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Report prepared for: Smug Oak Lane limited

For the Site of: Smug Oak Lane, Bricket Wood, St Albans, AL2 3PN

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Cherryfield Ecology has prepared this report for the named clients' use only.

Ecological reports are limited in shelf life, usually 12 to 18 months for baseline surveys and for BNG as and when plans change. Information is believed to be accurate at the time of the survey; recommendations are made without bias based on good practice guidelines within the industry. However, species presence and ecological parameters can change over time.

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Biodiversity Net Gain (BNG)/Biological Impact Assessment (BIA)

0.0 Non-Technical Summary

0.1 Background

The client commissioned Cherryfield Ecology to undertake a Biodiversity Net gain (BNG)/Biodiversity Impact Assessment (BIA) for the site of **Smug Oak Lane, Bricket Wood, St Albans, AL2 3PN**, to determine the biological impact of the proposed development.

Biodiversity Net Gain (BNG) is an approach to development that leaves biodiversity in a better state than it was before. The process relies on the mitigation hierarchy, which sets out that everything possible must be done to firstly avoid, secondly, minimise and thirdly restore and rehabilitate losses of biodiversity on site.

This report uses the Statutory Biodiversity Metric (DEFRA 2024), to quantify the biodiversity baseline for the site and calculate the post-development biodiversity unit for the proposed scheme following the best practice guidelines as set down by CIRIA (2019).

0.2 Results and Findings

A summary of the change in Biodiversity Net Gain on site is given in Table 1.

Table 1: Change in Biodiversity Net Gain (BNG) on site

BIA Units	Total Net Unit Change	Total Net % change
Habitat Units	-0.82	-45.67%
Hedgerow Units	-0.12	-100%
River Units	n/a	n/a

A 10% increase for each unit type present is required and the trading rules for each habitat type must be met to meet the minimum statutory requirement.

The proposed development will result in a **-45.67% net loss** in Habitat Units and a **-100% net gain** in Hedgerow Units on site and, therefore, does not meet this requirement.

As such, in order to meet the required 10% net gain for Habitat Units and meet the trading rules, a further **1.59 Habitat Units** and **0.13 Hedgerow Units** will need to be achieved. For the trading rules 0.55 units of this will need to be of Medium Distinctiveness Heathland and shrub habitat type or a higher distinctiveness habitat type and 1.04 units of Woodland and forest habitat type or a higher distinctiveness habitat type.

This is not possible on-site and off-site compensation will be required.

1.0 Introduction

1.1 Aim

The client, Smug Oak Lane limited, has commissioned Cherryfield Ecology to undertake a BNG/BIA for the site of **Smug Oak Lane, Bricket Wood, St Albans, AL2 3PN**.

The aim of this report is to determine the Biodiversity Net Gain for the proposed scheme and, where necessary, make recommendations for increasing net gain in order to comply with the statutory requirements.

1.2 Site Information

The site consists of one detached single-storey building, several industrial containers, bare ground, bramble scrub, a line of trees, other woodland – mixed – mainly coniferous. The proposed development includes for the development of housing and associated features, to replace the existing habitats found on site.

1.3 Study Area

The site is 0.76 Ha in size. The national grid coordinates for the center of the site are TL148022.

1.4 Suitably Qualified Ecologist

This report has been completed by Elijah Bird and checked by Heather Stuckey and Martin O'Connor. Heather and Martin both meet the criteria for a suitably qualified Ecologist as defined in BS 8683:2021.

2.0 Methods

Biodiversity Net Gain is assessed through the use of biodiversity calculators to assess the biodiversity value of habitats pre- and post-development based on habitat type, distinctiveness and condition.

A biodiversity index is derived from the baseline and the proposed development and net gain is achieved where an increase in value is delivered either on-site (or through offsite compensation), where lower value habitat is replaced with one of higher value.

This report uses the Statutory Biodiversity Metric (DEFRA 2024), to quantify the biodiversity baseline for the site and calculate the post-development biodiversity unit for the proposed scheme following the best practice guidelines as set down by CIRIA (2019).

2.2 Limitations

It is important to note that a scheme-wide biodiversity net gain or no net loss cannot be achieved for the scheme as a whole if there are negative impacts on irreplaceable habitats.

Any compensation offered to address impacts on irreplaceable habitats should be agreed directly with Natural England (NE). The baseline habitat which is identified for such compensation and the biodiversity units resulting from this compensation should also be excluded from biodiversity unit calculations.

Following Defra guidance, impacts on irreplaceable habitats and their compensation have been excluded from this biodiversity unit calculation.

Biodiversity Impact Assessment only deals with habitat and as such this report does not cover any of the requirements of the proposed development arising from potential impacts on protected species and designated sites.

3.0 Strategic Significance

Based on MAGIC, the following statutory sites and Natural England Protected Species (NEPS) have been located within the 2km search area (Figure 1).

Table 2: MAGiC search results

Receptor	Distance and Direction to Nearest (m/km)	Description
Statutory sites	~1622m SW	Bricket Wood Common SSSI
	~883m NW	Moor Mill Quarry, West SSSI
Granted protected species licenses	~305m W	2010-2620 – common pipistrelle
	~380m W	2009-1313 – great crested newt
	~302m W	2009-690 – great crested newt
	~1636m NW	2010-1663 – common pipistrelle
	~1662m NE	2015-16251-4 – great crested newt
	~819m SW	2019-39056 – brown long eared, common pipistrelle, soprano pipistrelle
	~866m SW	2019-39750 – soprano pipistrelle
Priority habitat	~1995m NE	Wood-pasture and Parkland
	~1881m NE	Traditional orchard
	~20m NE	Deciduous woodland
	~1057m WNW	Ancient & Semi-Natural Woodland
	~48m NE	Chalk Rivers
	Adjacent to the north and west site boundaries	Good quality semi-improved grassland
	~112m E	Coastal and floodplain grazing marsh

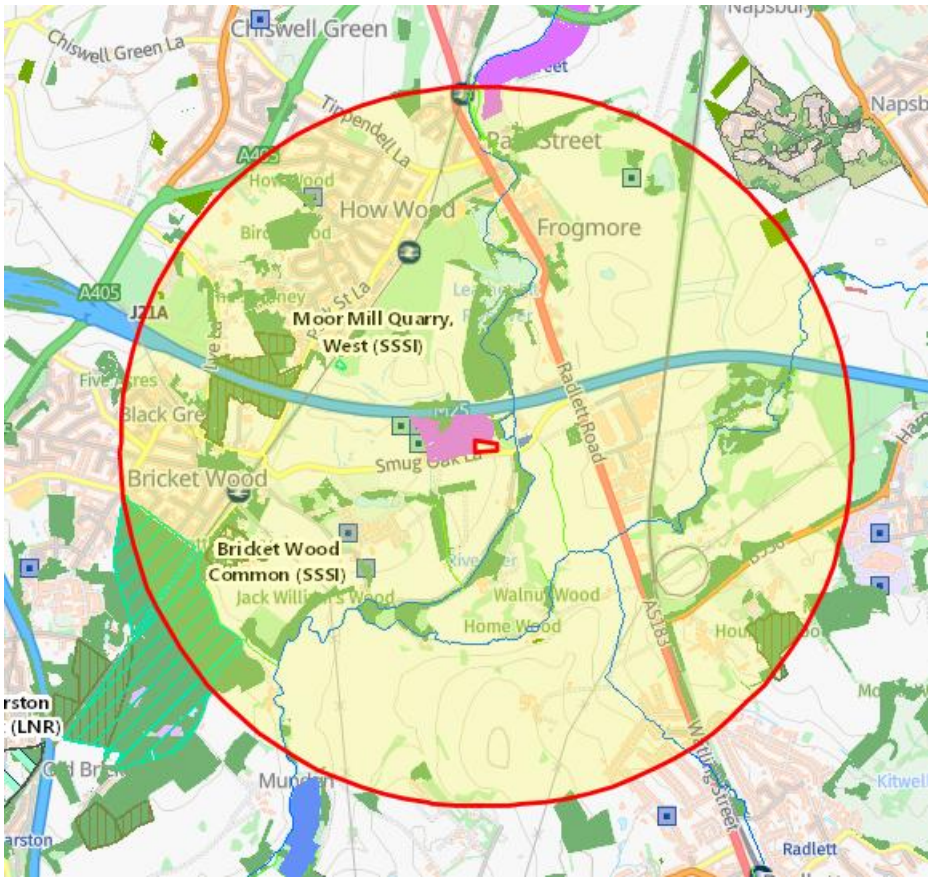

Figure 1: MAGiC

There is no LRNS on site according to the Hertfordshire Ecological Network Mapping, and there is no documentation found to indicate the site is in an area of strategic significance.

4.0 Baseline Units

The UK Hab survey map used to assess the baseline is provided in Figure 2. Please refer to the Ecological Appraisal (Cherryfield Ecology, 2025) for full site details and to the separate Excel sheet for full condition assessments.

The following table summarises the baseline habitat and linear value on-site. There are no watercourse features present.

Table 3: Baseline Habitat Value

Baseline Units	Total Net Unit
Habitat Units	1.80
Hedgerow Units	0.12
River Units	n/a

Figure 2: Baseline Habitats Site Plan

5.0 Post-Development Units

Proposed site plans "24-043" were provided by the Client and used to calculate the Biodiversity Units post-development. Please see the separate Excel sheet for the assumed post development condition assessments.

The following table summarises the post development habitat and linear value on-site. There are no watercourse features present.

Table 4: Post Development Habitat Value

Post Development Units	Total Net Unit
Habitat Units	0.98
Hedgerow Units	0.00
River Units	n/a

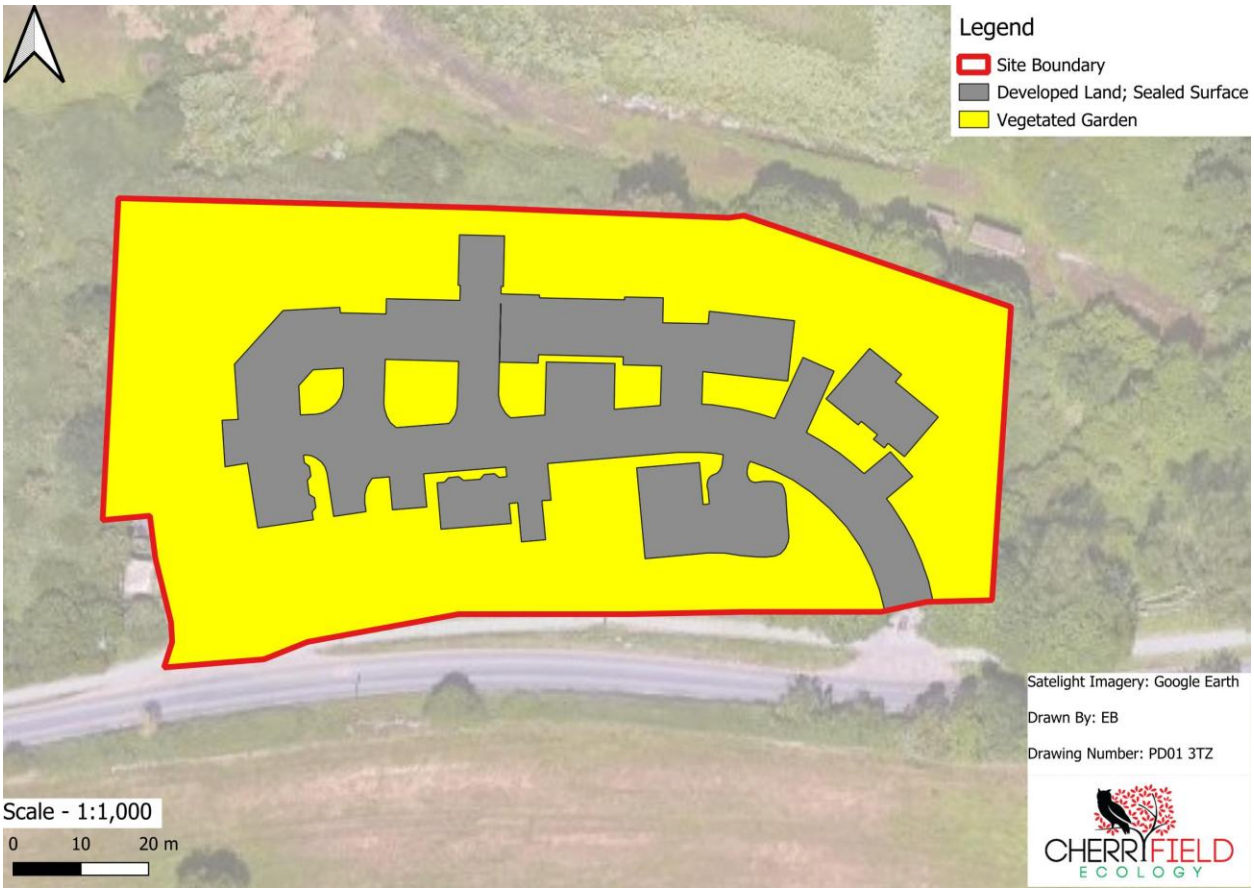

Figure 3: Proposed Habitats Site Plan

6.0 Results

Table 5: Change in Biodiversity Net Gain (BNG) on site

BIA Units	Total Net Unit Change	Total Net % change
Habitat Units	-0.82	-45.67%
Hedgerow Units	-0.12	-100%
River Units	n/a	n/a

6.1 Discussion

The mitigation hierarchy is the cornerstone of achieving net gain. It is a sequence of mitigation actions as described in Table 6.

Table 6: Mitigation hierarchy

Stage	In practice
Avoidance	This first stage is to avoid harm to biodiversity, for example locating to an alternative site. It is the most important stage and can ease the consent process, whereas missing this stage can lead to objections and refusal of permission to the development.
Minimise	If avoiding all adverse impacts is not possible, action is taken to minimize these effects.
Compensation	Addresses residual adverse effects, only considered after all possibilities for avoidance and minimising the effects have been implemented. Offsetting is a form of compensation that trades losses of biodiversity in one location with measurable gains in another. Offsetting losses of biodiversity with gains elsewhere can be within or outside of the development footprint.

Table 7 outlines how the mitigation hierarchy has been applied to this site.

Table 7: Application of the mitigation hierarchy

Hierarchy Level	Action	Habitat on site
Avoidance	Avoid	There are no priority habitats on site that would make avoidance necessary.
Minimise	Retain	No habitats will be retained by the scheme.
	Enhance	No habitats will be enhanced by the scheme.
Compensation	On-site creation	Developed land; sealed surface and vegetated garden will be created on site.
	Off-site creation	As the site consists of private residential land, any on-site enhancements cannot be conditioned. As such off-site compensation will be required to achieve the national guidelines for biodiversity net gain. (see Environment Bank https://environmentbank.com/ and Environmental Trading platform https://www.environmentaltradingplatform.com/ for available off-site units).

7.0 Conclusion

A 10% increase for each unit type present is required and the trading rules for each habitat type must be met to meet the minimum statutory requirement.

The proposed development will result in a **-45.67% net loss** in Habitat Units and a **-100% net gain** in Hedgerow Units on site and, therefore, does not meet this requirement.

As such, in order to meet the required 10% net gain for Habitat Units and meet the trading rules, a further 1.59 Habitat Units and 0.13 Hedgerow Units will need to be achieved. For the trading rules 0.55 units of this will need to be of Medium Distinctiveness Heathland and shrub habitat type or a higher distinctiveness habitat type and 1.04 units of Woodland and forest habitat type or a higher distinctiveness habitat type.

This is not possible on-site and off-site compensation will be required.

8.0 References

Cherryfield Ecology (2025), Ecological Appraisal Report, 2025.

CIRIA (2020), Biodiversity Net Gain: good practice principles for development. [Online] https://cieem.net/wp-content/uploads/2019/02/C776a-Biodiversity-net-gain.-Good-practice-principles-for-development.-A-practical-guide-web.pdf (Accessed Dec 2023)

Department for Communities and Local Government (2023), National Planning Policy Framework (NPPF). [Online] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1182995/NPPF_Sept_23.pdf(Accessed Sept 2023)

JNCC (2010), Handbook for Phase 1 Habitat Survey: A technique for environmental audit. JNCC, Peterborough.

Natural England (2010), Higher Level Stewardship, Farm Environment Plan (FEP) Manual, 3rd Edition. The Hedgerow Regulations (1997). [Online] http://www.legislation.gov.uk/uksi/1997/1160/contents/made (Accessed Sept 2020).

UKHabs (2020), *UK Habitat Classification*, UKHab, [Online] https://ukhab.org/ (Accessed 10th December 2020)