AEWC Ltd

Animal Ecology & Wildlife Consultants

Biodiversity Net Gain Assessment

Land Adjacent to Horsham Road

Five Oaks
Horsham
West Sussex

Natalie Arscott

24-116
May 2025

AEWC Ltd Birch Walk, Lower Street, Fittleworth, West Sussex, RH20 1JE
Tel:08452 505585, info@aewc.co.uk , www.aewc.co.uk

Registered in England and Wales No. 06527840

Contents

Summary 2
1. Introduction 3
2. Background 3
3. Method and Constraints 5
4. Habitat Data 6
5. Results 7
6. Conclusions & Recommendations 8
7. Habitat Creation and Management 8
References 10

FIGURE 1: SHOWING THE SITE LOCATION 3
FIGURE 2: AERIAL VIEW OF THE SITE SHOWING THE BOUNDARY 4
FIGURE 3: PROPOSED WORKS 5
FIGURE 4: BASELINE ON-SITE HABITATS 6
FIGURE 5: POST-DEVELOPMENT ON-SITE HABITATS 7

Author	Natalie Arscott
Authorised by	Ivana Murphy
Report and version number	24-116-BNG-v3
Survey Date	02/10/2024

Summary

- AEWC Ltd were commissioned by Batcheller Monkhouse on behalf of their client to undertake a Biodiversity Net Gain Assessment at Land adjacent to Horsham Road, Five Oak, Horsham at grid reference TQ 10235 28627 to help inform the proposed development of the site.

- The estimated existing and post-development biodiversity value of the habitats on the site is calculated using the Defra Statutory Biodiversity Metric Calculation Tool.

- The proposed development involves the creation of a gateway within the existing hedgerow and a 12m x 5m hard standing access track into the field, to allow agricultural machinery to access the land. This will involve the removal of an approximate 5m length of species-rich native hedgerow and a small area of arable land and grass verge.

- Ecological enhancements built into the development design include the planting of new species-rich native hedgerows either side of the proposed access track and two new trees in the field close to either side of the access track. In terms of the BNG metric, these are sufficient to offset the loss of the existing habitats on the site.

- **The headline results indicate that there is an estimated positive (i.e. gain) BNG of 18.40% for habitat units**.

- **The hedge-line results show an estimated increase of 0.12 hedgerow units which corresponds to a 49.67% gain**.

- **Trading rules have been satisfied.**

This report has been prepared by AEWC Limited, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the 'Guidelines for Preliminary Ecological Appraisal' and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1. Introduction

1.1 AEWC Ltd were commissioned by Batcheller Monkhouse on behalf of their client to undertake a Biodiversity Net Gain Assessment at Land adjacent to Horsham Road, Five Oaks, Horsham to help inform the proposed development of the site.

1.2 The purpose of this report is to give an estimate of the BNG units that may be achieved under the current development proposals, where a BNG of +10% is not achieved suggestions for additional ecological enhancement are provided.

2. Background

2.1 A Protected Species Walkover Survey with habitat mapping and condition assessment was conducted by AEWC Ltd in October 2024.

2.2 The proposed development site is located at Land adjacent to Horsham Road, Five Oaks, Horsham, West Sussex at central grid reference TQ 10235 28627. The site is located in a rural area adjacent to the A264 Horsham Road in Five Oaks, 350m east of the A29. The surrounding landscape comprises predominantly agricultural land with blocks of woodland, scattered residential and commercial properties, and a fishery to the northeast. See Figure 1.



FIGURE 1: SHOWING THE SITE LOCATION

2.3 The proposed development site is approximately 0.034ha and comprises predominantly an arable field, which was winter stubble at the time of the survey, a modified grassland verge adjacent to Horsham Road, and a species-rich native

hedgerow separating the arable field from the road and grass verge. See Figure 2 and Photos 1 and 2.



FIGURE 2: AERIAL VIEW OF THE SITE SHOWING THE BOUNDARY



Photo 1: Winter stubble.



Photo 2: Modified grassland and species-rich native hedgerow.

2.4 The proposed development plan involves the creation of a gateway within the existing hedgerow and a 12m x 5m hard standing access track into the field, to allow agricultural machinery to access the land. This will involve the removal of an approximate 5m length of hedgerow and a small area of arable land and grass verge. See Figure 3.

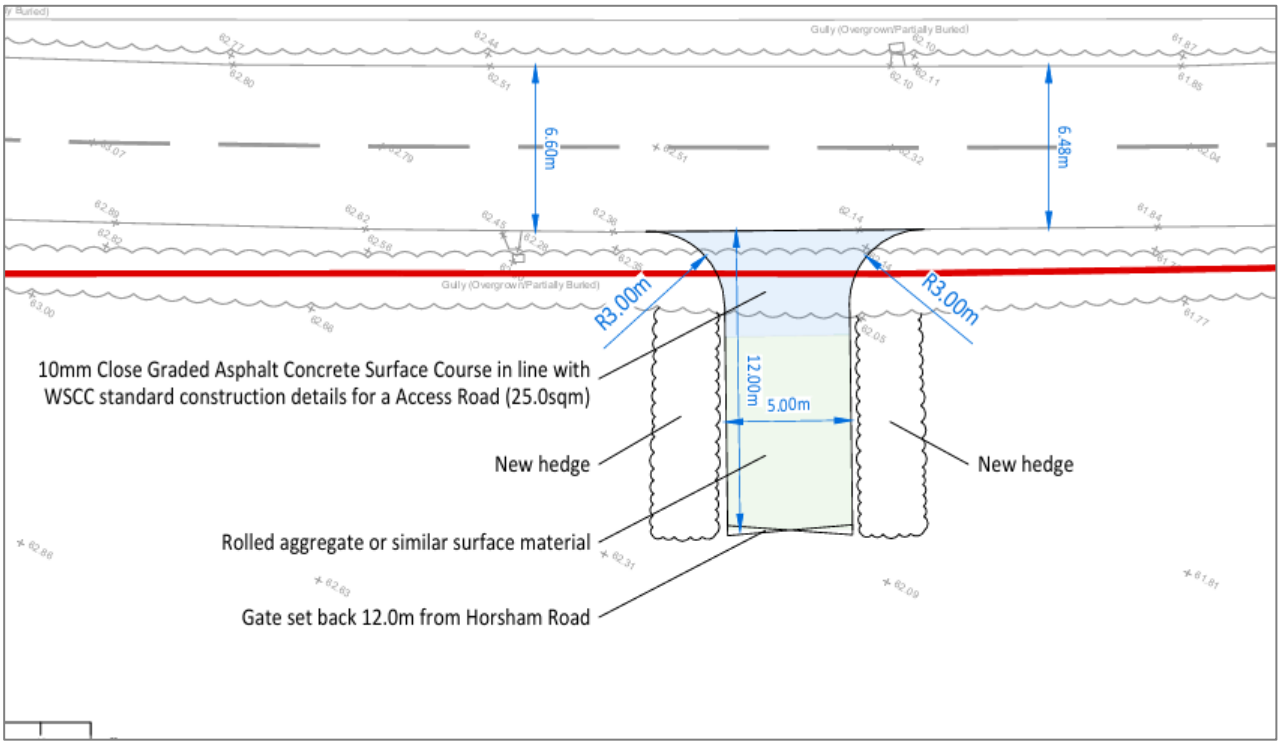


FIGURE 3: PROPOSED WORKS

3. Method and Constraints

3.1 The estimated existing and post-development biodiversity value of the habitats on the site is calculated using the Defra Statutory Biodiversity Metric Calculation Tool. Habitat condition was assessed using the Statutory Biodiversity Metric – Technical Annex 1 Condition Assessment Sheets.

3.2 The following assumptions have been made and therefore associated constraints should be considered when looking at BNG unit values obtained:

- The potential for protected and notable species is not covered within the scope of this report;
- Existing habitats on-site are taken from those identified within the survey undertaken in October 2024;
- Post-development habitats have been inferred from those given with the Proposed Site Layout as shown in Figure 3;
- All areas and lengths are approximate;
- Areas in hectares and length in km are both given to four decimal places, therefore rounding errors and occasional adjustments to values, to ensure consistency of total areas in existing and post-development habitat size, are unavoidable;
- Habitat quality has been estimated in some instances (i.e. for post-development habitats);
- Tree areas are calculated using the tree helper tool within the metric; and
- The area of planted trees was estimated using small trees in the tree helper tool.

3.3 Given the above constraints the values for BNG obtained should be considered to be an **estimate** only.

3.4 Calculations may need to be adjusted in future should the BNG metrics or requirements be revised.

4. Habitat Data

4.1 The baseline and post-development habitats used for this assessment are illustrated in Figures 4 and 5 respectively.



FIGURE 4: BASELINE ON-SITE HABITATS

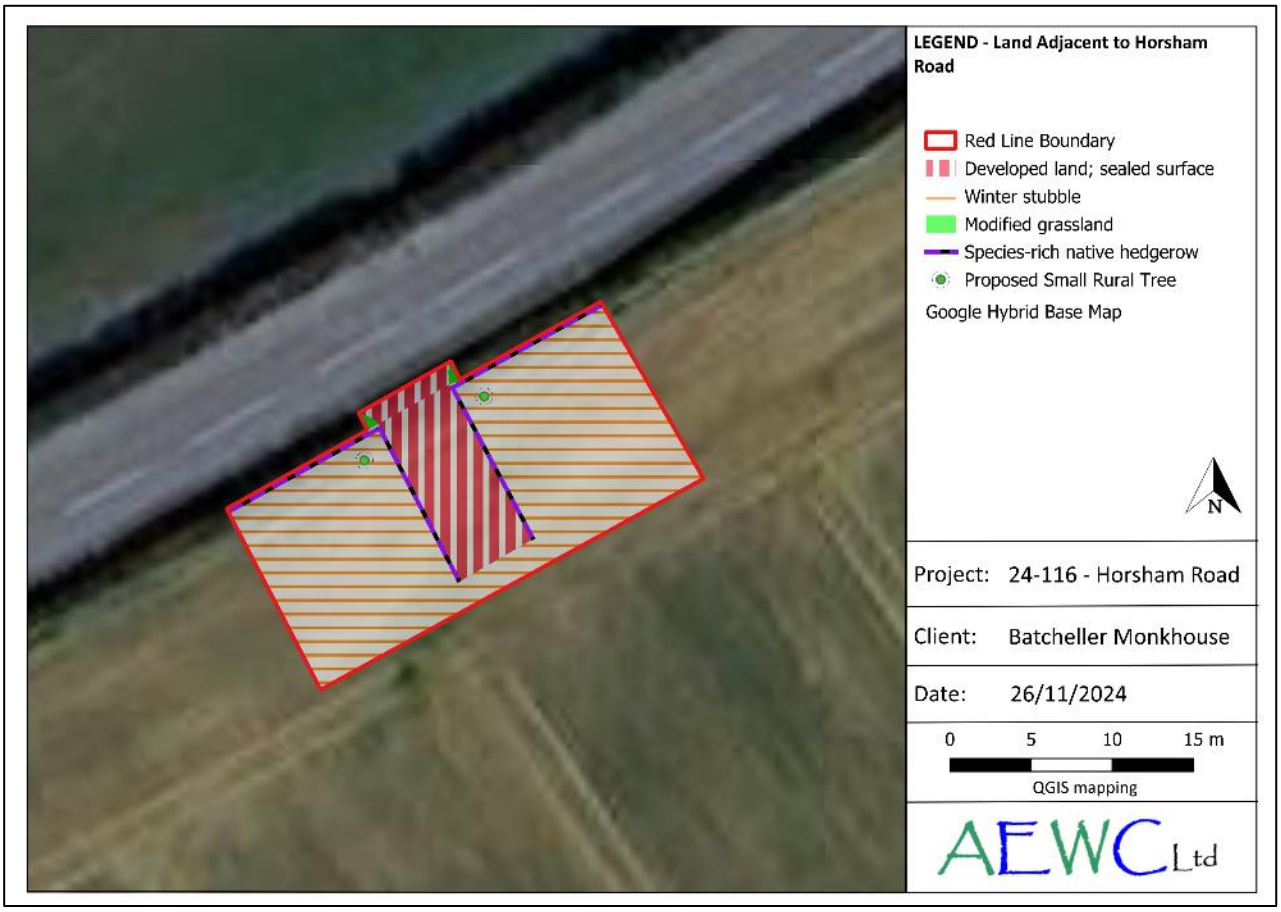


FIGURE 5: POST-DEVELOPMENT ON-SITE HABITATS

5. Results

5.1 The headline results using the above habitats and calculations are given below (refer to the metric for full details).

Table 1: Headline estimated BNG values

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	0.01
	Hedgerow units	0.12
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	18.40%
	Hedgerow units	49.67%
	Watercourse units	0.00%
Trading rules satisfied?	Yes ✓	

6. Conclusions & Recommendations

6.1 The development includes the loss of a 5m length of species-rich native hedgerow and a small area of modified grassland and cropland (winter stubble), to create a gateway and hard standing access track.

6.2 Ecological enhancements built into the development design include the planting of new species-rich native hedgerows either side of the proposed access track and two new trees in the field close to either side of the access track. In terms of the BNG metric, these are sufficient to offset the loss of the existing habitats on the site.

6.3 **The headline results indicate that there is an estimated positive (i.e. gain) BNG of 18.40% for habitat units**.

6.4 **The hedge-line results show an estimated increase of 0.12 hedgerow units which corresponds to a 49.67% gain**.

6.5 **Trading rules have been satisfied**.

6.6 In England BNG is becoming mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). This came into force in February 2024 for major developments and April 2024 for minor developments. Under the legislation developers must deliver a biodiversity net gain of 10%.

7. Habitat Creation and Management

Hedgerows

7.1 **The retained hedgerow and newly planted hedgerows will all be protected from the works** area with heras fencing or similar. The fence will remain until the completion of all construction works and will be in line with BS 5837:12 to ensure all root protection zones are adequately protected.

7.2 New hedgerow planting should take place between October and March, and ideally January. Avoid planting in freezing weather or when the ground is waterlogged.

7.3 The new hedgerows are to be ‘species-rich’ and therefore must be composed of at least five UK native woody species.

7.4 The new hedgerows must then be trimmed once to twice a year for the first five years in winter, early spring or late autumn outside of nesting bird season (March to August), or at the end of summer to ensure a dense structure.

7.5 After the first five years, the hedging should then be cut on a three-year rotation, cutting no more than 1/3 of the hedging within the site each time, avoiding nesting bird season. Once established, each section of hedging should be trimmed on all sides every three years and should aim to be maintained at least 1.5m wide. Any large gaps which begin to appear should be planted up with suitable species.

7.6 This cutting regime will ensure that a good yield of berries and flowers are produced by the hedgerow every year and that diverse hedgerow structures and heights are present for wildlife within the local area. It will also ensure the new hedgerows meet the criteria for ‘moderate’ condition in line with the BNG metric.

Planting and establishing trees

7.7 Correct planting and aftercare are crucial to the long-term survival of the two new trees. The new trees must be UK native species.

7.8 Bare-rooted trees should be planted between November and March, with the roots kept cool and moist before planting. Container trees can be planted throughout the year, but if planted in the summer they will need a lot more watering. Planting should not be carried out during periods of frost.

7.9 Prior to planting, vegetation must be cleared in a one-metre circle where the tree will be planted. Competition for water and nutrients can severely affect trees, particularly when young. This circle around the tree should therefore be kept clear of grass and weeds for at least three years after planting, through weed-suppressant matting, application of a thick mulch or regular weeding.

7.10 Where the soil structure is good, maidens can be notch-planted. For larger trees, and where soil structure needs to be improved, a hole of sufficient size to accommodate the roots without bending them is required.

7.11 Trees should be staked with a short stake of no more than 30 cm above ground level. This will allow the tree to flex and strengthen the trunk and roots. When planting, the final soil level must be no higher than the root collar. The tree should be watered regularly and thoroughly for the first few weeks and during any dry spells for the next year.

7.12 Tree guards will be required to protect trees from wild animals, which eat the leaves and bark, and rub against the tree. Guards should be checked regularly as the trees grow and adjusted if they are causing the tree any damage.

7.13 Once trees are established, the sward can be allowed to grow up to the trunk and there should be no need to apply fertilisers. Guards should be maintained for at least 10 years.

7.14 Should the trees fail at any point in the next 30 years, they must be replaced.

7.15 BNG targets will be met providing the two trees persist and are not subject to human activities that impact on their health, such as herbicide or aggressive pruning.

References

CIEEM (2013) *Competencies for Species Survey guidance documents*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2021) *Good Practice Guidance for Habitats and Species*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2022) *Code of Professional Conduct*. Chartered Institute of Ecology and Environmental Management, Winchester

Department for Communities and Local Government (2012). *National Planning Policy Framework.* Department of Communities and Local Government, London.

DEFRA (2023) *Defra Biodiversity Statutory Metric Auditing and accounting for biodiversity calculation Tool*

UKHab Ltd (2023). *The UK Habitat Classification Version 2.0 (at https://www.ukhab.org)*