Green
Environmental
Consultants

LODGE FARM
RAVELEY ROAD
GREAT RAVELEY
HUNTINGDON
PE28 2QZ

LODGE FARM BARNS
BIODIVERSITY NET GAIN
DESIGN STAGE REPORT

January 2025
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for:

Lodge Farm Partnership

Report number: 1637/4

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LODGE FARM, RAVELEY ROAD, GREAT RAVELEY, HUNTINGDON, PE28 2QZ

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SUMMARY

This report has been prepared by Green Environmental Consultants Ltd on behalf of Lodge Farm Partnership. It relates to barns and workshops at Lodge Farm, Raveley Road, Great Raveley, Huntingdon PE28 2QZ (the 'Site'), centred on OS Grid reference TL 23242 81416; ///blemishes.bounty.pipe. It is proposed to demolish the unused barns and workshops and replace with four dwellings and associated landscaping.

Baseline

The baseline date is 05 March 2024, but was revisited on 09 June 2025 to confirm habitat condition assessments.

The Site includes and surrounds unused agricultural barns and a workshop, dominated by buildings and hard-standing. Some species-poor agricultural grassland lies to the north and west, to the south is a Leylandii hedge forming the southern boundary. Fronting the barns to the east was an island of evenly-spaced planted native and non-native trees over modified grassland. Along the north (Raveley Road) boundary was a trimmed thorn hedge. The Site is surrounded by Lodge Farm land except to the north, where Raveley Road lies.

Proposed Development

The proposal is for four attached dwellings and gardens around three sides of a courtyard. Two areas of biodiverse grassland will be created for communal use. A stand of trees, the western part of which lies within the Site, will be retained to provide a continuing screen. Two Leylandii trees closest to the development will be retained for landscaping reasons, but as they will become part of the boundary to Plot 4 garden their retention cannot be guaranteed. So, as a precautionary measure, these Leylandii have been recorded as lost within the BNG calculation. Three Leylandii at the Site entrance will be removed; a mature broad-leaved tree here, will be retained. Seven new trees will be planted within the proposed scheme, to replace the Leylandii lost. The roadside hedge along the northern boundary will be retained. A new species-rich hedge with trees will be planted along the Site western boundary, outside the gardens, to screen a new farm access road which is to be created. A new species-rich hedge will be planted with a new communal area. As a result of these proposals, a net gain is achieved, but trading rules are not satisfied, due to the loss of (Leylandii) trees, which are not fully compensated by the proposed new planting. Cramming more trees into the site is not beneficial in biodiversity terms as it negatively impacts other new habitats. So it is proposed to plant five specimen trees around the farm estate. The likely position will be to the west of the site along a new proposed access road, but the precise location will be agreed with the LPA. Proposed enhancements include bat boxes. As the garden fences will be post and rail, Hedgehogs holes aren't necessary.

Summary of Change in Biodiversity Units

		Units	Percentage
On-site net change (units & percentage)	Habitat units	0.36	18.64
	Hedgerow units	0.76	168.68
Trading rules satisfied?	Yes		

1 INTRODUCTION

1.1 Introduction

This report has been prepared by Green Environmental Consultants Ltd on behalf of Lodge Farm Partnership. It relates to barns and workshops at Lodge Farm, Raveley Road, Great Raveley, Huntingdon PE28 2QZ (henceforth referred to as the 'Site'). The Site is centred on Ordnance Survey National Grid reference TL 23242 81416; ///blemishes.bounty.pipe. It is proposed to demolish the unused barns and workshops and replace with four dwellings.

An ecological Impact Assessment (EcIA) accompanies this document (Green Environmental Consultants 2025).

Lodge Farm is a typical Cambridgeshire farm with barns, workshops, storage areas and a dwelling with garden. However this farm has two barn complexes, one at the front near the entrance at Raveley Road and the second to the rear. It is the former barn complex at the front (north) which is the subject of these proposals.

The barns are approached via their own access track, off the main farm access road, and are screened from the main farm access by a stand of planted mixed-species trees. The buildings have agriculturally improved grassland to the north and west.

The planning application is for full planning permission and is accompanied by a design lay-out showing the proposed development, and from which the figures used in this report have been derived.

1.2 Objectives

The objectives of this report are to determine the Biodiversity Net Gain for the proposed scheme and makes recommendations for increasing net gain in order to comply with the national guidelines.

1.3 Policy and Legislation

The Statutory Biodiversity Metric November 2023 is the statutory Biodiversity Net Gain document (DEFRA 2023) which includes a calculation tool (metric) and User Guide which are used in this project.

In order to assess the national and local importance of habitats, reference has been made to the Local Plan. Reference has been made to protected species legislation as well as S41 lists (Habitats and Species of Principal Importance), as well as irreplaceable habitats.

2 METHODS

2.1 Desk Study and Field Survey Methods

A habitat survey was conducted according to the CIEEM Guidelines for Preliminary Ecological Appraisal (CIEEM 2017) and using the UK Habitat classification (UKHab) version 2.0 (UKHab Ltd 2023). The survey was undertaken by Jacqui Green BSc(Hons), MSc, CEcol, FCIEEM, an ecologist with forty years' experience.

The results of field survey, an Ecological Impact Assessment, along with other project information, have been used to undertake a Biodiversity Net Gain (BNG) calculation (metric) which forms part of this document.

2.2 Approach to BNG

The approach to this BNG assessment has been made according to the principles set out in BS 8683:2021 Process for designing and implementing Biodiversity Net Gain. The BNG calculator used, is the statutory metric issued November 2023 along with its guidance. This report uses the CIEEM template (CIEEM 2021. Biodiversity Net Gain Report and Audit Templates, Chartered Institute of Ecology and Environmental Management, Winchester, UK).

The metric calculations and results can be found on attached document '1637/4 LFGR BNG Metric' and associated habitat condition sheets.

2.3 Suitably Qualified Ecologist

Best practice guidelines require that this report be completed by a Suitably Qualified Ecologist. BS42020:2013 defines a suitably qualified ecologist as someone who:

1. holds a degree (or equivalent qualification, e.g. N/SVQ level 5) in an ecology related subject.
2. has been a practising ecologist with a minimum of 3 years relevant experience within the last 5 years.
3. clearly demonstrates a practical understanding of factors affecting ecology in relation to construction and the built environment; including acting in an advisory capacity to provide recommendations for ecological protection, enhancement and mitigation measures.
4. is bound by a professional code of conduct.
5. is subject to peer review.
6. is not acting or advising outside their professional competencies.

This report has been completed by Jacqui Green who is a Chartered Ecologist (CEcol) and Fellow of the Chartered Institute of Ecology and Environmental Management (FCIEEM) with in excess of forty years' relevant experience, and therefore meets the criteria for a Suitably Qualified Ecologist (SQE). The habitat surveys and condition assessments were also undertaken by Jacqui Green.

2.4 Limitations

The limitations relate mostly to the conversion of habitats from UKHab to BNG. As the habitats are all highly modified this is not a significant constraint for this project.

3 BASELINE CONDITIONS

3.1 Brief Description

The baseline date is 05 March 2024, revisited and reassessed on 09 June 2025.

The Site includes and surrounds existing unused agricultural barns and a workshop. The majority of the Site consists of buildings and hard-standing; there are three buildings and a lean-to. A small area of species-poor agriculturally improved grassland lies to the north and west (parts of an existing field), to the south is a tall compact, Leylandii hedge forming the southern boundary and separating the Site from the remainder of the farm on the southern side. Fronting the barns to the east was an island of evenly-spaced planted native and non-

native trees over modified grassland. Along the Raveley Road boundary was a trimmed thorn hedge of mostly Blackthorn *Prunus spinosa* and Hawthorn *Crataegus monogyna*, with some Field Maple *Acer campestre*.

The Site is surrounded by Lodge Farm land except to the north, where Raveley Road lies.

There are no statutory or non-statutory sites impacted by these proposals . There are no priority or irreplaceable habitats on site, nor was there any evidence of protected or S41 species present.

A baseline habitat map Figure 1637/4/1 is provided in the Appendix to this document.

3.2 Baseline Habitats

Table 3.1 - Baseline Habitats Area

Metric number	Habitat Type	Area (ha)	Comment
1	Developed land; sealed surface	0.02	Existing barns and workshops and access.
2	Modified grassland	0.2595	Agriculturally improved grassland to rear of barns. Species-poor dominated by grasses, with very few forbs. Lack of management has allowed it to become rank and dominated by species such as False Oat-grass and Cock's-foot.
3	Modified grassland	0.0255	Modified grassland under trees, managed as amenity grass. Regularly mown and kept short.
4	Rural tree	0.0651	Trees over modified grass/ landscaping. Part of larger group, allocated to ensure screening is retained for new development.
5	Rural tree	0.0081	Leylandii within tree group, retained for landscaping but not counted for BNG as will be on the boundary of garden Plot 4 and may be removed.
6	Rural tree	0.0366	Single tree by entrance
7	Rural tree	0.0122	Leylandii by access road entrance, removed.
	Total	**0.61**	
	Site area (excluding individual trees)	**0.49**	

Table 3.2 - Baseline Habitats Linear

Metric number	Habitat Type	Area (ha)	Comment
1	Native Hedgerow	0.07	Mainly thorn hedge along road

			frontage, retained.
2	Non-native/ornamental hedge	0.03	Line of Leylandii trees forming screen to workshops, regularly cut back and managed as hedge. To be removed. Line of non-native trees treated as hedge as per BNG guidelines.
	Total	**0.10**	

4 BNG GOOD PRACTICE PRINCIPLES FOR DEVELOPMENT

Biodiversity Net Gain good practice principles for development have been applied to this scheme at an early stage, as follows:

Principle 1 - Apply the Mitigation Hierarchy

The surveying included scoping for statutory and non-statutory sites, protected species and Habitats and Species of Principal Importance. This includes irreplaceable habitats which are an additional factor to those mentioned above.

Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere

The scheme produces a net gain on site. Broad-leaved trees have been retained whereas most Leylandii will be removed and native trees or fruit trees planted.

Principle 3 - Be inclusive and equitable

N/a

Principle 4 - Address risks

The buildings provide potential habitats for a number of species including bats and birds. This has been taken into account when devising mitigation and enhancements.

Principle 5 - Make a measurable Net Gain contribution

A net gain of 18.64% in area is achievable and 168.68% achieved in linear units.

Principle 6 - Achieve the best outcomes for biodiversity

The buildings and surroundings demonstrated little use by wildlife. Replacing with dwellings and gardens as well as areas of higher diversity grassland in communal spaces, will greatly improve the potential for use by wildlife.

Principle 7 - Be additional

The proposals include two areas of species-rich grassland to replace the modified grassland currently present. Additional species-rich hedgerow will also be provided. Bat and bird boxes will be provided as part of the development. More tree planting will be included around the farm estate.

Principle 8 - Create a Net Gain legacy

Grassland enhancement, hedgerow creation and on-going management will be a legacy of this project valuable to residents and local wildlife.

Principle 9 - Optimise sustainability

Retention of broad-leaved trees and planting of new ones, will contribute to carbon reduction. Tree screening to the east will help to insulate some of the properties from cold easterly winds.

Principle 10 - Be transparent

The provided documents clearly illustrate the potential impacts of the scheme and how the net gain is achieved.

5 PROPOSED DESIGN

The proposed scheme is shown on Figure 1637/4/2 in the Appendix.

The proposal is for four attached dwellings around three sides of a courtyard. The majority of the species-poor grassland will become new gardens and two areas of biodiverse grassland created. A stand of trees within the Site boundary will be retained to provide a continuing screen. Two Leylandii trees closest to the development will be retained, but as they will become part of the boundary to Plot 4 garden, they have been recorded as lost within the BNG calculation, as their retention cannot be guaranteed when located on a garden boundary. Three Leylandii at the Site entrance will be removed, but a mature broad-leaved tree is to be retained. Seven new trees will be planted within the site to replace the Leylandii lost. The roadside hedge along the northern boundary will be retained. A new species-rich hedge will be planted along the Site western boundary, outside the gardens, to screen a new farm access road which is to be created under an existing planning consent. Further new hedging will be planted within Area 2.

To ensure that trading rules are satisfied, a further five new native trees will be planted around the farm estate (cramming them into the small site boundary would be detrimental to other habitat enhancement). The most likely location will be along the western boundary of the consented new farm access road; the locations will be agreed with the LPA.

Proposed enhancements are shown on Figures 1637/5/3 and 1637/5/4 in the EcIA report showing proposed bat boxes. As the garden fences will be post and rail, Hedgehogs holes are not necessary.

6 BIODIVERSITY NET GAIN METRIC

6.1 Proposed Scheme

Document 1637/4 LFGR metric details the calculations derived for the proposed scheme. A summary is provided below. The proposed lay-out, Figure 1635/4/2 is provided in the Appendix.

Table 6.1 - Proposed Habitats Area

Metric no.	Habitat Type	Area (ha)	Comment
1	Developed land; sealed surface	0.155	Dwellings and road etc.

2	Vegetated garden	0.23	New garden habitats
3	Other Neutral grassland	0.02	Area 1 ONG
4	Other Neutral grassland	0.03	Area 2 ONG
5	Rural tree	0.0081	2 new native trees in Area 1
6	Rural tree	0.0203	5 new native trees or fruit trees, in Area 2.
7	Modified grassland	0.0085	Grassland in communal Area 1 which will be under trees. As they mature the grassland condition will decline. Hence entered as modified grass not ONG.
8	Modified grassland	0.021	Grassland in communal Area 2 which will be under trees. As they mature the grassland condition will decline. Hence entered as modified grass not ONG.
9	Rural tree	0.0254	5 new specimen native trees to be planted around the farm estate and managed as part of the estate.
	Total	**0.52**	
	Site area (excluding individual trees)	**0.46**	

Table 6.2 - Proposed Habitats Linear

Metric no.	Habitat Type	Area (ha)	Comment
1	Species-rich Native Hedgerow with trees.	0.07	New hedge along western boundary.
4	Species-rich Native Hedgerow	0.03	Around part of Area 2
	Total	0.10	

6.2 Calculator Summary

Table 6.3 Summary of Habitat Units Post-Development.

On-site Baseline	Habitat units	1.95	
	Hedgerow units	0.45	
	Watercourse units	0.00	
On-site post-intervention	Habitat units	2.32	
	Hedgerow units	1.21	
	Watercourse units	0.00	
on-site net change (units & percentage)	Habitat units	0.36	18.64
	Hedgerow units	0.76	168.68
	Watercourse units	0.00	

7 Project Implementation and Construction Plan

A CEMP will be provided.

8 Biodiversity Net Gain Management and Monitoring Plan

The communal areas (Areas 1 and 2), hedgerows and new tree planting will be managed by Lodge Farm Partnership as part of the wider farm management.

A management plan and monitoring proposals will be provided.

APPENDIX


H1
g4
HS
B1
B2
HS
HS
B3
HS
B4
HS
H2
g4
g4
g4
AM
&
ST
Pond
garden
Lodge Farm
Farmhouse
Line of proposed new farm access,
consented but not currently in place.
0
10
20m approx
© Crown Copyright. Licence Number 100055927
u1b developed land, sealed surface
u1b5 buildings
u1c artificial unvegetated unsealed surface
g4 modified grassland
Trees over grassland
u1e Built linear feature
h2a6 - other native hedgerow (H1)
h2b - non-native & ornamental hedgerow (H2)
ADDITIONAL BNG CODES:
HS - Hard-standing
AM - Modified grass (amenity grass) under trees.
ST - trees (broad-leaved) over AM
T - broad-leaved tree
ARLey - Access road Leylandii - to be removed
STLey - Leylandii within retained tree group.
Project:
LODGE FARM BARNS,
GREAT RAVELEY
Client:
Lodge Farm Ptnship
Scale: nts
Drawn by: JG
Date: 08/06/2025
Rev: D
Drawing:
1637/4/1
HABITAT MAP
BASELINE BNG
Green Environmental Consultants
22 Heath Road, Swaffham Bulbeck,
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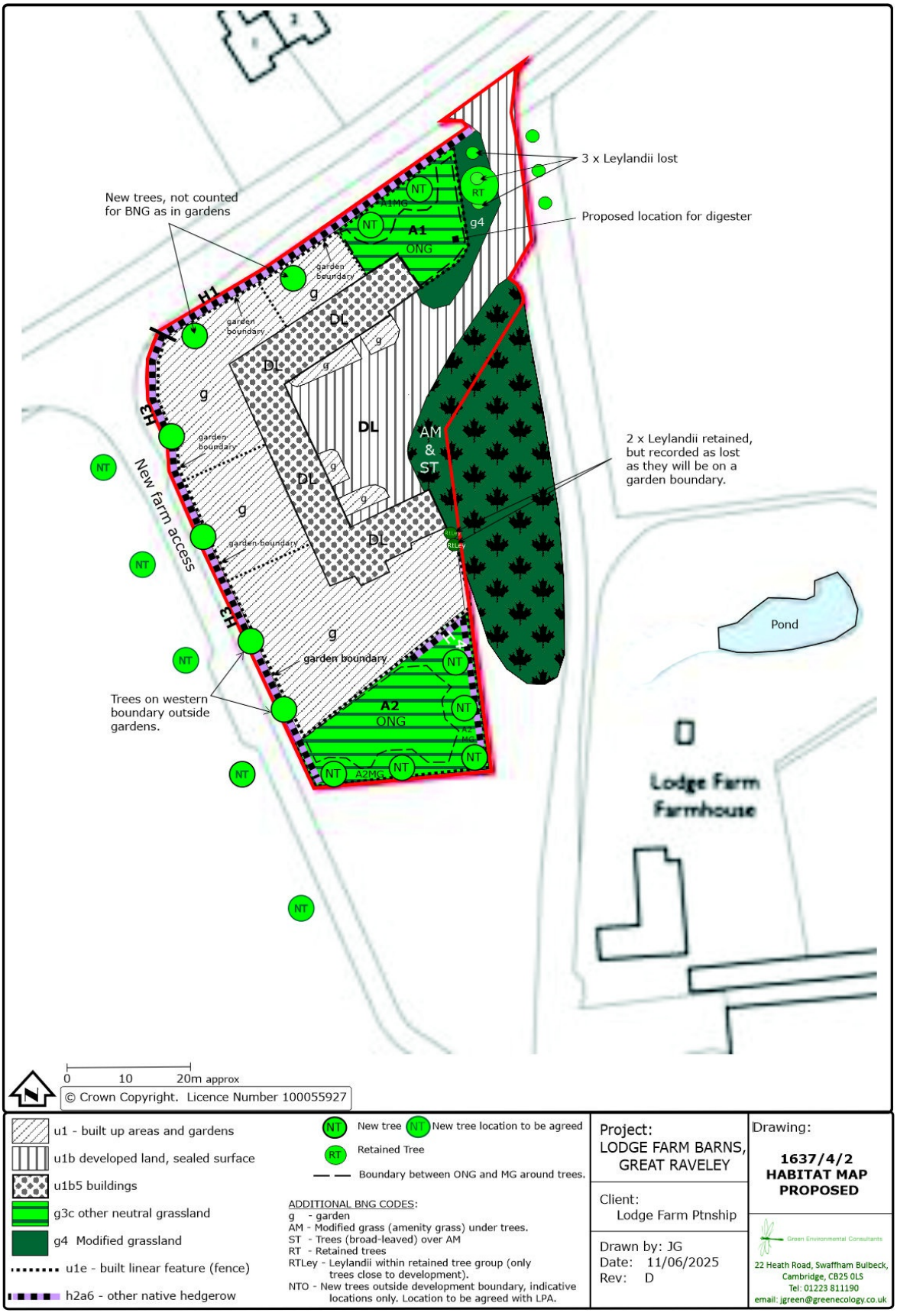
Tel: 01223 811190
email: jgreen@greenecology.co.uk


3 x Leylandii lost
Proposed location for digester
New trees, not counted for BNG as in gardens
2 x Leylandii retained, but recorded as lost as they will be on a garden boundary.
Trees on western boundary outside gardens.
New farm access
Pond
Lodge Farm Farmhouse
garden boundary
A1 ONG
A2 ONG
AM & ST
DL
g
g4
H1
H3
NT
RT
A1MG
A2MG
RTLey
0 10 20m approx
© Crown Copyright. Licence Number 100055927
u1 - built up areas and gardens
u1b developed land, sealed surface
u1b5 buildings
g3c other neutral grassland
g4 Modified grassland
u1e - built linear feature (fence)
h2a6 - other native hedgerow
New tree
New tree location to be agreed
Retained Tree
Boundary between ONG and MG around trees.
ADDITIONAL BNG CODES:
g - garden
AM - Modified grass (amenity grass) under trees.
ST - Trees (broad-leaved) over AM
RT - Retained trees
RTLey - Leylandii within retained tree group (only trees close to development).
NTO - New trees outside development boundary, indicative locations only. Location to be agreed with LPA.
Project: LODGE FARM BARNS, GREAT RAVELEY
Client: Lodge Farm Ptnship
Drawn by: JG
Date: 11/06/2025
Rev: D
Drawing: 1637/4/2 HABITAT MAP PROPOSED
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