



# **Biodiversity Net Gain Design Stage Assessment (Update)**

**Land at:  
Wineham Lane  
Wineham  
West Sussex**



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| <b>Client</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Asa Pryke                       |                                |
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| <b>Revision No</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Status/Comment</b>           | <b>Date</b>                    |
| 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | First issue to client           | 1 <sup>st</sup> September 2026 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                 |                                |
| <p>The information, advice and opinions provided in this report are true and were prepared and provided in accordance with CIEEM's <a href="#">Code of Professional Conduct</a>. The opinions expressed are true and professional bona fide opinions.</p> <p>Future Nature Consulting Ltd is a limited company registered in England and Wales. Reg. number: 13079276.<br/>Reg. office: Pharmacy Chambers, High Street, Wadhurst, East Sussex, TN5 6AP</p> <p>Contact details:<br/>Email: <a href="mailto:peter@futurenatureconsulting.co.uk">peter@futurenatureconsulting.co.uk</a><br/>Mobile: 07342 679784</p> |                                 |                                |

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# Executive Summary

## Context

- The proposed development site is part of a former agricultural field.
- The proposal is to construct an agricultural building with associated access and parking.
- The habitats on site are 'Ruderal/Ephemeral', 'Bramble scrub', and 'Modified grassland'.

## BNG Baseline Assessment Outcome

- The assessment indicates that the baseline biodiversity value is 0.48 area habitat units.
- There would be a biodiversity net loss of -0.22 area habitats units without any habitat creation. This would be a biodiversity net loss of 45.8%.

## BNG Conclusions and Recommendations

- To achieve the minimum requirement of at least 10% Biodiversity Net Gain (BNG) an additional 0.27 units is required.
- The BNG requirement could be met through a number of different habitat creation scenarios.
- This report provides a scenario which entails the planting of 600m<sup>2</sup> of native shrubs, 6 native trees and 300m<sup>2</sup> of rough mown grass. This would result in an overall BNG of 21%, thus exceeding the mandatory requirement of at least 10%.
- This report and accompanying spreadsheets demonstrate to the Local Planning Authority that the mandatory BNG requirement could be met through onsite habitat creation.
- A Biodiversity Gain Plan will need to be prepared should planning permission be granted.

## 1 Introduction

- 1.1 The Environment Act 2021 introduced a requirement that all new development (unless exempt) must ensure that habitat for wildlife is in a better state than it was before development. The minimum requirement is that new development should result in a BNG of at least 10%. This can be achieved through:
- Protecting, enhancing or creating habitats on the development site or adjacent land in the ownership of the applicant; and/or,
  - Securing off-site habitat enhancement or creation through the purchase of biodiversity units from a habitat bank<sup>1</sup>; and/or,
  - Purchasing statutory credits<sup>2</sup> (as a last resort).
- 1.2 To determine which solution (or combination of solutions) would best meet the BNG requirement, the baseline biodiversity value of the site must be calculated and compared with the biodiversity value of the site after development using one of the statutory metrics<sup>3</sup>.
- 1.3 For the site at Wineham Lane, the Statutory Metric (the Metric)<sup>4</sup> has been used.
- 1.4 When using the Metric, the biodiversity value of a site can relate to three categories of habitat, all of which are calculated separately:
- Area habitats (e.g. woodland, grassland, etc.).
  - Hedgerows (and lines of trees).
  - Watercourses.
- 1.5 This report has been prepared by Peter Massini, a member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

## 2 Site Context

- 2.1 The site is land at Wineham Lane. The location is shown in Figure 1.
- 2.2 The proposal is for an agricultural building with parking and access. The proposed layout is shown in Figure 2.
- 2.3 This BNG Assessment has been informed by a Preliminary Ecological Appraisal<sup>5</sup>.

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<sup>1</sup> [Make off-site biodiversity gains as a developer - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/make-off-site-biodiversity-gains-as-a-developer)

<sup>2</sup> [Buy statutory biodiversity credits - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/buy-statutory-biodiversity-credits)

<sup>3</sup> [Statutory biodiversity metric tools and guides - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/statutory-biodiversity-metric-tools-and-guides)

<sup>4</sup> [The Small Sites Metric Statutory Biodiversity Metric - User Guide July 2025.pdf](#)

<sup>5</sup> *Preliminary Ecological Appraisal. Land at Wineham Lane, Wineham. West Sussex. Future Nature Consulting (February 2026).*

Fig. 1 – site location

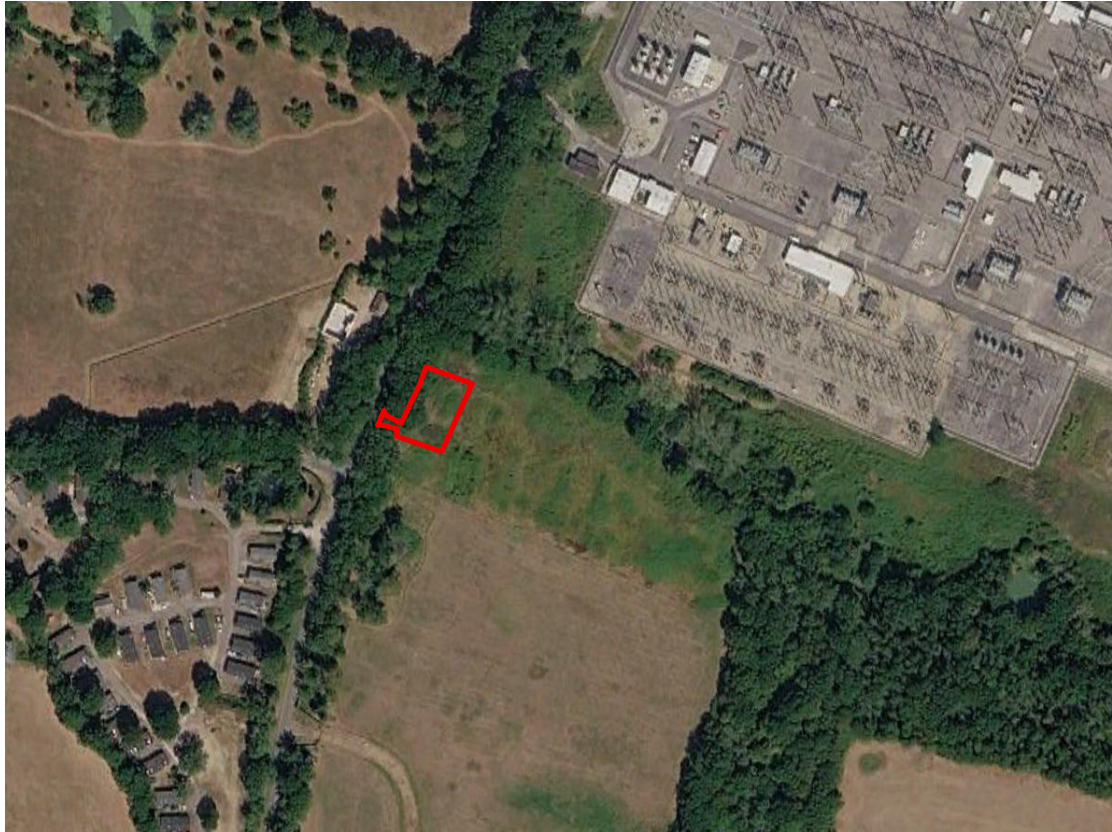
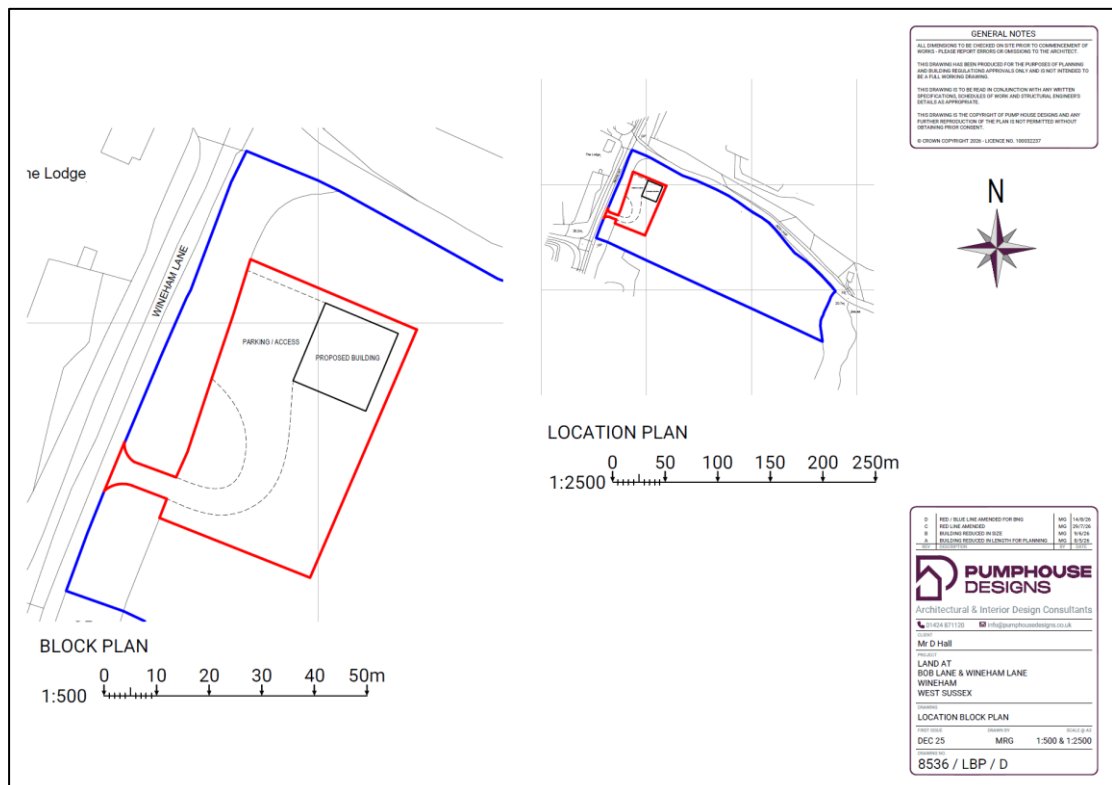


Fig.2 – proposed block plan



### 3 Approach to assessment

- 3.1 The calculation in this report is not a precise calculation of the BNG that would be achieved by the proposal as this can only be calculated once the final layout, including landscaping detail, is confirmed following grant of planning permission. However, it provides a good indication as to whether the proposed development could achieve the required BNG onsite and, if not, the options available for delivering the BNG requirement.
- 3.2 The Metric is used to determine the biodiversity value (measured in biodiversity units) of the development site before development (the baseline value) and the biodiversity value of the landscape that will be established on site as a result of the development (the post-development value). The biodiversity net gain, or loss, is the difference in the number of post-development units compared to the number of baseline units, expressed as a percentage.
- 3.3 If the calculation demonstrates that there would be a net loss of units, one of, or a combination of, the solutions identified in paragraph 1.1 must be implemented.
- 3.4 The determination of baseline biodiversity value is based on the habitats present on site at the time of a site survey or, if the site has been cleared, or partially cleared, any time after January 2020, the habitats that were present at that time. The requirement to undertake a retrospective assessment of the baseline biodiversity value if habitats have been lost since January 2020 is set out in paragraph 6 of Schedule 7A of the Town and Country Planning Act 1990<sup>6</sup>.
- 3.5 Evidence collected when undertaking the PEA, and subsequent examination of Google Earth imagery, demonstrates that there has been no such degradation. Consequently, the habitats present during the site visit are those relevant to this BNG assessment.

#### Baseline habitats

- 3.6 The baseline area habitats on site are 'Ruderal/Ephemeral', 'Modified grassland' and 'Bramble scrub'.
- 3.7 These are shown in the Baseline Habitat Map in Appendix 1.
- 3.8 There are no hedgerow or watercourse habitats on site.
- 3.9 To calculate the baseline units for the site, the following key determinants were inputted into the Metric:
- The area of each habitat.
  - The 'strategic significance' of the site based on whether it is within an area identified as a priority area for nature recovery. N.B. The land at Wineham Lane is not identified as being in any such area in the West Sussex Local Nature Recovery Strategy<sup>7</sup>.
  - Whether baseline habitats will be lost, retained or enhanced.
  - The 'distinctiveness' of each habitat.
- 3.10 These key factors are summarised in Table 1. For the full calculation see the Metric that accompanies this report titled *Statutory\_Metric (Update)\_Land at Wineham Lane-Wineham\_September2026.xlsx*.

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<sup>6</sup> [Town and Country Planning Act 1990 \(legislation.gov.uk\)](https://www.legislation.gov.uk/ukpga/1990/6)

<sup>7</sup> [Local Habitat Map West Sussex May26](#)

Table 1 – baseline area habitats

| Habitat            | Area (ha) | Condition | Lost, retained or enhanced | Notes                   |
|--------------------|-----------|-----------|----------------------------|-------------------------|
| Ruderal/Ephemeral  | 0.1       | Poor      | Lost                       | Majority of site        |
| Modified grassland | 0.03      | Moderate  | Lost                       | Along mown access route |
| Bramble scrub      | 0.04      | N/A       | Lost                       | Scattered patches       |

3.11 This results in a total of:

- 0.48 baseline area habitat units.

#### Proposed habitats

3.12 The site layout plan, shown in Fig. 2, p.3. shows that post development the site would comprise the new building and associated access and parking. Alone these would result in a net loss of biodiversity units as the existing habitats would be replaced by 'Developed land; sealed surface' and 'Artificial, unvegetated, unsealed surface' both of which score zero in the Metric.

3.13 Consequently, on-site habitat creation is required to achieve at least 10% BNG. The habitats that would be created are 0.06ha of 'Mixed scrub', 0.03 ha of 'Modified grassland' and 0.0244ha of 'Rural tree' (i.e. 6 new trees) all of which are anticipated to achieve Moderate condition.

3.14 The process for calculating the proposed habitats units is similar to that for the baseline habitat units but with additional factors relating to difficulty in creating habitats and the time it takes for habitats to become established.

3.15 The key factors that determine the proposed area habitats are summarised in Table 2 For the full calculation see the Metric that accompanies this report titled *Statutory\_Metric (Update)\_Land at Wineham Lane-Wineham\_September2026.xlsx*.

Table 3 – proposed area habitats

| Habitat                                  | Area (ha) | Anticipated Condition | Difficulty of creation | Notes                                             |
|------------------------------------------|-----------|-----------------------|------------------------|---------------------------------------------------|
| Developed land; sealed surface           | 0.025     | n/a                   | Low                    | New building                                      |
| Artificial unvegetated, unsealed surface | 0.045     | n/a                   | Low                    | New access and parking                            |
| Mixed scrub                              | 0.06      | Moderate              | Low                    | Mix of hawthorn, guelder rose, dogwood and hazel  |
| Rural tree                               | 0.0244    | Moderate              | Low                    | Six native trees e.g. crab apple and silver birch |
| Modified grassland                       | 0.03      | Moderate              | Low                    | Rough mown grass                                  |

3.16 This results in a total of:

- 0.58 proposed area habitat units.

#### Calculation and Score

3.17 The value of the baseline habitat units is 0.48 and the proposed habitat units is 0.58.

3.18 The biodiversity net gain (or loss) score is derived by taking the baseline total from the proposed total, dividing this by the baseline total, and multiplying by 100, as shown below:

Area habitat:  $0.58 - 0.48 = 0.1$   $(0.1 \div 0.48) \times 100 = 20.9$

3.19 Consequently, the scheme, without any habitat creation, would result in a 21% BNG for area habitats.

3.20 This is shown in Figure 3 – the Headline Results from the Metric.

Fig.3 – headline results

Land at Wineham Lane

Headline Results

Scroll down for final results ▲

Return to results menu

|                                                                                                          |                    |        |        |
|----------------------------------------------------------------------------------------------------------|--------------------|--------|--------|
| On-site baseline                                                                                         | Area habitat units | 0.48   |        |
|                                                                                                          | Hedgerow units     | 0.00   |        |
|                                                                                                          | Watercourse units  | 0.00   |        |
| On-site post-intervention<br>(Including habitat retention, creation & enhancement)                       | Area habitat units | 0.58   |        |
|                                                                                                          | Hedgerow units     | 0.00   |        |
|                                                                                                          | Watercourse units  | 0.00   |        |
| On-site net change<br>(units & percentage)                                                               | Area habitat units | 0.10   | 20.90% |
|                                                                                                          | Hedgerow units     | 0.00   | 0.00%  |
|                                                                                                          | Watercourse units  | 0.00   | 0.00%  |
| Off-site baseline                                                                                        | Area habitat units | 0.00   |        |
|                                                                                                          | Hedgerow units     | 0.00   |        |
|                                                                                                          | Watercourse units  | 0.00   |        |
| Off-site post-intervention<br>(Including habitat retention, creation & enhancement)                      | Area habitat units | 0.00   |        |
|                                                                                                          | Hedgerow units     | 0.00   |        |
|                                                                                                          | Watercourse units  | 0.00   |        |
| Off-site net change<br>(units & percentage)                                                              | Area habitat units | 0.00   | 0.00%  |
|                                                                                                          | Hedgerow units     | 0.00   | 0.00%  |
|                                                                                                          | Watercourse units  | 0.00   | 0.00%  |
| Combined net unit change<br>(Including all on-site & off-site habitat retention, creation & enhancement) | Area habitat units | 0.10   |        |
|                                                                                                          | Hedgerow units     | 0.00   |        |
|                                                                                                          | Watercourse units  | 0.00   |        |
| Spatial risk multiplier (SRM) deductions                                                                 | Area habitat units | 0.00   |        |
|                                                                                                          | Hedgerow units     | 0.00   |        |
|                                                                                                          | Watercourse units  | 0.00   |        |
| FINAL RESULTS                                                                                            |                    |        |        |
| Total net unit change<br>(Including all on-site & off-site habitat retention, creation & enhancement)    | Area habitat units | 0.10   |        |
|                                                                                                          | Hedgerow units     | 0.00   |        |
|                                                                                                          | Watercourse units  | 0.00   |        |
| Total net % change<br>(Including all on-site & off-site habitat retention, creation & enhancement)       | Area habitat units | 20.90% |        |
|                                                                                                          | Hedgerow units     | 0.00%  |        |
|                                                                                                          | Watercourse units  | 0.00%  |        |
| Trading rules satisfied?                                                                                 | Yes ✓              |        |        |

| Unit Type          | Target | Baseline Units | Units Required | Unit Deficit |                                                            |
|--------------------|--------|----------------|----------------|--------------|------------------------------------------------------------|
| Area habitat units | 10.00% | 0.48           | 0.53           | 0.00         | No additional area habitat units required to meet target ✓ |
| Hedgerow units     | 10.00% | 0.00           | 0.00           | 0.00         | No additional hedgerow units required to meet target ✓     |
| Watercourse units  | 10.00% | 0.00           | 0.00           | 0.00         | No additional watercourse units required to meet target ✓  |

## 4 Recommendations for achieving mandatory BNG

4.1 The proposal would meet the mandatory requirement of at least 10% BNG through the implementation of a habitat creation/landscaping scheme involving the following elements:

- An area of 600m<sup>2</sup> of mixed scrub planted to the south of the proposed agricultural building, comprising native shrubs such as hawthorn *Crataegus monogyna*, guelder rose *Viburnum opulus*, dogwood *Cornus sanguinea* and hazel *Corylus avellana*.
- Six native trees (e.g. crab apple *Malus sylvestris* and silver birch *Betula pendula*) planted along the access track.
- An area of 300m<sup>2</sup> maintained as rough mown grass around the building and adjacent to the access track.

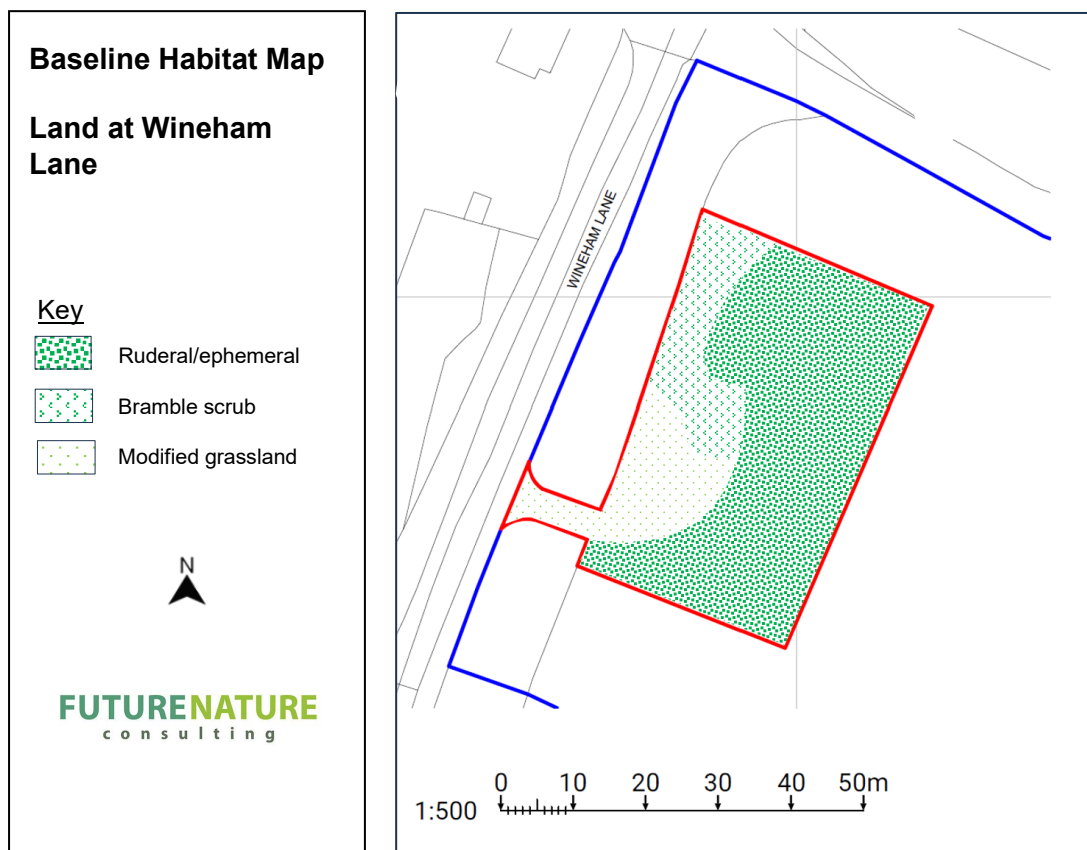
- 4.2 Demonstrating exactly how the statutory BNG requirement will be achieved will be a pre-commencement planning condition. A Biodiversity Gain Plan<sup>8</sup> will need to be produced should planning permission be granted.

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<sup>8</sup> [Submit a biodiversity gain plan - GOV.UK](#)

# APPENDIX 1

## Baseline Habitat Map



## APPENDIX 2

### Proposed habitat creation





Director: Peter Massini MCIEEM

This report has been prepared and provided in accordance with the Chartered Institute of Ecology and Environmental Management's Code of Professional Conduct. I confirm that the opinions expressed are true and professional opinions.