BIODIVERSITY NET GAIN ASSESSMENT

LAND AT 8 WALMSLEY BROW
BILLINGTON
CLITHEROE
BB7 9TT

JUNE 2024

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A report for

STANCLIFFE AND JANIS RILEY
8 Walmsley Brow
Billington
Clitheroe
BB7 9TT

Report authors

Stuart Macpherson BSc (Hons), MSc, ACIEEM
1a Turnlee Road
Glossop
Derbyshire
SK13 6JS
[redacted]

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EXECUTIVE SUMMARY

PENNINE Ecological were commissioned in April 2024 by Stancliffe and Janis Riley to undertake a Biodiversity Net Gain (BNG) assessment for the proposed development at 8 Walmsley Brow, Billington, Clitheroe, BB7 9TT. The development comprises the division of an existing bungalow to from two separate dwellings, and the construction of a new residential property within the existing garden.

The assessment follows the completion of a Preliminary Ecological Appraisal undertaken by PENNINE ecological in March 2024 (PENNINE ecological, 2024).

The assessment includes the use of the Natural England Biodiversity Metric (version 4.0) tool to determine whether the proposals would result in a biodiversity net gain or loss. The assessment was completed using standard methodologies and there was no deviation from the recognised guidance.

The habitats encountered on site were of very low, low and medium distinctiveness according to the metric. The habitats recorded on site included woodland (medium distinctiveness), modified grassland and introduced shrub (both low distinctiveness) and finally developed land; sealed surface (very low distinctiveness). Ornamental hedgerows and a culvert were recorded on site, although these aren't to be affected by the proposals.

The habitat retention, enhancement and creation (where applicable) proposals for the development would result in an overall biodiversity net gain of 0.05 habitat units (2.52%), the results of which are included within the table below.

Table 1: BNG Metric v4.0 Results

	Habitat Units	Habitat Units % Change	Hedgerow Units	Hedgerow Units % Change	Watercourse Units	Watercourse Units % Change
On-site Baseline	1.96	-	0.04	-	0.03	-
On-site Post-intervention	2.01	-	0.04	-	0	-
On-site Net Change	0.05	2.52	0	0	0	0
Trading Rules Satisfied	Yes					

1. INTRODUCTION

1.1 BACKGROUND

PENNINE Ecological were commissioned in April 2024 by Stancliffe and Janis Riley to undertake a Biodiversity Net Gain (BNG) assessment for the proposed development at 8 Walmsley Brow, Billington, Clitheroe, BB7 9TT. The development comprises the division of an existing bungalow to from two separate dwellings, and the construction of a new residential property within the existing garden.

The habitats recorded during the field survey are illustrated in Figure 1 Appendix A with the site proposals included within Figure 2.

The assessment has been undertaken to determine whether or not the development demonstrates an overall net gain or loss of biodiversity, in line with the current National Planning Policy Framework, 2021.

1.2 SITE LOCATION

The site is located on the northern edge of Billington village within a residential area. The sites central

National Grid Reference is SD 7270 3583.

1.3 PURPOSE OF THIS REPORT AND BNG BACKGROUND

This document provides the results of the BNG assessment which includes the use of the biodiversity metric (version 4.0) tool to determine whether the proposals on-site would result in an overall net gain or net loss; this result can be expressed in habitat units and/or a percentage. A habitat will contain a number of biodiversity units, depending on the following: size, quality, location and type. Biodiversity units can be lost through development or generated through work to create and/or enhance habitats.

As can be read in https://www.gov.uk/guidance/understanding-biodiversity-net-gain the purpose of Biodiversity Net Gain is "a way of creating and improving natural habitats. BNG makes sure development has a measurably positive impact ('net gain') on biodiversity, compared to what was there before development."

Through site selection and layout, developers should avoid or reduce any negative impact on biodiversity. They must deliver at least 10% BNG (unless agreed otherwise with the Local Authority), as measured by the statutory biodiversity metric. There are three ways a developer can achieve BNG.

1. They can create biodiversity on-site (within the red line boundary of a development site).

2. If developers cannot achieve all of their BNG on-site, they can deliver through a mixture of on-site and off-site. Developers can either make off-site biodiversity gains on their own land outside the development site, or buy off-site biodiversity units on the market.

3. If developers cannot achieve on or off-site BNG, they must buy statutory biodiversity credits from the government. This should be a last resort. The government will use the revenue to invest in habitat creation in England.

As of 12th February 2024 BNG became mandatory (unless exempt) under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). Developers must deliver a BNG of 10% unless otherwise agreed with the relevant Local Authority.

2. METHODOLOGY

2.1 UK HABITAT CLASSIFICATION BASELINE SURVEY

For a BNG assessment to be completed a UK Habitat Classification (UKHabs) Survey (UKHab Ltd, 2022) has to be undertaken of the site's baseline habitats. In this case, the survey completed was an Extended Phase 1 Habitat Survey (EP1HS) and the habitats transferred to the UKHabs habitat categories (including condition assessments). The EP1HS was undertaken by PENNINE ecological in March 2024.

The EP1HS was undertaken by Robert Leatham, a highly experienced ecological consultant with over 25 years of experience. The BNG assessment was undertaken by Stuart Macpherson who is an Associate member of the Chartered Institute of Ecology and Environmental Management (ACIEEM) who is a competent botanist with over 14 years' experience in the land management and ecology sectors.

2.2 BIODIVERSITY METRIC VERSION 4.0 CALCULATOR TOOL

All habitats recorded within the footprint of the site during the March 2024 field survey were included in the Biodiversity Metric 4.0 Metric Calculation Tool. The statutory (official) biodiversity metric is a way of measuring biodiversity value for the purposes of BNG. It measures all types of habitat, including:

- grassland
- hedgerows
- lakes
- woodland
- watercourses such as rivers and streams

For BNG, biodiversity is measured in standardised biodiversity units. The metric measures the biodiversity value of habitats by calculating the number of biodiversity units. It calculates:

- how many units a habitat contains before development takes place.
- how many units are needed to replace the units of habitat lost and to achieve 10% BNG (unless agreed otherwise the Local Authority), through the creation or enhancement of habitat .

The formula takes different factors into account, including the habitat's:

- size
- quality
- location
- type

For created or enhanced habitats, the formula also takes account of:

- difficulty of creation or enhancement
- the time it takes a habitat to reach its target condition
- distance from the habitat loss

The statutory (official) biodiversity metric calculation tool must be used in order to demonstrate that the ecologist/assigned person has calculated the number of biodiversity units for existing habitat or habitat enhancements in accordance with the metric. This enables an assessment of the baseline condition, expected habitat losses arising from the development and proposed on-site habitat mitigation following construction.

This metric calculation has been undertaken following the standard methodology (Natural England, 2023) and in accordance with CIEEM good practice guidelines (CIEEM, 2019).

2.3 LIMITATIONS

The survey was undertaken outside of the optimal botanical survey season which is generally accepted to be between and including April and August. However, because of the habitats on site being of generally low ecological value and diversity, all plant species on site were readily identifiable. As such there are considered to be no significant constraints to the field survey or the BNG assessment.

3. BIODIVERSITY NET GAIN ASSESSMENT RESULTS

3.1 ON-SITE HABITAT BASELINE RESULTS

The habitats encountered on site were of very low, low or medium distinctiveness according to the metric. The habitats and their respective areas, distinctiveness, condition etc. are included in Table 3.1 below.

In total, the surveyed habitats have a total habitat value of 1.96 habitat units. A summary of the baseline habitats and habitat unit information is provided in Table 3.1 below. Only low or above distinctiveness habitats need to be mitigated for their losses as very low distinctiveness habitats, in this case developed land; sealed surface do not comprise any habitat units.

Table 3.1: Summary of the Baseline Habitats and Habitat Value

Broad Habitat	Habitat Type	Irreplaceable habitat	Habitat Area (ha)	Distinctiveness	Condition	Total Habitat Units (Ecological Baseline)	Area Retained – ha / units	Area Enhanced – ha / units	Habitat Area (ha) Lost	Units Lost (before mitigation)
Woodland	Other woodland; broadleaved.	No	0.1302	Medium	Moderate	1.2	0.1302 / 1.2	0	0	0
Grassland	Modified grassland	No	0.1086	Low	Moderate	0.43	0.0726 / 0.29	0	0.036	0.036
Urban	Introduced shrub	No	0.0196	Low	n/a	0.04	0.0188 / 0.04	0	0.0014	0
Urban	Developed land; sealed surface	No	0.0982	Very low	n/a	0	0	0	0	0
Individual trees	Urban tree	No	0.0326	Medium	Moderate	0.29	0.0326 / 0.29	0	0	0

3.2 ON-SITE HABITAT CREATION RESULTS

The habitats to be created on site (Table 3.2) are of very low, and medium distinctiveness. The very low distinctiveness habitat to be 'created' on site is developed land; sealed surface (no habitat units are delivered using this habitat thus is not included below in Table 3.2). The medium distinctiveness habitats are neutral grassland and individual trees respectively.

The total number of habitat units delivered is 0.2.

Table 3.2: Summary of the On-Site Habitat Creation and Habitat Value

Broad Habitat	Habitat	Habitat Area (ha)	Distinctiveness	Condition	Habitat Units Delivered
Grassland	Other neutral grassland	0.02	Medium	Moderate	0.15
Urban	Developed land; sealed surface	0.0407	Very low	n/a	0
Individual trees	Urban tree	0.0122	Medium	Moderate	0.04

3.3 ON-SITE HEDGEROW BASELINE RESULTS

Approximately 328m of non-native ornamental hedgerow were recoded on site (Table 3.3). These were both leylandii hedgerows and totalled 0.04 hedgerow units.

Table 3.3: Summary of the Baseline Hedgerows

Habitat	Length (km)	Distinctiveness	Condition	Hedgerow Units
Non-native and ornamental hedgerow	0.0328	Very low	Poor	0.04

3.4 ON-SITE HEDGEROW CREATION RESULTS

No new hedgerows are proposed as part of the scheme. The hedgerows detailed above in section 3.3 are to be retained.

3.5 ON-SITE WATERCOURSE BASELINE RESULTS

A culvert measuring approximately 24m was recorded within the site. The culvert is to be retained as part of the proposals. Details are included in Table 3.4 below.

Table 3.4: Summary of the Baseline Watercourse

Watercourse Type	Length (km)	Distinctiveness	Condition	Watercourse Units
Culvert	0.024	Low	Poor	0.03

3.6 HEADLINE BIODIVERSITY NET GAIN ASSESSMENT RESULTS

3.6.1 Habitat Units

The following section summaries the Biodiversity Net Gain assessment results.

Baseline habitats of very low, low and medium distinctiveness were recorded during the site survey conducted in March 2024. Habitat creation of ecological value includes the creation of other neutral grassland and individual trees. There will be losses of some modified grassland and introduced shrub. The woodland on site is to be retained as part of the proposals. The existing hedgerows and culvert will not be impacted on by the proposals.

Overall, there will be a biodiversity net gain as part of the habitat creation proposals as is detailed in Table 3.5 below. The habitat trading rules have been satisfied by the proposals.

Overall, the proposals would result in a 0.05 Habitat Unit Gain equivalent to a +2.52%.

Table 3.5: Summary of the Biodiversity Net Gain Results

	Habitat Units	Habitat Units % Change	Hedgerow Units	Hedgerow Units % Change	Watercourse Units	Watercourse Units % Change
On-site Baseline	1.96	-	0.04	-	0.03	-
On-site Post-intervention	2.01	-	0.04	-	0	-
On-site Net Change	0.05	2.52	0	0	0	0
Trading Rules Satisfied	Yes					

4. CONCLUSION

4.1 CONCLUSION

Based on the results of the Biodiversity Metric Calculator 4.0 (Natural England, 2023), the development would result in a net gain of 0.05 Habitat Unit Gain equivalent to +2.52%.

The Trading Rules have been satisfied.

REFERENCES

CIEEM (2019). Biodiversity net gain. Good practice principles for development; a practical guide. CIRIA publications

Natural England, 2023. Biodiversity Metric 4.0 Calculation Tool.

PENNINE ecological (2024). Preliminary Ecological Appraisal, Land at 8 Walmsley Brow, Billington, Clitheroe, BB7 9TT.

The UK Habitat Classification (2022) System (https://ukhab.org/)

Appendix A - Figures

Figure 1: Baseline Habitats (March 2024)

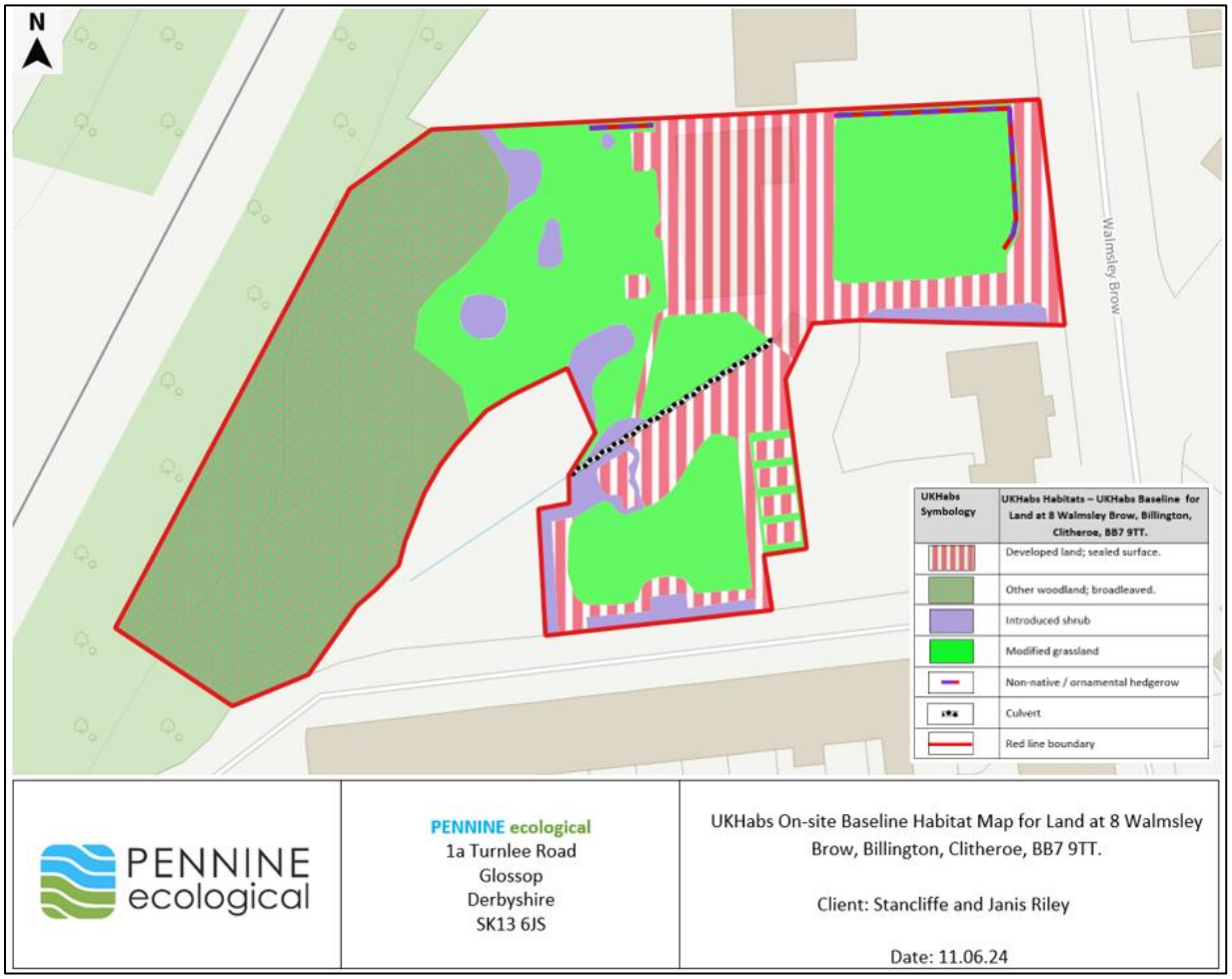

Figure 2: Proposed landscaping plans.