

**229 North Road  
Yate  
BS37 7LG**

**Biodiversity Net Gain Assessment**

**LUS Ecology**

On behalf of

**Scott Brothers UK LTD**

Date: 20/03/24

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Revision: Submission A

Approved by: Greg Nightingale

**LUS**



# Contents

<b>Chapter 1: Summary</b>	<b>2</b>
<b>Chapter 2: Introduction</b>	<b>3</b>
<b>Chapter 3: Method</b>	<b>6</b>
<b>Chapter 4: Baseline and Proposed Development</b>	<b>11</b>
<b>Chapter 5: Results and Discussion</b>	<b>13</b>
<b>Appendix A: Delivery of the BNG Good Practice Principles</b>	<b>14</b>
<b>Appendix B: Condition Assessment Tables</b>	<b>17</b>

## Chapter 1: Summary

- 1.1 A Statutory Biodiversity Metric of 229 North Road, Yate, BS37 7LG has been completed.
- 1.2 Current local policy requirements relating to Biodiversity Net Gain Assessment in the South Gloucestershire Council area, require a >0% Biodiversity Net Gain outcome.
- 1.3 The Proposed Development will result in a net biodiversity loss of -0.03 habitat units (-5.74%) and a net biodiversity gain of 0.06 hedgerow units (+10.64), with the Trading Rules not met due to the overall loss.
- 1.4 To achieve a Biodiversity Net gain, the applicant has outlined they are either willing to make a financial contribution to a biodiversity offset or will agree to a legal agreement to plant an additional eight small trees within the applicant's wider adjacent ownership.
- 1.5 This assessment has been based upon a site visit and has been completed by an ecologist experienced in the Biodiversity Net Gain Assessment process. Full methods and assessments are included within this report. The completed Statutory Biodiversity Metric Excel file will be submitted alongside this report.
- 1.6 Based on the results from the survey, context of the Site, and overall low ecological importance of the Site, this report is valid for a period of 18 months (i.e., the 25/03/2025). This is reasoned in line with good practice guidelines.

## Chapter 2: Introduction

### Site and Planning Context

- 2.1 This report sets out a Biodiversity Net Gain (BNG) Assessment of 229 North Road, Yate, BS37 7LG (referred to as 'the Site' throughout this report). It presents the results of the BNG Assessment of the Site and is supported by a BNG site visit undertaken on 25/09/2023 and Ecological Assessment (EA) by LUS Ecology<sup>1</sup>.
- 2.2 In accordance with the National Planning Policy Framework (NPPF)<sup>2</sup> proposals should seek to demonstrate BNG. The NPPF states plans should:
- '...promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.'*
- 2.3 South Gloucestershire Council's Biodiversity and Planning: Guidance for new development: Supplementary planning document (March 2023) sets out:
- "Prior to BNG becoming mandatory, the council would encourage applicants to achieve 10% net gain, in support of the Council's overarching BNG objectives, but any 'gain' is acceptable in accordance with PSP19. Once BNG becomes mandatory, which is expected to be November 2023, then the Council will be requiring 10% net gain to be achieved on development sites as a minimum."*
- 2.4 The Environment Act 2021 sets out a mandatory requirement for all planning permissions in England (with a few exemptions) to lead to a 10% net gain in habitats and applies to Major Development, and planning applications for Small Sites<sup>3</sup> submitted on or after 02/04/24.
- 2.5 The Site does not fall into the category of a major development, as defined in article 2(1) of the Town and Country Planning (Development Management Procedure) (England) Order 2015. The Site is a small site, as it is a residential development where the number of dwellings is between 1 and 9 on a site of an area 1 hectare or less. The Site is therefore exempt from Mandatory BNG until 02/04/24.
- 2.6 **Based on the above policy review, the Proposed Development targeted a >0% BNG outcome.**

### Site Description

- 2.7 The Site consists of a rear garden, hardstanding, two buildings, and a small extension of an offsite building, and is bound by trees and hedgerows (**Figure 1**). The Site is located to the northwest of Yate, South Gloucestershire. The Site lies to the north of an area of housing currently being built, which was granted permission in January 2021 by South Gloucestershire Council (P20/15214/F). Existing areas of housing lie to the east, residential

<sup>1</sup> LUS Ecology (2023). 229 North Road, Yate, BS37 7LG: Ecological Assessment: LUS2350 EA Submission. LUS Ecology, Bristol.

<sup>2</sup> Ministry of Housing, Communities and Local Government (2019). National Planning Policy Framework. MHCLG, London

<sup>3</sup> Available at <https://www.gov.uk/guidance/biodiversity-net-gain-exempt-developments>. Accessed 10/10/23.

gardens lie to the north, and arable and pasture lie to the west. The area of land to the west is highly likely to be developed as conditions are being discharged for a planning application which covers this land (P19/2575/F, South Gloucestershire Council).



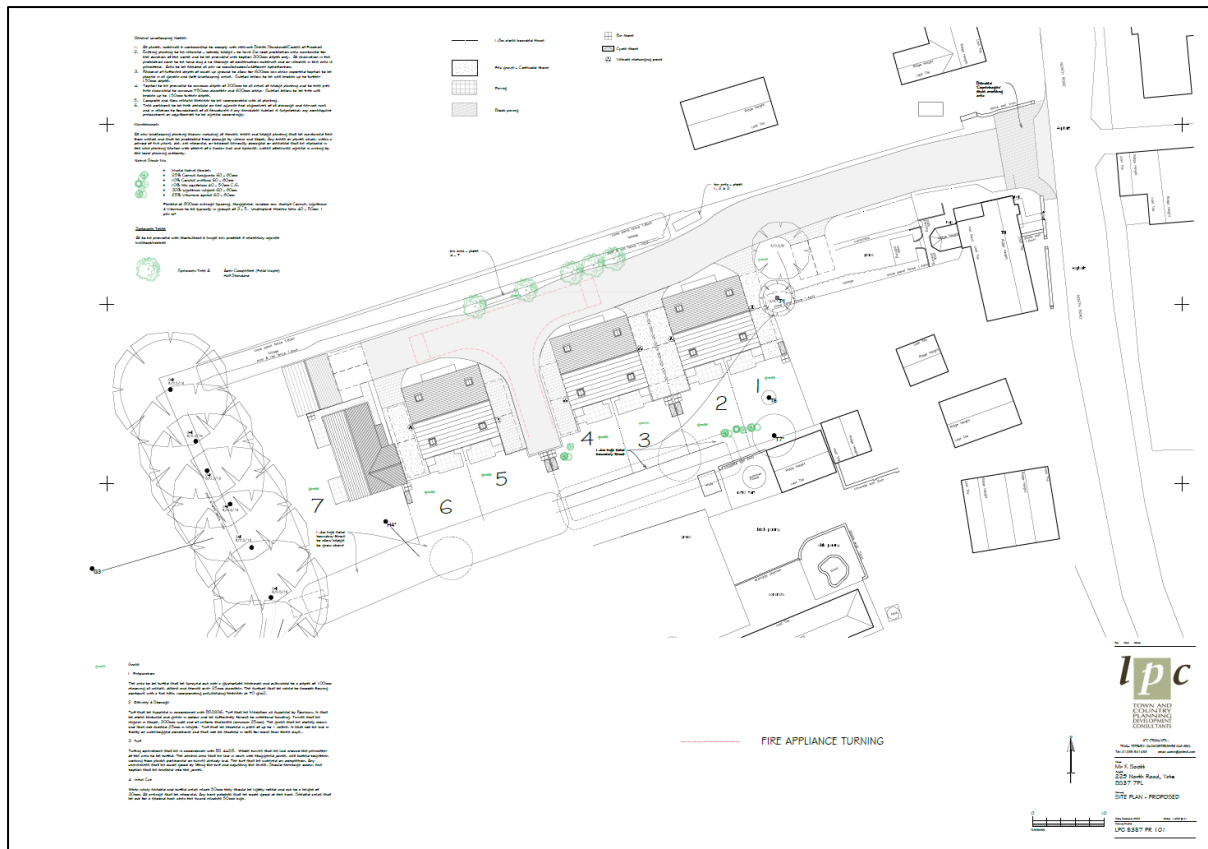
**Figure 1. Aerial image - Site boundary in red line<sup>4</sup>**

### **Proposed Development**

- 2.8 A planning application for the construction of seven residential units, with associated access and landscaping will be submitted soon (referred to as the Proposed Development throughout this report). The Proposed Development will result in the demolition of a small single storey extension, the removal of two wooden structures, the removal of grassland, and the removal of a small number of trees. The boundary habitats will be retained and protected throughout the development process. **Figure 2** shows the Proposed Development.

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<sup>4</sup> Image used under licence (©2023 Google): Accessed: 09/11/2023.



**Figure 2. The Proposed Development**

### **Purpose of this report**

- 2.9 The purpose of this report is to provide sufficient information for the Local Planning Authority to fully assess the ecological impacts of the Proposed Development, via the Biodiversity Net Gain Assessment process.
- 2.10 The key objectives of this BNG Assessment are to:
- Determine the BNG percentage required to be delivered by the Proposed Development.
  - Outline the BNG Assessment method, including any assumptions and/or deviations.
  - Follow the 'Mitigation Hierarchy', and outline if irreplaceable habitats will be lost.
  - Undertake the BNG Assessment:
    - Determine the BNG baseline of the Site, using the Ecological Impact Assessment and Biodiversity Net Gain Condition Assessment Survey.
    - Determine the BNG proposals for the Site, using the layout.
    - Compare the BNG baseline against the BNG Proposals.
  - Outline the agreed management activities that relate to the BNG Assessment.
  - Outline the agreed monitoring and adaptive management requirements that relate to this BNG Assessment.
  - Determine if a BNG has been achieved, or the measures required to achieve BNG.

## Chapter 3: Method

### Biodiversity Net Gain

- 3.1 Calculations have been carried out with regards to Biodiversity Net Gain: Good Practice Principles for Development guidance<sup>5</sup> and in line with the Statutory Biodiversity Metric guidelines<sup>6</sup>. **Appendix A** sets out how each of the BNG Good Practice Principles<sup>7</sup> have been applied. In this way, this report meets **Principle 3** of The Statutory Biodiversity Metric.
- 3.2 The Statutory Biodiversity Metric is the established method for calculating BNG and provides a quantitative approach to losses and gains resulting from development or land management changes. Whilst the Statutory Biodiversity Metric is the default system of calculating BNG, it should not be considered a complete tool in assessing BNG and therefore professional judgement has been used where appropriate (this includes consideration of Environmental Net Gain (ENG)). Where professional judgement has been used, this is outlined in the text and additional references, where required, have been provided. This is in line with **Principles 4 and 6** of The Statutory Biodiversity Metric:

*“Principle 4: This biodiversity metric is not a complex or comprehensive ecological model and is not a substitute for expert ecological advice.”*

...

*Principle 6: This biodiversity metric is designed to inform decisions in conjunction with locally relevant evidence, expert input, or guidance.”*

### Site Visit

- 3.3 An Extended Phase 1 Habitat Survey was undertaken by LUS Ecology on 25/09/23. This included BNG Condition Assessments. This survey was supplemented by information from the Ecological Assessment<sup>1</sup>. The Site was surveyed using the Phase I Habitat Survey method and a Phase 1 Habitat Survey Plan was produced (**Figure 3**). The full methods of the Phase I Habitat Surveys undertaken at the Site are reported in full within the Ecological Assessment<sup>1</sup>. The Statutory Biodiversity Metric Condition Assessment sheets were then used to gather the necessary ecological information to determine the condition of the habitats present within the Site.
- 3.4 The full methods of the Phase 1 Habitat Survey undertaken at the Site are reported in full within the EA<sup>1</sup><sup>Error! Bookmark not defined.</sup>. During the Site survey, The Statutory Biodiversity Metric Condition Assessment sheets<sup>8</sup> were used to gather the necessary ecological information to determine the condition of the habitats present within the Site.

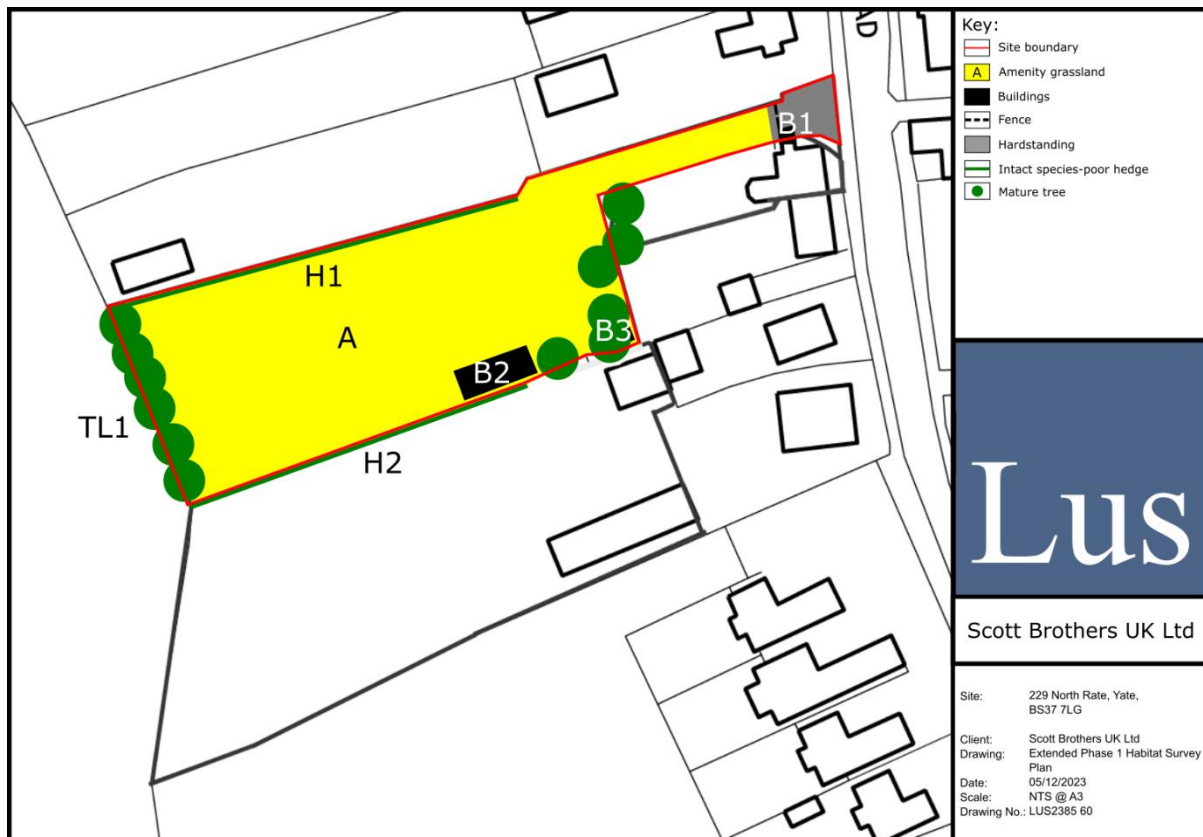
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<sup>5</sup> Baker J., Hoskins R., and Butterworth T. (2019). *Biodiversity Net Gain. Good practice principles for development: A practical guide*. Ciria, London.

<sup>6</sup> Defra (2023). *The Statutory Biodiversity Metric: User Guide (draft): Date November 2023*. Department for Environment food and rural affairs, London.

<sup>7</sup> Baker J., Hoskins R., and Butterworth T. (2016). *Biodiversity Net Gain. Good practice principles for development*. Ciria, London.

<sup>8</sup> Defra (2023). *The Statutory Biodiversity Metric: Technical Annex 1: Condition Assessment Sheets and Methodology: Date November 2023*. Department for Environment food and rural affairs, London.



**Figure 3. Extended Phase 1 Habitat Survey (baseline)**

- 3.5 Based on the results of the surveys used to inform this assessment, the context of the Site, and the high likelihood that the habitats within the Site will not change significantly over time, this report is valid for a period of 18 months (i.e., the 25/03/2025). This is reasoned in line with good practice guidelines<sup>9</sup>.

### Baseline Calculation

- 3.6 To calculate the baseline area and linear units for the Site the following data and assessments were undertaken:
- Phase 1 Habitat classifications were converted to UK Habitat Classification habitats through The Statutory Biodiversity Metric conversion tool and then manually cross referenced against the UKHab habitat definitions<sup>10</sup> and adjusted as required to accurately characterise the baseline habitats.
  - The UKHab 25m<sup>2</sup> rule was applied (habitats occupying less than 25m<sup>2</sup> were absorbed and considered within the adjacent habitat(s)).
  - Trees within gardens were recorded in line with the guidelines<sup>11</sup>.
  - The habitats were then assigned a pre-set distinctiveness grade<sup>12</sup>.

<sup>9</sup> CIEEM (2019). *Advice Note: On the Lifespan of Ecological Reports and Surveys*. Chartered Institute for Ecology and Environmental Management, Winchester.

<sup>10</sup> UKHab Ltd (2023). *UK Habitat Classification Version 2.0*. UKHab Ltd, Stockport.

<sup>11</sup> "You should assess most individual trees that are recorded in private gardens. You should record:

- any medium, large and very large trees as individual trees
- any small trees that are ancient or veteran"

<sup>12</sup> Indicative of the inherent 'value' of the habitat.

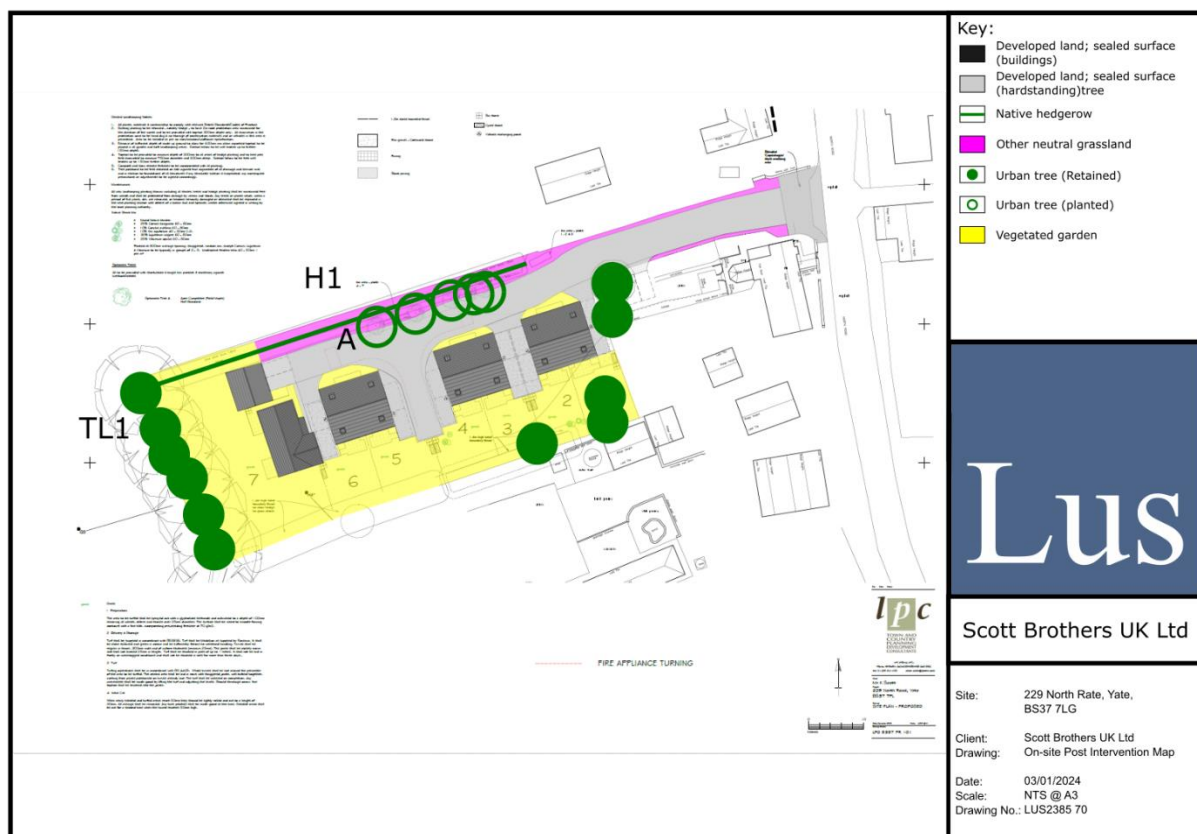


- The area (hectares) of each habitat parcel and length of linear habitats (km) within the Site was calculated from the On-site Baseline Map (**Figure 3**). Any areas of the Site within riparian zones were excluded from this assessment.
- Scattered trees were calculated using the Tree Helper Tool, following the size guidelines within The Statutory Biodiversity Metric User Guide, and using either data collected directly by the ecologist or via information within the Proposed Development's Tree Schedule, with the use of a Tree Schedule taking precedence.
- Where applicable, habitats were subject to a 'condition assessment'<sup>13</sup>.
- Habitats were subject to a strategic significance assessment based on their position within the landscape or importance within the area, including consideration of local plans to identify local priorities for targeting biodiversity.

3.7 The baseline habitats (as detailed above) were entered into The Statutory Biodiversity Metric to calculate baseline biodiversity units for the Site.

### Proposed Development Assessment

3.8 Using the Proposed Development shown **Figure 2**, an On-site Post Intervention Map (**Figure 4**) was produced.



**Figure 4. Proposed Landscaping (On-site Post Intervention Map)**

3.9 In relation to created and enhanced habitats, all habitat interventions within this report are considered to be realistic and deliverable within the project time frame (in line with **Principle**

<sup>13</sup> The 'condition' of the habitat is a measure of habitat quality and measures the 'working-order' of the habitat against the optimal state of the habitat type.

7 of The Statutory Biodiversity Metric), along with the expected or agreed management resources and availability of funding.

- 3.10 The same process using the On-site Post Intervention Map (**Figure 4**), along with the following additional methods:
- The loss of baseline habitats was calculated by overlaying the footprint of the proposals onto the On-Site Baseline Map. Using this method, the area of loss to each habitat was determined.
  - The On-site Post Intervention Map was reviewed to identify habitats retained, created or that could be enhanced. The proposed habitats were subject to condition and strategic significance assessments.
  - Where a new habitat or existing habitat has been created or enhanced, additional consideration has been given towards the time taken for habitats to establish and reach target condition (temporal multiplier), and the difficulty of habitat re-creation (difficulty multiplier). The 'Habitat creation in advance' and 'Delay in starting habitat creation' functions were set to 0 years. No advanced habitat creation is proposed, and there will be no 'delay between habitat loss and the start of habitat creation and enhancement works'.

### Strategic Significance

- 3.11 The Site is not located within a strategically significant ecological area. Therefore, baseline and proposed habitats were assigned as 'Area/compensation not in local strategy/no local strategy'.

### Data Summary and Discussion

- 3.12 The Statutory Biodiversity Metric Defra presents a detailed summaries of the resultant biodiversity unit change, separated by habitat type.
- 3.13 A biodiversity unit change has been provided habitat units, hedgerow units, and watercourse units. However, caution has been applied when interpreting these numbers. It is important to note that BNG should assess habitats in isolation and any unit losses or gains considered in detail. This assessment includes consideration of the effect of the proposals on each habitat group, and like-for-like replacement within broad habitat groups.
- 3.14 The discussion also considers the wider context of the planning application, surrounding landscape, wider ecological functions not captured by the BNG assessment process, and socio-economic values of the development, as well as considering how the Proposed Development contributes towards nature conservation priorities at the local, regional, and national levels. This approach is guided by Principles 6 and 9 of BNG Good Practice Principles<sup>7</sup>, along with **Principles 8 and 9** of The Statutory Biodiversity Metric:

*"Principle 8 Created and enhanced habitats should be, where practical and reasonable, local to any impact and deliver strategically important outcomes for nature conservation.*

...

*Principle 9 This biodiversity metric does not enforce a minimum habitat size ratio for compensation of losses. Proposals should aim to:*

- *maintain habitat extent - supporting more, bigger, better and more joined up ecological networks*
- *ensure that proposed or retained habitat parcels are of sufficient size for ecological function”*

### Method Clarifications

3.15 The applicant has advised that they do not own the southern hedgerow (**H2**).

3.16 For parts of the existing Vegetated Garden, the temporary loss rule was applied:

*“You do not need to account for habitat loss where there are temporary impacts to a habitat and the area can be restored to both:*

- *baseline habitat type within two years of the initial impact; and*
- *baseline condition within two years of the initial impact”<sup>8</sup>.*

### Contributor information

3.17 The BNG Condition Assessments, BNG Assessment, and BNG report were completed by Greg Nightingale. **Table 1** outlines the relevant experience of the assessment contributor.

Contributor	Experience
<p style="text-align: center;"><b>Greg Nightingale</b> BSc (Hons) MCIEEM</p>	<p>Greg is the Director of LUS Ecology with over nine years of ecology and environmental management in the private sector. LUS Ecology is a CIEEM Registered Practice and Greg Nightingale is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM). CIEEM act to govern best practice in the ecology sector.</p> <p>Greg has been working on BNG since 2016, prior to its inclusion within the National Planning Policy Framework (2018 revision) and the Environment Act 2021. This has included working with all the Defra Metrics, The Warwickshire Model, BREEAM 2018, and the Network Rail BNG Model.</p> <p>Greg has established and developed BNG processes in three ecological consultancies and is highly experienced in the application of BNG at the site and local level, including delivering BNG offsetting and contributions via S106 Agreements, third parties, and brokers.</p> <p>As part of this, Greg is experienced in Phase 1 Habitat classification, UKHabs, and BNG condition assessment. This includes the completion of the industry standard training courses for BNG, UKHab, and the crossover training for BNG and UKHab. In addition, he has completed a CIEEM training course on Environmental Net Gain and has a foundational understanding of The Environmental Benefits from Nature Tool and how this relates to the BNG assessment process. In addition, he is an accredited Modular River Survey River Condition Assessment surveyor.</p> <p>Greg Nightingale’s skills and experience meet <b>Principle 1</b> of The Statutory Biodiversity Metric.</p>

**Table 1. Contributor experience**

## Chapter 4: Baseline and Proposed Development

### Irreplaceable habitats

4.1 No irreplaceable habitats will be removed as a result of the Proposed Development.

### Baseline Assessment

#### The Baseline Assessment

4.2 The habitats present within the Site are set out below:

- **Urban:** Developed land; sealed surface.
- **Urban:** Vegetated garden.
- **Hedgerow:** Ecologically valuable line of trees.
- **Hedgerow:** Native hedgerow.

4.3 The assessment of the character, extent, condition, historic management, and species composition of these habitats is outlined within the EA<sup>1</sup> and condition assessment tables within **Appendix B**. 'Urban: Developed land; sealed surface' and 'Urban: Vegetated garden' do not require a condition assessment.

### Proposed Development Assessment

4.4 The below is based on the Proposed Site Plan shown in **Figure 2**. Assessment of the proposals is split into three sections, as detailed below:

- **Retained/Lost habitats**, which identifies habitats retained and protected during the implementation of the proposals and those to be removed.
- **Created Habitats**, which assesses habitats which will be created as part of the proposals, and outlines measures as to how these habitats will reach target condition.
- **Enhanced Habitats**, which assesses habitats which will be created as part of the proposals, and outlines measures as to how these habitats will reach target condition.

#### Habitats Retained/Lost

4.5 The Proposed Development will result in the following:

- The removal of the buildings, hardstanding, and areas of hardstanding.
- The retention of **H1** and **TL1**.
- The retention of 0.136ha of Vegetated Garden.

#### Habitats Created

4.6 The Proposed Development will provide the following:

- **Grassland** – Other neutral grassland.
- **Urban** – Developed land; sealed surface.
- **Individual trees** – Urban Tree.
- **Hedgerow** – Non-native and ornamental hedgerow.

*Grassland – Other neutral grassland*

- 4.7 Approximately 0.032ha of Other Neutral Grassland will be provided within the Proposed Development. This will be the grassland areas along the access track. These areas will be seeded with a species rich grassland mix (to match a UKHab neutral grassland mix) and managed in line with hay meadow management using hand tools and with the arisings removed. It is expected that management measures will be needed to reduce the richness of the soil. These details will be set out within a Landscape and Ecology Management plan for the Proposed Development.
- 4.8 A 'Good' condition could be achieved. However, the target condition has been set to 'Moderate' as a pre-caution. Criteria relating to sward height, bare ground, bracken, invasive species, and species composition, physical damage, and invasive species can reasonably be met.

*Hedgerow – Non-native and ornamental hedgerow*

- 4.9 60m of non-native and/or ornamental hedgerow will be planted within the Site. This habitat does not require a condition assessment.

*Urban - Developed land; sealed surface*

- 4.10 This habitat is not discussed further as it is of negligible ecological value and does not require a condition assessment.

*Habitats Enhanced*

- 4.11 No habitats will be enhanced.

## Chapter 5: Results and Discussion

- 5.1 Decision making during the development of the proposals has been informed and influenced by the Biodiversity Net Gain: Good Practice Principles for Development guidance<sup>5Error! Bookmark not defined.</sup> to ensure these obligations for achieving BNG have been met. In addition, throughout the construction of the Proposed Development, these principles will be adhered to.
- 5.2 Following the avoidance tier of the mitigation hierarchy, the Proposed Development will not remove any irreplaceable habitats, very high distinctiveness habitats, or high distinctiveness habitats, and the loss of medium distinctiveness habitats has been reduced as far as possible.
- 5.3 The headline results demonstrate a net biodiversity loss of 0.03 habitat units (-5.74%), a net biodiversity gain of 0.06 hedgerow units (+10.64%), with the Trading Rules met (**Figure 5**).

FINAL RESULTS		
<b>Total net unit change</b> <small>(Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small>	<i>Habitat units</i>	-0.03
	<i>Hedgerow units</i>	0.06
	<i>Watercourse units</i>	0.00
<b>Total net % change</b> <small>(Including all on-site &amp; off-site habitat retention, creation &amp; enhancement)</small>	<i>Habitat units</i>	-5.74%
	<i>Hedgerow units</i>	10.64%
	<i>Watercourse units</i>	0.00%
<b>Trading rules satisfied?</b>	<b>No - Check Trading Summaries ▲</b>	

**Figure 5. Headline results of The Statutory Biodiversity Metric**

- 5.4 To achieve a Biodiversity Net gain, the applicant has outlined they are either willing to make a financial contribution to a biodiversity offset or will agree to a legal agreement to plant an additional eight small trees within the applicant's wider adjacent ownership.
- 5.5 The details within this report will need to be secured via soft landscape plan and a Landscape and Ecology Management Plan. These plans should be secured by planning conditions.

## Appendix A: Delivery of the BNG Good Practice Principles

BNG Principle	Application
<p><b>Principle 1. Apply the Mitigation Hierarchy</b>  <i>Do everything possible to first avoid and then minimise impacts on biodiversity. Only as a last resort, and in agreement with external decision-makers where possible, compensate for losses that cannot be avoided. If compensating for losses within the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.</i></p>	<p>The mitigation hierarchy was applied throughout the planning process. The Proposed Development is located at a previously developed Site (gardens) which was of limited ecological importance. Aside from the loss of a medium sized purple cherry plum and the loss of 10m of hedgerow, the mature trees and hedgerows within the Site have been retained. The loss of low importance habitats has been compensated via the provision of grassland buffers to the tree lines.</p>
<p><b>Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere</b>  <i>Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve No Net Loss or Net Gain.</i></p>	<p>There will be no loss of irreplaceable habitats and the habitats lost are readily replaceable or are unnatural/modified in nature.</p>
<p><b>Principle 3. Be inclusive and equitable</b>  <i>Engage stakeholders early, and involve them in designing, implementing, monitoring and evaluating the approach to Net Gain. Achieve Net Gain in partnership with stakeholders where possible, and share the benefits fairly among stakeholders.</i></p>	<p>Pre-application consultation and public consultation were not considered proportionate to the size and scope of the scheme. Engagement with stakeholders, including local residents and the Local Planning Authority will be undertaken as part of the planning application.</p>
<p><b>Principle 4. Address risks</b>  <i>Mitigate difficulty, uncertainty and other risks to achieving Net Gain. Apply well-accepted ways to add contingency when calculating biodiversity losses and gains in order to account for any remaining risks, as well as to compensate for the time between the losses occurring and the gains being fully realised.</i></p>	<p>Limitations from the habitat survey have been considered and the precautionary principle applied during the baseline and proposed assessment where required. The Proposed Development assessment primarily uses basic habitats which require limited management to achieve the proposed outcomes. A planning condition has been recommended to secure the details of the habitat creation and enhancement measures. There is a clear statement in relation to the outcome of the trading rules and actions required to satisfy the Trading Rules. All other risks are dealt with via the Ecological Impact Assessment process and/or planning conditions, where considered required.</p>

<p><b>Principle 5. Make a measurable Net Gain</b>  <i>Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.</i></p>	<p>The Statutory Biodiversity Metric has been used. Use of the 'Environmental Benefits from Nature Tool' to consider ecosystem services is not yet part of policy and voluntary use was not considered proportionate to the nature and scope of this Proposed Development.</p>
<p><b>Principle 6. Achieve the best outcomes for biodiversity</b>  <i>Achieve the best outcomes for biodiversity by using robust, credible evidence and local knowledge to make clearly-justified choices when:</i></p> <ul style="list-style-type: none"> <li>• <i>Delivering compensation that is ecologically equivalent in type, amount and condition, and that accounts for the location and timing of biodiversity losses.</i></li> <li>• <i>Compensating for losses of one type of biodiversity by providing a different type that delivers greater benefits for nature conservation</i></li> <li>• <i>Achieving Net Gain locally to the development while also contributing towards nature conservation priorities at local, regional and national levels.</i></li> <li>• <i>Enhancing existing or creating new habitat.</i></li> <li>• <i>Enhancing ecological connectivity by creating more, bigger, better and joined areas for biodiversity.</i></li> </ul>	<p>The loss of ecologically important habitats has been limited. Replacement habitats to compensate the minor habitat losses on Site have been secured. This has ensured that the ecological compensation provided is ecologically equivalent in type, amount, and condition, with an overall increase in soft landscape at the Site.</p> <p>The retention and protection of the key wildlife corridors adjacent to the Site, along with the provision of new structural planting (trees, shrubs, and hedgerows) within the Site will ensure that wildlife can continue to move through the Site and access other adjacent land parcels.</p> <p>The local environment and local wildlife priorities have been considered through the Ecological Impact Assessment process, namely via the provision of enhancement which target NERC/BAP species.</p>
<p><b>Principle 7. Be additional</b>  <i>Achieve nature conservation outcomes that demonstrably exceed existing obligations (i.e. do not deliver something that would occur anyway).</i></p>	<p>The additionality principle has not been contravened.</p>
<p><b>Principle 8. Create a Net Gain legacy</b>  <i>Ensure Net Gain generates long-term benefits by:</i></p> <ul style="list-style-type: none"> <li>• <i>Engaging stakeholders and jointly agreeing practical solutions that secure Net Gain in perpetuity.</i></li> <li>• <i>Planning for adaptive management and securing dedicated funding for long-term management.</i></li> <li>• <i>Designing Net Gain for biodiversity to be resilient to external factors, especially climate change.</i></li> <li>• <i>Mitigating risks from other land uses.</i></li> <li>• <i>Avoiding displacing harmful activities from one location to another.</i></li> <li>• <i>Supporting local-level management of Net Gain activities.</i></li> </ul>	<p>Engagement with stakeholders, including local residents and the Local Planning Authority will be undertaken as part of the planning application. Pre-application consultation and public consultation were not considered proportionate to the size and scope of the scheme.</p> <p>The retention of existing features, replacement tree planting, and the provision of landscape buffers to the tree lines will be the legacy of the Site.</p>



<p><b>Principle 9. Optimise Sustainability</b>  <i>Prioritise Biodiversity Net Gain and, where possible, optimise the wider environmental benefits for a sustainable society and economy.</i></p>	<p>Use of the 'Environmental Benefits from Nature Tool' to consider ecosystem services is not yet part of policy and voluntary use was not considered proportionate to the nature and scope of this Proposed Development.</p>
<p><b>Principle 10. Be transparent</b>  <i>Communicate all Net Gain activities in a transparent and timely manner, sharing the learning with all stakeholders.</i></p>	<p>The surveys and data that underpin this assessment have been made clear, including any limitations and assumptions.</p> <p>The methods used in this assessment are clearly set out. The areas requiring additional details for transparency was the retention of the garden habitats (replacement within two years of loss) and the enhancement of the tree lines. The method and reasoning in these areas has been clearly set out.</p> <p>The assessment outcomes have been explained in full. This includes the inclusion of notes within the excel file to explain reasoning and full explanations for how existing and proposed habitat conditions will be achieved.</p> <p>Next steps and the measures required to ensure this Biodiversity Net Gain Assessment outcome will be achieved, have been clearly set out within the Summary and Discussion. This includes a statement that outlines the recommended next steps.</p> <p>All requirements within this report have been discussed and agreed with the Applicant.</p>

# Appendix B: Condition Assessment Tables

UKHabs Classification:		'Native Hedgerow' and 'Native hedgerow with trees'
Condition Sheet:		Hedgerow Habitat Types
Survey Date and Surveyor:		25/09/2023 – Greg Nightingale
Assessment Criteria		
Functional groupings	Criteria (the minimum requirements for 'favourable condition')	Description
A1 Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).
A2 Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn <i>Prunus spinosa</i> suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).
B1 Gap – Hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).
B2 Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).
C1 Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: Measured from outer edge of hedgerow; and Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.
C2 Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.

D1 Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website, as well as the BSBI website where the 'Online Atlas of the British and Irish Flora' contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website.
D2 Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g., excessive hedgerow cutting).
E1 Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.
E2 Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.
Condition categories for hedgerows without trees		
Good	No more than 2 failures in total; AND No more than 1 in any functional group.	
Moderate	No more than 4 failures in total; AND Does not fail both attributes in more than one functional group.	
Poor	Fails a total of more than 4 attributes; OR Fails both attributes in more than one functional group.	
Condition categories for hedgerows with trees		
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	
Moderate	No more than 5 failures in total; AND Does not fail both attributes in more than one functional group.	
Poor	Fails a total of more than 5 attributes; OR Fails both attributes in more than one functional group.	

Condition Assessment (Achieved Y/N)	
Functional groupings	<b>H1 – Native hedgerow</b>
A1	Yes
A2	Yes
B1	Yes
B2	Yes
C1	No – Gardens on either side
C2	No – A mixture of garden and nettles
D1	Yes
D2	Yes
E1	N/A
E2	N/A
Outcome	<b>Moderate</b>

UKHabs Classification:		'Ecologically valuable line of trees' and 'Ecologically valuable line of trees - associated with bank or ditch'
Condition Sheet:		Line of Trees Habitat Type
Survey Date and Surveyor:		25/09/2023 – Greg Nightingale
Linear feature		<b>TR1 – Ecologically valuable line of trees</b>
A	More than 70% of trees are native species.	Yes
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Yes
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	Yes
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice.	No
E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	Yes
Condition Assessment Outcome:		
Passes 5 criteria		<b>Moderate</b>
Passes 3 or 4 criteria		
Passes 2 or fewer criteria		