

BIODIVERSITY NET GAIN PLAN

LAND AT LONGFORD PARK, CANAL LANE, BODICOTE.
BANBURY, OXFORDSHIRE, OX15 4GD

ON BEHALF OF

MERCIAN GROUP LTD.

REFERENCE: ZEL_175
DATE: November 2022
V2

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V1	Biodiversity Net Gain Plan	A. Woodman BSc (Hons)	02 November 2022
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The evidence gathered, and the opinions provided, have been prepared in accordance with the Chartered Institute of Ecology and Environmental Management (CIEEM) Code of Professional Conduct.

Where any appraisal is based upon information provided by third parties, it is assumed that this information is relevant, correct and complete; there has been no independent verification of information obtained from third parties unless otherwise stated. Where field investigations have been carried out these have been appropriate to the agreed scope of works and carried out to a level of detail required to achieve the stated objectives.

CONTENTS

1.0	INTRODUCTION	1
2.0	BIODIVERSITY NET GAIN.....	2
3.0	METHODOLOGY	4
4.0	RESULTS	5

APPENDIX A: Plans

APPENDIX B: Condition Assessment

APPENDIX C: Qualifications and Experience

1.0 INTRODUCTION

Background to the Development

- 1.1 Zebra Ecology Ltd was commissioned by Mercian Group Ltd. to complete a Biodiversity Net Gain Plan of the Land at Longford Park, Canal Lane, Bodicote, Banbury, Oxfordshire (centred on Ordnance Survey grid reference SP 467 381).
- 1.2 The site is approximately 1ha in area and comprises a sheep-grazed pasture surrounded by lines of trees and native hedgerows. The application site boundary is shown in Figure 1.



Figure 1: Application Site Boundary

- 1.3 Planning consent is being sought from Cherwell District Council for a 128 bed care home, with associated landscaping.
- 1.4 This Biodiversity Net Gain Plan has been informed by the Preliminary Ecological Appraisal undertaken for the site completed during August 2022. Habitat and hedgerow condition assessments were completed at the same time. The calculation of biodiversity net gain units has been undertaken using the Natural England Biodiversity Metric 3.1 and follows guidance set out within the Biodiversity Net Gain: Good practice principles for development (Baker *et al.*, 2019).

Objectives

- Classify the type, distinctiveness, condition and strategic significance of existing and post-development habitats.
- Calculate baseline existing and post-development habitat and hedgerow units for the site based on current development and soft landscaping proposals.
- Maximise biodiversity net gain through habitat creation and enhancement measures.
- Aim to achieve biodiversity net gain on site where feasible; with off-site measures or purchase of credits considered as an alternative option.

2.0 BIODIVERSITY NET GAIN

- 2.1 Biodiversity Net Gain (BNG) is defined as ‘*development that leaves biodiversity in a better state than before, and an approach where developers work with local governance, wildlife groups, landowners and other stakeholders in order to support their priorities for nature conservation*’.
- 2.2 In 2016, the *BNG: Good practice principles for development* was published to support developments across the UK achieve BNG in accordance with good practice. These principles aimed to set a benchmark of ‘*what good looks like*’ and they include the mitigation hierarchy and avoiding impacts of irreplaceable habitats. In 2019, the principles were supplemented with practical guidance on designing, implementing and the long-term maintenance and monitoring of BNG through the project lifecycle.
- 2.3 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):

Table 1: The UK’s good practice principles for biodiversity net gain (after Baker, 2016)

Principle	In Practice
Apply the mitigation hierarchy	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 with the development footprint is not possible or does not generate the most benefits for nature conservation, then offset biodiversity losses by gains elsewhere.
Avoid losing biodiversity that cannot be offset elsewhere	Avoid impacts on irreplaceable biodiversity – these impacts cannot be offset to achieve no net loss / net gain.
Be inclusive and equitable	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.
Address risk	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 compensate for the time between the losses occurring and the gains being fully realised.
Make a measurable net gain contribution	Achieve a measurable, overall gain for biodiversity and the services ecosystems provide while directly contributing towards nature conservation priorities.
Achieve the best outcomes for biodiversity	Achieve the best outcomes for biodiversity by using robust credible evidence and local knowledge to make clearly justified choices when: <ul style="list-style-type: none"> - delivering compensation that is ecologically equivalent in type, amount and condition that accounts for the location and timing of biodiversity losses - compensating for losses of one type of biodiversity offsetting by providing a different type that delivers greater benefits for nature conservation - achieving net gain locally to the development whilst also contributing towards nature conservation priorities at local, regional, and national levels.

	<ul style="list-style-type: none"> - enhancing existing or creating new habitat - enhancing ecological connectivity by creating more bigger, better and joined areas for biodiversity.
Be additional	Achieve nature conservation outcomes that demonstrably exceed existing obligations i.e. do not deliver something that would occur anyway
Create a net gain legacy	<p>Ensure net gain generates long-term benefits by:</p> <ul style="list-style-type: none"> - engaging stakeholders- and jointly agreeing practical solutions that secure Net Gain in perpetuity - planning for adaptive management and securing dedicated funding for long-term management - designing net gain for biodiversity to be resilient to external factors, especially climate change - mitigating risks from other land uses - avoiding displacing harmful activities from one location to another - supporting local-level management of net gain activities
Optimise sustainability	Prioritise BNG and, where possible, optimise the wider environment benefits for sustainable society and economy
Be transparent	Communicate all net gain activities in a transparent and timely manner, sharing the learning with all stakeholders.

3.0 METHODOLOGY

Preliminary Ecological Appraisal

- 3.1 A Preliminary Ecological Appraisal (including UK Habitat Classification Survey) was completed during August 2022. Habitats are mapped with the Habitat Plan in Appendix A. These habitats were used to inform the baseline units within the calculator.

Desk Study

- 3.2 Existing ecological and nature conservation data relevant to the site was collated from various sources including the Multi Agency Geographic Information for the Countryside (MAGIC) online database (<http://magic.defra.gov.uk>) and Thames Valley Environmental Records Centre.
- 3.3 A third-party data search was undertaken to attain biological records from Thames Valley Environmental Records Centre during August 2022 to identify any designated sites and protected / notable species within a 1km radius of the site.
- 3.4 A search of European statutory designated sites such as Special Areas of Conservation (SAC) or Special Protection Areas (SPA) within 5km of the site boundary was also undertaken.

Condition Assessments

- 3.5 Condition assessments were completed on 12 August 2022. Habitat condition was assigned following guidance from the 'Technical Supplement' document (Natural England, 2021) to be read in conjunction with Biodiversity Metric 3.1. The condition of each broad habitat type was assessed following this guidance.

Strategic Significance

- 3.6 The strategic significance of the site was assessed by determining whether any area of the site falls within a strategic location for biodiversity or forms part of an ecological network identified within local plans. Neither were identified for the site; therefore, the site has been classified as '*area / compensation not in local strategy / no local strategy*'.

Measurement of Habitat and Hedgerow Units

- 3.7 Baseline habitat parcels were measured using habitat mapping and aerial imagery overlain in QGIS. Post-development habitats were calculated by measuring the Detailed Soft Landscaping Plan produced by Zebra Landscape Architects (ref: ZLA_1231-L-200) in AutoCAD, allowing areas of retained, created and enhanced habitats to be identified.

4.0 RESULTS

Calculating Biodiversity Units

- 4.1 The Biodiversity Metric 3.1 was used to calculate the change in biodiversity (habitat and hedgerow units) and the overall percentage change. Metric calculations have been undertaken by A. Woodman BSc (Hons).
- 4.2 Headline results can be seen below with the full copy of the metric accompanying this report.

Existing Habitats Condition Assessment

Grassland

- 4.3 The grassland field has been categorised as low distinctiveness 'modified grassland'. Information attained from Google aerials indicate that the field has been in use as grazing pasture since at least 2004, and during the survey it had been heavily grazed by sheep and goat to less than 10cm. The vegetation is dominated by fast-growing grasses (e.g. perennial ryegrass) on neutral soils. Grass cover is high forming >90% of the sward. Broadleaved species are restricted to include rough hawkbit *Leontodon hispidus* and creeping buttercup *Ranunculus repens*.
- 4.4 Botanical quadrat data was collected in randomly selected locations of the field on 12 August 2022 to assess average species per m². This did not average 6 or more species. The grassland has therefore been classified as being in 'poor' condition as 6-8 species per m² is an essential criterion to achieve 'moderate' condition. The sward height is uniform (<10cm) with an absence of scrub, bracken and invasive non-native species as listed on Schedule 9 of The Wildlife and Countryside Act, 1981. Physical damage (e.g. by excessive poaching) was noted in over 5% of the grassland area, resulting in patches of bare ground that covered between 1-10% of the total area. Full Condition Assessment results can be seen in Appendix C.

Urban Tree

- 4.5 Within the north-eastern boundary hedgerow there is one individual semi-mature (medium sized) ash *Fraxinus excelsior* tree, one individual young (small sized) ash tree and a group of three semi-mature (small sized) trees, including field maple *Acer campestre*, ash and damson *Prunus domestica*. Urban trees are a 'medium distinctiveness' habitat, and these trees have all been classified as being in 'moderate' condition, as they are all healthy with over 20% of their canopies oversailing vegetation beneath, and the canopy of the group is predominantly continuous.

Developed Lane, Sealed Surface

- 4.6 There is a small area of hardstanding near the centre of the site. This is a 'very low distinctiveness' habitat with condition assessments not applicable.

Hedgerow

- 4.7 One native hedgerow (H1) is present on site. This hedgerow does not meet the criteria to be classified as a hedgerow with trees, as it does not support "tall trees that are less than 20m apart over most of its length". A total of six species were recorded across the entire length of hedgerow (field maple *Acer campestre*, hawthorn *Crataegus monogyna*, ash *Fraxinus excelsior*, wild privet *Ligustrum vulgare*, blackthorn *Prunus spinosa*, and elder *Sambucus nigra*), but only one 30m section (TN2) supported at least five species and was therefore classified as 'species rich'.

- 4.8 Native hedgerow is a 'low' distinctiveness habitat, whilst native species rich hedgerow is 'medium' distinctiveness. Both sections of this hedgerow have been classified as being in 'moderate' condition, as they are not associated with a >1m width of undisturbed ground with perennial herbaceous vegetation for 90% of length due to grazing, and undesirable species such as nettles (*Urtica spp.*), cleavers (*Galium aparine*) and docks (*Rumex spp.*) exceeds 20% cover of undisturbed ground.

Line of Trees

- 4.9 Two 'low' distinctiveness lines of trees are present, one near the southern end of the field and one running along the south-eastern and south-western boundary. These do not qualify as ecologically valuable as there are no trees of ancient or veteran quality.
- 4.10 G1 is a group of non-native Italian alder *Alnus cordata* trees and G2 is dominated by native species (field maple *Acer campestre*, hawthorn *Crataegus monogyna*, crab apple *Malus sylvestris*, damson *Prunus domestica*, blackthorn *Prunus spinosa* and elder *Sambucus nigra*), with a short line of Italian alder at the southern corner.
- 4.11 Neither treeline is associated with a $\geq 6\text{m}$ undisturbed naturally vegetated strip, and therefore they having been classified as being of 'moderate' condition.

Habitat Creation and Enhancement

Created Habitats

- 4.12 Extensive habitat creation is proposed within open spaces at the site. A summary of these habitats has been provided below and should be read in conjunction with the detailed soft landscaping plan produced by Zebra Landscape Architects. Measures to establish and secure the long-term management of these areas will be specified within an Ecological Mitigation and Enhancement Strategy (EMES) for the site.
- Two swales to be planted with a wet tolerant grassland mix. Swales will not be permanently wet and will be managed as 'poor' condition neutral grassland (other neutral grassland).
 - Species-rich (minimum 9 species per m^2) wildflower meadow areas / strips to be created around the edge of the site and managed in a 'poor' condition.
 - The edges of the existing hedgerow to be planted with a hedgerow wildflower grassland mix and will be managed as 'poor' condition neutral grassland (other neutral grassland).
 - Amenity lawn to be created in the formal garden spaces of the care home and managed as 'poor' condition modified grassland.
 - Flowering lawn to be created in the areas between the amenity lawn and wildflower areas and managed as 'poor' condition neutral grassland (other neutral grassland).
 - Planting of 54 trees and managed in a 'poor' condition. The aim is for 31 small, 17 medium and 3 large trees, but as a buffer against failure of trees to reach the desired size 41 small, 6 medium and 3 large trees have been used in the urban tree helper calculator.
 - Planting of ornamental shrubs within formal plant borders.
 - Planting of native mixed scrub within the more informal plant borders, to be managed in a 'poor' condition.
 - Total of 85m of native species-rich hedgerow to be planted and managed in a 'poor' condition.
 - Total of 229m of ornamental hedgerow to be planted.

Biodiversity Unit Calculations

4.13 The final developed layout will contain 2.76 habitat units (+0.33 units) and 2.24 hedgerow units (+0.73 units). Table 2: Habitat Biodiversity Impact

Table 2: Habitat Biodiversity Impact

Factor	Habitats
Baseline units	2.43 units
Post-intervention biodiversity units	2.76 units
Total net unit change	0.34 units
Total project biodiversity % change	+ 13.91%

Table 3: Hedgerow Biodiversity Impact

Factor	Hedgerows
Baseline units	1.86 units
Post-intervention biodiversity units	2.24 units
Total net unit change	0.38 units
Total project biodiversity % change	+ 20.23%

4.14 The scheme provides the opportunity to exceed the 10% net increase in biodiversity (habitat and hedgerow units) mandated under the Environment Bill. This is in line with Chapter 15, paragraph 179 of the NPPF, requiring measurable net gains for biodiversity.

APPENDIX A

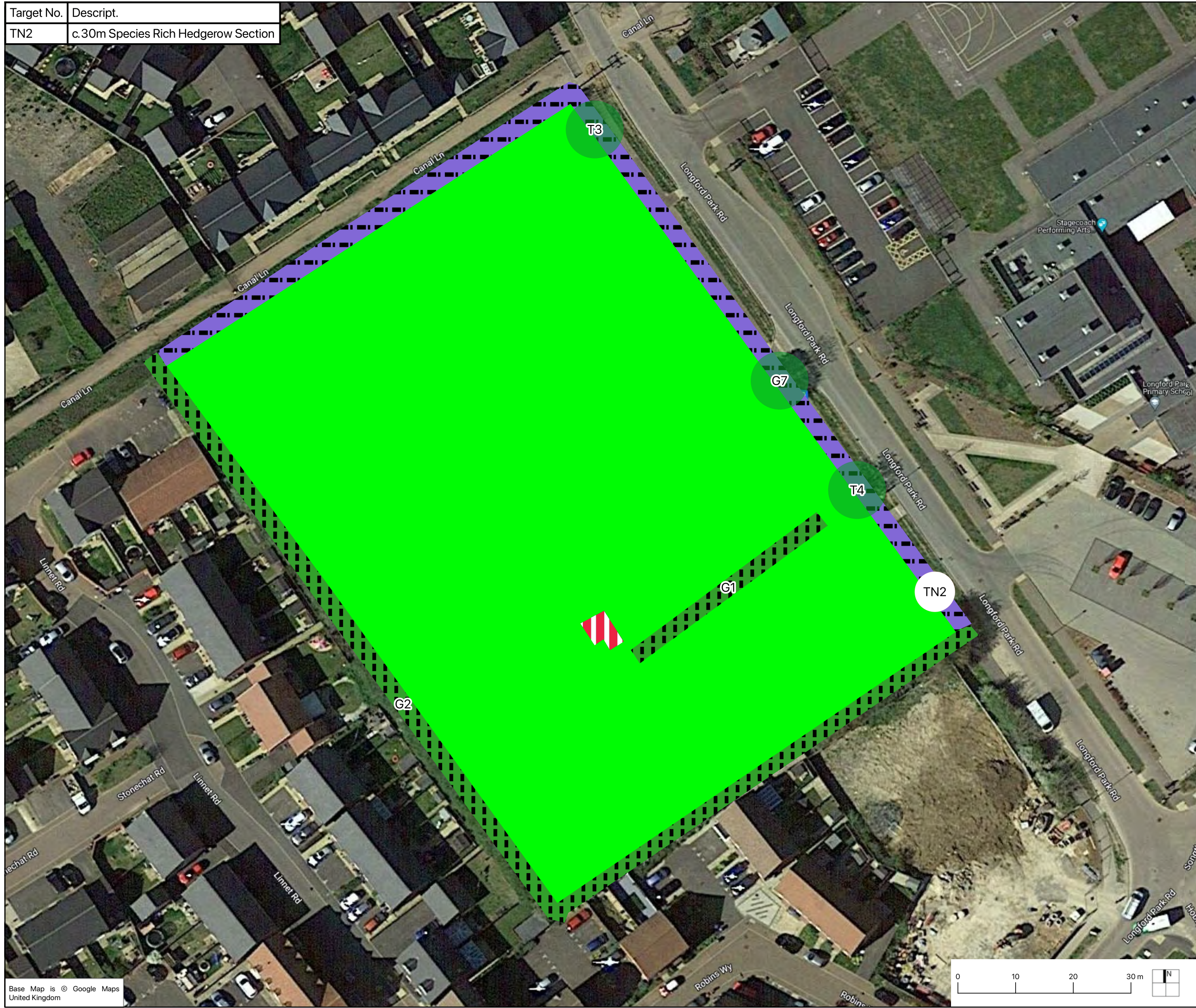
Plans

- UK Habitat Classification Plan
- Post-development Habitats Map
- Detailed Soft Landscaping Plan produced by Zebra Landscape Architects (ref: ZLA_1231-L-200)

Target No.	Descript.
TN2	c.30m Species Rich Hedgerow Section

APPENIDX A On-Site Habitats

-  Developed Land, Sealed Surface - u1b6 (Condition N/A)
-  Native Hedgerow - h2a (Moderate Condition)
-  Line of Trees - w1g6 (Moderate Condition)
-  Modified Grassland - g4 (Poor Condition)
-  Scattered Trees
-  Target Notes



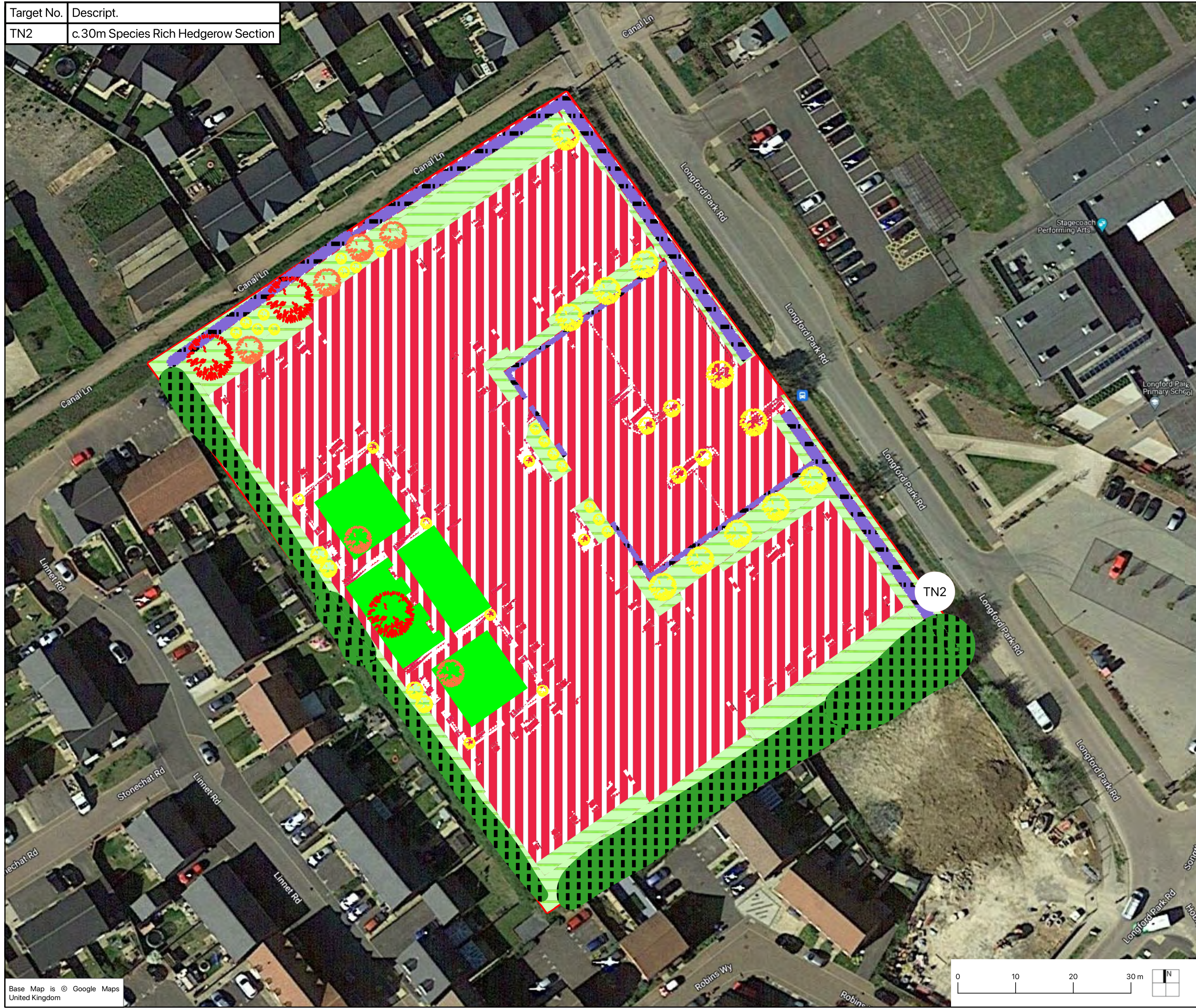
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Land at Longford Park
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E-101
October 2022
UK Habitat Classification Map

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Target No.	Descript.
TN2	c.30m Species Rich Hedgerow Section



Proposed Habitats

- Proposed Large Trees
- Proposed Medium Trees
- Proposed Small Trees
- w1g6 Retained Line of Trees (Moderate Condition)
- h2a Retained Native Hedgerow (Moderate Condition)
- h2a Proposed Native Hedgerow (Poor Condition)
- g4 Modified Grassland (Poor Condition)
- g3c Other Neutral Grassland (Poor Condition)
- u1 1160 Built Up Areas and Gardens (Condition N/A)
- u1b Developed Land; Sealed Surface (Condition N/A)
- Red Line Boundary



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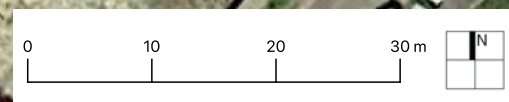
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APPENDIX B

Condition Assessments

Table 4: Grassland – Low Distinctiveness

Condition Assessment Criteria		
1	There must be 6-8 species per m2. If a grassland has 9 or more species per m2 it should be classified as a moderate distinctiveness grassland habitat type. NB - this criterion is non-negotiable for achieving moderate condition.	
2	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20 per cent is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	
3	Some scattered scrub (including bramble) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of shrubs with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	
4	Physical damage evident in less than 5% of total grassland area, such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities.	
5	Cover of bare ground between 1% and 10%, including localised areas, for example, rabbit warrens.	
6	Cover of bracken less than 20%.	
7	There is an absence of invasive non-native species (as listed on Schedule 9 of WCA, 1981).	
Condition Assessment Result		Condition Assessment Score
Passes 6 or 7 of 7 criteria including passing essential criterion 1		Good
Passes 4 or 5 of 7 criteria; OR passes 4 of 5 criteria including passing essential criterion 1.		Moderate
Passes 0, 1, 2 or 3 of 7 criterion or 4, 5, 6 of criteria but failing criterion 1		Poor

Table 5: Grassland – Low Distinctiveness. Assessment Results

Habitat	Criteria							Score
	1	2	3	4	5	6	7	
Field	N	N	Y	N	Y	Y	Y	Poor

Table 6: Urban Tree

Condition Assessment Criteria	
1	The tree is a native species (or more than 70% of trees within the block/line are native species).
2	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).
3	The tree is mature ¹ or veteran ² , or more than 50% of the block/line are.
4	There is little or no evidence of an adverse impact on tree health by anthropogenic activities such as vandalism or herbicide use. There is no current regular pruning regime so the trees retain >75% of expected canopy for their age range and height.
5	Micro-habitats for birds, mammals and insects are present e.g. presence of deadwood, cavities, ivy or loose bark.
6	More than 20% of the tree canopy area is oversailing vegetation beneath.

Footnote 1 – a mature tree in this context is one that is at least 2/3 expected fully mature height for this species

Footnote 2 – all ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value. veteran trees can be classified if they have four out of the five following features: rot sites associated with wounds which are decaying >400cm²; holes and water pockets in the trunk and mature crown >5cm diameter; dead branches or stems >15cm diameter; any hollowing in the trunk or major limbs; fruit bodies of fungi known to cause wood decay.

Condition Assessment Result	Condition Assessment Score
Passes 5 or 6 of 6 criteria	Good
Passes 3 or 4 of 6 criteria	Moderate
Passes 0, 1, or 2 of 6 criteria	Poor

Table 7: Urban Tree Assessment Results

Habitat	Criteria						Score
	1	2	3	4	5	6	
T3, T4, G7	Y	Y	N	Y	N	Y	Moderate

Table 8: Hedgerow

Attribute	Criteria	Description
A1. Height	>1.5 m average along length	<p>The average height of woody growth estimated from base of stem to the top of shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees.</p> <p>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).</p>
A2. Width	>1.5 m average along length	<p>The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees.</p> <p>Outgrowths are only included in the width estimate when they are >0.5m in height.</p> <p>Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years.</p>
B1. Gap – hedge base	Gap between ground and base of canopy <0.5 m for 90% of length (unless 'line of trees')	<p>This is the vertical gappiness of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth.</p> <p>Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).</p>

B3. Gap – hedge canopy continuity	<ul style="list-style-type: none"> · Gaps make up <10% of total length and · No canopy gaps >5 m 	<p>This is the horizontal gappiness of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy.</p> <p>Access points and gates contribute to the overall gappiness, but are not subject to the >5m criterion.</p>
C1. Undisturbed ground and perennial vegetation	<p>>1m width of undisturbed ground with perennial herbaceous vegetation for >90% of length:</p> <ul style="list-style-type: none"> · measured from outer edge of hedgerow, and · is present on one side of the hedge (at least) 	<p>This is the level of disturbance (excluding wildlife disturbance) at the base of the hedge.</p> <p>Undisturbed ground should be present for at least 90% of the hedgerow length greater than 1m in width and must be present along at least one side of the hedge.</p> <p>This criterion recognises the value of a hedge 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.</p>
C2. Undesirable 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.).
D1. Invasive and neophyte species	90% of the hedgerow and undisturbed ground is free of invasive non-native and neophyte species	Neophytes are plants that have naturalised in the UK since AD 1500. For information on neophytes see the JNCC website and 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	<p>This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes.</p> <p>This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (e.g. excessive hedge cutting).</p>
Condition Assessment Result		Condition Assessment Score
No more than 2 failures in total; AND no more than 1 in any functional group.		Good
No more than 4 failures in total AND does not fail both attributes in more than one functional group.		Moderate
Fails a total of more than 4 attributes; OR fails both attributes in more than one functional group (e.g. fails attributes A1, A2, B1 & B2 = Poor condition).		Poor

Table 9: Hedgerow Assessment Results

Habitat	Criteria								Score
	A1	A2	B1	B2	C1	C2	D1	D2	
H1a	Y	Y	Y	Y	N	N	Y	Y	Moderate
H1b	Y	Y	Y	Y	N	N	Y	Y	Moderate

Table 10: Line of Trees

Condition Assessment Criteria	
1	More than 70% of trees are native species.
2	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.
3	Includes one or more mature ¹ or veteran ² tree.
4	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 anthropogenic operations.
5	At least 95% of the 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.
Footnote 1 – a mature tree in this context is one that is at least 2/3 expected fully mature height for this species	
Footnote 2 – all ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value. veteran trees can be classified if they have four out of the five following features: rot sites associated with wounds which are decaying >400cm ² ; holes and water pockets in the trunk and mature crown >5cm diameter; dead branches or stems >15cm diameter; any hollowing in the trunk or major limbs; fruit bodies of fungi known to cause wood decay.	
Condition Assessment Result	Condition Assessment Score
Passes 5 of 5 criteria	Good
Passes 3 or 4 of 5 criteria	Moderate
Passes 0, 1, or 2 of 5 criteria	Poor

Table 11: Line of Trees Assessment Results

Habitat	Criteria					Score
	1	2	3	4	5	
G1	N	Y	Y	N	Y	Moderate
G2	Y	Y	Y	N	Y	Moderate

APPENDIX C

Qualifications and Experience

Zebra Ecology Ltd is Registered Practice of the Chartered Institute of Ecology and Environmental Management (CIEEM). A comprehensive range of ecological services are offered including Preliminary Ecological Appraisal (PEA), Ecological Impact Assessment (EclA), Habitat Regulations Assessment (HRA), Biodiversity Impact Assessment (BIA) and European Protected Species (EPS) Surveys / Licensing.

The practice works closely with clients to achieve their aspirations alongside securing the best outcomes for the environment. With wildlife legislation and policy as its basis; commercial awareness, pragmatism and defensible advice is combined to form Zebra Ecology's approach.

As well as offering a wide range of ecological services, Zebra Ecology forms part of Zebra Group offering an in-house collaborative approach in conjunction with Zebra Architects, Zebra Landscape Architects, Zebra Trees and Zebra Land and Development.

Emma Seaton BSc (Hons) MCIEEM

Emma holds a BSc (Hons) degree in Biology from the University of Sheffield and has since gained a postgraduate certificate in Ecological Consultancy. Her ecological experience includes Preliminary Ecological Appraisals, Ecological Impact Assessments (EclA), surveying for notable / European Protected Species, mitigation / licensing advice. She has held Natural England survey licences for bats (Class 2), great crested newts and white-clawed crayfish since 2015. She is also a Registered Consultant under the Bat Mitigation Class Licence (BMCL) licence and an Earned Recognition (ER) consultant under the Natural England bat pilot project. Emma is a Full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

Aimmie Woodman BSc (Hons)

Aimmie holds a BSc (Hons) degree in Conservation Biology and Ecology from the University of Exeter. Her ecological experience includes Preliminary Ecological Appraisals, Ecological Impact Assessments (EclA) and surveying for notable / European Protected Species, with particular experience with bats as a volunteer bat carer since 2016. She has held Natural England survey licences for bats (Class 2) and great crested newts since 2021. Aimmie is a Qualifying member of the Chartered Institute of Ecology and Environmental Management.