



**Essential
Ecology**

**Green Farm, Green Farm Lane, Shorne, Gravesend,
Kent, DA12 3HL**

Biodiversity Gain Statement

(Ref: ESEC/25081/01/v1.0)

Prepared by Essential Ecology
on behalf of Mr and Mrs J Houghton

February 2026

Quality Control

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The recommendations and conclusions are valid for the current proposals only. Should the proposals plans be amended, the report will need to be updated and where appropriate informed by additional/update survey work.

Report Ref.	Issue Date	Revision	Surveyor(s)	Author	Comments
ESEC/25081/01	09/02/26	v1.0	MJ	MJ	

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Appendix 2	Habitat Condition Assessment Sheets – Baseline
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1. Executive Summary

Table 1.1. Executive Summary	
Section	Summary
Introduction and Methodology	A Biodiversity Gain Statement, informed by the Statutory Metric, has been provided by Essential Ecology (ESEC) on behalf of Mr and Mrs J Houghton. The assessment is based on a UK Habitat survey and the proposals provided for the site and has been undertaken in accordance with the relevant legislation and the Statutory Metric User Guide.
Biodiversity Gain Assessment and Strategy	The proposals are for the conversion of an agricultural building for residential use. In addition, to offset habitat losses an area of existing arable land within the site will be enhanced (see drawing no. ESEC/25081/01-02). Subject to the information set out within this report (including the implementation of measures described above) and the accompanying Statutory Metric, the proposals will result in a net gain of habitat units in excess of 10%. No existing linear hedgerow or watercourse features are present within the site, whilst no watercourse features have been identified within 10m of the site and therefore net gains are not required.
Conclusions	The proposals in their current form result in a net gain of habitat units in excess of 10% and therefore are compliant with the legislation pertaining to BNG. As such, subject to the proposals remaining unchanged, no additional units will need to be acquired from a habitat bank and/or additional land under the client's control in order for the pre-commencement biodiversity gain condition to be discharged.

2. Introduction

2.1 Terms of Reference

2.1.1 Essential Ecology (ESEC) has been commissioned by Mr and Mrs J Houghton to provide a Biodiversity Gain Statement to inform a planning application for the site, located at Green Farm, Green Farm Lane, Shorne, Gravesend, Kent, DA12 3HL (central ordnance survey (OS) grid reference TQ 69629 72488).

2.1.2 The assessment for the site will be submitted to Gravesham Borough Council to inform the planning application.

2.2 Site Location and Overview

2.2.1 The site is located east of Green Farm Lane, in the north of Shorne, Gravesend, Kent (see Appendix 1). Within a wider context, the site is surrounded by existing agricultural land and agricultural buildings/farmhouses.

2.2.2 The site, as shown by the red line boundary on drawing no. ESEC/25081/01-01, comprises an area of c. 0.37ha. The site comprises arable land, developed land; sealed surface, bare ground, tall forbs, ruderal/ephemeral, modified grassland and a tree.

2.3 Description of Proposals

2.3.1 The proposals include the conversion of an agricultural building for residential use (see Appendix 1).

2.4 Purpose of Report

2.4.1 On the basis of the proposals, the development will be subject to the biodiversity gain condition. The purpose of this Biodiversity Gain Statement is to provide the local planning authority with sufficient information in order to assist the consideration of biodiversity net gain as part of the determination of the planning application.

2.5 Quality Assurance and Management

2.5.1 The site survey work and Biodiversity Gain Statement have been undertaken by Megan Jewson (Director). Megan has over 13 years' experience in professional ecological consultancy, is a full member of CIEEM and holds a Master's degree in Biodiversity and Conservation. Megan has experience in undertaking numerous biodiversity net gain assessments across a range of sites and development projects in England, since the Warwickshire pilot in 2012.

2.5.2 This report and the associated Statutory Metric have been produced with reference to the relevant legislation and current best practice guidance produced by DEFRA, including '*Statutory biodiversity metric: user guide*' (DEFRA 2024), as well as British Standard (BS) 8683:2021 (The

British Standards Institution 2021) which sets out the process for designation and implementing biodiversity net gain.

3. Methodology

3.1 Habitat Survey

3.1.1 The site was surveyed on 14th January 2026 based on UK Habitat Classification Survey (v2) (UKHab Ltd 2023) methodology. This involves identifying and mapping habitat types. The condition of each habitat has been assessed in accordance with technical Annex 1 of the Statutory Biodiversity Metric '*Condition Assessment Sheets and Methodology*' (DEFRA 2024).

3.2 Statutory Metric

3.2.1 To quantify the level of biodiversity net gain that can be achieved under the proposed development, the change in biodiversity value has been calculated using the Statutory Biodiversity Metric calculation tool (DEFRA 2024). The Statutory Metric has been completed in accordance with the relevant legislation and accompanying user guide (DEFRA 2024). The metric is based on the UK Habitat survey undertaken by Essential Ecology and the proposals plan provided (see Appendix 1).

3.3 Survey and Assessment Limitations

3.3.1 The UK Habitat Classification Survey was undertaken in January, outside the optimum survey season. Nevertheless, given the nature of the site, it is considered that a valid sample of ecological evidence has been collected, which provides a robust assessment of the habitats. Nevertheless, given the time of year, a precautionary approach has been taken with regards to grassland species counts as part of condition assessments.

4. Biodiversity Net Gain Strategy

4.1 Overview

- 4.1.1 The relevant date for the pre-development biodiversity value is the date of submission.
- 4.1.2 All of the land within the site, as shown by the red line boundary, has contributed to the overall biodiversity net score. There are no other schemes in place at the site which would mean it can only contribute in part or not at all (e.g., suitable alternative green space (SANG), nutrient neutrality or environmental impact assessment compensation).

4.2 Statutory Metric

- 4.2.1 The Statutory Biodiversity Metric Tool has been used to complete the assessment. The assessment has been undertaken in accordance with the User Guide (DEFRA 2024).
- 4.2.2 The site comprises only of habitats. No linear hedgerow or watercourse features are present onsite, whilst not watercourse features have been identified within 10m of the site.
- 4.2.3 Coding for strategic significance of habitats pre- and post-development should be based on Local Nature Recovery Strategies. Where these are not yet in place, strategic significance of habitats has been based on their inclusion within Local Plans, strategies or policies, such as the Local Biodiversity Action Plan. In this instance, other neutral grassland has been assigned medium strategic significance in accordance with Kent County Council's Interim Strategic Significance Guidance for Biodiversity Net Gain in Kent and Medway (Kent County Council 2024).

Baseline

Habitats

- 4.2.4 Baseline habitats are shown at drawing ESEC/25081/01-01, whilst condition assessment sheets are provided at Appendix 2.
- 4.2.5 The site comprises very low to medium distinctiveness habitats in the form of:
- Very Low – Developed land; sealed surface (condition N/A).
 - Low – Modified grassland (moderate condition); Bare ground (poor condition); Tall Forbs (poor condition) and Ruderal/ephemeral (poor condition).
 - Medium – Rural tree (moderate condition).
- 4.2.6 None of the habitats within the site form irreplaceable habitats.

Post-development

Habitats

4.2.7 Post-development habitats are shown at drawing ESEC/25081/01-02, whilst condition assessment sheets are provided at Appendix 3.

4.2.8 Following development, the site will comprise very low to medium distinctiveness habitats in the form of:

- Very Low – Developed land; sealed surface (condition N/A).
- Low – Vegetated garden (condition N/A).
- Medium – Other neutral grassland (moderate condition) and Rural tree (moderate condition).

4.2.9 Habitat enhancements include creation of medium distinctiveness habitat and therefore could be considered significant enhancements, albeit given the scale of the proposals, consideration should be given to whether this would be disproportionate.

Results

4.2.10 Subject to the information set out within this report and the accompanying Statutory Metric, the table below provides a summary of the overall results:

Table 4.1: BNG Results Summary					
Habitat Type	Baseline Units	Post-development Units	Net Change Units		Unit Deficit to achieve 10%
			Units	%	
Habitats	0.68	0.78	+0.09	13.76%	N/a

4.2.11 On the basis of the results, the current proposals for the site, subject to the enhancements set out within this report and accompanying metric, and as shown at drawing no. ESEC/25081/01-02, result in net gains in excess of 10% for habitat units. The proposals are therefore considered to be compliant with the legislation pertaining to BNG. As such, no additional habitat units would need to be acquired from a habitat bank and/or additional land under the client's control in order for the pre-commencement biodiversity gain condition to be discharged.

4.3 Biodiversity Gain Hierarchy

4.3.1 The proposals for the site impact only on habitats of low/very low distinctiveness. These habitats are subject to less stringent requirements within the Biodiversity Net Gain hierarchy. Biodiversity Net Gain will be achieved onsite primarily through creation of new habitats. On this basis, it is considered that the proposals are in accordance with the Biodiversity Gain Hierarchy.

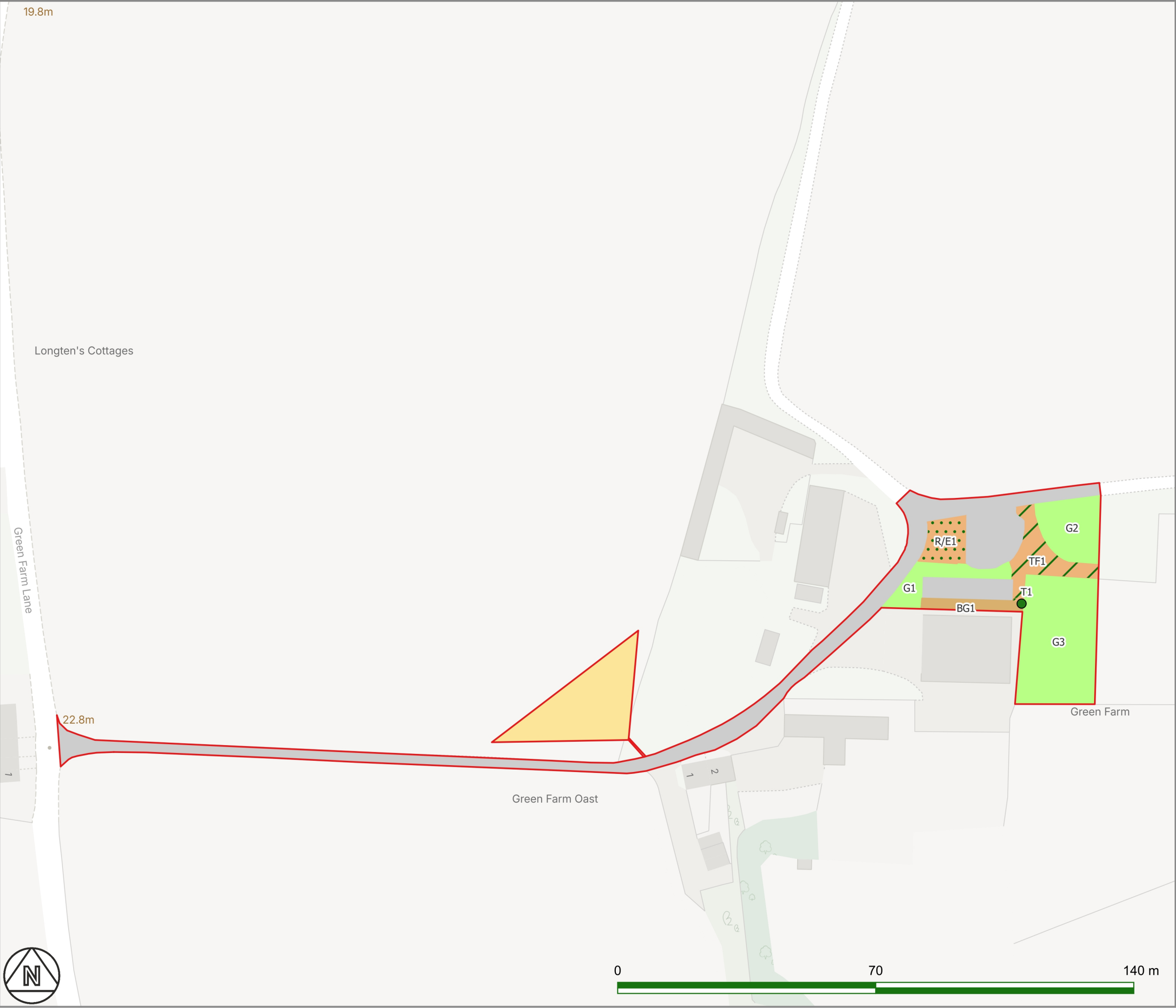
5. Conclusions

- 5.1.1 Essential Ecology has undertaken a UK Habitat survey and completed the Statutory Metric in order to inform a Biodiversity Gain Statement for the site. The assessment has been undertaken in accordance with the relevant legislation and User Guide and consideration has been given to the Biodiversity Gain Hierarchy.
- 5.1.2 On the basis of the assessment of the proposals using the Statutory Metric, the development of the site will result in a net gain of habitat units in excess of 10%.
- 5.1.3 As such, subject to the enhancements set out within this report, accompanying metric and shown on the Post-development Habitats plan (drawing no. ESEC/25081/01-02), the proposals are considered to be compliant with the legislation pertaining to BNG and no additional units will need to be acquired from a habitat bank and/or additional land under the client's control in order for the pre-commencement biodiversity gain condition to be discharged.

6. References

- DEFRA. 2024. *Statutory biodiversity metric calculation tool* . London: DEFRA.
- DEFRA. 2024. *The Statutory Biodiversity Metric: User Guide* . London: DEFRA.
- Kent County Council. 2024. "Biodiversity Net Gain Guidance Note: Interim Strategic Significance Guidance for Biodiversity Net Gain in Kent and Medway. ."
- The British Standards Institution. 2021. *Process for designing and implementing Biodiversity Net Gain - Specification*. London: BSI Standards Limited.
- UKHab Ltd. 2023. "UK Habitat Classification Version 2.0." *UK Habitat Classification website*. Accessed 2024. <https://www.ukhab.org>.

Drawings



Key:

- Site boundary
- Cereal crops [0.055ha]
- Tall forbs [0.022ha]
- Developed land; sealed surface [0.155ha]
- Ruderal/ephemeral [0.013ha]
- Modified grassland [0.113ha]
- Bare ground [0.008ha]
- Rural tree [0.004 ha]

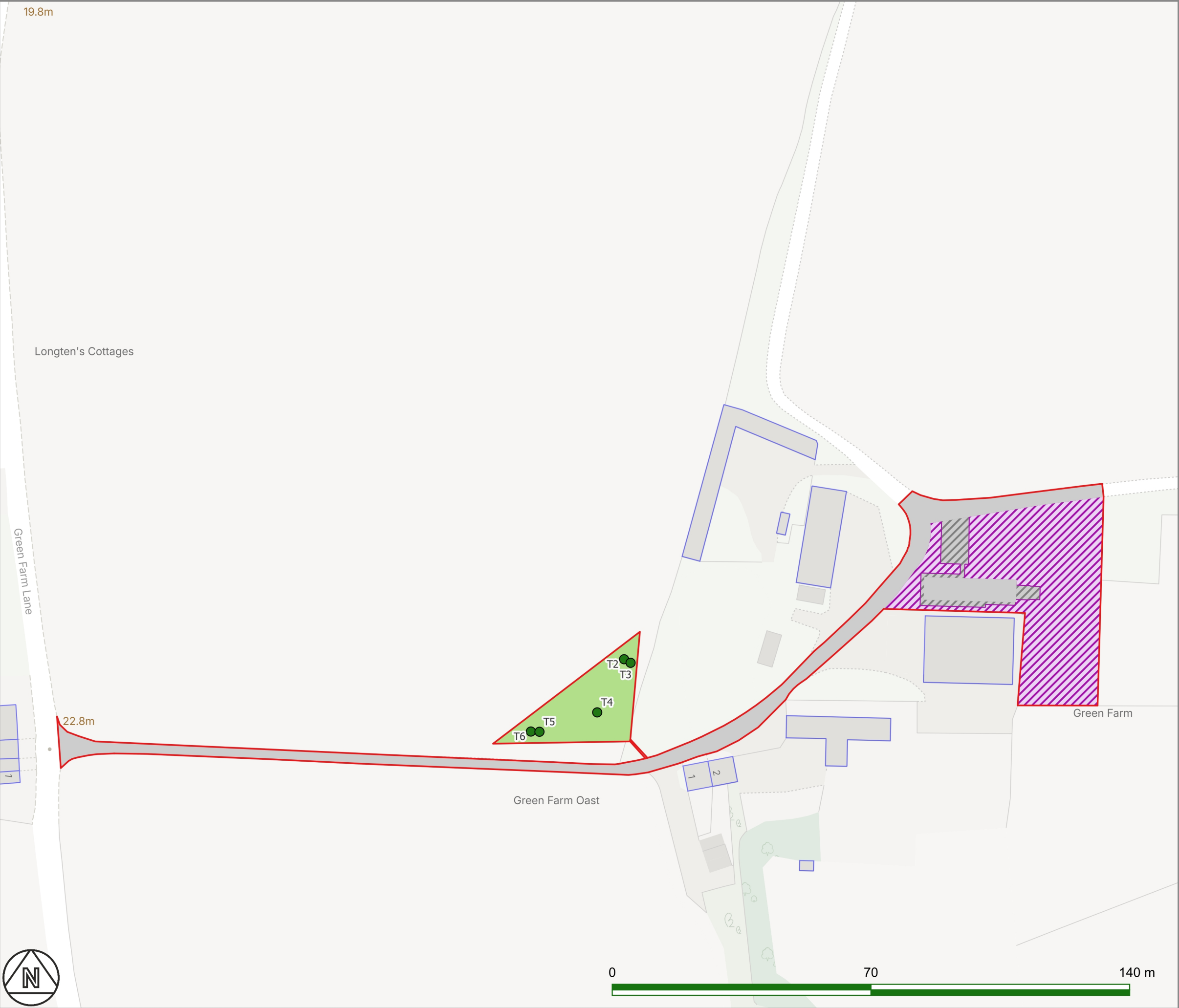
Project:
**Green Farm, Green Farm Lane, Shorne,
Gravesend, Kent, DA12 3H**

Drawing Title:
Baseline Habitats

Drawing No: **ESEC/25081/01-01** Rev: **-**

Date:
February 2026


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- Key:
- Site boundary
 - Other neutral grassland [0.055ha]
 - Retained Developed land; sealed surface [0.133ha]
 - Developed land; sealed surface [0.018ha]
 - Vegetated garden [0.16ha]
 - Rural tree [0.020ha]

Project:
Green Farm, Green Farm Lane, Shorne,
Gravesend, Kent, DA12 3H

Drawing Title:
Post-development Habitats

Drawing No:
ESEC/25081/01-02

Date:
February 2026

Rev:
-

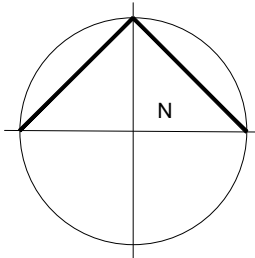


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Appendices

NOTES

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C	APPLICATION SITE UPDATED FOR BNG AREA	05-02-2026	JB
B	APPLICATION SITE UPDATED	19-01-2026	JB
A	APPLICATION SITE UPDATED	28-10-2025	JB
Rev	Description	Date	Drawn



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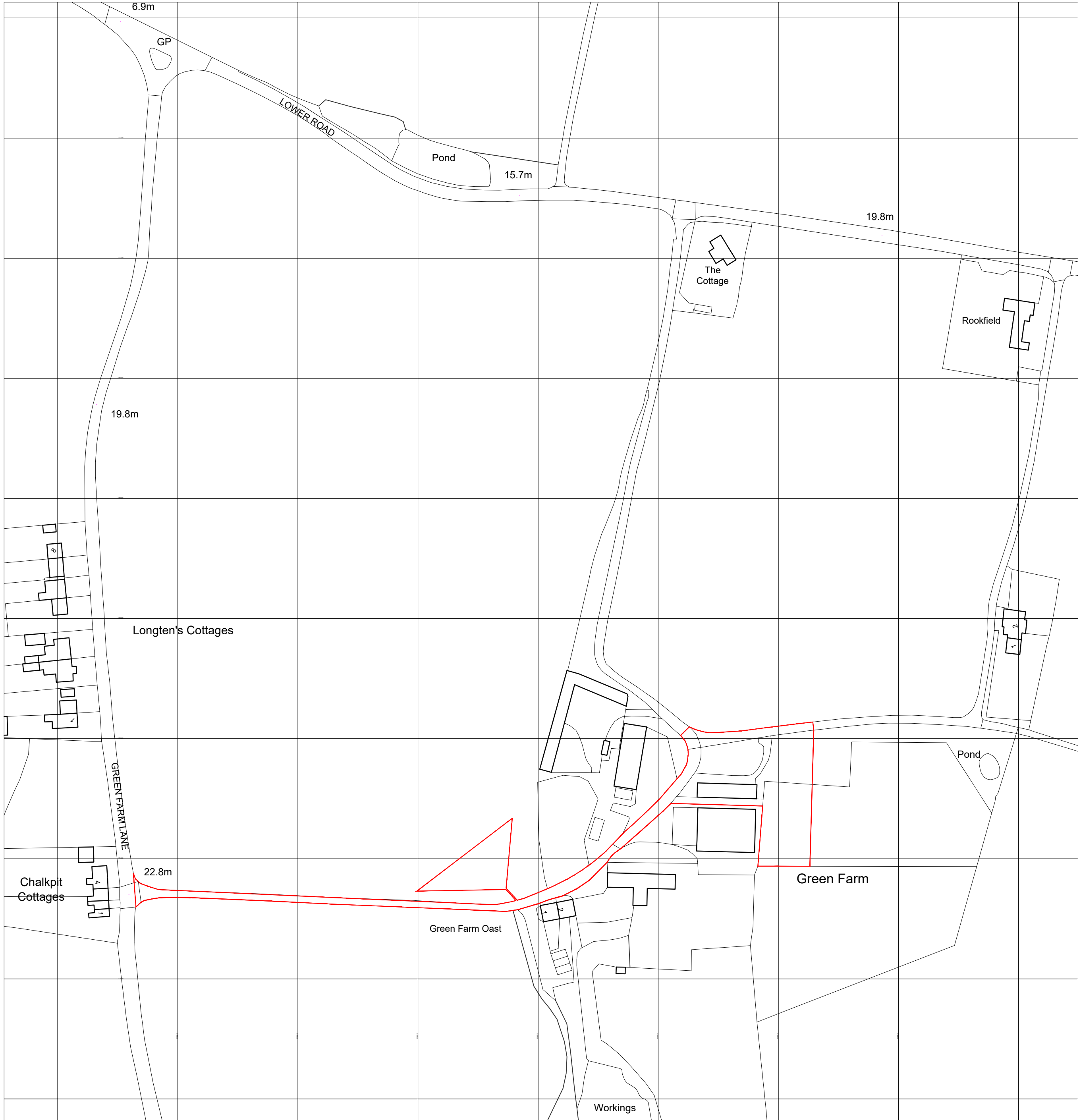
Client
Mr & Mrs J Houghton
Green Farm
Green Farm Lane
Shorne
Gravesend
Kent
DA12 3HL

Job Title
Conversion of an Existing Agricultural Barn to a Dwellinghouse & Erection of a Garden Room

Drawing Title
Proposed Site Location Plan

Original Drawing Size	Drawn By	Checked	Date
A1	JB		16-12-2024

Scale	Drawing Issue	Job/Drawing No
1: 1250	Planning	2421-P-03C



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1: 200 0 2 4 6 8 10m

Scale	Drawing Issue	Job/Drawing No
1: 200	Planning	2421-P-05

Habitat	Modified Grassland	Parcel Reference										Notes
Condition Assessment Criteria		G1	G2	G3								
												Notes (such as justification)
A	There are 6-8 vascular plant species per m² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.	Y	Y	Y								Species per m²: G1 – 7.5 G2 – 5* G3 – 6.5 *Passed criterion A on a precautionary basis due to time of year of assessment.
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	N	N								
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	Y	Y								
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	N	N	N								
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	N	N	N								
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y	Y	Y								
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Y	Y	Y								

Essential criterion achieved (Yes or No)		Y	Y	Y								
Number of criteria passed		4	4	4								
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	Score Achieved ×/✓										
Passes 6 or 7 criteria including passing essential criterion A	Good (3)											
Passes 4 or 5 criteria including passing essential criterion A	Moderate (2)	✓	✓	✓								
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)											

Habitat	Tall Forbs / Ruderal/Ephemeral / Bare Ground	Parcel Reference										Notes
Condition Assessment Criteria		TF1	R/E1	BG1								Notes (such as justification)
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N	N	N								
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N	N	N								
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	Y	Y								
Essential criteria relevant for habitat type achieved (Yes or No)		Y	Y	Y								
Number of criteria passed		1	1	1								
Condition Assessment Result		Condition Assessment Score										
Results for habitats requiring assessment of 3 core criteria only:		Score Achieved x/√										
• Passes all 3 core criteria; - AND • Meets the requirements for Good condition within criterion C.		Good (3)										

• Passes 2 of 3 core criteria; OR • Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)										
• Passes 0 or 1 of 3 core criteria.	Poor (1)	✓	✓	✓							

Habitat	Trees	Parcel Reference										Notes
Condition Assessment Criteria		T1										
		Criterion passed (Yes or No)										Notes (such as justification)
A	The tree is a native species (or at least 70% within the block are native species).	Y										
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y										
C	The tree is mature (or more than 50% within the block are mature) ¹ .	N										
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y										
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N										
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y										
Number of criteria passed		4										
Result	Condition Assessment Score	Score Achieved x/√										
Passes 5 or 6 criteria	Good (3)											
Passes 3 or 4 criteria	Moderate (2)	√										
Passes 2 or fewer criteria	Poor (1)											

Habitat	Other Neutral Grassland	Parcel Reference										Notes
Condition Assessment Criteria		G4										
												Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description). ¹ Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Y										
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	N										
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	N										
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y										
E	Combined cover of species indicative of suboptimal condition ³ and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) are present, this criterion is automatically failed.	Y										
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.	N										

Green Farm, Green Farm Lane, Shorne, Gravesend, Kent, DA12 3HL
Appendix 3 – Habitat Condition Assessment Sheets – Post-development

Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		Y											
Number of criteria passed		3											
Condition Assessment Result	Condition Assessment Score	Score Achieved $\times/\sqrt{}$											
Non-acid grassland types (Result out of 6 criteria)													
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)												
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	✓											
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)												

E	There are clearings, glades or rides present within the scrub, providing sheltered edges.	N											
Number of criteria passed		3											
Condition Assessment Result (out of 5 criteria)		Condition Assessment Score	Score Achieved ×/√										
Passes 5 criteria		Good (3)											
Passes 3 or 4 criteria		Moderate (2)	✓										
Passes 2 or fewer criteria		Poor (1)											

Green Farm, Green Farm Lane, Shorne, Gravesend, Kent, DA12 3HL
Appendix 3 – Habitat Condition Assessment Sheets – Post-development

Condition Assessment Criteria		T2-T6												
		Criterion passed (Yes or No)											Notes (such as justification)	
A	The tree is a native species (or at least 70% within the block are native species).	Y												
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y												
C	The tree is mature (or more than 50% within the block are mature) ¹ .	N												
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y												
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N												
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y												
Number of criteria passed		4												
Result	Condition Assessment Score	Score Achieved ×/✓												
Passes 5 or 6 criteria	Good (3)													
Passes 3 or 4 criteria	Moderate (2)	✓												
Passes 2 or fewer criteria	Poor (1)													



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