

Wheatlands, Shalbourne

Biodiversity Net Gain Plan



4th March 2026

Document control

Project title	Wheatlands – Biodiversity Net Gain Plan	
Client	Mr & Mrs Dunne	
Project number	5951	
Version number	5951.5	
Date of issue	4 th March 2026	
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Declaration	I confirm that the information provided in this document is truthful and accurate at the time of completion.	
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Contents

1. Introduction	5
2. Personnel	7
3. Planning and Legislation	7
4. Methodology.....	8
5. On-Site biodiversity.....	9
6. Off-site biodiversity	11
7. Biodiversity Net Gain	14
8. Habitat Mitigation	16
9. References.....	19

Executive summary	
Purpose of report	To provide a Biodiversity Net Gain (BNG) Plan for the proposed development site, involving: • Details of the proposed development • On and off-site pre-development biodiversity • On and off-site post-development biodiversity • How BNG will be achieved • Mitigation and enhancement measures for the development.
Context of report	The site contains a two-storey family home with a large garden to the east, south and west aspects. The north of the house was comprised of a paved driveway leading to two other single storey buildings. It was mostly comprised of a mix of modified and neutral grassland to the east and south of the site, bordered by native hedgerows separating it from Rivar Road running to the west. The proposed development and alterations to the site were as follows: • Demolition of two storey residential annex/garage, stable buildings and workshop, in association with alterations and extensions to the host dwelling.
Methodology	• The BNG metric was run using baseline conditions collected in the Preliminary Ecological Appraisal (PEA). • The open-source Geographic Information System, QGIS was used to map the pre-development and post-development UKHabitat 2.0 habitat maps and obtain the areas of each habitat. • Results from the metric including any credits required, mitigation and enhancement measures were recommended.
On-site biodiversity	The total on-site area measured 3900 m² which was comprised of a two-storey main house, a two-storey cottage, a stable block, timber garage, timber shed and timber stables. This is shown in the red line boundary in Figure 1.
Off-site biodiversity	The off-site habitats measured 24,600 m² and was comprised of g4 - modified grassland, bordered by g3c6 - Lolium-Cynosurus neutral grassland. This is shown in the blue line boundary in Figure 1.
Biodiversity Net Gain	Based on the data presented, the proposed project will yield a 628.89% Net Gain in Biodiversity Net Gain on and off Site, see Figure 7 below for the results output of the Statutory Small Sites Biodiversity Net Gain Metric. No credits need to be purchased for the development to achieve BNG.

1. Introduction

1.1. Background

1.1.1. In February 2026, Wessex Ecology Ltd were commissioned by Mr & Mrs Dunne to undertake a UK Habitat 2.0 Survey and Biodiversity Net Gain at Wheatlands, Shalbourne. This was following a preliminary ecological appraisal (PEA) conducted on the 25th September 2025. A further preliminary roost assessment was undertaken on 1st October 2025.

1.1.2. The planning reference for this project is TBC.

1.1.3. The purpose of this report was to:

- Provide details of the proposed development
- Present the on and off-site pre-development biodiversity
- Present the proposed on and off-site post-development biodiversity
- Show how BNG will be achieved
- Suggest measures for mitigation and enhancement for the development.

1.2. Site Description

1.2.1. Wheatlands and its grounds, hereafter referred to as 'the Site', measured approximately 2.85 ha and was situated on Rivar Road, which ran to the west of the Site (approximate OS grid reference: SU 31833 61987), see Figures 1 & 2 below.

1.2.2. The Site was comprised of urban land on the north and west aspects of the main building, modified and neutral grassland, native and non-native hedgerows mostly lining the edge of the site.

1.2.3. The buildings on Site were a two-storey house, a two-storey residential annex/garage, stable buildings, workshop, poor equipment shed and oil tank. Behind the stable block was a large square of artificial unvegetated, unsealed surface which was lined by a non-native or ornamental hedgerow (Lawson's cypress – *Chamaecyparis lawsoniana*). East, south and west aspects of the main house is surrounded by vegetated garden (u1), bordered by a non-native or ornamental hedgerow (Portuguese laurel – *Prunus lusitanica*). To the north and west of the main house was a paved driveway that led to each of the other buildings. Northwest of the driveway was more vegetated garden (u1), lined with a non-native or ornamental hedgerow (Lawson's cypress – *Chamaecyparis lawsoniana*) separating it from Rivar Road which runs west of the site. The east and south of the site was largely modified grassland (g4) bordered by *Lolium-Cynosurus* neutral grassland (g3c6). Part of the west boundary and all the south boundary is lined with native hedgerow.

1.2.4. At the time of writing, the proposed developments and alterations to the Site were as follows:

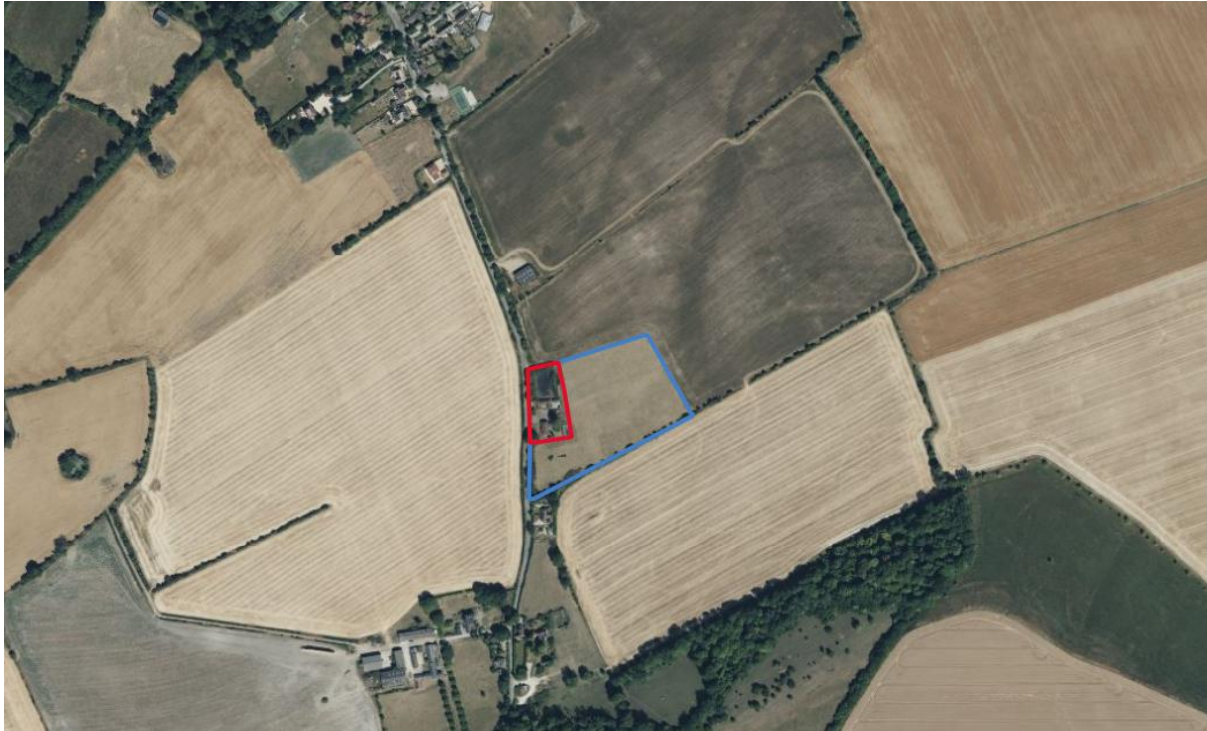
- Demolition of the two-storey residential annex/garage, stable buildings and workshop in association with alterations and extensions to the host dwelling.

1.2.5. All ecological surveys are led by Ecologists who are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) at the appropriate level. By joining the CIEEM staff sign up to a professional code of conduct.

Figure 1. Site location with red line (on-site) boundary and blue line (off-site) boundary.



Figure 2. Landscape surrounding site of proposed development showing red and blue line boundaries.



2. Personnel

2.1. BNG metric, condition assessment and field survey

2.1.1. Aaron Jones is an assistant ecologist who works as an accredited agent under the Natural England Class 2 Licence 2025-86241-CL18-BAT. He supports bat emergence surveys, Preliminary Roost Assessments, carries out Preliminary Ecological Assessments, UKHabs 2.0 and BNG surveys. He also is a qualifying member of the CIEEM and working towards his own bat and dormice license.

3. Planning and Legislation

3.1. Planning policies

3.1.1. This report is prepared with reference to the National Planning Policy Framework 2024.

3.2. Legislation

3.2.1. Biodiversity Net Gain is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). This means developers must deliver a BNG of 10% which means a development will result in more or better-quality natural habitat than was there prior to the development.

3.2.2. BNG can be achieved through creating biodiversity on-site within the red-line boundary, a mixture of on and off-site, or by buying statutory biodiversity credits from the government as a last resort.

4. Methodology

4.1. Desk study

4.1.1. The following publicly accessible websites were searched for relevant ecological information:

- <http://planningguidance.planningportal.gov.uk/>
- <http://jncc.defra.gov.uk/page-1376> - summary of nature conservation legislation
- www.ukbap.org.uk (archived 2012)
- www.gridreferencefinder.com and www.google.com for aerial photography
- The Multi Agency Geographic Information for the Countryside- <https://magic.defra.gov.uk/magicmap.aspx>

4.2. Biodiversity Net Gain

4.2.1. The BNG metric was run using baseline conditions collected from the PEA.

4.2.2. Post-development data was collected from the agent.

4.2.3. The open-source Geographic Information System, QGIS was used to map the base line habitats on and off Site and obtain the areas of each habitat, see Figures 3 and 5.

4.2.4. Post-development UKHab 2.0 maps showing the proposed enhancements was also created for both on-site and off-site areas, see Figure 4 and 6.

4.2.5. The Statutory Biodiversity Metric was run with the areas obtained from QGIS and the client or agent alongside the Statutory Biodiversity Metric Condition Assessments for each relevant habitat.

4.2.6. Results from the metric are presented in Figure 7.

4.3. Limitations

4.3.1. The UKHabitat 2.0 survey provides a snapshot of conditions at the time of survey and some plant species may not have been present on the day due to time of year, conditions etc.

4.3.2. The details within this report will remain valid for a period of 12 months from the date of issue.

4.3.3. The only limitation for the survey was the time of year as certain species may be missed (died back) therefore the species list may lack all on-site species.

5. On-Site biodiversity

5.1. Pre-development

5.1.1. The on-site habitats were comprised of one main two-storey building, a two-storey cottage and other buildings named above in the report. The on-site area measured 3900 m². The UKHab 2.0 habitat map of the Site pre-development is presented in Figure 3 below.

5.1.2. The following on-site habitat types were recorded during the survey:

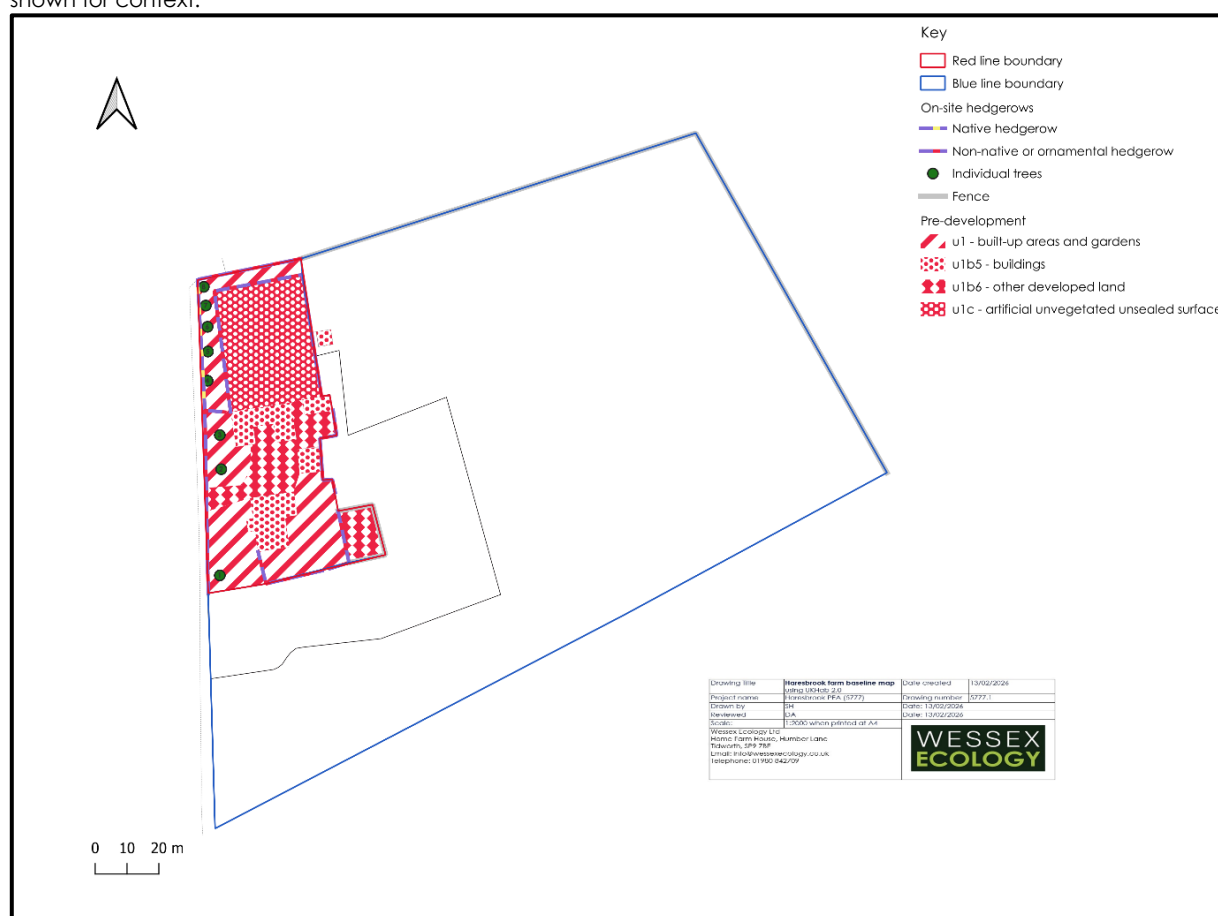
- u1c – artificial unvegetated, unsealed surface
- u1b5 – buildings
- u1b6 – other developed land
- u1d – vegetated garden

5.1.3. The areas of each habitat onsite are presented in Table 1 below.

Table 1. Pre-development habitat areas on-site.

Broad habitat	Habitat type	UKHab 2.0 code	Area (ha)
Urban	Developed land, sealed surface	u1b6	0.342
Urban	Developed land, sealed surface	u1b5	0.539
Urban	Artificial unvegetated, unsealed surface	u1c	0.354
Urban	Vegetated garden	u1d	0.254

Figure 3. Pre-development on-site UKHab 2.0 habitat map of Site within the red line boundary. Blue line boundary shown for context.



5.2. Post-development

5.2.1. The proposed development will result in the loss and modification of urban habitats on-site.

5.2.2. The areas of the on-site habitats lost are presented in Table 2 below.

Table 2. Areas of habitat lost on-site

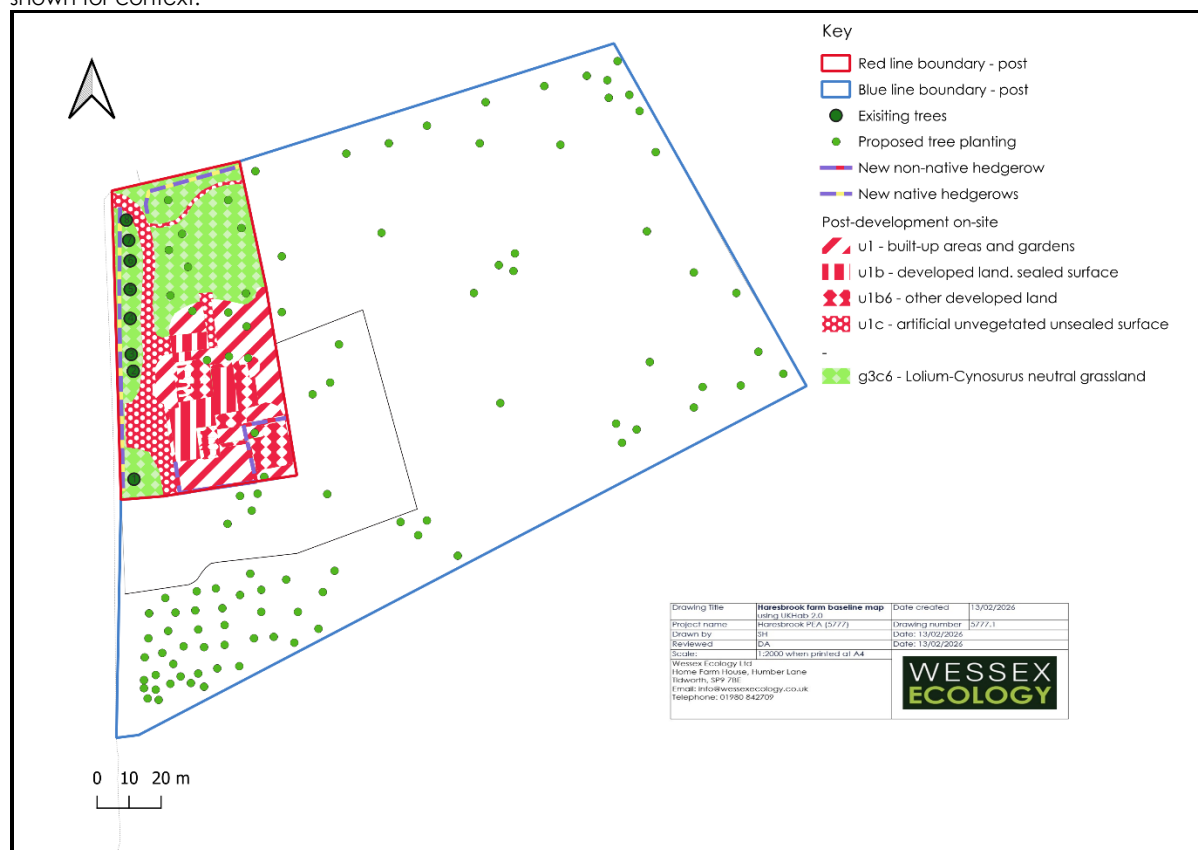
Broad habitat	Habitat type	UKHab 2.0 code	Area (ha)
Urban	Buildings	u1b5	0.0482
Urban	Artificial unvegetated, unsealed surface	u1c	0.0250
Urban	Vegetated garden	u1d	0.0635

5.2.3. The areas of the on-site habitats created are presented in Table 3 and shown in Figure 4 below.

Table 3. Areas of habitat created on-site

Broad habitat	Habitat type	UKHab 2.0 code	Area (ha)
Grassland	Lolium-Cynosurus neutral grassland	g3c6	0.1667

Figure 4. Post-development on-site UKHab 2.0 habitat map of Site within the red line boundary. Blue line boundary shown for context.



6. Off-site biodiversity

6.1. Pre-development

6.1.1. The off-site habitats were comprised of g4 - modified grassland, bordered by g3c6 - Lolium-Cynosurus neutral grassland. The off-site area measured 24,600 m². The UKHab 2.0 habitat map of the Site pre-development is presented in Figure 5 below.

6.1.2. The following habitat types were recorded during the survey:

- g3c6 – Lolium-Cynosurus neutral grassland
- g4 – modified grassland

6.1.3. The areas of each habitat off site are presented in Table 4 below.

Table 4. Pre-development habitats off-site

Broad habitat	Habitat type	UKHab 2.0 code	Area (ha)
Grassland	Modified grassland	g4	2.24
Grassland	Lolium-Cynosurus neutral grassland	g3c6	0.216

6.1.4. Species lists for the habitats recorded are set out in Table 5, below.

Table 5. Species list for the habitats recorded on site

Habitat type	Species recorded	Percentage present
g4-16 – modified grassland	Perennial rye-grass – <i>Lolium perenne</i>	60%
	White clover - <i>Trifolium repens</i>	5%
	Cow parsley - <i>Anthriscus sylvestris</i>	20%
	Ground ivy – <i>Glechoma hederacea</i>	5%
	Purple deadnettle – <i>Lamium purpureum</i>	1%
	Forbes:	
	Common hogweed - <i>Heracleum sphondulium</i>	5%
	Common dandelion - <i>Taraxacum officinale</i>	2%
g3c6 - Lolium-Cynosurus neutral grassland	Broad leaved dock – <i>Rumex obtusifolius</i>	2%
	Perennial Rye-grass – <i>Lolium perenne</i>	40%
	Common bent – <i>Agrostis capillaris</i>	5%
	Crested dogs tail – <i>Cynosurus cristatus</i>	5%
	Oat grass sp.	10%
	Soft brome – <i>Bromus hordeaceus</i>	10%
	White clover – <i>Trifolium repens</i>	10%
	Forbes:	
	Yarrow – <i>Achillea millefolium</i>	2.5%
	Marsh thistle – <i>Cirsium palustre</i>	2.5%
	Common hogweed – <i>Heracleum sphondulium</i>	5%
	Broad leaved dock – <i>Rumex obtusifolius</i>	7.5%
	Buttercup sp.	2.5%

Key

- Red line boundary
- Blue line boundary
- Off-site hedgerows
 - Non-native or ornamental hedgerow
 - Native hedgerow
- Fence
- Pre-development habitats
 - g3c6 - Lolium-Cynosurus neutral grassland
 - g4 - modified grassland

Map Details:

- North Arrow
- Scale: 0 10 20 m

Drawing title	Horsbrook Farm baseline map	Date created	13/02/2004
Project name	Horsbrook Farm (0399)	Drawing number	0399.1
Drawn by	JA	Revise	13/02/2004
Reviewed by	JA	Revise	13/02/2004
Scale	1:2000 when printed at A4		
Wessex Ecology Ltd 10001 10th Avenue, 10th Floor Bournemouth, BH9 7DL E-mail: info@wessexecology.co.uk Telephone: 01706 542700			

6.2.1. The proposed development will result in the modification of g4 – modified grassland and g3c6 - *Lolium-Cynosurus* neutral grassland.

Wheatlands Biodiversity Net Gain Plan
Mr & Mrs Dunne

Key

- Red line boundary - post
- Blue line boundary - post
- Proposed tree planting
- Existing native hedgerow
- Fence
- Post-development Off-site
- g3c6 - Lolium-Cynosurus neutral grassland

0 10 20 m

Drawing title	Harebrook farm baseline map	Date created	15/02/2006
Project name	Long 1st July 2006	Drawing number	0777-1
Project ref	Harebrook Farm (0777)	Date	15/02/2006
Author	DA	Date	15/02/2006
Checker	15/02/2006		
Wessex Ecology Ltd Horse Farm Estate, Bordon Road Bosworth, SP9 7BE Email: info@wessexecology.co.uk Telephone: 01904 64709			

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Based on the data presented above, the proposed project will yield a 628.89% Net Gain in Biodiversity Net Gain on and off site, see Figure 7 below for the results output of the Statutory Small Sites Biodiversity Net Gain Metric. No credits need to be purchased for the development to achieve BNG.

Figure 7. Statutory small sites Biodiversity Net Gain results for the proposed development

Wheatlands

Headline Results

Scroll down for final results ⚠

Return to results menu

On-site baseline	Area habitat units	1.96	
	Hedgerow units	0.17	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	3.15	
	Hedgerow units	0.47	
	Watercourse units	0.00	
On-site net change (unit & percentage)	Area habitat units	1.19	60.62%
	Hedgerow units	0.30	173.95%
	Watercourse units	0.00	0.00%
Off-site baseline	Area habitat units	5.34	
	Hedgerow units	0.60	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Area habitat units	16.48	
	Hedgerow units	0.60	
	Watercourse units	0.00	
Off-site net change (unit & percentage)	Area habitat units	11.14	208.40%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	12.33	
	Hedgerow units	0.30	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	Area habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Ensure bespoke compensation has been agreed where stated ⚠			
FINAL RESULTS			
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	12.33	
	Hedgerow units	0.30	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Area habitat units	628.89%	
	Hedgerow units	173.95%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Area habitat units	10.00%	1.96	2.16	0.00
Hedgerow units	10.00%	0.17	0.19	0.00
Watercourse units	10.00%	0.00	0.00	0.00

0 additional area habitat units required to meet target

0 additional hedgerow units required to meet target

0 additional watercourse units required to meet target

8. Habitat Mitigation

8.1. On-site habitat management

8.1.1. The following recommendations should be followed to minimise adverse effects of the proposed development on the existing biodiversity on-site:

8.1.2. Control measures

- All potentially environmentally damaging chemicals will be stored off-site.
- The fuel store must be bunded so that any spillage is contained.
- Small hand-held containers must be stored on spill mats at all times when not in use.
- A suitable spill kit must be available at all times. Site staff must be made aware of its location and how and when to deploy it.
- Any spillage must be reported to the Site Foreman immediately.

8.1.3. Biosecurity

- Everyone on Site should ensure vehicle access is kept to a minimum.
- Everyone on Site should arrive at the site with clean footwear. Any vehicles entering or leaving the Site should be clean, with tires clean of soil and debris.
- Everyone on Site should ensure footwear is clean (visually from soil and debris) before entering or leaving the site.
- Construction waste shall be removed from Site by a licenced contractor.

8.1.4. Tree protection

- Root Protection Areas should be established to protect the trees being retained. No construction activity whatsoever, including on-site parking, routing of underground services, or storage of materials must be allowed within Root Protection Areas.
- No chemicals can be stored or mixed within 10m of the trunk of any retained trees, nor in any position where the slope of the ground could lead to contamination of the Root Protection Area. This includes cement, concrete, oil, fuel, bitumen or other chemicals.
- No fires should be lit in a position where their flames could extend to within 10m of foliage, branches or trunk.
- All landscaping carried out within Root Protection Areas must be undertaken carefully, without damaging shallow roots. Rotovators and other heavy mechanical cultivation equipment must NOT be used.
- Temporary tree protection fencing should be erected prior to any enabling works commencing on the Site. The fencing is to be to the specification shown at Figure 6 below.

- The fenced areas are to exclude all construction activities, including temporary materials storage, for the duration of the development works and shall be affixed with appropriate signage at regular intervals to warn contractors that the enclosed areas are strictly off-limits, other than for essential maintenance works.

8.1.5. Weatherproof notices must be fixed to the tree protection fencing, one every 10m of fencing. These should include the following;

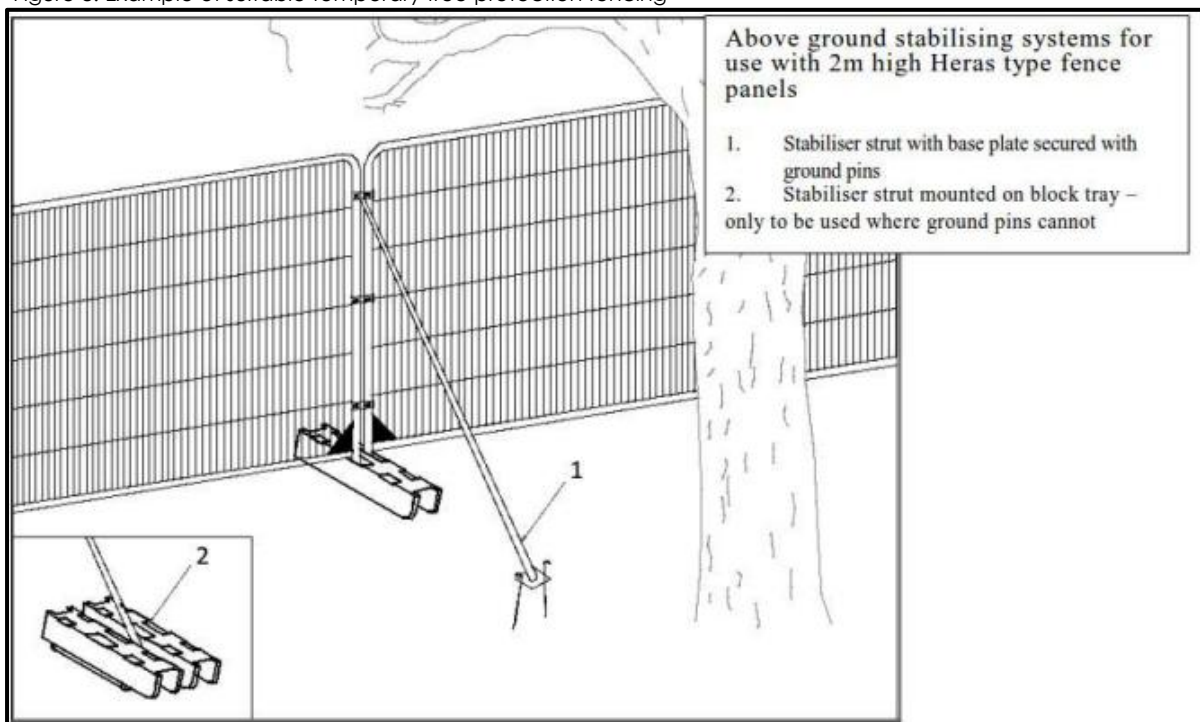
TREE PROTECTION AREA

KEEP OUT

THE FOLLOWING MUST BE OBSERVED BY ALL PERSONS:

- The Protection Fence must not be moved
- No person or machine must enter the area
- No materials or spoil must be deposited
- No excavation must be permitted

Figure 8. Example of suitable temporary tree protection fencing



8.1.6. Groundworks

- Excavations will be boarded or fenced using steel mesh fencing at the end of each day to prevent wildlife becoming trapped.
- Where closing excavations is not possible, ramps will be provided to allow any trapped wildlife to escape.
- Dust suppression measures should be taken during dry conditions to reduce pollution spread.
- Use sensitive construction practices including no routine night-time working.
- Reduction of light spill by directing lighting only where needed, not facing upward and away from trees and the priority habitats.

8.2. Habitat enhancement

8.2.1. The following are recommendations for habitat enhancement on-site.

- One Harlech bat box - https://www.birdfood.co.uk/harlech-woodstone-bat-box-black?gclid=EAlaIQobChMIwlbT2pqD_glVYZ7tCh1AoAVbEAAYAiAAEgLxGfD_BwE. Installed at a height of at least 3m above the ground on a west facing tree or building elevation.
- One Woodstone bird box - https://www.birdfood.co.uk/national-trust-woodstone-32mm-nest-box-green?utm_source=google_shopping&gclid=EAlaIQobChMI-ef86JqD_glVjdPtCh21_QonEAQYASABEgLZcPD_BwE. Installed at a height of at least 3m above the ground on a west facing tree or building elevation.
- One insect block - https://www.birdfood.co.uk/woodstone-insect-block-grey?utm_source=google_shopping&gclid=EAlaIQobChMIrZm8-ZqD_glVEmHmCh2g5g_FEAQYAiABEgJu4fD_BwE. Installed at a height of 1.5m above the ground on a south facing tree or building elevation.

9. References

Collins, J. (ed.) (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th edn.) The Bat Conservation Trust, London.

Gunnell, K., et al (2010) Designing for Biodiversity: A technical guide for new and existing buildings. (2nd edn). RIBA.

UKHab Ltd (2023) UK Habitat Classification Version 2.0 (<https://www.ukhab.org/>)