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Report prepared for: WS Planning & Architecture

For the Site of: Dunn Elms Nelsons Lane Hurst Reading Berkshire RG10 0RR

Version:	Written by:	Checked by:	Final:
Draft	Sarah Downing 30/04/2024		
Final	Sarah Downing 08/05/2024	Martin O'Connor 08/05/2024	Sarah Downing 09/05/2024
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Amended (Proposed Habitats)	Heather Stuckey 16/12/2025	Martin O'Connor 16/12/2025	Heather Stuckey 16/12/2025

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 Dunn Elms Nelsons Lane Hurst Reading Berkshire RG10 0RR, 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	+0.86	+10.09%
Hedgerow Units	+0.30	+97.43%
River Units	+0.17	+12.14%

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 +10% gain across all habitat types with the trading rules met and, therefore, meets this requirement.

1.0 Introduction

1.1 Aim

The client, WS Planning & Architecture, has commissioned Cherryfield Ecology to undertake a BNG/BIA for the site of Dunn Elms Nelsons Lane Hurst Reading Berkshire RG10 0RR.

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 an assortment of buildings within a gravel yard. There are two (linked) horse paddocks with modified grassland. Ornamental hedgerows line the boundaries and ditches are located just beyond the site boundary.
The proposed development includes for the extension of the yard to provide space for an assortment of mobile homes.

1.3 Study Area

The site is 1.58 Ha in size. The national grid coordinates for the center of the site are SU 80764 72685.

1.4 Suitably Qualified Ecologist

This report has been completed by Heather Stuckey and checked by 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 (m/Km)	Description
Statutory sites	N/A	N/A
Granted protected species licenses	~1,521.1m, NW	Soprano pipistrelle, *Pipistrellus pygmaeus* (2016-25277, 2019-43858)
	~1,003.4m, SE	Brown long-eared, *Plecotus auritus*, & common pipistrelle, *Pipistrellus pipistrellus* (2015-8658, 2012-4899)
	~1,366.5M, NW	Common pipistrelle, *Pipistrellus pipistrellus* (2017-32001)
Priority habitat	~578.5m, all directions	Deciduous woodland
	~619.9m, NW	Traditional orchards
	~899.7m, all directions	Wood pasture and parkland BAP priority habitat

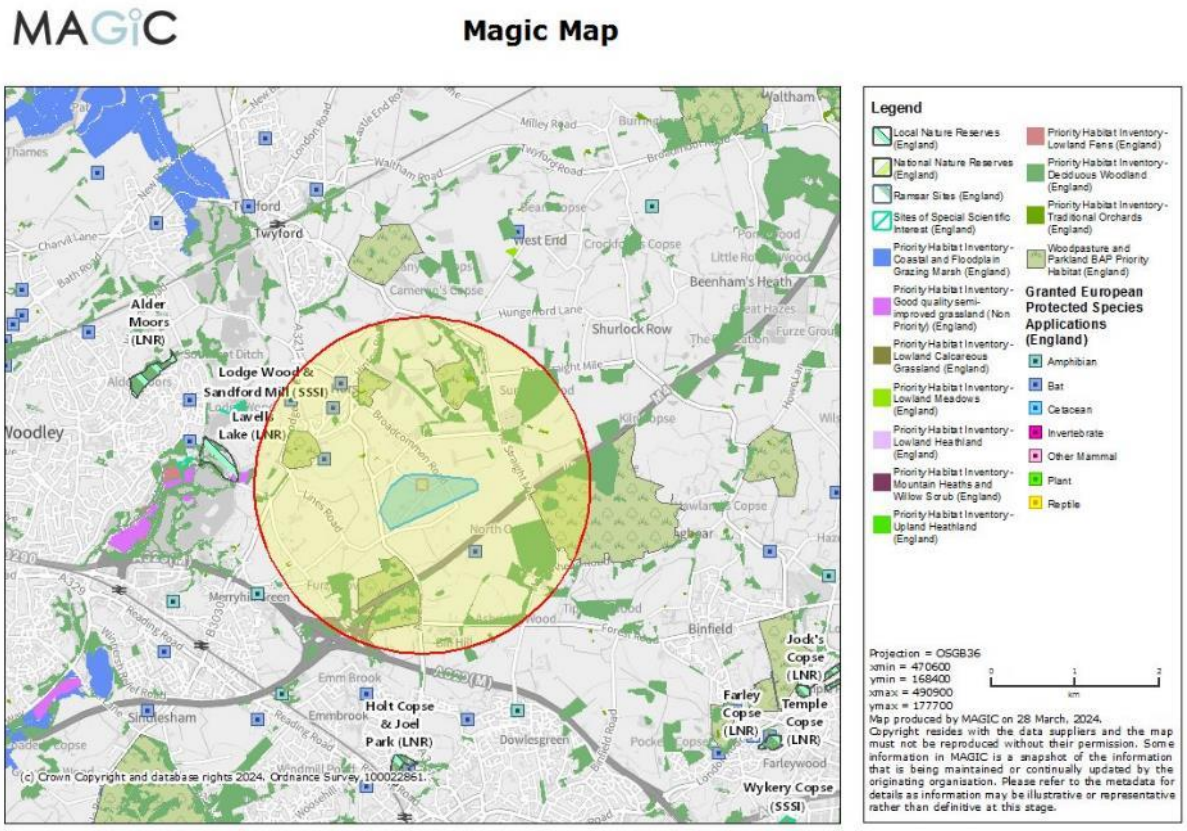

Figure 1: MAGiC

Based on the Berkshire Local Nature Recovery Strategy, the site does not fall within an area of opportunity for biodiversity, therefore, no strategic significance has been applied.

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, 2024) for full site details and to the separate Excel sheet for full condition assessments.

The following table summarises the baseline habitat, linear and watercourse values.

Table 3: Baseline Habitat Value

Baseline Units	Total Net Unit
Habitat Units	8.55
Hedgerow Units	0.31
River Units	1.38

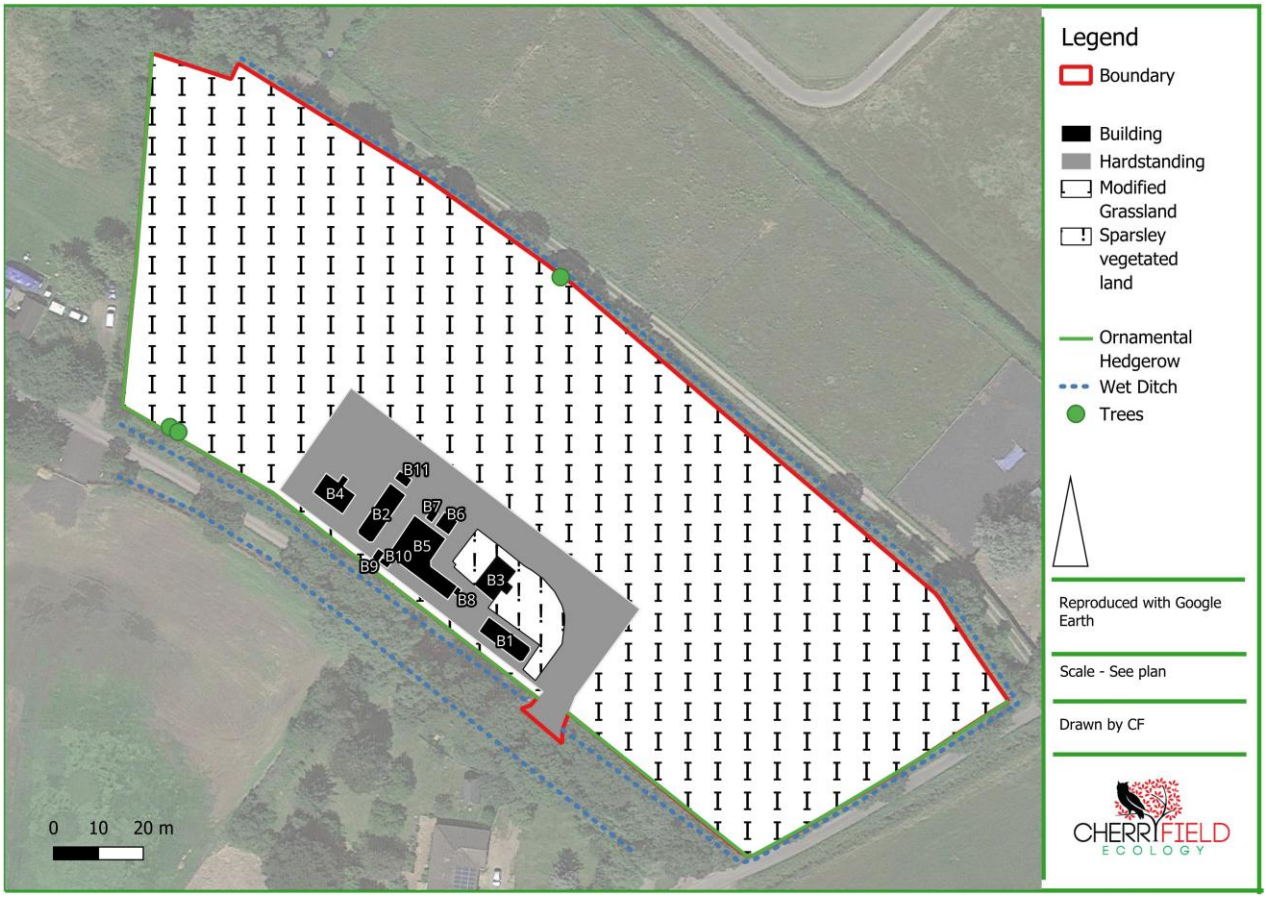

Figure 2: Baseline Habitats Site Plan

5.0 Post-Development Units

Proposed site plans "Nelson Lane Proposed Rev G" 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, linear and watercourse values.

Table 4: Post Development Habitat Value

Post Development Units	Total Net Unit
Habitat Units	9.41
Hedgerow Units	0.61
River Units	1.55

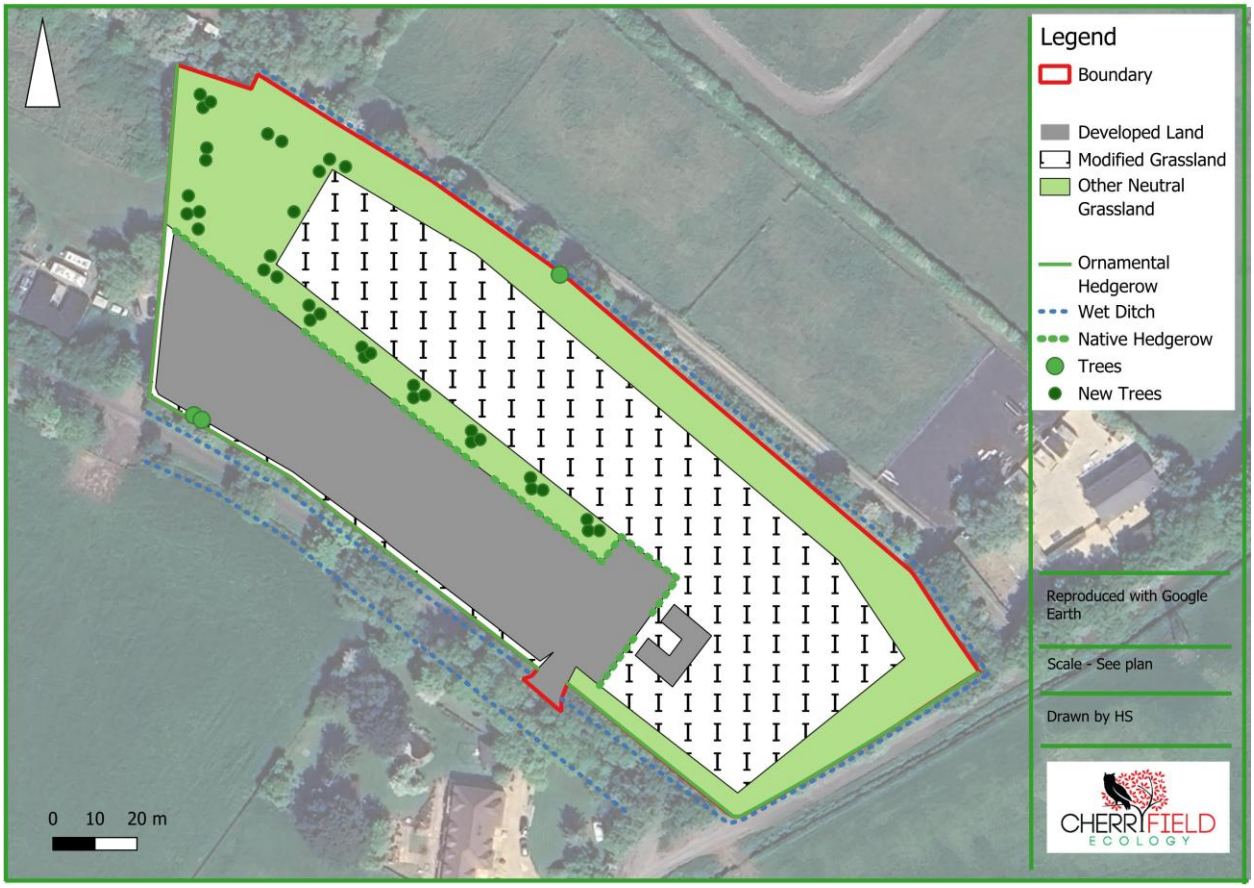

Figure 3: Proposed Habitats Site Plan

6.0 Results

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

BIA Units	Total Net Unit Change	Total Net % change
Habitat Units	+0.86	+10.09%
Hedgerow Units	+0.30	+97.43%
River Units	+0.17	+12.14%

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	Much of the modified grassland will be retained and will continue to be used for horse grazing. The ornamental hedgerows around the boundaries will also be retained and the occasional rural trees will be retained.
	Enhance	The grassland around the boundary of the horse paddock will be fenced off and enhanced to other neutral grassland and as a result the ditches around the boundaries will be enhanced due to the reduction in encroachment within the riparian zone.
Compensation	On-site creation	An extended area of developed land will be created, with a new stable building located in the paddock. A new length of short native hedgerow will be planted around the yard and new rural trees will be planted within the enhanced grassland.
	Off-site creation	**N/A**

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 +10% gain across all habitat types with the trading rules met and, therefore, meets this requirement.

8.0 References

Cherryfield Ecology (2024), Ecological Appraisal Report

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)

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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).

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