

Queens Drive, Kirkholt,

Rochdale

Biodiversity Net Gain Assessment

2026



RACHEL
HACKING
ECOLOGY

Client Triangle Architects Ltd (on behalf of MSV Housing)

Project Title Queens Drive, Kirkholt

Project Reference RHE.4414

Project Leader Lucia Ruiz Mut

Contact Details lucia@rachelhackingecology.co.uk

	Name	Position	Date
Author	Lucia Ruiz Mut	Senior Ecologist	13/01/2026
Reviewer	Tim Palmer	Principal Ecologist	20/01/2026
Approved	Tim Palmer	Principal Ecologist	20/01/2026
Revision			



**RACHEL
HACKING
ECOLOGY**

The Stables
Paradise Wharf
Ducie Street
Manchester
M1 2JN

0161 465 8971

www.rachelhackingecology.co.uk

mail@rachelhackingecology.co.uk



Report Contents

Executive Summary	3
1. Introduction	4
2. Methods	6
3. Biodiversity Net Gain Assessment	7
4. Recommended Mitigation	12
Appendix 1: Planning Policy & Legislation	13
Appendix 2: UKHab Habitat Classification Map	17
Appendix 3: Proposed Site Layout	18
Appendix 4: Statutory Biodiversity Metric Headline Results.	19

Executive Summary

Development Details

The client is proposing a residential development of land off Queen Drive in Kirkholt, Rochdale, hereafter referred to as the 'site'. This report assesses the predicted changes in biodiversity units resulting from the proposed development and provides recommendations for compliance with Biodiversity Net Gain policy and legislation.

Biodiversity Impact Assessment

Baseline habitats score 1.68 habitat units, zero hedgerow units and zero watercourse units. The proposed development will achieve 1.37 habitat units, 0.16 hedgerow units and zero watercourse units.

Outcomes

The proposed development is currently in a net loss of **0.30 habitat units (-18.19%)**. To compensate for this loss and comply with the Environment Act mandatory requirement for 10% net gain, it will be necessary to purchase biodiversity units from a third party, i.e. via an external biodiversity offset.

1. Introduction

1.1 Project Brief

- 1.1.1 Rachel Hacking Ecology Ltd. (RHE) was commissioned in 2025 by Triangle Architect Limited (on behalf of MSV Housing) to carry out a Biodiversity Net Gain Assessment of land off Queens Drive, in Kirkholt, Rochdale OL11 2NW, hereafter known as the 'site'. The site is located at O.S. grid reference: SD 89286 11307 (see Figure 1).



Figure 1. Map showing the location of the site (red line boundary) as provided by the client. The green line boundary will be the subject of a separate planning application.

Description of Development

- 1.1.2 The site will be the subject of a planning application for a residential development comprising the construction of several new dwellings, associated ancillary infrastructure, parking and landscaping. A Preliminary Ecological Appraisal (PEA) has been undertaken by RHE and the PEA report ¹should be read in conjunction with this report.

¹RHE (2024) Queens Drive, Kirkholt, Rochdale. Preliminary Ecological Appraisal.

- 1.1.3 It should be noted that when the PEA was undertaken the application site boundary of the development covered a larger area, as it included the whole of the Community Gardens site. However, the present BNG Assessment refer to the most up-to-date red line boundary only, as shown in Figure 1.

1.2 Scope of Work

- 1.2.1 Triangle Architect Ltd (on behalf of MSV Housing) commissioned RHE to undertake a Biodiversity Net Gain Assessment to quantify the predicted changes in biodiversity units from the proposed development, and to provide advice regarding design changes to achieve the mandatory 10% biodiversity net gain where necessary, in accordance with policy and legislative requirements.

2. Methods

2.1 Biodiversity Net Gain

2.1.1 The Statutory Biodiversity Metric Calculation Tool² was used to achieve the predicted changes in habitat units resulting from the proposed development. This report should be read in conjunction with the spreadsheet *Queens Drive, Kirkholt-Biodiversity Metric-2026*.

- The baseline habitats recorded during the Habitat Survey were measured using QGIS software (see Appendix 2 for the Phase 1 Habitat Survey Map).
- The baseline habitats were translated into the metric habitat classification.
- Habitat conditions were assessed using the Statutory Biodiversity Metric Habitat Condition Assessment sheets.
- The strategic significance of baseline habitats was assessed on whether they were formally identified in a local strategy or policy, or whether they were in an ecologically desirable location.
- The proposed habitats were assessed based on information, including post-development habitat measurements, provided by the client and the landscape masterplan produced by Saville Landscape Desing. This (see Appendix 3).

2.1.2 The predicted change in biodiversity units was determined by using the metric to calculate the difference between the baseline units and the post-development units.

2.1.3 Lucia Ruiz Mut (Senior Ecologist) carried out the calculations and assessment in January 2026. Lucia has over 3 years' professional experience including carrying out Biodiversity Net Gain Assessment.

² RHE (2026). Queens Drive, Kirkholt-Biodiversity Metric-2026

3. Biodiversity Net Gain Assessment

- 3.1.1 The Statutory Biodiversity Metric Calculation Tool and Condition Assessment spreadsheets are supplied separately and should be read in conjunction with this report. The Statutory Biodiversity Metric Headline Results are shown in Appendix 4.
- 3.1.2 All habitats are of low strategic significance as they do not fall under the areas mapped within the Greater Manchester Local Nature Recovery Strategy³.

3.2 Baseline Habitats

- 3.2.1 The baseline is calculated to be 1.68 habitat units and no hedgerow or watercourse units.
- The site covers part of an active community gardens site and the grounds of a former NHS medical centre, which has now been demolished.

Urban – Allotments

- 3.2.2 Within the community gardens, the western half of the site comprises the allotments/horticulture site (1). This habitat dominant ground cover is modified grassland which is regularly mown and offers poor species diversity. Patches of bare ground covered in mulch and pebbles are present.
- 3.2.3 This habitat is of low distinctiveness, extends to 0.021ha, is in moderate condition, and delivers 0.08 habitat units.

Cropland – Intensive Orchard

- 3.2.4 This habitat (2) refers to the eastern edge of the community garden, which features a small, young orchard. It is of low distinctiveness.
- 3.2.5 This habitat is of low distinctiveness, extends to 0.06ha, does not qualify to be condition assessed, and delivers 0.12 habitat units.

Urban – Artificial Unvegetated; Unsealed Land

- 3.2.6 This habitat (3) comprises a small patch of bare, unsealed surface in the middle of the orchard.
- 3.2.7 This habitat is of very low distinctiveness, extends to 0.006ha, does not qualify to be condition assessed, and delivers zero habitat units.

³ Guidance Note: Biodiversity Net Gain Strategic Significance and the Greater Manchester Local Nature Recovery Strategy

Urban – Developed Land; Sealed Surface

- 3.2.8 This habitat (4) includes the former carpark of the demolished NHS building and associated pedestrian walkways. The demolition of this building, which presumably occurred after 30th January 2020, had not have an impact on the biodiversity baseline of the site as the building footprint would have similarly been classed as 'developed land, sealed surface'.
- 3.2.9 This habitat is of very low distinctiveness, does not qualify to be condition assessed, and does not deliver any habitat units. It extends to 0.114ha

Sparsely Vegetated Land – Ruderal/Ephemeral

- 3.2.10 The previously sealed surface comprising the former NHS building footprint has been colonized sparsely by ephemeral and ruderal vegetation (5).
- 3.2.11 This habitat is of low distinctiveness, extends to 0.035ha, is in poor condition, and delivers 0.07 habitat units.

Grassland – Modified Grassland (A)

- 3.2.12 This area refers to grassland habitat (6) at the northeast corner of the site. The habitat is intensively managed and as such, supports a short sward and poor species diversity.
- 3.2.13 This habitat is of low distinctiveness, extends to 0.021ha, is in poor condition, and delivers 0.04 habitat units.

Grassland – Modified Grassland (B)

- 3.2.14 This area refers to grassland habitat (7) surrounding the former building and associated carpark. This habitat is not regularly mown showing varied sward height, however, species richness is low.
- 3.2.15 This habitat is of low distinctiveness, extends to 0.114ha, is in poor condition, and delivers 0.23 habitat units.

Bramble Scrub

- 3.2.16 At the southern boundary of the site, south of the former carpark, there are two clusters of scrub (8) featuring dominant Bramble *Rubus fruticosus agg.*, with the invasive, non-native species Wall Cotoneaster *Cotoneaster horizontalis* and other ornamental species.
- 3.2.17 This habitat is of medium distinctiveness, extends to 0.002ha, does not qualify to be condition assessed, and delivers 0.01 habitat units.

Building/Structures

- 3.2.18 This refers to electricity substation building, which is classed as developed land, sealed surface within the metric.

- 3.2.19 This habitat accounts for 0.002ha, does not qualify to be condition assessed and delivers zero habitat units.

Individual Trees

- 3.2.20 This section refers to all individual trees on site including one tree (T1) assessed as in good condition and further trees assessed as in moderate condition (T2, T3, T6, T7, T8, T9 & G2). Tree areas have been estimated using the 'Tree Helper' tool included in the Metric Calculator spreadsheet.
- 3.2.21 Individual trees are of medium distinctiveness. Collectively, individual trees onsite deliver 1.12 habitat units.

3.3 Proposed Habitats

3.3.1 The Proposed Landscape Plan is shown in Appendix 3, and The Statutory Biodiversity Metric Headline Results are provided in Appendix 4.

3.3.2 All baseline habitats will be lost to the development and replaced with newly created habitats except for two retained trees (see Individual Trees title below).

Developed Land; Sealed Surfaces - Buildings

3.3.3 The proposal includes several buildings including apartment blocks, dwelling and ancillary infrastructure, accounting for a total of 0.0886ha.

3.3.4 This habitat is classed as 'Developed land; sealed surface'. Condition assessment does not apply for this habitat which does not provide biodiversity units.

Developed Land; Sealed Surfaces

3.3.5 This habitat comprises all hardstanding surfaces withing the proposals including access roads, paths, parking areas and private patios, which extend to 0.1385ha.

3.3.6 This habitat is also classed as 'Developed land; sealed surface'. Condition assessment does not apply for this habitat which does not provide biodiversity units.

Vegetated Garden

3.3.7 This habitat refers to the vegetated garden associated with the proposed dwellings, which will cover a total area of 0.0248ha.

3.3.8 This habitat is classed as 'Vegetated garden' and is of low distinctiveness. Condition assessment does not apply for this habitat. It will deliver **0.05** biodiversity units.

Rain Garden

3.3.9 The proposal includes the creation of 0.004ha of rain garden as part of the proposed soft landscaping features.

3.3.10 This habitat is classed as 'Rain garden' in the metric and is of low distinctiveness. Target condition for this habitat is good, which must be achieved within 5 years of creation. It will deliver 0.02 biodiversity units.

Introduced Shrub

3.3.11 Ornamental shrub beds are proposed extending to a total of 0.01275ha as part of the proposed soft landscaping.

- 3.3.12 This habitat is classed as 'Introduced shrub' in the metric and is of low distinctiveness. Condition Assessment does not apply to this habitat. It should be established within one year and it will deliver 0.02 habitat units.

Mixed Scrub

- 3.3.13 Native shrub planting is proposed along the western boundary of the site, accounting for a total of 0.007ha.
- 3.3.14 This habitat is classed as 'Mixed scrub' in the metric and is of medium distinctiveness. Target condition for this habitat is poor, due to the site location and size constrictions, and it shall be achieved within 1 year. This habitat will deliver 0.03 habitat units.

Modified Grassland

- 3.3.15 Areas of Public Open Space (POS) within the site will feature amenity grassland comprising low growing Germinal WFG20 Eco Species Rich Lawn mix, referred to as Wildflower Meadow Mix C in the proposed landscape plan, extending to 0.0608ha. This habitat will be subject to regular management.
- 3.3.16 This habitat is classed as 'Modified grassland' in the metric and is of low distinctiveness. Target condition for this habitat is good and must be achieved within 7 years. This habitat will deliver 0.28 habitat units.

Other Neutral Grassland

- 3.3.17 Also within POS, several areas of wildflower grassland habitat, which will be subject to a more relaxed management, are proposed. These include areas seeded with Emorsgate Seeds EM3 Special General Purpose Meadow Mixture (0.026ha) and Landlife Wildflowers Woodland and Heavy Shade Wildflower Seeds LW8P (0.014ha), referred to as Wildflower Meadow Mix A and B, respectively in the proposed landscape plan.
- 3.3.18 This habitat is classed as 'Other neutral grassland' in the metric and is of medium distinctiveness. Target condition for this habitat is moderate and must be achieved within 5 years. This habitat will deliver 0.17 (Meadow Mix A) and 0.09 (Meadow Mix B) habitat units.

Individual Trees

- 3.3.19 Among all existing trees onsite, only T3 (small) and T9 (large), both in moderate condition, will be retained providing 0.33 habitat units.
- 3.3.20 A total of 30 native species, tree specimens will be planted as heavy standards. Target condition for all proposed trees is moderate, and it shall be achieved within 27 years. Newly planted trees will deliver 0.37 habitat units.

Native Hedgerow

- 3.3.21 A total length of 0.035km of native hedgerow is proposed. This habitat is of low distinctiveness and is targeted at achieving good condition within 12 years. It will deliver 0.14 hedgerow units.

Non-native and Ornamental Hedgerow

- 3.3.22 A total length of 0.0285km of non-native and ornamental hedgerow is proposed. This habitat is of very low distinctiveness and is targeted at achieving poor condition within 1 year. It will deliver 0.03 hedgerow units.

3.4 Predicted Change

- 3.4.1 The Statutory Biodiversity Metric shows a net loss of 0.30 habitat units (-18.19%) and a net gain of 0.16 hedgerow units (gain from zero).
- 3.4.2 The trading rules are not satisfied. This is due to a shortfall of medium distinctiveness habitats, namely individual trees, and low distinctiveness habitats including the intensive orchard, allotments and ruderal/ephemeral habitats.

4. Recommended Mitigation

- 4.1.1 The proposals result in a deficit of 0.47 habitat units. For the proposed development to achieve an overall net gain for biodiversity it will be necessary to seek compensation.
- 4.1.2 On-site compensation has been provided with the inclusion in the landscape proposals of ecologically valuable habitats such as wildflower grassland, mixed scrub and individual tree planting. Given the limited size of the site, it is not viable to include further green infrastructure without compromising the housing requirements and viability of the proposal. As such, compensation for the deficit in biodiversity units must be sought off site.
- 4.1.3 It is understood that the applicant does not have access to additional land to provide compensatory habitat creation. Therefore, to compensate for the loss in habitat units and to achieve the mandatory 10% overall BNG the applicant/developer will acquire biodiversity units through a biodiversity unit offsetting market. This could be The Environment Bank or other registered units' provider.

Appendix 1: Planning Policy & Legislation

National Policy

The National Planning Policy Framework (NPPF 2023) describes the Government's planning policy for England and how it should be applied. Within this framework, the requirements in relation to biodiversity are included within several policies. The two most relevant to individual planning decisions are Paragraphs 180 and 186, shown below:

- 180. Planning policies and decisions should contribute to and enhance the natural and local environment by:
 - a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.
- 186. When determining planning applications, local planning authorities should apply the following principles:
 - a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments),

should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;

- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.

Legislation

The Wildlife and Countryside Act 1981 (as amended by the CRow Act 2000) includes the notification and confirmation of Sites of Special Scientific Interest (SSSIs). SSSIs can be notified for their floral, faunal, geological, or physiographical features. Protection against damaging operations and management of SSSIs is also included within the Act. Impact Risk Zones (IRZs) are zones around an SSSI account for the particular sensitivities of the features for which it is notified and identify development proposal which could have adverse impacts.

The Wildlife and Countryside Act 1981 (as amended by the CRow Act 2000) protects native animals, plants and habitats. Under the Act it is an offence to intentionally kill, injure or take any wild animal listed on Schedule 5 and it is an offence to interfere with places used for shelter or protection, or intentionally disturb animals occupying such places. The Act prohibits picking, uprooting or destroy any wild plant (or any attached seed or spore) listed in Schedule 8.

European Protected Species (EPS) such as bats, Hazel Dormouse, Otter, Natterjack Toad, Smooth Snake, Sand Lizard and Great Crested Newt are protected by the Wildlife and Countryside Act 1981 (as amended by the CRow Act 2000) and the Conservation of Habitats and Species Regulations 2017. The Acts make it an offence to:

- a) Deliberately capture, injure or kill an EPS;
- b) Deliberately impair an EPS's ability to survive, breed, reproduce, rear or nurture young; to hibernate or migrate; or significantly affect the local distribution or abundance of the EPS.
- c) Possess or control live or dead EPS or any part of, or anything derived from a EPS;
- d) Damage or destroy a breeding site or resting place of an EPS;

- e) Intentionally or recklessly obstruct access to any place that is used for shelter or protection by an EPS;
- f) Intentionally or recklessly disturb a structure or place that it uses for shelter or protection that is occupied by an EPS.

All common herptiles are protected under the Wildlife and Countryside Act 1981 (as amended by the CRow Act 2000). Grass Snake, Slow Worm, Common Lizard, Adder are protected against intentional killing or injury. Common Frog, Common Toad, Smooth Newt and Palmate Newt is protected against sale. In addition, all British reptiles, Common toad and Great Crested Newt are listed as Species of Principal Importance.

All nesting birds are protected under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally kill, injure or take any wild bird or take, damage, or destroy its nest whilst in use or being built, or take or destroy its eggs. It is an offence to intentionally or recklessly disturb a species listed on Schedule 1 of the Act while they are nest building or at or near a nest with eggs or young, or to disturb the dependent young.

The Protection of Badgers Act 1992 makes it an offence to wilfully, or to attempt to kill, injure, take, possess or cruelly ill-treat a Badger, or intentionally or recklessly interfere with a sett. Interference of a sett includes disturbing badgers during occupation of a sett, or damaging or destroying a sett, or obstructing access to the sett.

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006 places a duty on every public authority to have regard to conserving biodiversity. Section 41 of the same Act requires the Secretary of State to publish a list of the living organisms and types of habitats that are of 'Principal Importance' for the purpose of conserving biodiversity. The Secretary of State must take steps, as appear reasonably practicable, to further the conservation of those living organisms and habitats in any list published under this section. The list of species and habitats of principal importance currently includes 943 species and 56 habitats. These are the species and habitats found in England which are regarded as conservation priorities under the UK Post-2010 Biodiversity Framework

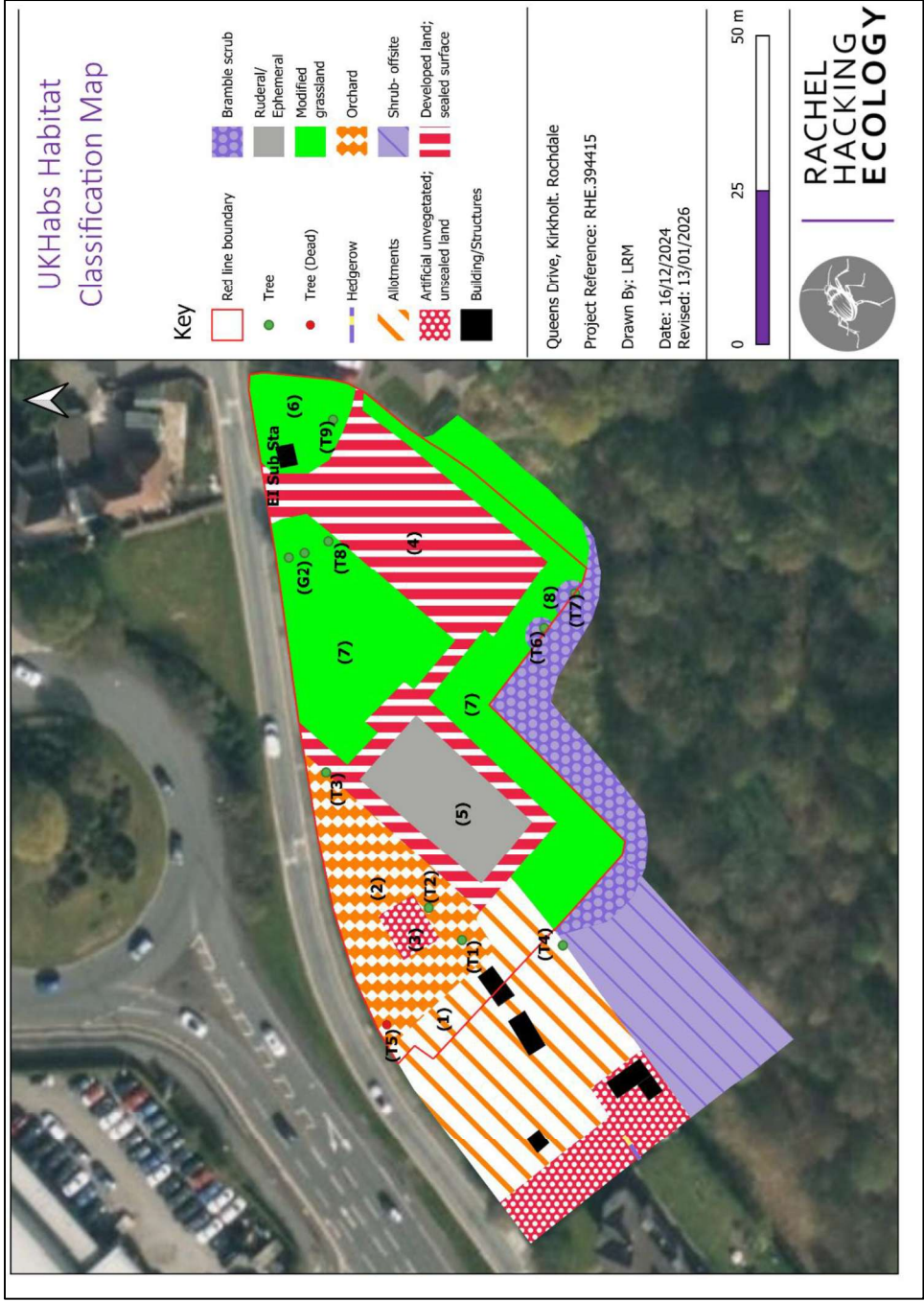
The Hedgerows Regulations 1997 protect 'important' hedgerows from destruction or damage. A hedgerow is 'important' if it (a) has existed for 30 years or more; and (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations. Under the Regulations, it is against the law to remove or destroy 'important' hedgerows unless permitted by the local planning authority.

The Environment Bill 2021 makes it mandatory for housing and development, subject to some narrow exemptions, to achieve at least a 10% net gain in value for biodiversity – a requirement that habitats for wildlife must be left in a measurably better state than before the development. Developers must submit a 'biodiversity gain plan' alongside usual planning application documents. The local authority must assess whether the 10% net gain requirement is met in order to approve the biodiversity gain plan.

The Environment Bill 2021 strengthens the duty on public authorities (NERC Act, 2006) to have regard to the conservation of biodiversity.

The Environment Bill 2021 amends the Wildlife and Countryside Act 1981 to introduce an additional purpose for granting a protected species licence in relation to development, 'for reasons of overriding public interest', and two additional tests for the granting of such licences: that there is 'no other satisfactory solution' and that granting the licence is 'not detrimental to the survival of any the population of the species concerned'. These changes will reduce the scope for unlicensed activities to provide clear safeguards before licences can be granted, providing legal certainty and clarity to developers about their environmental obligations.

Appendix 2: UKHab Habitat Classification Map



Appendix 3: Proposed Site Layout

Appendix 4: Statutory Biodiversity Metric

Headline Results.

Headline Results

Return to results menu

Scroll down for final results ▲

On-site baseline	Habitat units	1.68		
	Hedge-row units	0.00		
	Watercourse	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	1.37		
	Hedge-row units	0.16		
	Watercourse	0.00		
On-site net change (unit & percentage)	Habitat units	-0.30	-18.19%	On-site net gain is less than target net
	Hedge-row units	0.16	N/A	Zero baseline units - X cannot be calculated
	Watercourse	0.00	0.00%	
Off-site baseline	Habitat units	0.00		
	Hedge-row units	0.01		
	Watercourse	0.00		
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00		
	Hedge-row units	0.01		
	Watercourse	0.00		
Off-site net change (unit & percentage)	Habitat units	0.00	0.00%	
	Hedge-row units	0.00	0.00%	
	Watercourse	0.00	0.00%	
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.30		
	Hedge-row units	0.16		
	Watercourse	0.00		
Spatial risk multiplier (SRM) deductions	Habitat units	0.00		
	Hedge-row units	0.00		
	Watercourse	0.00		

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-0.30		
	Hedge-row units	0.16		
	Watercourse	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-18.19%	Total net gain achieved is less than target net	
	Hedge-row units	N/A	Zero baseline units - X cannot be calculated	
	Watercourse	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	1.68	1.68	0.47	
Hedge-row units	10.00%	0.00	0.00	0.00	No additional hedge-row units required to meet target ✓
Watercourse units	10.00%	0.00	0.00	0.00	No additional watercourse units required to meet target ✓

Input errors/rule breaks present in metric ▲