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Biodiversity Net Gain Assessment January 2024



Report for

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1. Introduction

1.1 Background

Three Shires Ltd was commissioned by HSSP Architects Ltd on behalf of Mr Paul Batson in December 2023 to undertake a Biodiversity Net Gain (BNG) assessment on land located at 34 Keats Lane, Earl Shilton, LE9 7DR (hereafter known as 'the Site').

1.2 Site Location and Description

The 0.89Ha Site is located approximately 3km northeast of Hinckley, with the city of Leicester about 24km east. It sits within a residential area along Keats Lane and is bordered by extensive arable fields to the north.

The approximate centre of the Site is Ordnance Survey National Grid Reference (SP 46524 98134).

The Site is predominantly grassland bordered by overgrown and unmanaged hedgerows on the northwest and west, with residential properties along the south. It includes various other habitats such as a small broadleaved wood, sparsely vegetated land, areas of scrub, and a line of trees. Additionally, there are outbuildings including a stable block and a field shelter, along with sizable areas of hardstanding. There is a pond located just north of the Site boundary.

For the most part, the Site appears to be used for horse grazing and it is divided into paddocks by electric fencing. Although the Site has a history of equine use, both the activity itself and the land management practices have decreased in recent times. As a result, areas that were previously managed have now been taken over by natural vegetation.

The Site location, Site boundary and surrounding landscape can be seen in **Figures 1** and **2**, below.

Figure 1: Site Location



1.4.2 Planning Policy

The most relevant biodiversity policies are the National Planning Policy Framework (NPPF)³, and the Hinckley and Bosworth Local Plan Review 2020 - 2039⁴.

1.4.3 National Planning Policy

The National Planning Policy Framework (NPPF) sets out the Government's planning policies for England and how these are expected to be applied by Local Authorities within their Local Development Frameworks (LDF). The revised NPPF was published in September 2023.

The NPPF states that "planning policies and decisions should "identify and pursue opportunities for securing measurable net gains for biodiversity", with Section 11 requiring Local Authorities in England to take measures to:

- Conserve and enhance biodiversity;
- Protect the habitats of these species from further decline; and
- Protect the species from the adverse effects of development.

The 2021 update to the NPPF includes a requirement for biodiversity improvements and net gains to be integrated into development design from the outset. It strengthens the wording on irreplaceable habitats, and where the public benefit would outweigh the loss or deterioration of irreplaceable habitats will be required to provide detailed justification for the loss of irreplaceable habitats by demonstrating an overriding public need.

1.4.4 Local Planning Policies

The current Local Development Framework, Core Strategy appears to be the current Hinckley and Bosworth planning framework; however it is not possible to find the relevant biodiversity related documents or sections on line. The new Hinckley and Bosworth Local Plan 2020 - 2039 draft is currently being consulted but is not yet adopted as the active working version.

The following policies within the Hinckley and Bosworth Local Plan 2020 - 2039 draft are of relevance for biodiversity.

NAT08 Enhancing Biodiversity and Habitat Connectivity

Development proposals must demonstrate how they conserve and enhance features of nature conservation and geological value including proposals for their long-term future management and how the scheme is pollinator friendly. All development should provide a measurable 10% net gain in biodiversity on site in the first instance, through biodiversity enhancement off-site, or through off setting where appropriate. All proposals should be supported by evidence to demonstrate a biodiversity net gain using the recognised biodiversity accounting metric and provide details of the long-term maintenance and management of the net gain. Major developments in particular must include measures to deliver biodiversity gains through opportunities to:

- a) Restore and enhance existing features on site;*
- b) Create additional habitats and ecological networks; and*

³ Ministry of Housing, Communities & Local Government, National Planning Policy Framework (NPPF), September 2023

⁴ HBBC Local Plan Regulation 19 Consultation February 2022,

https://www.hinckleybosworth.gov.uk/downloads/file/7702/hinckley_and_bosworth_pre-submission_local_plan_regulation_19

c) The linking of existing habitats to create links between ecological networks and where possible, with adjoining features.

Biodiversity net gain should be additional to any habitat creation required to mitigate or compensate for impacts on protected local/national BAP priority species. Net Gain can be delivered where there are no losses through development. Proposals where the primary objective is to conserve or enhance biodiversity or geological interest will be permitted where they comply with other relevant policies in the Plan. The retention and enhancement of linear features which enables strong connectivity of biodiversity as part of an integrated habitat network will be supported; this includes networks of hedgerows and ditches; enhanced habitats along the River Sence and Ashby Canal; roadside verges; and (cumulatively) private gardens, disused railway lines or other linear landscape features. On site features should be retained, buffered and managed favourably to maintain their ecological value, connectivity and functionality in the long-term. The removal or damage of such features shall only be acceptable where it can be demonstrated the proposal will result in no net loss of biodiversity and where the integrity of the hierarchy of international, national and locally designated sites identified in Policy NAT07 is secured. If the harm cannot be prevented, adequately mitigated against or appropriate compensation measures provided, planning permission will be refused.

2. Biodiversity Net Gain Calculations

This assessment was carried out using the most up to date Defra Metric (currently version 4.0).

The habitat classification and condition assessments were undertaken on 5 December 2023, by suitably experienced ecologists from Three Shires Ltd, following the UKHab Classification guidelines⁵. The condition assessment results are presented in **Appendix F**.

Biodiversity Net Gain (BNG) calculations require all habitats within the red line boundary of the proposed works to be entered into the calculator, even if it is not impacted by the proposed works. BNG is calculated on three distinct categories of habitats:

1. Area based habitats such as grassland, woodland etc measured in hectares.
2. Linear habitats such as hedgerows, lines of trees etc measured in km.
3. Watercourses such as rivers, streams etc measured in km.

Value of each habitat is measured in biodiversity units (BUs) and broadly based on the three components:

1. Distinctiveness – A pre-assigned value by the metric depending on the habitat type.
2. Condition – Assessed by the ecologist during the site survey to allow for variation of quality between different parcels of the same habitat type.
3. Strategic significance - The local significance of the habitat based on its location and habitat type.

The metric is then be used to calculate the baseline units for each category of the site. To achieve BNG the number of biodiversity units on Site has to be higher than this baseline on each category present on the Site.

This report will present the biodiversity units that are present within the current red line boundary and quantify the impact of the proposals by measuring the value of the habitats post development.

⁵ UKHab Classification guidelines – Version 2.0 (2018,2023)

3. Site Baseline Habitats

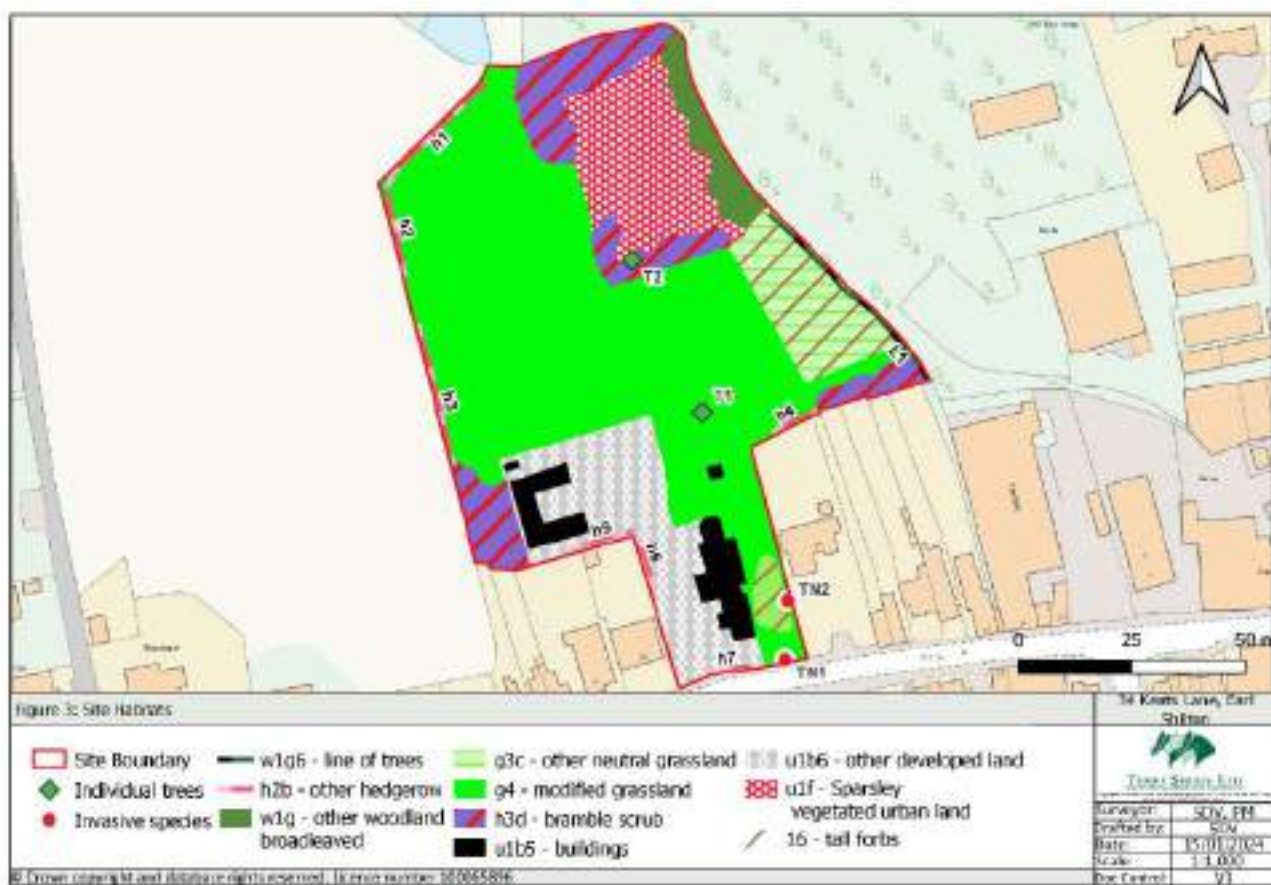
3.1 General Overview

The Site is dominated by grassland areas, bordered by hedgerows to the northwest and west, and is interspersed with scrub areas and a line of trees marking the southeastern boundary. In the northeast, there is a small section of woodland, with an area of scrub running along the northeast border. The northeastern area is a former menage which has been out of current use and is being colonised by native plants.

There are four buildings on the Site, all in current use: a residential house (**B1**), a shed (**B2**), a stable block (**B3**), and a field shelter (**B4**). Additionally, extensive hardstanding areas are situated in the southwestern part of the Site.

A description of each habitat is detailed below (along with their UKHab code), with their locations shown in **Figure 3 (Appendix A for an A3 version)**.

Figure 3: Site Habitats Pre-Development



3.2 Grassland

3.2.1 Modified Grassland (g4)

Extensive modified grassland areas are present in the southern, central, and northwestern parts of the Site (**Photographs 1, 2**).

These areas maintain a consistent structure due to frequent grazing by horses. The dominant species is perennial ryegrass (*Lolium perenne*), with occasional presence of cock's foot (*Dactylis glomerata*) and

common bent (*Agrostis capillaris*). The plant diversity in this area is minimal, mainly comprising nettle (*Urtica dioica*), common plantain (*Plantago major*), creeping buttercup (*Ranunculus repens*), autumn hawkbit (*Scorzoneroides autumnalis*), and dandelion (*Taraxacum officinale*).

A multi-stemmed elder (*Sambucus nigra*) (T1) lies in the area of modified grassland. It reaches a height of about 3m and has a main trunk measuring roughly 8 cm in diameter. (**Photograph 7**).

This habitat was assessed as being in ‘poor’ ecological condition for the purposes of BNG calculations.



Photograph 1: Modified grassland western area



Photograph 2: Modified grassland centre of the Site

3.2.2 Other neutral grassland – Tall forbs (g3c-16)

An area of other neutral grassland is present in the east part of the Site (**Photographs 3, 4**). Tussocks of grass and forb species characterise this area with a sward of greater height and more tussocky compared to the surrounding grassland areas.

The dominant species is perennial ryegrass with the presence of other grass species such as false oat grass (*Arrhenatherum elatius*), common couch (*Elymus repens*), creeping bent (*Agrostis stolonifera*) and sweet vernal grass (*Anthoxanthum odoratum*). Various forb species were identified, including common nettle, creeping thistle (*Cirsium arvense*), ribwort plantain (*Plantago lanceolata*) and bitter dock (*Rumex obtusifolius*).

This area was assessed as being in ‘moderate’ ecological condition for the purposes of BNG calculations.



Photograph 3: Other neutral grassland to the east of the Site.



Photograph 4: Other neutral grassland northern elevation.

3.2.3 Modified Grassland – Tall Forbs (g4-16)

Located to the southeast of the house, there is an area of modified grassland with a mound at its centre. (**Photograph 5**). Access to this area was unavailable during the survey.

The mound was dominated by growth of common nettle and was unmanaged, in contrast to the apparently regularly mown surrounding area dominated by perennial ryegrass.

Butterfly bush (*Buddleia davidii*) was discovered in this area on the south and east sides of the Site (**Photograph 6**), as indicated in Target Notes (**TN1, TN2**).

This habitat was assessed as being in ‘poor’ ecological condition for the purposes of BNG calculations.



Photograph 5: Mound dominated by nettle in the southeast area



Photograph 6: *Buddleia* along the wire fence on the south of the Site



Photograph 7: Elder located in the southeast of the Site

3.4 Linear Features – w1g6

3.4.1 Line of Trees (33)

There is one line of trees along the southeastern boundary of the Site (**L1, Photograph 8**).

The line is mostly composed of hawthorn and elder with occasional holly (*Ilex aquifolium*) and English elm (*Ulmus minor*). Most of the trees are semi-mature with no deadwood or hollow areas observed. The composition and structure suggest a former hedgerow, now grown to a height of 10 m and therefore classed as a line of trees.

This habitat was assessed as being in 'moderate' ecological condition.



Photograph 8: Lines of trees along the southeastern boundary.

3.4.2 Native Hedgerow (h2a)

Hedgerows border the northwestern and the western Site boundaries (H1, **Photograph 9**; H2, **Photograph 10**). These hedges are mainly composed of hawthorn and bramble, often intertwined with common ivy (*Hedera helix*). While these hedges generally have good height and structure, some sections of hawthorn have grown into small trees, creating gaps at ground level.

Planted hedges are situated within the hardstanding area (H5, H6, H7, **Photographs 12, 13, 14**) and to the southeast of the Site (H4, **Photograph 11**). These hedges appear well-tended and dense, primarily dominated by holly and Leyland cypress (*Cupressus × leylandii*). No visible gaps were observed in these hedges.

The hedge on the southeast of the Site (H4) was dominated by holly and very occasional other species including raspberry (*Rubus idaeus*), bramble, and barberry (*Berberis sp.*).

Hedgerows H1-4 were in good condition whilst hedgerows H5-7 were considered to be in poor condition.



Photograph 9: Hedgerow 'H1' on the northwest of the Site



Photograph 10: Hedgerow 'H2' along the western boundary



Photograph 11: Hedgerow 'H4' on the southeast of the Site



Photograph 12: Hedgerow 'H5' on the southwest of the Site



Photograph 13: Hedgerow 'H6' on the southwest of the Site



Photograph 14: Hedgerow 'H7' on the south of the Site

3.5 Heathland and Shrub

3.5.1 Dense Bramble Scrub (h3d)

Four distinct areas of dense scrub are located across the Site, with further smaller scattered pockets forming boundaries/edge ecotone habitats. The largest area lies to the northeast of the Site with smaller sections located to the southeast, southwest and centre of the Site (**Photographs 15, 16**).

A single grey willow (*Salix cinerea*) (T2) grows within the bramble scrub section located at the centre of the Site. It stands at a height of around 7m, with the main trunk measuring approximately 15cm in diameter (**Photograph 17**).

All areas are approximately 1.5 – 2m high with species composition dominated by bramble (*Rubus sp.*). Species present at the edges of these scrub areas include nettle, thistle (*Cirsium sp.*), and common dock (*Rumex obtusifolius*).

The north-eastern boundary of the Site consists of a section of unmanaged bramble scrub, resulting in the development of areas of dense, untended vegetation that merge with the adjacent woodland, forming part of its understorey.

Scrub condition was generally assessed to be moderate/fairly poor.



Photograph 15: Dense bramble scrub located in the southwest of the Site



Photograph 16: Dense bramble scrub located in the southeast area of the Site



Photograph 17: Grey willow located in the northeast of the Site

3.6 Woodland (w)

3.6.1 Other woodland - broadleaved (w1g)

Located in the northeastern part of the Site is a small woodland area comprising a cluster of planted native tree species (**Photographs 18, 19**). Aerial images indicate that the central part of the woodland existed as early as 1999, whereas the outer section, adjacent to the Site, was planted around 2011. Within the woodland's northern part, there was an abundance of willow saplings.

The area is dominated by grey willow with very occasional hazel (*Corylus avellana*) and silver birch (*Betula pendula*). Due to the time of year, it was not feasible to observe the canopy for space, gaps, or diversity. Nonetheless, the understorey appeared bare with scattered areas of bramble, indicating a generally uniform canopy cover.

This habitat was assessed as being in 'moderate' ecological condition.



Photograph 18: Woodland on the northeast of the Site



Photograph 19: Mixed woodland, mainly broadleaved

3.7 Urban (u)

3.7.1 Sparsely Vegetated Urban Land (u1f)

An area of sparsely vegetated urban land is situated in the northeast of the Site and is bordered by woodland to the east, and bramble scrub to the north and south within the Site boundary. This habitat refers to the

former menage area and is characterised by a deep sandy substrate dominated by mosses and fungus species, with sporadic tufted plants (**Photographs 20, 21**).

Notably, numerous pixie cup fungi (*Cladonia pyxidata*) were observed, alongside just one greater tussock sedge (*Carex sp.*) plant. The terrain is forming a sandy soil which is beginning to enter into successional vegetation, with these species being early colonisers.

This habitat was assessed as being in 'poor' ecological condition.



Photograph 20: Ground level of the sparsely vegetated land



Photograph 21: Sparsely vegetated land northern view

3.7.2 Buildings (u1b5)

Four structures are located within the Site, being:

B1 - a two-storey residential house made of solid red brick with a tiled roof. It includes a garage to the south and a conservatory to the north (**Photograph 22**). This building has a footprint of approximately 210m² and is not going to be affected by the proposal.

B2 – a wooden shed constructed of tongue and groove boarding with a bitumen felt roof (**Photograph 23**). The building has a footprint of approximately 10m² and is not going to be affected by the proposal.



Photograph 22: Residential house 'B1'



Photograph 23: Shed 'B2'

B3 and B4– Stable Block and Field Shelter: B3 and B4 share a consistent construction style as wooden stables with corrugated metal roofs (**Photographs 24, 25**). Currently in use, they cover an area of 150m² and 10m², respectively. These structures are due to be demolished.



Photograph 24: Stable Block 'B3'



Photograph 25: Field Shelter 'B4'

3.7.3 Urban – Developed Land (u1b6)

The Site comprises a gravel area with planted hedgerows, enabling vehicle entry via the south entrance (**Photograph 26**). This access space extends through the centre of the Site, where there is a second gate leading to the rear part of the residential house where there are larger hardstanding surface areas (**Photograph 27**).



Photograph 26: Gravel access road, south entrance.



Photograph 27: Hardstanding surrounding structures.

4. On Site Baseline Biodiversity Units

The baseline units of the two modules present on Site are listed in **Table 2** (area habitats), **Table 3** (hedgerow and lines of trees) below. These should be used in conjunction with the habitat map in **Appendix A** showing the locations of each feature.

Table 2: On Site Area Habitat Baseline

Broad Habitat	Habitat Type	Distinctiveness	Condition	Area (Ha)	Baseline Units	Map Reference
Grassland	Modified grassland	Low	Poor	0.516	1.03	Central east - SP 46687 98251, central west and north - SP 46651 98279, Southeast - SP 46705 98211
Grassland	Modified grassland (Tall Forbs – 16)	Low	Poor	0.01	0.02	South area - SP 46707 98198
Grassland	Other neutral grassland	Medium	Moderate	0.068	0.54	Southeast area - SP 46723 98259
Urban	Vacant or derelict land	Low	Poor	0.096	0.19	Northeast area - SP 46678 98297
Woodland and Forest	Other woodland: broadleaved	Medium	Moderate	0.027	0.22	North-Eastern boundary - SP 46694 98310
Heathland and shrub	Bramble scrub	Medium	N/A	0.046	0.18	Northern boundary - SP 46667 98321
Heathland and shrub	Bramble scrub	Medium	N/A	0.021	0.08	Central area - SP 46678 98277
Heathland and shrub	Bramble scrub	Medium	N/A	0.012	0.05	Southeast corner - SP 46739 98251
Heathland and shrub	Bramble scrub	Medium	N/A	0.023	0.09	Southwest corner - SP 46643 98215
Urban	Developed Land; Sealed surface	V. Low	N/A	0.155	0.00	Buildings and hardstanding - SP 46680 98222
			Total	0.974	2.41	

Table 3: On-Site Linear Habitats Baseline

Habitat Type	Distinctiveness	Condition	Length (km)	Baseline Units	Map Reference
Line of trees	Low	Moderate	0.046581	0.19	L1
Native hedgerow	Low	Good	0.025748	0.15	H1
Native hedgerow	Low	Good	0.019837	0.12	H2
Native hedgerow	Low	Good	0.031051	0.19	H3
Native hedgerow	Low	Good	0.010534	0.06	H4
Native hedgerow	Low	Poor	0.014463	0.03	H5
Native hedgerow	Low	Poor	0.010131	0.02	H6
Non-native and ornamental hedgerow	V. Low	Poor	0.007327	0.01	H7
		Total	0.165672	0.77	

5. Post Development On Site Habitat Creation and Enhancement

Figures 4 and 5, respectively, show the post development Site layout and the habitats present (In UKHAB/BNG metric format).

The habitat units delivered from post-development habitats are listed in **Table 4** (area habitats) and **Table 5** (Hedgerow and lines of trees).

Habitat enhancements are detailed in **Table 6** (area habitats), and habitats that have been retained are presented in **Table 7**.

Figure 4. Post Development Site Layout



Figure 5. Post Development Site Habitats

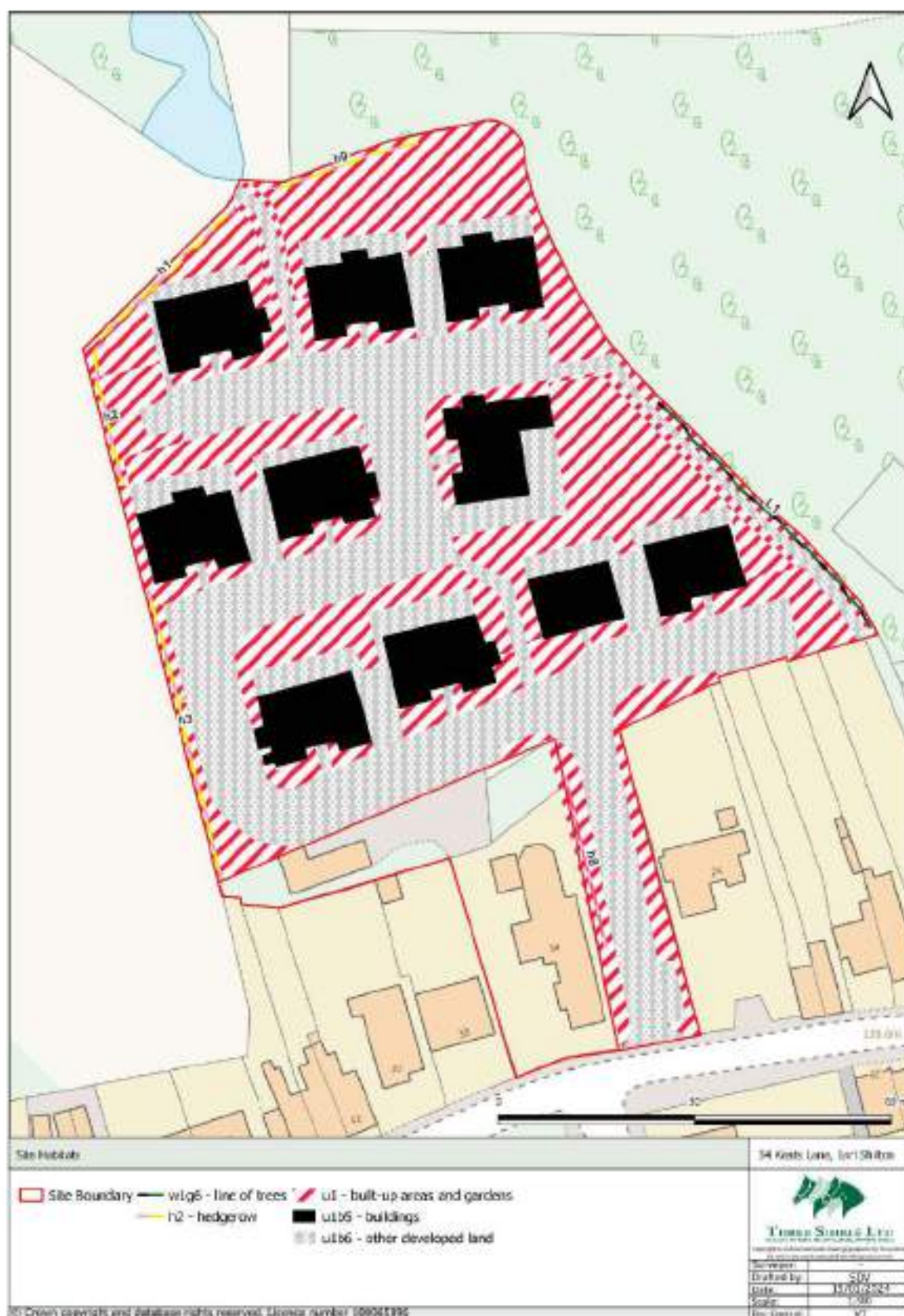


Table 4: Post Development On-Site Habitats

Habitat Type	Distinctiveness	Condition	Area (ha)	Habitat Units	Map Reference
Vegetated Garden	Low	N/A	0.249	0.48	North, centre, and south areas
Developed land; sealed surface	V. Low	N/A	0.39	0.00	Widespread across the Site
Developed land; sealed surface	V. Low	N/A	0.164	0.00	Bungalows
Developed land; sealed surface	V. Low	N/A	0.123	0.00	Southwest area (including the house 'B1' and the shed 'B2')
		Total	0.833	0.60	

Table 5: On-Site Hedgerow Creation

Habitat Type	Distinctiveness	Condition	Length (km)	Habitat Units	Map Reference
Native Hedgerow	Low	Good	0.027	0.11	East of the residential house - SP 46700 98210

Table 6: Post Development On-Site Habitat Enhancement

Habitat Type	Distinctiveness	Condition	Area (ha) /Length (km)	Habitat Units	Map Reference
Heathland and shrub – Mixed scrub	Medium	N/A	0.046	0.37	Northern boundary - SP 46667 98321
Heathland and shrub – Mixed scrub	Medium	N/A	0.012	0.10	Southeast corner - SP 46739 98251
Line of trees	Low	Moderate	0.047	0.19	L1 * not showing as a value within the metric
		Total	0.105	0.66	

Table 7: Retained Habitats

Habitat Type	Distinctiveness	Condition	Length (km)	Length retained (km)	Baseline Habitat Units	Map Reference
Native Hedgerow	Low	Good	0.025748	0.025748	0.15	H1
Native Hedgerow	Low	Good	0.019837	0.019837	0.12	H2
Native Hedgerow	Low	Good	0.031051	0.031051	0.19	H3
Native Hedgerow	Low	Poor	0.014463	0.014463	0.03	H5
Native Hedgerow	Low	Poor	0.010131	0.010131	0.02	H6
Non-native and ornamental hedgerow	V. Low	Poor	0.007327	0.007327	0.01	H7
		Total	0.108557	0.108557	0.70	

6. Summary

The baseline site habitat BNG Unit value is 3.18. The habitats currently proposed to be created post development result in a loss of biodiversity value and do not replace the value lost. This is not an unexpected result with the current Site design and extent of habitat change. Whilst the overall percentage loss is high, the baseline value is relatively low (-1.52 units)

The Site baseline value is primarily generated by modified grassland, which covers a significant portion of the Site. Although this habitat does not hold a notably high ecological value per unit, it contributes 1.60 units due the area. Additionally, there are smaller contributions from bramble areas, accounting for 0.41 units, and woodland, which adds 0.22 units.

The hedgerows and the line of trees present on the Site account for 1/3 of the overall BNG value, providing 0.77 units. More details are presented in **Table 8**.

Table 8: On-site Baseline Summary

Habitat Type	Units
Area based - Grassland, Woodland, Scrub, Urban (buildings/hardstanding), Individual trees	2.41
Linear Habitats – Hedgerow, Line of trees, Ornamental hedgerow	0.77
Total	3.18

The proposals are likely to result in losses of habitats such as modified grassland, other neutral grassland, and woodland. However, all hedgerows, except H4, will be retained and potentially enhanced. Bramble areas in the north and southeast will see improvement through mixed scrub planting, while other patches of bramble scrub are due to be removed. This results in a loss of -1.46 habitat units and -0.14 hedgerow units.

Table 9: On-site post-development summary

Habitat Type	Units
Area based - Grassland, Woodland, Scrub, Urban (buildings/hardstanding), Individual trees	0.95
Linear Habitats – Hedgerow, Line of trees, Ornamental hedgerow	0.62 + 0.19
Total	1.66

Table 10 shows the amount of units and % change, with area based habitats (largely grassland) showing a total of -60.64% decrease in area habitat and -18.51% hedgerow as a result of the development.

Table 10: Summary Results of BNG Calculation

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	-1.46
	<i>Hedgerow units</i>	-0.14
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	-60.64%
	<i>Hedgerow units</i>	-18.51%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	No - Check Trading Summaries ▲	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
<i>Habitat units</i>	10.00%	2.41	2.85	1.70
<i>Hedgerow units</i>	10.00%	0.77	0.84	0.22
<i>Watercourse units</i>	10.00%	0.00	0.00	0.00

7. Recommendations

It will be challenging to achieve a position of no net loss (in quantitative terms) on the Site, and even more difficult to achieve a net gain. However, some modifications to site layout and habitat plans have the potential to increase the BNG values, in terms of reducing losses and increasing gains.

In order to fully satisfy the current rules of BNG, habitats lost must be offset by habitats of the same type, which may be possible with the hedgerows, but may be challenging to achieve on Site with area based (grassland type) habitats. However, with the advent of mandatory BNG in late January 2024, it will become possible to replace low distinctiveness habitats (such as modified grassland which form the majority of the site) with those of higher distinctiveness (eg. Woodland, ponds, higher value grassland).

Whilst this increases the possibility for delivering a net gain, or reaching no net loss, it remains difficult to achieve on Site with the current design layout.

Options to increase the score, using land on Site, include:

- Increasing the species diversity as well as structure in existing hedgerows, but new planting and careful management.
- Retaining the existing woodland and planting/management to increase condition (although likely to generate a small value only)
- Considering the Site layout to provide more open green space, which can be used for grassland type habitats (noting the requirement for these areas to be subject to a management plan of at least 30 years duration)

This document will need reviewing and updating as the project develops.

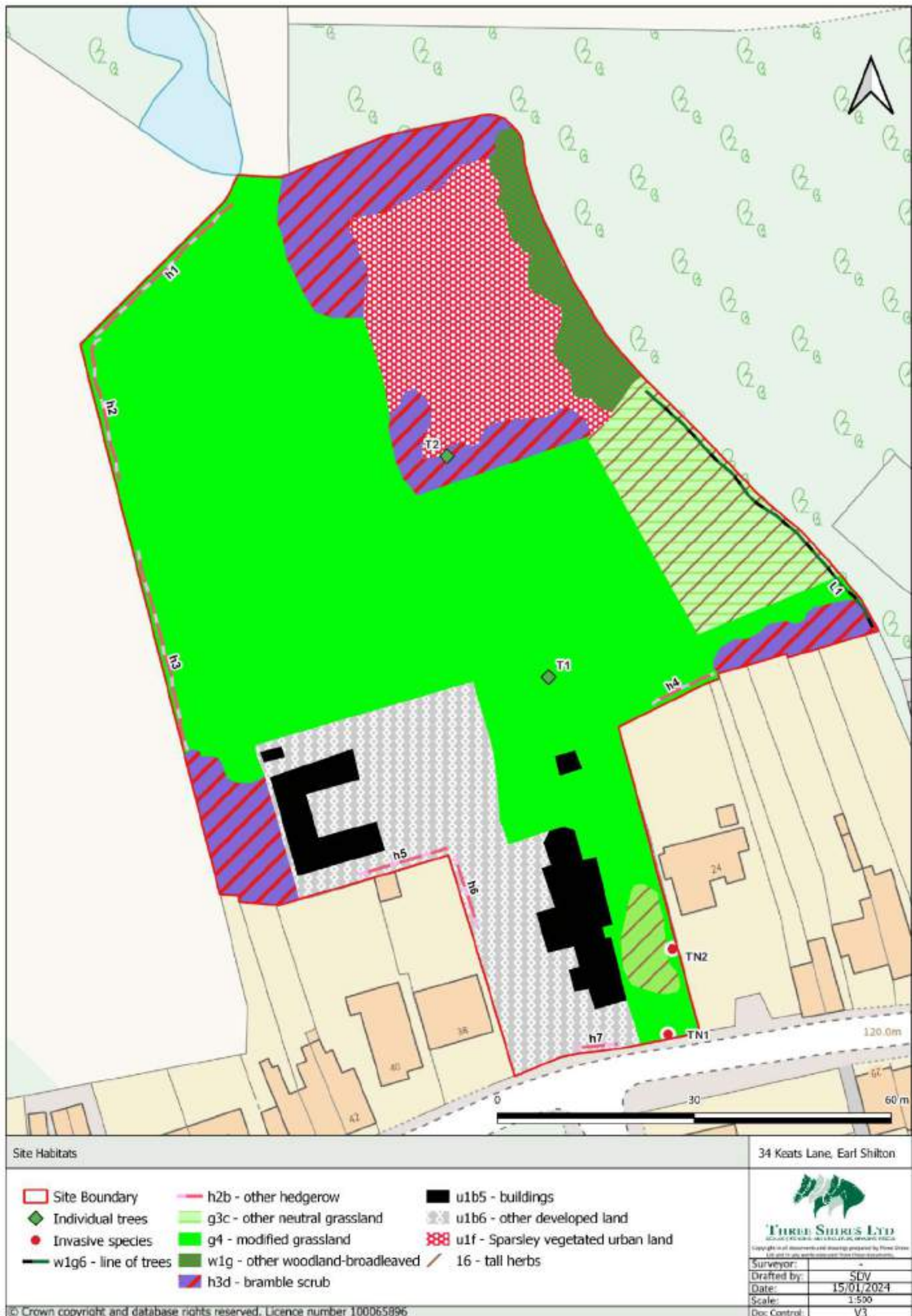
It should be noted that BNG rules do not allow a greater increase in one module to offset a loss in a different module. For example, it is not acceptable to create 200 BU into area habitat to offset the losses in hedgerows and lines of trees.

Any losses of specific habitat should be compensated with the creation of similar habitats (i.e. loss of woodland compensated by replanting woodland).

Any habitat creation or enhancement will need to be in line with the trading rules set out in the current Defra metric (currently 4.0).

Any enhancements that are required for biodiversity net gain will be required to achieve the target condition within the specified timeframe and will need to be maintained for a minimum of 30 years post development. No development will be allowed to occur in these areas without incurring further penalties.

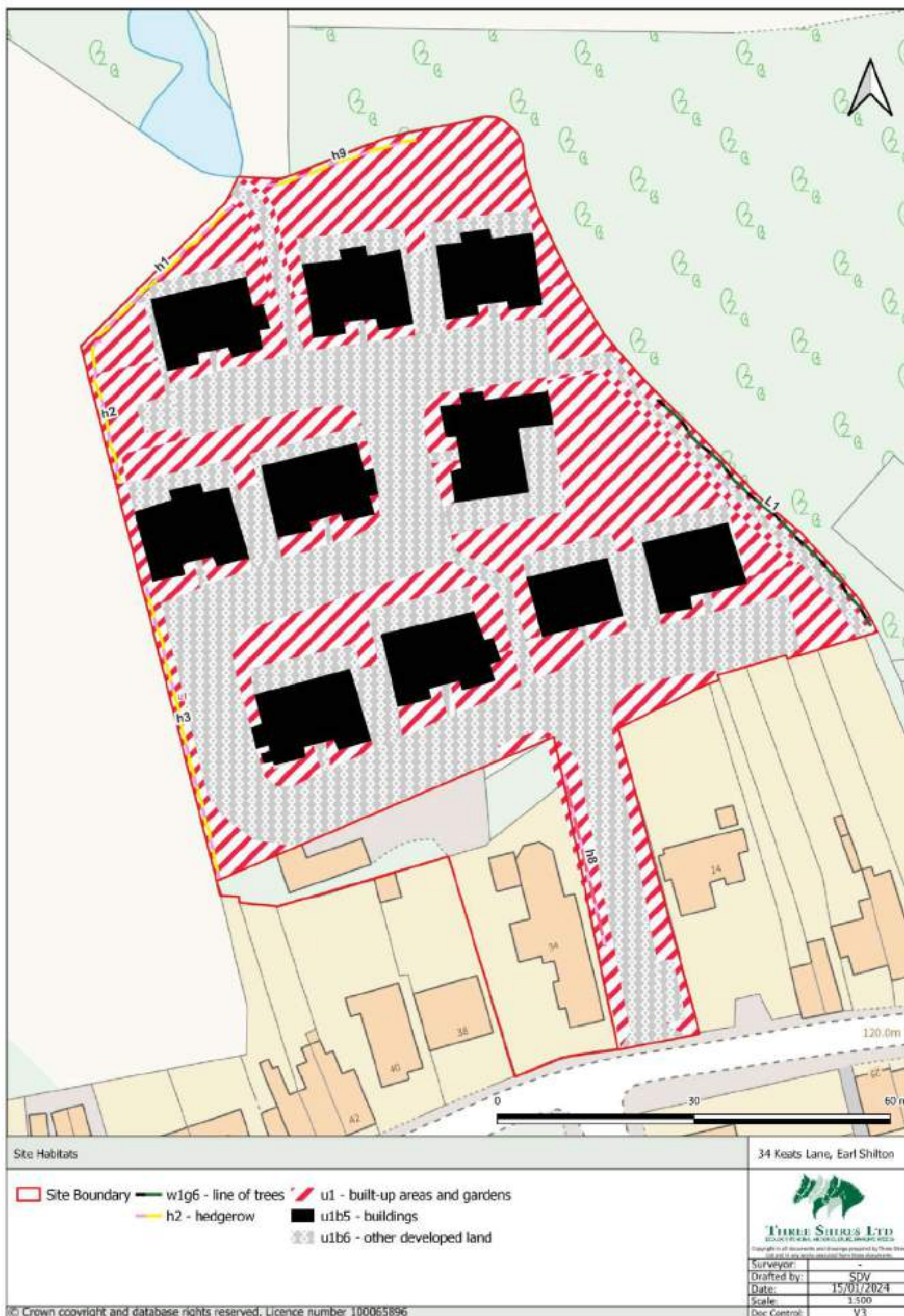
Appendix A: Site Habitats



Appendix B: Strategic Landscape Masterplan



Appendix C: Post-Development Habitat Map



Appendix D: Biodiversity Net Gain Baseline Calculations

Ref	Existing area habitats			Distinctiveness		Condition		Strategic significance			Required Action to Meet Trading Rules	Ecological baseline Total habitat units	Retention category biodiversity value					
	Broad Habitat	Habitat Type	Area (hectares)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic significance multiplier			Area retained	Area enhanced	Baseline units retained	Baseline units enhanced	Area habitat lost	Units lost
1	Grassland	Modified grassland	0.516	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	1.03			0.00	0.00	0.52	1.03
2	Grassland	Other neutral grassland	0.068	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required ≥	0.54			0.00	0.00	0.07	0.54
3	Grassland	Modified grassland	0.01	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.02			0.00	0.00	0.01	0.02
4	Urban	Developed land; sealed surface	0.155	V.Low	0	N/A - Other	0	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Compensation Not Required	0.00			0.00	0.00	0.16	0.00
5	Urban	Vacant or derelict land	0.096	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness or better habitat required ≥	0.19			0.00	0.00	0.10	0.19
6	Woodland and forest	Other woodland; broadleaved	0.027	Medium	4	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required ≥	0.22			0.00	0.00	0.03	0.22
7	Heathland and shrub	Bramble scrub	0.046	Medium	4	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required ≥	0.18		0.046	0.00	0.18	0.00	0.00
8	Heathland and shrub	Bramble scrub	0.021	Medium	4	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required ≥	0.08			0.00	0.00	0.02	0.08
9	Heathland and shrub	Bramble scrub	0.012	Medium	4	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required ≥	0.05		0.012	0.00	0.05	0.00	0.00
10	Heathland and shrub	Bramble scrub	0.023	Medium	4	Condition Assessment N/A	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same broad habitat or a higher distinctiveness habitat required ≥	0.09			0.00	0.00	0.02	0.09

Hedge Baseline

Baseline ref	Existing hedgerow habitats			Distinctiveness		Condition		Strategic significance			Required Action to Meet Trading Rules	Ecological baseline Total hedgerow units	Retention category biodiversity value					
	Hedge number	Hedgerow type	Length (km)	Distinctiveness	Score	Condition	Score	Strategic significance	Strategic significance	Strategic position multiplier			Length retained	Length enhanced	Units retained	Units enhanced	Length lost	Units lost
1	L1	Line of trees	0.046581	Low	2	Moderate	2	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness	0.19		0.046581	0.00	0.19	0.00	0.00
2	h1	Native hedgerow	0.025748	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness	0.15	0.025748		0.15	0.00	0.00	0.00
3	h2	Native hedgerow	0.019837	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness	0.12	0.019837		0.12	0.00	0.00	0.00
4	h4	Native hedgerow	0.010534	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness	0.06			0.00	0.00	0.01	0.06
5	h5	Native hedgerow	0.014463	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.03	0.014463		0.03	0.00	0.00	0.00
6	h6	Native hedgerow	0.010131	Low	2	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.02	0.010131		0.02	0.00	0.00	0.00
7	h7	Non-native and ornamental hedgerow	0.007327	V.Low	1	Poor	1	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same distinctiveness band or better	0.01	0.007327		0.01	0.00	0.00	0.00
8	h3	Native hedgerow	0.031051	Low	2	Good	3	Area/compensation not in local strategy/ no local strategy	Low Strategic Significance	1	Same	0.19	0.031051		0.19	0.00	0.00	0.00

Appendix E: Biodiversity Metric –Headline Results

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-1.46		
	Hedgerow units	-0.14		
	Watercourse units	0.00		
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	-60.64%		
	Hedgerow units	-18.51%		
	Watercourse units	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	2.41	2.65	1.70
Hedgerow units	10.00%	0.77	0.84	0.22
Watercourse units	10.00%	0.00	0.00	0.00

Appendix F: On-Site Habitat Condition Assessment Sheets

Modified Grassland

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)												
UK Habitat Classification (UKHab) Habitat Type(s)												
Grassland - Modified grassland												
Habitat Description												
ukhab -- UK Habitat Classification												
Site name and location		Earl Shilton	On-site or off-site		On site							
			Survey reference (if relating to a wider survey)									
Limitations (if applicable)		Habitat parcel reference										Notes (such as justification)
		Central east	Central west and	Southeast	South (Tall Forbs)							
Grid reference												
Condition Assessment Criteria		SP 46687 96251	SP 46651 96279	SP 46705 96211	SP 46707 96196							
		Criterion passed (Yes or No)										
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (this may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition.	N	N	N	N							Reduced plant variability. The western zone is a paddock, while the other areas, northwest and southeast, appear homogeneous.
	Where the vascular plant species present are characteristic of medium, high or very high distinctiveness grassland, or there are 9 or more of these characteristic species per m ² (excluding those listed in Footnote 1), please review the full UKHab description to assess whether the grassland should instead be classified as a higher distinctiveness grassland. Where a grassland is classed as medium, high, or very high distinctiveness, please use the relevant condition sheet.											
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	N	Y	N							Southeast area: central zone characterised by nettles
C	Some scattered scrub (including bramble <i>Rubus fruticosus</i> agg.) may be present, but scrub accounts for less than 20% of total grassland area. Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	Y	Y	N							
D	Physical damage is evident in less than 5% of total grassland area. Examples of physical damage include excessive poaching, damage from machinery use or storage, erosion caused by high levels of access, or any other damaging management activities.	Y	Y	Y	Y							
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Y	Y	Y	Y							
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Y	Y	Y	Y							Bracken has not been observed
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Y	Y	N	Y							Buddleja has been found on area 5
Essential criterion achieved (Yes or No)		N	N	N	N							
Number of criteria passed		4	5	5	4							
Condition Assessment Result (out of 7 criteria)		Score Achieved =										
Passes 6 or 7 criteria including passing essential criterion A		Good (3)										
Passes 4 or 5 criteria including passing essential criterion A		Moderate (2)										
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)		Poor (1)										
Suggested enhancement interventions to improve condition score												
Footnotes												
Footnote 1 – Creeping thistle <i>Cirsium arvense</i> , spear thistle <i>Cirsium vulgare</i> , curled dock <i>Rumex crispus</i> , broad-leaved dock <i>Rumex obtusifolius</i> , common nettle <i>Urtica dioica</i> , creeping buttercup <i>Ranunculus repens</i> , greater plantain <i>Plantago major</i> , white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i> .												
Footnote 2 – For example, this could include small, scattered areas of bare ground allowing establishment of new species, or localised patches where not exceeding 10% cover.												
Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, using professional judgement.												
Footnote 4 – Wildlife and Countryside Act 1981 (as amended).												

Other Neutral Grassland

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type(s)			
Grassland - Lowland calcareous grassland Grassland - Lowland dry acid grassland Grassland - Lowland meadows Grassland - Other lowland acid grassland Grassland - Other neutral grassland Grassland - Tall herb communities (H6430) [Note Tall herb habitat that does not meet the Annex 1 definition should be recorded as 'Other neutral grassland'] [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.] Grassland - Upland acid grassland Grassland - Upland calcareous grassland Grassland - Upland hay meadows Sparsely vegetated land - Calaminarian grassland			
Site name and location	Earl Shilton	On-site or off-site	On site
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference	SP 46723 98259	Habitat parcel reference	
Habitat Description			
Other neutral grasslands with Tall forbs (g3c-16)			
ukhab – UK Habitat Classification			
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	The grassland is a good representation of the habitat type it has been identified as, based on its UKHab description - the appearance and composition of the vegetation closely matches the characteristics of the specific grassland habitat type. Indicator species listed by UKHab for the specific grassland habitat type are consistently present. Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.	Y	Species: False oat grass, common couch, sweet vernal grass, creeping bent grass, perennial ryegrass, creeping thistle, ribwort plantain, bitter dock. The habitat matches 3 out of 4 criteria. It has no more than 8 species per m2
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	N	The sward height is uniform
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ¹ .	Y	
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y	
E	Combined cover of species indicative of sub-optimal condition ² and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴) are present, this criterion is automatically failed.	Y	
Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m ² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 2 and 4 cannot contribute towards this count). Note - this criterion is essential for achieving Good condition for non-acid grassland types only.		
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		Y	

Number of criteria passed		4	
Condition Assessment Result	Condition Assessment Score	Score Achieved x/	
Acid Grassland Types (Result out of 5 criteria)			
Passes 5 criteria	Good (3)		
Passes 3 or 4 criteria	Moderate (2)	✓	
Passes 2 or fewer criteria	Poor (1)		
Non-acid grassland Types (Result out of 6 criteria)			
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)		
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)		
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)		
Suggested enhancement interventions to improve condition score			
Notes			
Footnote 1 – For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover. Footnote 2 - Species indicative of sub-optimal condition for this habitat type include: creeping thistle <i>Cirsium arvense</i>, spear thistle <i>Cirsium vulgare</i>, curled dock <i>Rumex crispus</i>, broad-leaved dock <i>Rumex obtusifolius</i>, common nettle <i>Urtica dioica</i>, creeping buttercup <i>Ranunculus repens</i>, greater plantain <i>Plantago major</i>, white clover <i>Trifolium repens</i> and cow parsley <i>Anthriscus sylvestris</i>. There may be additional relevant species local to the region and or site. Footnote 3 – Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly, applying a buffer zone around the invasive non-native species with a size relative to its risk of spread into adjacent habitat, by applying professional judgement. Footnote 4 – Wildlife and Countryside Act 1981 (as amended).			

Hedgerows

Condition sheet: HEDGEROW Habitat Types														
Habitat Type														
Native hedgerow														
Native hedgerow - associated with bank or ditch														
Native hedgerow with trees														
Native hedgerow with trees - associated with bank or ditch														
Species-rich native hedgerow														
Species-rich native hedgerow - associated with bank or ditch														
Species-rich native hedgerow with trees														
Species-rich native hedgerow with trees - associated with bank or ditch														
Habitat Description														
h1 & h2: Species-rich native hedgerow - h3, h4, h5, h6: Planted hedgerow														
See the Biodiversity Metric 4.0 User Guide Section 9. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.														
Site name and		Earl Shilton		On-site or off-site		On site								
Limitations (if applicable)				Survey reference (if relating to a wider survey)										
Condition Assessment Criteria														
A series of ten attributes, representing key physical characteristics are used for this assessment. This assessment is based on the Hedgerow Survey Handbook ¹ and Favourable Conservation Status document ² . For further clarification please refer to the Hedgerow Survey Handbook. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria.														
Hedgerow favourable condition attributes														
Attributes and functional groupings (A, B, C, D and E)	Criteria - the minimum requirements for 'favourable condition'	Criteria description	Habitat parcel reference											
			h1	h2	h4	h5	h6	h7	h3					
			Grid reference											
			SP 466	SP 466	SP 467	SP 466	SP 466	SP 466	SP 466	SP 466	SP 466			
Core groups - applicable to all hedgerow types			Criterion passed (Yes or No)										Notes (such as justification)	
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).	Y	Y	N	N	N	N	Y				
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).	Y	Y	Y	N	N	N	Y				Need Nigel opinion: h3, h4, h5, and h6 are planted hedges consisting of holly and Leylandi cypress. It needs to be determined if they meet the criteria of 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).	N	N	Y	Y	Y	Y	N				

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).	Y	Y	Y	Y	Y	Y	Y							
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.	Y	Y	Y	N	N	N	Y							The recently planted hedges do not have undisturbed ground as they are surrounded by handstanding, except for h3 which is in a grassland area
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.	Y	Y	N	N	N	N	Y							
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 ⁵) 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 ⁶ , as well as the BSBI website ⁷ where the 'Online Atlas of the British and Irish Flora ⁸ ' 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 ⁹ .	Y	Y	Y	Y	Y	Y	Y							
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).	Y	Y	Y	Y	Y	Y	Y							
Additional group - applicable to hedgerows with trees only																	
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and/or ancient ¹⁰), 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.														
E3.	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.														
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the metric. The scores for each are set out in the tables below.																	
Condition categories for hedgerows without trees																	
Category		Category Requirements		Metric Score													
Good		No more than 2 failures in total; AND No more than 1 failure in any functional group.		3													
Moderate		No more than 4 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and C2 = Moderate condition).		2													

Poor	Fails a total of more than 4 attributes; OR Fails <u>both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		
Condition categories for hedgerows with trees		
Category	Category Requirements	Metric score
Good	No more than 2 failures in total; AND No more than 1 failure in any functional group.	3
Moderate	No more than 5 failures in total; AND <u>Does not fail both attributes</u> in more than one functional group (e.g., fails attributes A1, A2, B1, C2 and E1 = Moderate condition).	2
Poor	Fails a total of more than 5 attributes; OR Fails <u>both attributes</u> in more than one functional group (e.g. fails attributes A1, A2, B1 and B2 = Poor condition).	1
Score achieved:		
Suggested enhancement interventions to improve condition score		

Line of Trees

Condition Sheet: LINE OF TREES Habitat Type			
Habitat Type(s)			
Line of trees Line of trees – associated with bank or ditch Ecologically valuable line of trees Ecologically valuable line of trees – associated with bank or ditch			
Habitat Description			
See the Biodiversity Metric 4.0 User Guide Section 9. This assessment is based on the Hedgerow Survey Handbook ¹ . For further clarifications please refer to the Handbook. Where ancient and veteran trees are present within the line of trees, see Footnote 2 for standing advice.			
Site name and location	Earl Shilton	On-site or off-site	On site
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference	SP 46726 98272	Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	At least 70% of trees are native species.	Y	Species composition: Elder, hawthorn, holly, English elm
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.	Y	
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.	N	

Condition Sheet: LINE OF TREES Habitat Type			
Habitat Type(s)			
Line of trees Line of trees – associated with bank or ditch Ecologically valuable line of trees Ecologically valuable line of trees – associated with bank or ditch			
Habitat Description			
See the Biodiversity Metric 4.0 User Guide Section 9. This assessment is based on the Hedgerow Survey Handbook ¹ . For further clarifications please refer to the Handbook. Where ancient and veteran trees are present within the line of trees, see Footnote 2 for standing advice.			
Site name and location	Earl Shilton	On-site or off-site	On site
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference	SP 46726 98272	Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
A	At least 70% of trees are native species.	Y	Species composition: Elder, hawthorn, holly, English elm
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.	Y	
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.	N	

Urban – Sparsely vegetated land u1f

Condition Sheet: URBAN Habitat Type			
Habitat Type			
Where a parcel contains areas of higher distinctiveness habitats within it, then the area of higher distinctiveness habitat must be separated and recorded and assessed as such.			
Sparsely vegetated land - Ruderal/Ephemeral			
Sparsely vegetated land - Tall forbs			
Urban - Allotments			
Urban - Biodiverse green roof			
Urban - Bioswale			
Urban - Cemeteries and churchyards			
Urban - Facade-bound green wall			
Urban - Ground based green wall			
Urban - Intensive green roof			
Urban - Open mosaic habitats on previously developed land			
Urban - Rain garden			
Urban - Sustainable drainage system (SuDS)			
Urban - Vacant or derelict land			
Urban - Bare ground			
Habitat Description			
Sparsely vegetated urban land - u1f			
See Biodiversity Metric 4.0 User Guide for green roofs and UK Habitat Classification (UKHab) for other habitats:			UKHab – UK Habitat Classification
Site name and location	Earl Shilton	On-site or off-site	On site
Limitations (if applicable)		Survey reference (if relating to a wider survey)	
Grid reference	SP 46678 98297	Habitat parcel reference	
Condition Assessment Criteria		Criterion passed (Yes or No)	Notes (such as justification)
Core Criteria - must be assessed for all urban habitat types :			
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N	
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	N	
C	Invasive non-native plant species (listed on Schedule 9 of WCA ¹) and others which are to the detriment of native wildlife (using professional judgement) ² cover less than 5% of the total vegetated area ³ . Note - to achieve Good condition, this criterion must be satisfied by a complete absence of invasive non-native species (rather than <5% cover).	Y	
Additional Criteria - must be assessed for Open mosaic habitat on previously developed land only:			
D1	The parcel shows spatial variation and forms a mosaic of at least four early successional communities (a) to (h) PLUS bare substrate. (a) annuals; (b) mosses/liverworts; (c) lichens; (d) ruderals; (e) inundation species; (f) open grassland; (g) flower-rich grassland; (h) heathland.		
D2	The parcel contains pools of water such as permanent and ephemeral waterbodies.		
Additional Criteria - must be assessed for Bioswale and SuDS habitat types only:			
E1	Plant species are mostly native. If non-native species are present, they should not be detrimental to the habitat or native wildlife ⁴ .		
E2	The vegetation is comprised of plant species suited to wetland or riparian situations.		
Additional Criterion - must be assessed for Intensive green roofs only:			
F	The roof has a minimum of 50% native and non-native wildflowers. 70% of the roof area is soil and vegetation (including water features).		
Additional Criterion - must be assessed for Biodiverse green roofs only:			

G	The roof has a varied depth of 80 – 150 mm; at least 50% is at 150 mm and is planted and seeded with wildflowers and sedums or is pre-prepared with sedums and wildflowers. Note – to achieve Good condition some additional habitat, such as sand piles, stones, logs etc are present.		
Essential criteria relevant for habitat type achieved (Yes or No)			
Number of criteria passed			
Condition Assessment Result	Condition Assessment Score	Score Achieved x/7	
Results for habitats requiring assessment of 3 core criteria only (all listed urban habitats except Open mosaic habitat on previously developed land, Bioswale, SuDS and Green roofs):			
• Passes all 3 core criteria; - AND • Meets the requirements for Good condition within criterion C.	Good (3)		
• Passes 2 of 3 core criteria; - OR • Passes 3 of 3 core criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
• Passes 0 or 1 of 3 core criteria.	Poor (1)	✓	
Results for Green roofs (requiring assessment of 4 criteria only - core criteria plus additional criterion specified for habitat type):			
• Passes all 3 core criteria; - AND • Meets the requirements for Good condition within criterion C; - AND • Passes additional criterion relevant to specific habitat type (F or G).	Good (3)		
• Passes 2 or 3 of 4 criteria; - OR • Passes 4 of 4 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
• Passes 0 or 1 of 4 criteria.	Poor (1)		
Results for Open mosaic habitat on previously developed land, Bioswale or SuDS (requiring assessment of 5 criteria - core criteria plus additional criteria specified for habitat type):			
• Passes all 3 core criteria; - AND • Meets the requirements for Good condition within criterion C; - AND • Passes all additional criteria relevant to specific habitat type (Group D or Group E)	Good (3)		
• Passes 3 or 4 of 5 criteria; - OR • Passes 5 of 5 criteria but does not meet the requirements for Good condition within criterion C.	Moderate (2)		
• Passes 2 or fewer of 5 criteria.	Poor (1)		
Suggested enhancement interventions to improve condition score			
Footnotes			

Woodland – Other broadleaved

Condition Sheet: WOODLAND Habitat Type					
UK Habitat Classification (UKHab) Habitat Type(s)					
Woodland and forest - Lowland beech and yew woodland Woodland and forest - Lowland mixed deciduous woodland Woodland and forest - Native pine woodlands Woodland and forest - Other coniferous woodland Woodland and forest - Other Scot's pine woodland Woodland and forest - Other woodland; broadleaved Woodland and forest - Other woodland; mixed Woodland and forest - Upland birchwoods Woodland and forest - Upland mixed ashwoods Woodland and forest - Upland oakwood Woodland and forest - Wet woodland					
Habitat Description					
Other woodland - mixed					
ukhab – UK Habitat Classification					
This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here:					
Woodland Wildlife Toolkit (sylva.org.uk)					
IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition assessment are not equivalent to, nor are they comparable with the scores from the EWBG condition assessment, because the EWBG assessment has been adapted for the biodiversity metric, including the removal of EWBG Indicator 7 (Proportion of favourable land cover around woodland) and Indicator 14 (Size of woodland), and minor changes to other indicators.					
Site name and location	Earl Shilton	On-site or off-site	On site		
Limitations (if applicable)		Survey reference (if relating to a wider survey)			
Grid reference	SP 46694 98310	Habitat parcel reference			
Condition Assessment Criteria					
Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Score per indicator	Notes (such as justification)
A Age distribution of trees	Three age-classes ¹ present.	Two age-classes ¹ present.	One age-class ¹ present.	2	Semi-mature and sapling trees were observed on site
B Wild, domestic and feral herbivore damage	No significant browsing damage evident in woodland ² .	Evidence of significant browsing pressure is present in 40% or less of whole woodland ² .	Evidence of significant browsing pressure is present in 40% or more of whole woodland ² .	3	
C Invasive plant species	No invasive species ³ present in woodland.	Rhododendron <i>Rhododendron ponticum</i> or cherry laurel <i>Prunus laurocerasus</i> not present, other invasive species ³ <10% cover.	Rhododendron or cherry laurel present, or other invasive species ³ >10% cover.	3	
D Number of native tree species	Five or more native tree or shrub species ⁴ found across woodland parcel.	Three to four native tree or shrub species ⁴ found across woodland parcel.	Two or less native tree or shrub species ⁴ across woodland parcel.	2	Species found were hazel, silver birch and grey willows
E Cover of native tree and shrub species	>80% of canopy trees and >80% of understory shrubs are native ⁵ .	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native ⁵ .	<50% of canopy trees and <50% of understory shrubs are native ⁵ .	3	

F	Open space within woodland	10 - 20% of woodland has areas of temporary open space ⁶ . Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted ⁷ .	21 - 40% of woodland has areas of temporary open space ⁶ .	<10% or >40% of woodland has areas of temporary open space ⁶ . But if woodland <10ha has <10% temporary open space, please see Good category ⁷ .	3	The woodland is ~0.027ha
G	Woodland regeneration	All three classes present in woodland ⁸ ; trees 4 - 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland ⁸ .	No classes or coppice regrowth present in woodland ⁸ .	2	
H	Tree health	Tree mortality less than 10%, no pests or diseases and no crown dieback ⁹ .	11% to 25% mortality and/or crown dieback or low-risk pest or disease present ⁹ .	Greater than 25% tree mortality and or any high-risk pest or disease present ⁹ .	3	
I	Vegetation and ground flora	Recognisable NVC plant community ¹⁰ at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community ¹⁰ at ground layer present.	No recognisable woodland NVC plant community ¹⁰ at ground layer present.	1	
J	Woodland vertical structure	Three or more storeys across all survey plots or a complex woodland ¹¹ .	Two storeys across all survey plots ¹¹ .	One or less storey across all survey plots ¹¹ .	1	
K	Veteran trees	Two or more veteran trees ¹² per hectare.	One veteran tree ¹² per hectare.	No veteran trees ¹² present in woodland.	1	
L	Amount of deadwood	50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities ¹³ .	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities ¹³ .	1	
M	Woodland disturbance	No nutrient enrichment or damaged ground evident ¹⁴ .	Less than 1 hectare in total of nutrient enrichment across woodland area and or less than 20% of woodland area has damaged ground ¹⁴ .	More than 1 hectare of nutrient enrichment and or more than 20% of woodland area has damaged ground ¹⁴ .	3	
Total Score (out of a possible 39)						28
Condition Assessment Result				Condition Assessment Score		Result Achieved
Total score >32 (33 to 39)				Good (3)		Moderate
Total score 26 to 32				Moderate (2)		
Total score <26 (13 to 25)				Poor (1)		
Suggested enhancement interventions to improve condition score						