AEWC Ltd

Animal Ecology & Wildlife Consultants

Biodiversity Net Gain Assessment

Flagstones

North Heath Lane
Horsham
West Sussex
RH12 5PQ

Thomas Wright

24-161
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Summary

- AEWC Ltd were commissioned by Mark Winskill to undertake a Biodiversity Net Gain Assessment at Flagstones, North Heath Lane, Horsham, West Sussex, RH12 5PQ at grid reference TQ 17961 32217 to help inform the proposed development of the site.

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

- The development includes the demolition of the single storey garage to make way for the construction of a single detached residential dwelling with associated parking and amenity gardens. In addition, three parking spaces will be created for the existing dwelling within the southwest corner of the site with a further spaces two spaces to the north. The existing trees and introduced shrub will be retained.

- No specific ecological enhancements can be included, since all vegetated areas will be within private gardens. In terms of the BNG metric, this is not sufficient to offset the loss of the baseline habitats on the site. Trading rules have not been satisfied.

- **The headline results indicate that there is an estimated net loss of 8.14% for habitat units**.

- **There is currently a deficit of 0.02 habitat units to reach a 10% gain. If an acceptable gain is not possible to achieve on-site, off-site units or credits may be purchased to offset the losses with agreement from the local planning authority.**

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 Mark Winskill to undertake a Biodiversity Net Gain Assessment at Flagstones, North Heath Lane, Horsham, West Sussex 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 The proposed development site is located at Flagstones, Norh Heath Lane, Horsham, West Sussex RH12 5PQ at central grid reference TQ17958 32216. The site is located in the town of Horsham in West Sussex and is approximately 1.3km from the A24. The surrounding landscape comprises residential and commercial development with associated amenity facilities and Warnham Local Nature Reserve and a golf course to the west of the site. See Figure 1.

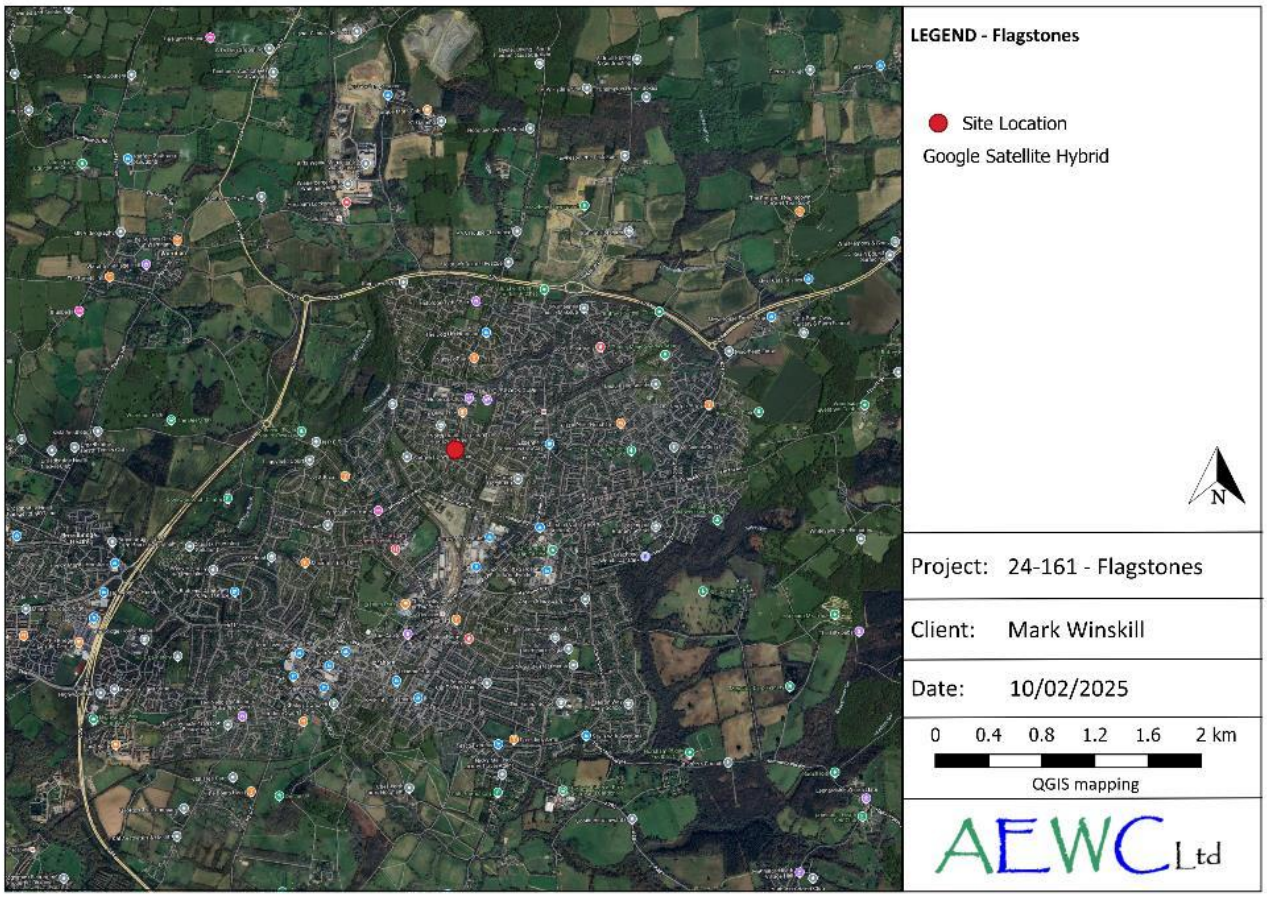

FIGURE 1: SHOWING THE SITE LOCATION

2.2 The proposed development site is approximately 0.096ha and comprises two buildings – a double storey detached residential property and a single storey garage. The residential property is surrounded by vegetated garden with introduced shrubs

along the eastern boundary of the property. Existing areas of sealed surface surround the property with additional sealed surface acting as parking areas within the northwest and northeast corners of the site. See Figure 2 and Photos 1 through to 4.

FIGURE 2: AERIAL VIEW OF THE SITE SHOWING THE BOUNDARY

Photo 1: Vegetated garden west section of site

Photo 2: Sealed surface and two small non-native trees to the south

	
Photo 3: Sealed surface surrounding the property, west elevation	**Photo 4:** Sealed surface to the west of the garage.

2.3 The proposed development plan involves of the demolition of the single storey garage to make way for the construction of a single detached residential dwelling with associated parking and amenity gardens. In addition, three parking spaces will be created for the existing dwelling within the southwest corner of the site with a further spaces two spaces to the north. The existing trees and introduced shrub will be retained. See Figure 3.

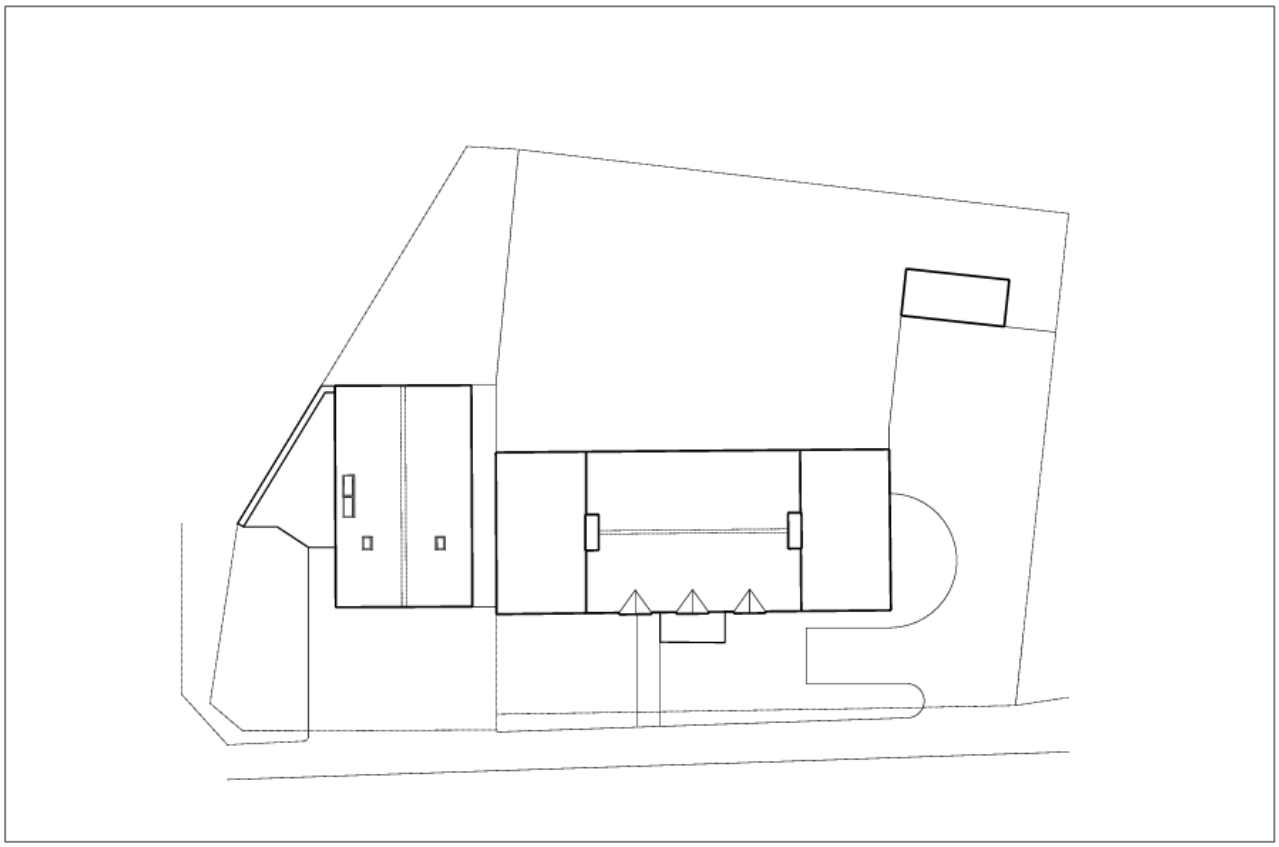

FIGURE 3: PROPOSED WORKS

3. Method and Constraints

3.1 The estimated baseline and post-development biodiversity value of the habitats on the site is calculated using the Defra Statutory Biodiversity Metric Calculation Tool / Defra Statutory Biodiversity Small Site 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;
- Baseline habitats on-site are taken from those identified within the survey undertaken in January 2025;
- 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 lengths in km are both given to four decimal places, therefore rounding errors and occasional adjustments to values, to ensure consistency of total areas in baseline and post-development habitat size, are unavoidable;
- Habitat quality has been estimated in some instances (i.e. for post-development habitats); and
- Tree areas are calculated using the tree helper tool within the metric. Within private gardens only medium and large trees are included within mapping and calculations.

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.

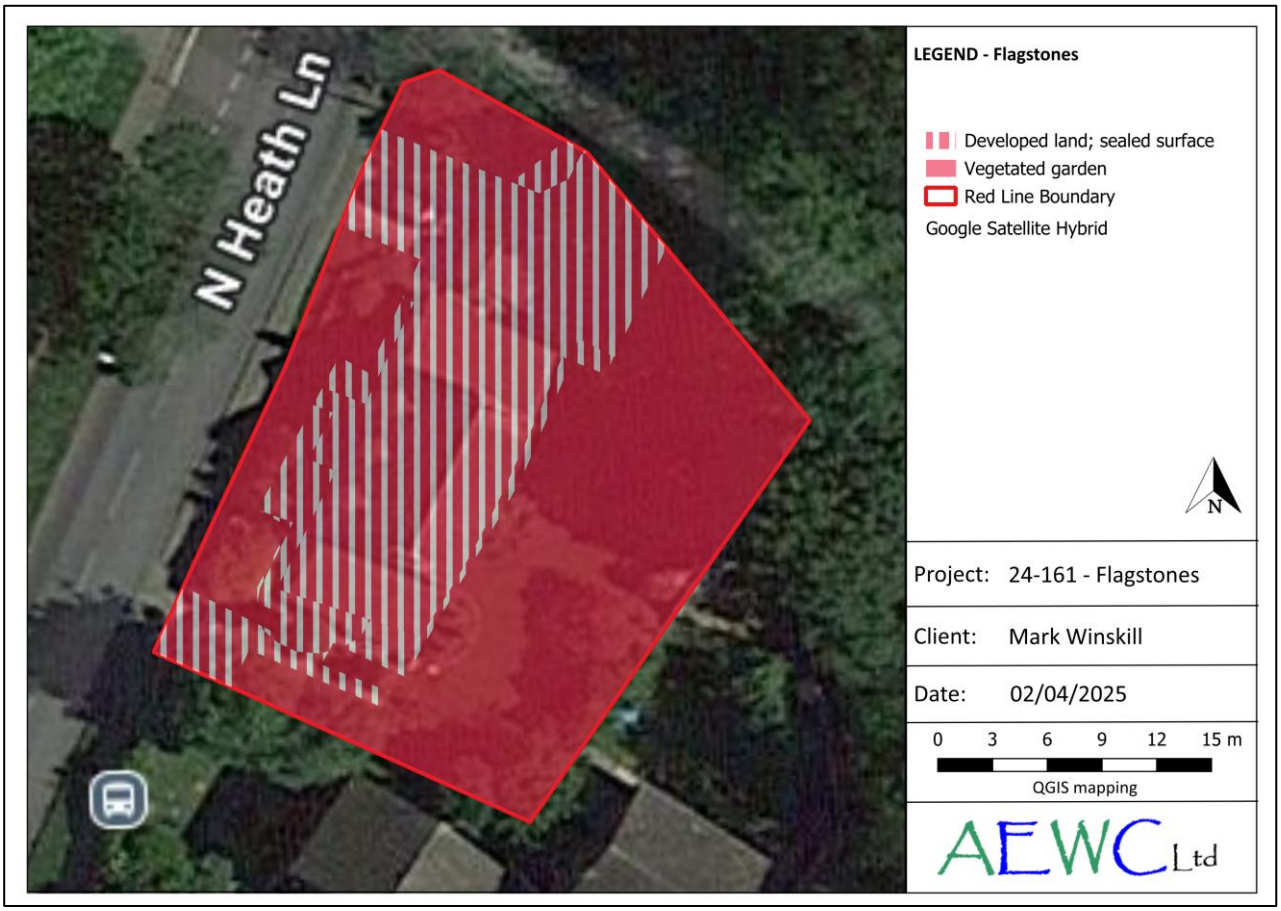

FIGURE 4: BASELINE ON-SITE HABITATS

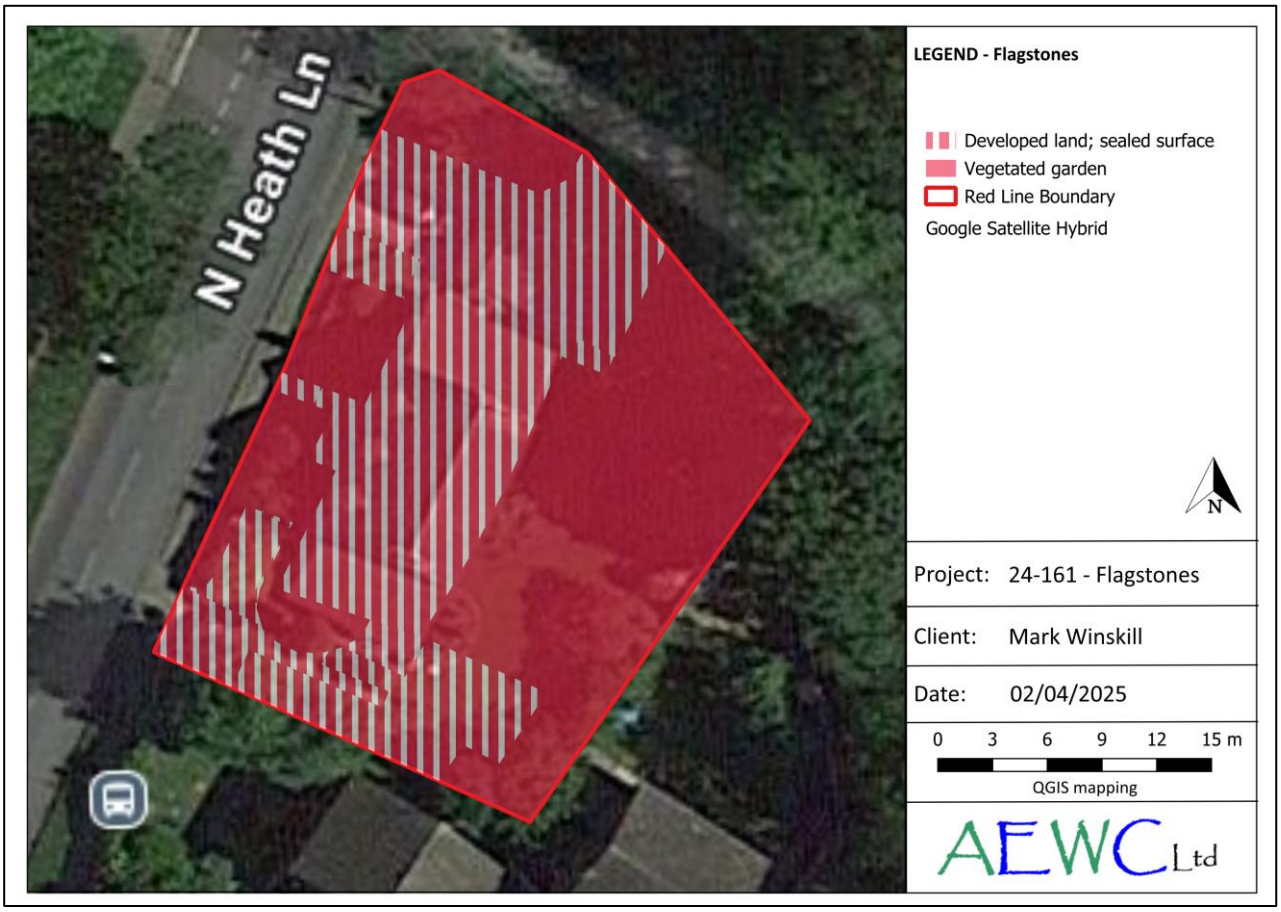

FIGURE 5: POST-DEVELOPMENT ON-SITE HABITATS

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	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-8.14%
	Hedgerow units	0.00%
	Watercourse units	0.00%

6. Conclusions & Recommendations

6.1 The development includes the demolition of the garage, construction of a single detached dwelling and the creation of five parking spaces. Small parcels of vegetated garden will be lost within the northwest and southwest corners of the site.

6.2 No specific ecological enhancements can be included, since all vegetated areas will be within private gardens. In terms of the BNG metric, the plans are not sufficient to offset the loss of the baseline habitats on the site. Trading rules have not been satisfied.

6.3 **The headline results indicate that there is an estimated net loss of 8.14% for habitat units**.

6.4 The BNG value achievable on the site can be increased by reducing the built footprint and / or increasing the area or quality of the habitats post-development. Some examples include:

- Including green roofs
- Replacing areas of hard standing with planted surface

6.5 In England BNG is 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%.

6.6 There is currently a deficit of 0.02 habitat units to reach a 10% gain. If an acceptable gain is not possible to achieve on-site, off-site units or credits may be purchased to offset the losses with agreement from the local planning authority.

Table 2: Headline unit results

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.09	0.10	0.02
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

7. Wildlife Enhancements

Bats and Birds

7.1 To enhance the site for bats and birds known to be present within the local area it is recommended that a bat boxes and a bird boxes be installed within the site. Boxes could be installed on existing retained trees within the site or integrated into the new development.

7.2 Ideally bat boxes would be woodcrete or similar hard-wearing material (rather than the less durable wooden boxes) and should be installed at least 3m above the ground (where safe installation is possible), sheltered from strong winds and exposed to the sun for part of the day (usually south or south-west facing).

7.3 Example tree-mounted bat boxes are shown below: Schwegler 1FF bat box (below left, suitable for pipistrelle bats *Pipistrellus sp*.), and a Schwegler 2F bat box (below right, suitable for long-eared bats *Plecotus sp.*), or similar bat boxes.

7.4 Example integrated bat boxes are shown below: Integrate Eco Bat Box (below left), Habibat Bat box - Plain for rendering (below centre) and a Schwegler 1WI Summer and Winter bat box (below right) or similar bat boxes.

7.5 Tree-hung bird boxes should comprise a mix of traditional ‘32mm round-holed’ (below left: which are suitable for tits, sparrows, redstarts and nuthatches) and open-fronted boxes (below right: these are suitable for pied wagtails, robins and wrens) and also ideally be woodcrete or similar hard wearing material (rather than the less durable traditional wooden boxes). Boxes should be installed with an aluminium nail or screw to prevent tree damage between 2m and 4m above ground for round-holed and low down, below 2m, well hidden in vegetation for open-fronted boxes and (unless shaded by buildings or trees) be facing north or east.

7.6 Integrated bird boxes should comprise of swift bricks which are suitable for a range of species (below left), these should be installed at a minimum of 4m above the ground, north or east facing and with open flight access, or sparrow terraces (below centre) which should be installed in line with vegetation such as trees or hedge lines to allow the birds the use of jumping off points and be installed a minimum of 3m above the ground on a north or east elevation. Where suitable overhanging eaves are present house martin cups (below right) may also be suitable.

References

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