 1 Habitat Types.

UK Habitats as per DEFRA Metric	Label Reference - see plan below	Distinctiveness	Condition assessment	See Condition Assessment sheet
Cereal crops	-	Low	N/A	N/A
Modified grassland	-	Low	Poor	5A
Bare ground	-	Low	Poor	22A
Hawthorn scrub	-	Medium	Poor	20A
Ditch	Ditch 1	Low	Poor	4B
	Ditch 2	Low	Poor	4B

Figure 2 The Site's habitats assigned to types used in the relevant DEFRA Biodiversity Metric. Labelled codes cross-reference to our condition assessment and description in the PEAR, which should be read in conjunction with this report.



Figure 3 Extract from the DEFRA Biodiversity Metric 4.0 Calculation Tool showing entered information and resultant Biodiversity Units¹.

Ref	Existing area habitats			Distinctiveness	Condition	Strategic significance	Required Action to Meet Trading Rules	Ecological baseline
	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Condition	Strategic significance		Total habitat units
1	Cropland	Cereal crops	0.0938	Low	Condition Assessment N/A	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.19
2	Grassland	Modified grassland	0.7472	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	1.49
3	Heathland and shrub	Hawthorn scrub	0.0068	Medium	Poor	Area/compensation not in local strategy/ no local strategy	Same broad habitat or a higher distinctiveness habitat required (≥)	0.03
4	Urban	Bare ground	0.1116	Low	Poor	Area/compensation not in local strategy/ no local strategy	Same distinctiveness or better habitat required ≥	0.22
5								
6								
7								
8								
9								
Total habitat area			0.96					1.93
Site Area (Excluding area of Individual trees and Green walls)			0.96					

Baseline ref	Existing watercourse type		Distinctiveness	Condition	Strategic significance	Watercourse encroachment	Riparian encroachment	Required Action to Meet Trading Rules	Ecological baseline
	Watercourse type	Length (km)	Distinctiveness	Condition	Strategic significance	Extent of encroachment	Extent of encroachment for both banks		Total watercourse units
1	Ditches	0.043	Medium	Poor	Area/compensation not in local strategy/ no local strategy	No Encroachment	Major/Minor	Same habitat required =	0.14
2	Ditches	0.058	Medium	Poor	Area/compensation not in local strategy/ no local strategy	No Encroachment	Major/Major	Same habitat required =	0.17
3									
4									
5									
		0.10							0.32

¹ Our report provides an estimate of the Site’s value in Biodiversity Units. This is based on thorough assessment at the time of survey and using the information available at this time. In this assessment we have used Version 4.0 of DEFRA’s Biodiversity Metric Tool, the UK Habitats Classification, and relevant guidance. This assessment requires subjective judgments to be made in terms of habitat type and condition and could be open to other interpretations. Reliance on the Unit Score, or conversion of this into a monetary value, would be at the developer’s own risk. Where conversion to monetary value is required, it is always advisable to get calculations checked independently.

Habitat score

11. The Site has been assessed as having a baseline score of 1.93 Habitat Units and 0.32 Watercourse Units. These break down as shown in Table 2, below.
12. As part of delivering a Net Gain for biodiversity, the BNG process requires that trading rules are complied with, such that loss of habitats is compensated for in a like-for-like or like-for-better fashion. This is based on habitat distinctiveness.
13. Once trading rules are complied with, the ‘gain’ component can come from any distinctiveness category.

Table 2 Habitat Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Very Low	0	No compensation required.
Low	1.91	Can be replaced with <u>any</u> habitat of the same distinctiveness (low) or any habitat from a higher distinctiveness (Medium, High or Very High).
Medium	0.03	Cannot be replaced with habitats from a lower distinctiveness. Compensation needs to be like for like, or like for better. This means it can only be replaced by habitat from the same broad categories in Medium distinctiveness (in this case Scrub), or <u>any</u> habitat from a higher distinctiveness category (High or Very High).
High	0	Can only be replaced with the same habitat.
Very High	0	Bespoke compensation would be required.
Irreplaceable	0	Cannot be compensated.

Please note that Units may appear to not ‘add up’ correctly; this is due to rounding within the Metric calculator itself.

Table 3 Watercourse Units broken down by distinctiveness at this Site.

Distinctiveness	Units	Approach to compensation if lost
Low	0	Can be replaced with any watercourse type of higher distinctiveness.
Medium	0.32	Can only be replaced with the same watercourse type.
High	0	Can only be replaced with the same watercourse type.
Very High	0	Bespoke compensation likely to be required.

Planning your development

Mitigation hierarchy

14. To engage with the Biodiversity Gain process, a project must be able to demonstrate that it has complied with the Mitigation Hierarchy of Avoid - Mitigate - Compensate. Its relevance to this Site is set out in Table 4 below.

Table 4 Mitigation hierarchy summary.

Level of Hierarchy	Requirement at this Site
<i>First</i> Avoid	The PEA has established that there are no High or Very High distinctiveness habitats. The only Medium distinctiveness habitat is the hawthorn scrub present along the southern boundary. This should be retained, protected, and enhanced. Achieving this in a layout would engage with this part of the hierarchy and helps to minimise loss of Biodiversity Units.
<i>then</i> Mitigate	It would be very difficult to retain the Site's grassland within any development. This loss could be mitigated in part by designing in structured landscaping with native scrub and tree planting to new boundaries.
<i>then</i> Compensate	Any residual loss would need to be compensated off-Site. It will not be possible to deliver a Net Gain on-Site alongside development here, so this element will be required.

Summary and Recommendations

15. Site value is measured as 1.93 Habitat Units and 0.32 Watercourse Units.
16. Assuming the recommendations set out above can be followed, it seems likely that the mitigation hierarchy can be complied with. These recommendations should be a consideration of any design work.
17. Development of the Site is very likely to result in the requirement to offset losses elsewhere. Potential means of achieving this would be:
- Creating a bespoke offset on land available to the developer, as locally as possible.
 - Making use (through monetary contribution) of a Local Authority habitat banking scheme, if this is available.
 - Purchasing the necessary Units from a broker or habitat banking scheme, again as locally as possible (and ideally within the same Local Authority or Natural Character area/s as the development).
 - Purchasing Statutory Credits from the UK government scheme (this is the last resort and is not available yet at the time of writing).

Table 5 Summary of recommendations.

Recommendation	Rationale	When
R1 Produce a layout which minimises loss of biodiversity	Engage with the recommendations set out above, involve your ecologist in designs at an early stage, as required. The proposals will need to consider the NPPF hierarchy of Avoid – Mitigate – Compensate in minimising any loss of biodiversity.	During the design process
R2 Biodiversity Gain Strategy (BGS)	Engage an ecologist to work with the design team to maximise available Biodiversity Units on-Site. Identify opportunities to address any losses off-Site.	During the design process
R3 Landscape Design	Make sure your landscape architect follows ecological advice or the BGS to maximise Biodiversity Units on-Site and make sure there are no design conflicts.	During the design process
R4 Calculate final Biodiversity Impact Score	Use the DEFRA Metric to quantify Net Gain/Loss of biodiversity – complete Part 2 of this report.	After a fixed design is agreed

Part 2

Post-development value

18. This section calculates the biodiversity value of the post-development Site and quantifies any shortfall in Biodiversity Units.
19. It can only be completed once a design for the Site is fixed.

References

CIEEM (2019) Advice Note - On the Lifespan of Ecological Reports and Surveys

DEFRA (2023) Biodiversity Metric 4.0 Calculation Tool - macro- enabled

DEFRA (2023) Biodiversity Metric 4.0 - Technical Annex 1 - Condition Assessment Sheet and Methodology

DEFRA (2023) Biodiversity Metric 4.0 - Technical Annex 2 - Technical Information

DEFRA (2023) Biodiversity Metric 4.0 - User Guide

Appendices

The following reports/digital documents have been provided alongside this report and should be read in conjunction with it:

- Biodiversity Metric 4.0 Calculation Tool - BM-7054-01
- Biodiversity Metric 4.0 - Technical Annex 1 - Condition Assessment Sheets CA-7054-01
- Preliminary Ecological Appraisal Report ER-7054-01