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Report for: Reg Cuthbert-Alderbury Developments

Commissioned by: Graham Peel – Chantry Architects

Biodiversity Net Gain Assessment



Site Plan- Scheme 2 (Chantry Architects, 2024)

24 St. Annes Road, London Colney AL2 1LJ

Report No: J3232

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Clifford C Stuckey BSc (Hon's) PhD CEnv MCIEEM

SUMMARY

On the instructions of Graham Peel – Chantry Architects on behalf of Reg Cuthbert-Alderbury Developments, Morgan & Stuckey Ecological Consultants carried out a Biodiversity Net Gain (BNG) Assessment for the site of 24 St. Annes Road, London Colney AL2 1LJ.

The proposed development will entail the demolition of the existing structures and the development of five new residential properties. The area of developed land; sealed surface on site will increase, with a consequential loss of vegetated garden area. The sweet chestnut tree (medium sized) will also be lost to facilitate the development. The remaining medium sized trees (an ash and the two pears) will be retained.

This results in a 25.06% BNG loss in Habitat Area Units with the trading rules not satisfied.

A further 0.31 Habitat Units are required to meet the 10% net gain for the site and, to meet the trading rules, at least 0.19 units of this must be of Medium Distinctiveness Individual Tree habitat (or a higher distinctiveness habitat).

As the site will consist wholly of private residential land, this will not be possible to achieve on-site and off-site compensation should be sought. It is intended that the units required will be sought through a third-party habitat bank.

CONTENTS

1	INTE	RODUCTION	.5
	1.1	Instructions and Objectives	.5
2 Method		hod	.6
	2.1 2.1.1	BIODIVERSITY NET GAIN Data Sources	.6 6
	2.2	Surveyor Information	.6
	2.3	Limitations	.6
3	Resu	ılts	. 7
	3.1	Site Location and Settings	.7
	3.2	Desk Study	.8
	3.3	Strategic Significance	.9
	3.4	BNG Assessment	10
	3.4.1	Baseline Units	10
	3.4.2	Post-Development Units	11
	3.4.3	BNG Gain/Loss	12
4	Disc	ussion & Conclusion	13
	4.1	Biodiversity Net Gain (BNG)	13

TABLES

Table 3.1 Baseline Area Units	10
Table 3.2 Post-development Area Units	11

FIGURES

Figure 3-1 Proposed development area with red boundary.	7
Figure 3-2 MAGIC Map	9
Figure 3-3 Baseline Habitats	10
Figure 3-4 Post Development Habitats	11
Figure 3-5 Metric Headline results	12

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Biological Records of species identified during this survey, the date, their location and a brief description of the circumstances of their identification, may be passed on to Biological Records Centres, local wildlife groups, the Wildlife Trust, Natural England and other interested parties unless written instructions not to do so are received within 30 days of receipt of this report.

Clifford C Stuckey BSc (Hon's) PhD CEnv MCIEEM

1 INTRODUCTION

1.1 INSTRUCTIONS AND OBJECTIVES

On the instructions of Graham Peel – Chantry Architects on behalf of Reg Cuthbert-Alderbury Developments, Morgan & Stuckey Ecological Consultants carried out a Biodiversity Net Gain (BNG) Assessment for the site of 24 St. Annes Road, London Colney AL2 1LJ.

Proposals for the site are for the demolition of the existing structures and the development of five new residential properties.

The aim of this report is to determine the Biodiversity Net Gain (BNG) for the proposed development and, where necessary, provide recommendations for increasing net gain.

BNG is an approach to developments that aims to measurably improve the natural environment from its previous state. The mitigation hierarchy is followed to first avoid the loss of biodiverse habitats, secondly to enhance and create biodiverse habitats on site and thirdly to seek off-site compensation as a last resort.

2 METHOD

2.1 BIODIVERSITY NET GAIN

This report uses the Statutory Biodiversity Metric (DEFRA, 2023) to make the calculations for the baseline biodiversity units and the post-development biodiversity units, to quantify the net gain of the development.

Supporting documentation for the Statutory Biodiversity Metric (listed below) is used and adhered to:

- Statutory biodiversity metric: draft user guide
- Statutory biodiversity metric condition assessments

2.1.1 DATA SOURCES

QGIS Open-Source software and Google Earth are used to measure and calculate the habitat areas and lengths.

The Ecological Impact Assessment (Morgan & Stuckey, Ecological Consultants, 2024) was used to determine the baseline habitats.

Drawings Site Plan- Scheme 2 (Chantry Architects, 2024) were used to determine the post-development habitats.

2.2 SURVEYOR INFORMATION

This report and the BNG calculation have been carried out by Dr Clifford Stuckey BSc (Hons), PHD, CEnv, MCEEIM.

2.3 LIMITATIONS

Ecological surveys are limited by factors which affect the presence of plants and animals such as the time of year, migration patterns and behaviour and the ecological survey of this site has not produced a complete list of plants and animals. Nevertheless, the results of the ecological survey allow evaluation of nature conservation value, assessment of the significance of potential impacts that may arise from the proposals and consideration of appropriate mitigation measures.

3 RESULTS

3.1 SITE LOCATION AND SETTINGS

The site is centred on OS NGR TL 17619 03522, post code AL2 1LJ, in London Colney, St Albans.

The site is located on a road with moderate-density residential housing along its length. Broad Colney Lakes Nature Reserve is located immediately to the southeast of the site which includes an area of priority deciduous woodland (bounding the site) and large fishing lakes, the closest of which (North Lake) is \sim 50/80m away. A broad section of the River Colne (Long Lake) is beyond this, at \sim 215m to the south.

Further afield, a high-density residential area is found to the north and northeast and agricultural land and open pasture is found to the south and west.



Figure 3-1 Proposed development area with red boundary.

3.2 DESK STUDY

Report J3232

Interrogation of the Multi-Agency Geographic Information for the Countryside (MAGIC) showed that the site falls into the SSSI Impact Risk Zone for:

- Redwell Wood (SSSI), ~3.3km east
- Moor Mill Quarry, West (SSSI), ~3.5km west
- Bricket Wood Common (SSSI), ~4.6km west

Two Natural England Protected Species licences (NEPS) have been granted within the search area:

- Common pipistrelle and brown long-eared bat, ~1.7km to the south. Licence No. 2015-18031-EPS-AD2.
- Great crested newt, ~ 1.9km to the west. Licence No. 2015-16251-EPS-MIT-4.

The following areas of priority habitat are found within the search area:

- Small areas of Deciduous Woodland dominate the search area. The closest point is located immediately south of the site.
- The River Colne, which at its closest point runs ~215m to the south, is a high certainty chalk river.
- Napsbury Park residential development is designated as an area of Woodpasture and Parkland. Closest point located ~530m north-west.
- Small area of Lowland Fens located ~705m west.
- Four areas of Traditional Orchards are located within the search area. The closest area is located ~1km west.
- Coppice Wood Ancient & Semi-Natural Woodland located ~1.2km north-east

MAGIC

AL2 1JL



Figure 3-2 MAGIC Map

3.3 STRATEGIC SIGNIFICANCE

There is no documentation found to indicate that the site falls into an area of strategic significance.

3.4 BNG ASSESSMENT

3.4.1 BASELINE UNITS

The site consists of two residential plots with two main dwellings (B1 and B2) and an assortment of outbuildings set within residential gardens.

The pre-development habitats on site were entered into the Statutory Biodiversity Metric and the results are summarised below.

Table 3.1 Baseline Area Units

UKHab Classification	Condition Area (ha)		Units	
Developed Land;	N/A	0.058	0.00	
Sealed Surface				
Vegetated Garden	N/A	0.055	0.11	
Urban Trees	Good	0.0651	0.78	
		Total area units	0.89	



Figure 3-3 Baseline Habitats

3.4.2 POST-DEVELOPMENT UNITS

The post-development habitats proposed for the site were entered into the Statutory Biodiversity Metric and the results are summarised below.

Table 3.2	Post-devel	lopment	Area	Units
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UKHab Classification	Condition	Area (ha)	Units			
Developed land; sealed	N/A	0.071	0.00			
surface						
Vegetated gardens	N/A	0.042	0.08			
Baseline units retained						
Urban Tree	Good	0.0489	0.59			
		Total Area Units	0.67			



Figure 3-4 Post Development Habitats

3.4.3 BNG GAIN/LOSS

The proposed development will result in a 25.06% BNG loss in Habitat Area Units with the trading rules not satisfied.

24 St. Annes Road, London Colney AL2 1LJ Headline Results	Return to results menu				
Scroll down for final results					
		Habitat units	0.89	1	
On-site has	line	Hedgerow units	0.00		
Oll-Blie Daseille		Watercourse units	0.00		
		Habitat unite	0.67		
On-site post-inte	rvention	Hedgerow units	0.00		
(Including habitat retention, creati	on & enhancement)	Watercourse units	0.00		
	ŕ	Unhitat unita	0.22	05.000/	
On-site net cl	ange	Hedgerow units	0.00	-25.06%	On-sile n et g ain is less than targ et set
(units & percenta	ле)	Watercourse units	0.00	0.00%	
				0.0076	
2		Habitat units	0.00	l	
Off-site base	line	Hedgerow units	0.00		
OII-SILC DASC	Ante	Watercourse units	0.00		
		Habitat units	0.00		
Off-site post-inte	rvention	Hedgenow units	0.00		
(Including habitat retention, creati	on & enhancement)	Watercourse units	0.00		
	,	Habitat units	0.00		r
Off-site net cl	ange	Habitat units	0.00	0.00%	
(units & percenta	m)	Watercourse units	0.00	0.00%	
(anto a persona		watercourse units	0.00	0.00%	
Combined net un (Including all on-site & off-site habitat retent	Habitat units Hedgerow units Watercourse units	-0.22 0.00 0.00			
		Habitat units	0.00		
Spatial risk multiplier (SR	M) deductions	Hedgerow units	0.00		
	Watercourse units	0.00			
	FINAL RESULTS			1	
	2	Habitat units	-0.22		
Total net unit o	hange	Hedgerow units	0.00		
(Including all on-site & off-site habitat retent	ion, creation & enhancement)	Watercourse units	0.00		
		Habitat units	-25.06%	Totalne	t gain ach ieved is less than targ et set A
Total net % change		Hedgerow units	0.00%		
(Including all on-site & off-site habitat retention, creation & enhancement)		Watercourse units	0.00%		
Trading rules sa	No - Check Tradi	ng Summaries 🛦			
Unit Type Targe	Baseline Units	Units Required	Unit Deficit		
Habitat units 10.00%	0.89	0.98	0.31		
Watercourse units 10.00%	0.00	0.00	0.00	No ad d ition a	i hed gerow units required to meet target ✓ watercourse units required to meet target ✓
Input errors/ru	le breaks present	in metric 🔺			

Figure 3-5 Metric Headline results

4 DISCUSSION & CONCLUSION

4.1 BIODIVERSITY NET GAIN (BNG)

The proposed development will entail the demolition of the existing structures and the development of five new residential properties. The area of developed land; sealed surface on site will increase, with a consequential loss of vegetated garden area. The sweet chestnut tree (medium sized) will also be lost to facilitate the development. The remaining medium sized trees (an ash and the two pears) will be retained.

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