
Biodiversity Impact
Assessment

35 Greenes Road,
Whiston, L35 3AU
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Biodiversity Impact Assessment

of

35 Greenes Road, Whiston, L35 3AU

for

Level 2 Architects

December 2024

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Contents

EXECUTIVE SUMMARY	- 3 -
1.0 Introduction	- 4 -
1.1 Purpose of this report	- 4 -
2.0 Methods	- 6 -
2.1 Field Survey	- 6 -
2.2 Biodiversity Baseline Methods	- 6 -
2.3 Post Intervention Methods	- 7 -
2.4 Limitations and assumptions.....	- 7 -
3.0 Biodiversity Baseline	- 8 -
3.1 Biodiversity Baseline for habitats on site.....	- 8 -
4.0 Impacts on Biodiversity.....	- 9 -
4.1 Post-development biodiversity value of the proposed development site.....	- 9 -
4.2 Change in biodiversity value	- 9 -
5.0 References.....	- 10 -

Appendix 1 Drawing P.2135.24.E01 Baseline Habitats

Appendix 2 Drawing 494-1-PLN-005 Proposed Floor Plans

EXECUTIVE SUMMARY

This report presents an assessment study of effects on biodiversity in connection with the proposed development at 35 Greenes Road, Whiston, L35 3AU.

This report calculates 'biodiversity units' using DEFRA's Statutory Biodiversity Metric Calculation Tool, and following the methods set out in the *The Statutory Biodiversity Metric auditing and accounting for biodiversity value* (User guide) and *The Statutory Biodiversity Metric: Auditing and accounting for biodiversity value: technical supplement*. The units are calculated based on the area (or length), condition and distinctiveness of habitats found on the site. Pre-development and post-development biodiversity values are calculated and compared to identify any change in the biodiversity value of the site.

Based on the current proposals there will be **a gain of +0.01 (+81.30%) habitat units** within the proposed development area, demonstrating that a net gain has been achieved within the site in line with National Planning Policy (NPPF).

Post development biodiversity units with the proposed development site were calculated based on the habitats displayed on the landscape planting plan Drawing 494-1-PLN-005 Proposed Floor Plans appendix 2.

1.0 Introduction

1.1 Purpose of this report

Ascerta has been instructed by Level 2 Architects to carry out a Biodiversity Impact Assessment (BIA) at 35 Greenes Road, Whiston, L35 3AU (hereafter referred to as the site). The site OS grid reference is SJ 46699 90914 and the What3Words reference is skills.jaws.remit. The extent of the site is displayed in photograph 1.1 below. The site boundary is shown in **Figure 1**.



Figure 1: Site boundary of the land at 35 Greenes Road, Whiston, L35 3AU

The BIA aims to:

- Provide baseline data to classify the type, distinctiveness, condition and strategic significance of habitats prior to and post development.
- Ensure that baseline habitat conditions are classified in a robust and consistent manner, and that classification is based on the best available data at the time of assessment.
- Clearly identify data collection methods and any limitations.
- Calculate baseline pre-development and post-development habitat units for the site based on current development proposals.
- Aim to achieve BNG on-site wherever possible; with off-site contribution measures being considered as an alternative option if required.

The Natural Environment Planning Policy Guidance (PPG) (updated September 2023) provides further explanation on how this should be done. In particular, it addresses principles across a broad spectrum of topics targeting biodiversity conservation, from individual site and species protection through to the supporting of ecosystem services, and the use of local ecological networks to support the national Nature Recovery Network. The PPG promotes the delivery of measurable Biodiversity Net Gain through the creation and enhancement of habitats alongside development.

The Government has confirmed Biodiversity Net Gain at a minimum of 10% for all major development planning applications submitted from 12th February 2024. The Environment Act sets out how the UK will maintain environmental standards following leaving of the EU. The Bill builds on the vision of the 25 Year Environment Plan, with the ambition from the government to leave the environment in a better state than it was when inherited.

The Defra Statutory Biodiversity Metric has been implemented to work alongside the Environment Act. This tool calculates potential biodiversity impacts as a result of development and identifies mitigation and compensation requirements to ensure no net loss of biodiversity. In addition, it identifies measures that can be implemented in order to meet Biodiversity gain as a result of development.

The National Planning Policy Framework (NPPF) 2023 has been published to provide further planning guidance. Wildlife, biodiversity and ecological networks are referred to in Section 15 '*Conserving and enhancing the natural environment*'. The NPPF states that the planning system should contribute to and enhance the natural and local environment by: protecting and enhancing valued landscapes and sites of biodiversity value, recognise the wider benefits from natural capital and ecosystem services and minimising impacts on and provided net gains for biodiversity. Further guidance is provided within Government Circular 06/05: *Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System*.

Biodiversity net gain has been defined as 'development that leaves biodiversity in a better state than before, and an approach where developers work with local governments, wildlife groups, landowners and other stakeholders in order to support their priorities for nature conservation' (Baker, 2016).

Good practice principles for biodiversity net gain are set out within Table 1.1 of Biodiversity Net Gain: Good practice principles for development (Baker et al., 2019).

The key principles include:

- Apply the 'Mitigation Hierarchy' (in line with CIEEM Guidelines for Ecological Impact Assessment (EcIA)) (CIEEM, 2018) and be 'additional' by achieving outcomes that exceed existing obligations.
- Avoid losing biodiversity which cannot be off-set elsewhere (e.g. irreplaceable habitats).
- Address risk (e.g. difficulty of achieving habitat creation / enhancement for net gain).
- Make a 'measurable' net gain contribution (e.g. calculated using an appropriate metric) and ensure that calculations consistent and transparent (i.e. limitations and assumptions are clearly identified).
- Ensure that net gain design achieves the best outcome for biodiversity (this may require both quantitative and qualitative assessment) and create a net gain legacy for long-term benefits.

2.0 Methods

2.1 Field Survey

The initial walkover survey of the site was conducted on 4th December 2024 when the habitat types and features of ecological interest were identified and mapped. An extended phase one habitat survey was undertaken along with a habitat condition assessment (*Natural England Farm Environment Plan (FEP) Manual, 3rd Edition, March 2010*).

Information and Data Used to Inform the Biodiversity Net Gain Calculation

The following information was used to inform the Biodiversity Unit Calculations:

- GIS baseline map of the site (Appendix 1);
- Drawing 494-1-PLN-005 Proposed Floor Plans (Appendix 2); and
- The baseline condition assessments.

2.2 Biodiversity Baseline Methods

To calculate a biodiversity baseline, this study used methods detailed within *The Statutory Biodiversity Metric Calculation Tool* and following the methods set out in the *The Statutory Biodiversity Metric: auditing and accounting for biodiversity value* (User guide) and *The Statutory Biodiversity Metric: Auditing and accounting for biodiversity value: technical supplement*. Initially, habitats were digitised in GIS using field notes. Areas were measured in hectares and linear features in kilometres. The biodiversity unit value for each habitat was then calculated by multiplying the habitat area (or length) by its distinctiveness score and then by its condition score, both described below. The unit values for each habitat were then totalled to produce the biodiversity baseline. Linear habitats were assessed separately to areas.

2.2.1 Habitat distinctiveness

Habitats identified are entered into DEFRA's *Statutory Biodiversity Metric Calculation Tool* which then assigns a pre-determined distinctiveness value. Habitat distinctiveness is a collective measure of biodiversity and includes parameters such as species-richness, diversity, rarity, and the degree to which a habitat supports species rarely found in other habitats.

2.2.2 Habitat Condition

The condition of the habitats present has been assessed during the site visits using *The Statutory Biodiversity Metric: auditing and accounting for biodiversity value* (User guide) and *The Statutory Biodiversity Metric: Auditing and accounting for biodiversity value: technical supplement*.

The post-development biodiversity units were calculated using information from the landscape planting plan drawing 494-1-PLN-005 Proposed Floor Plans (Appendix 2). To calculate the post-development biodiversity units the habitat areas are multiplied by the distinctiveness and condition values and then divided by a multiplier based on the difficulty of creating the proposed habitat and the time needed to achieve the proposed condition. The baseline biodiversity units were then subtracted from the post development units to determine any change in biodiversity value of the site as a result of the development. The

target condition of the habitats is based on guidance set out within the *Statutory Biodiversity Metric: auditing and accounting for biodiversity value user guide* and the *Statutory Biodiversity Metric: Auditing and accounting for biodiversity value: technical supplement* which may require ecological input and/or guidance to ensure the target conditions are achieved.

2.2.23 Habitat Strategic Significance

A desk study was undertaken and presented within the Preliminary Ecological Appraisal. Nature Recovery Areas, National Character Area objectives and green infrastructure strategies were also used to identify whether the site was as identified, desirable or not in the local strategy.

Trading Summary

'Trading Up' is a concept which requires 'conserving through offset components of biodiversity that are of a higher conservation priority (for example, because they are more irreplaceable and vulnerable) than those affected by the development project for which the offset is envisaged' (BBOP, 2018). For example, should non-irreplaceable habitats be lost / impacted as a result of the proposed development, offsets should be achieved through the creation / enhancement of habitat of the same or higher distinctiveness, where environmental conditions are appropriate and where it generates the greatest benefits for biodiversity.

2.3 Post Intervention Methods

The post-development biodiversity units were calculated using information from drawing 494-1-PLN-005 Proposed Floor Plans (Appendix 2). To calculate the post-development biodiversity units the habitat areas are multiplied by the distinctiveness and condition values and then divided by a multiplier based on the difficulty of creating the proposed habitat and the time needed to achieve the proposed condition. The baseline biodiversity units were then subtracted from the post development units to determine any change in biodiversity value of the site as a result of the development. The target condition of the habitats is based on guidance set out within the *Statutory Biodiversity Metric: auditing and accounting for biodiversity value user guide* and the *Statutory Biodiversity Metric: Auditing and accounting for biodiversity value: technical supplement* which may require ecological input and/or guidance to ensure the target conditions are achieved.

2.4 Limitations and assumptions

Baseline habitat condition assessments areas and habitat type have been converted into a reasonable category using the assistance of *Statutory Biodiversity Metric: Auditing and accounting for biodiversity value: technical supplement*. Cross referencing of drawing 494-1-PLN-005 Proposed Floor Plans (appendix 2), aerial imagery has been used to determine the metric calculations.

3.0 Biodiversity Baseline

This section establishes the biodiversity baseline for the site based on the preliminary ecological appraisal of the proposed development site and the proposed compensatory site.

3.1 Biodiversity Baseline for habitats on site

The *Baseline Condition Assessment*, drawing P.2135.29E01 (Appendix 1) has been used to identify the habitat area types within the development site. The phase 1 habitat categories have translated into UKHab habitat classification (*UK Habitat Classification User Manual*) using the UKHab/Phase 1 translation tool within the *Statutory Biodiversity Metric Calculation Tool* and following the methods set out in the the *Statutory Biodiversity Metric : auditing and accounting for biodiversity value* (User guide) and the *Statutory Biodiversity Metric: Auditing and accounting for biodiversity value: technical supplement* and biodiversity scores have been calculated and assessed, as displayed in Table 1 below.

Table 1: Baseline Habitat Areas Biodiversity Calculation for onsite habitats

Broad Habitat	Habitat Type	Irreplaceable habitat	Area (hectares)	Distinctiveness	Score	Condition	Score
Urban	Developed land; sealed surface	No	0.01	V.Low	0	N/A - Other	0
Grassland	Modified grassland	No	0.0011	Low	2	Good	3
Urban	Developed land; sealed surface	No	0.0115	V.Low	0	N/A - Other	0

4.0 Impacts on Biodiversity

4.1 Post-development biodiversity value of the proposed development site

Drawing 494-1-PLN-005 Proposed Floor Plans (Appendix 2) has been used to identify the new habitat area types within the proposed development site. Habitat areas, distinctiveness and condition scores have been calculated and assessed and are displayed in Table 3 and Table 2 below.

Table 2: Post Development Habitat Areas Biodiversity Calculation for Onsite Habitats

Broad Habitat	Proposed habitat	Area (hectares)	Distinctiveness		Condition	
			Distinctiveness	Score	Condition	Score
Urban	Vegetated garden	0.0062	Low	2	Condition Assessment N/A	1

4.2 Change in biodiversity value

Based on the current proposals there will be **a gain of +0.01 (+81.30%) habitat units** within the proposed development area, demonstrating that a net gain has been achieved within the site in line with National Planning Policy (NPPF).

The BNG Good Practice Principles, as outlined in 1.1 have been applied, however due to the nature of the proposals net gain has not been achieved on the proposed development site.

Avoid losing biodiversity which cannot be off-set elsewhere, applying the mitigation hierarchy, ensuring that net gain design achieves the best outcome for biodiversity and create a net gain legacy for long-term benefits.

Through stakeholder engagement and design team meetings an avoidance for the biodiversity loss has been considered throughout the production of the proposals.

Addressing risk and applying the mitigation hierarchy.

The residual impacts will be short-term and landscape changes following re-vegetation would not be obvious or attract attention given the baseline habits and current use of the site.

Make a 'measurable' net gain contribution.

Given the habitats that are present within the site, predevelopment of a measurable net gain contribution has been achieved. It is considered that the proposed design achieves the best outcome for biodiversity.

5.0 References

JNCC (2010), Handbook for Phase 1 habitat survey - a technique for environmental audit. JNCC, Peterborough

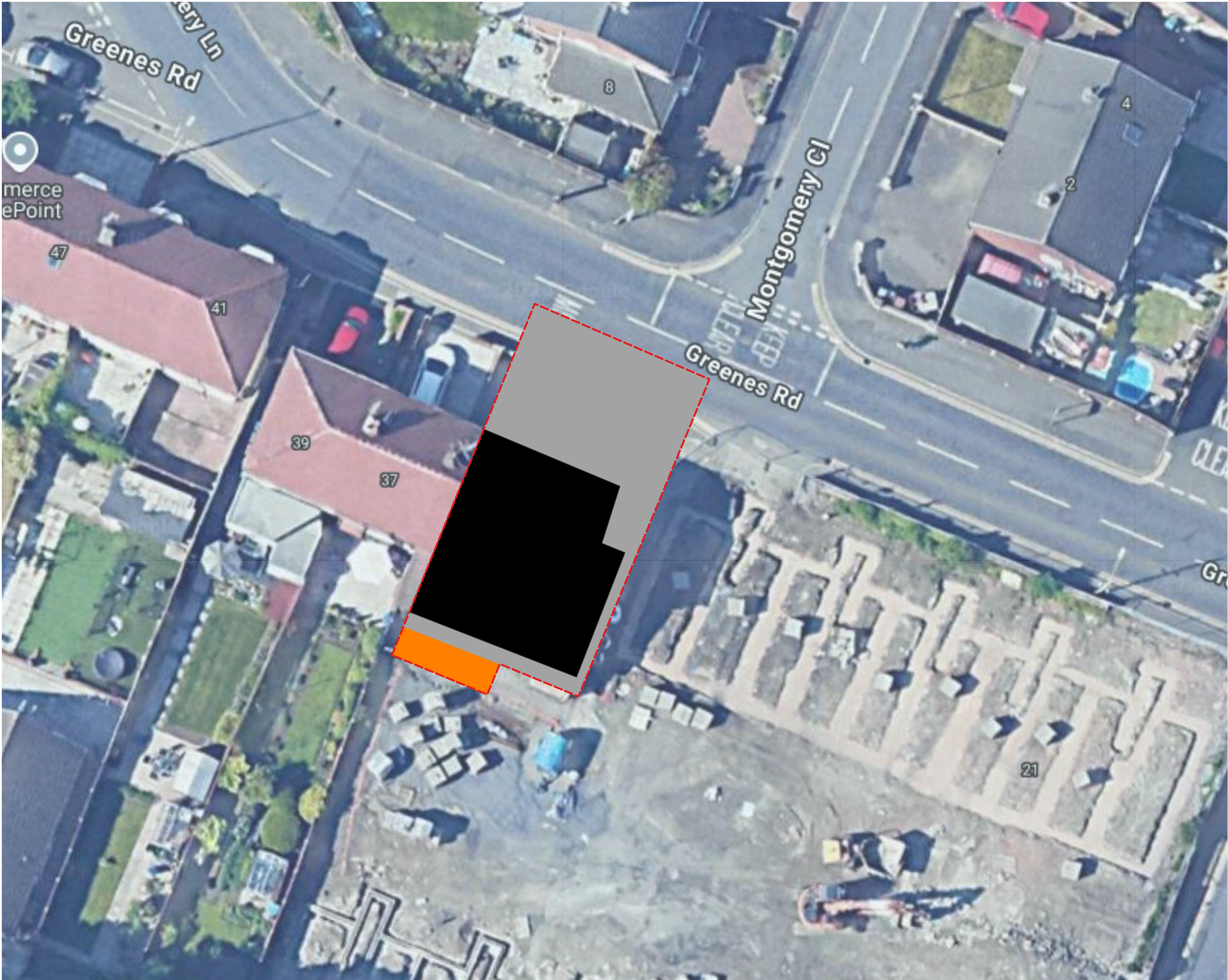
STEPHEN PANKS A , NICK WHITE A , AMANDA NEWSOME A , MUNGO NASH A , JACK POTTER A , MATT HEYDON A , EDWARD MAYHEW A , MARIA ALVAREZ A , TRUDY RUSSELL A , CLARE CASHON A , FINN GODDARD A , SARAH J. SCOTT B , MAX HEAVER C , SARAH H. SCOTT C , JO TREWEEK D , BILL BUTCHER E AND DAVE STONE *Biodiversity metric 4.0: Auditing and accounting for biodiversity – User Guide*. Natural England.

A – Natural England, B – Environment Agency, C – Department for Environment, Food and Rural Affairs, D – Treework Environmental Consultants Ltd, E – eCountability Ltd

UK Habitat Classification Working Group (2023). *UK Habitat Classification User Manual* at <http://ecountability.co.uk/ukhabworkinggroup-ukhab>

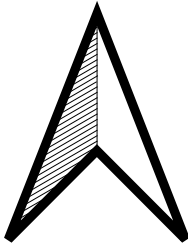
UK Habitat Classification Working Group (2023). *UK Habitat Classification – Habitat Definitions* at <http://ecountability.co.uk/ukhabworkinggroup-ukhab>

Appendix 1



KEY

- Survey area
- Building (u1b5)
- Modified grassland (g4)
- Hardstanding (u1b)



DO NOT SCALE.
ALL COORDINATES RELATED TO LOCAL GRID.
LOCATED TO NG BY BEST FIT TO DETAIL.
EXTRACTED FROM OS DIGITAL DATA.

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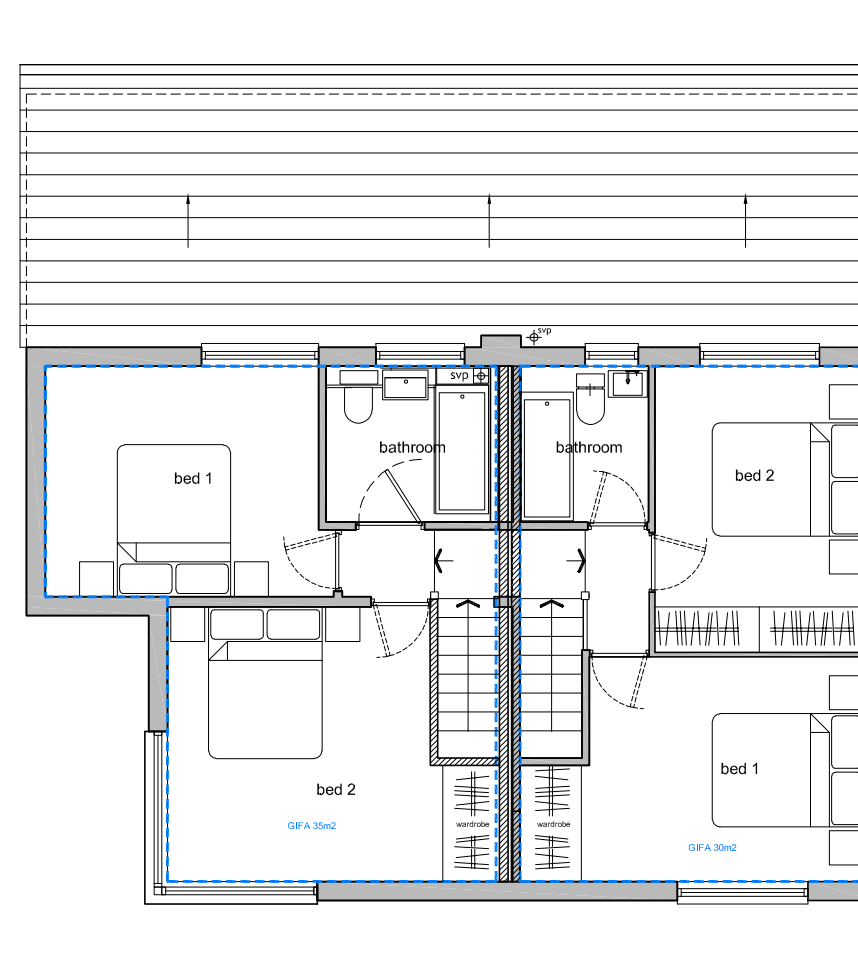
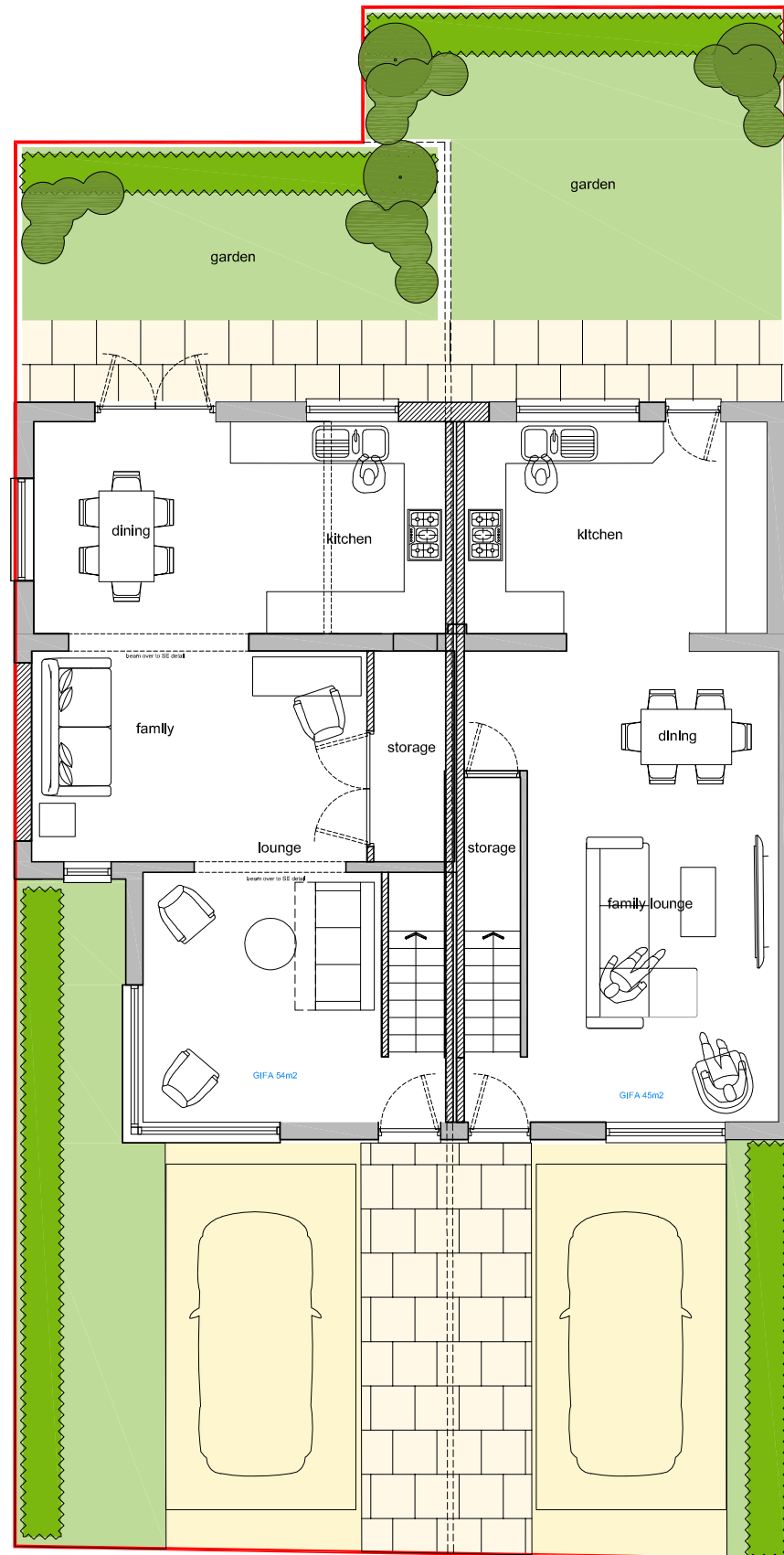
CLIENT:
Level 2 Architects

PROJECT:
35 Greenes Road

DRAWING TITLE:
Baseline Habitats

SCALE: 1:200@A3	DRAWN BY: LK	DRAWING No: P.2135.24.E01
DATE: 06/12/2024	CHKD BY: AR	REV: -

Appendix 2



- Existing walls
- Walls removed
- New walls