

Ramsden Farm, off Round Thorn Road, Middleton M24 1ZB

ASSESSMENT OF BIODIVERSITY NET GAIN

September 2024

ERAP (Consultant Ecologists) Ltd Reference: 2024-242

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Document Control

Survey Type:	Surveyors	Survey Date(s)
UK Habitat Classification Survey (including Condition Assessments of habitats) for On-site and Off-site Habitats	Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM Principal Ecologist	24 th August 2024
Reporting	Personnel	Date
Author	Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM Principal Ecologist	29 th August 2024
Signature(s)		
Checked by	Rachel Brown	11 th September 2024
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Report issued to	Kevin Kelly	
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1.0 INTRODUCTION

1.1 Background and Rationale

- 1.1.1 ERAP (Consultant Ecologists) Ltd was commissioned to carry out an assessment of Biodiversity Net Gain (BNG) of the land at Ramsden Farm, Middleton M24 1ZB (hereafter the 'site'). The Ordnance Survey (OS) grid reference at the centre of the site is SD 87702 05393.
- 1.1.2 The assessment was requested in connection with a planning application proposing the construction of three new detached residential dwellings and associated landscaping.
- 1.1.3 This Assessment of BNG supplements the *Ecological Survey and Assessment* report (ERAP (Consultant Ecologists) Ltd, 2024) and has been prepared to provide an assessment of the biodiversity value of the baseline of the site, an assessment of the value of post-development habitats based on the site proposals and provides guidance in relation to the requirements to attain a net gain in accordance with accordance with *Biodiversity Net Gain: Good Practice Principles for Development* (CIEEM, 2016).
- 1.1.4 This report also advises on how compliance with Chapter 15, paragraph 186(d) of the *National Planning Policy Framework* (NPPF) (Department for Levelling Up, Housing and Communities, 2023)¹ can be achieved, which states '*opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate*'.

1.2 Site Description

- 1.2.1 An aerial image of the site is appended at **Figure 1**.
- 1.2.2 The total site area is **0.58 hectares²**.
- 1.2.3 The site comprises an area of land that was previously used as a site compound during the construction of the existing four detached properties at Ramsden Farm. Since the completion of construction, the ground has been levelled and areas have been seeded with a wildflower grassland. Along the southern margin of the site is a steep mound colonised by secondary woodland of Sycamore with the Bramble understorey.
- 1.2.4 The site is bordered by existing development to the south and west. The access road to the existing four properties lies to the north. Land to the east comprises a mosaic of unmanaged grassland Bramble scrub, Indian Balsam, mixed scrub and scattered trees leading down to Wince Brook which is over 90 metres away from the site boundary.
- 1.2.5 A brief description of the individual habitats present within the site is presented at **Section 3.1** of this report and photographs are provided at **Section 8.1**.

1.3 Scope of Study

- 1.3.1 This report has been prepared to accompany a completed assessment of BNG using *The Statutory Biodiversity Metric Calculation Tool* (Natural England, 2023). The completed Microsoft Excel spreadsheet

¹ Hereafter the NPPF

² As measured by ERAP (Consultant Ecologists) Ltd; detail on the methods used to measure the area of the site are presented at **Section 2.0**.

assessment is presented as a separate document, named 'ERAP Ltd 2024-242 Statutory Biodiversity Calculation Tool_27.08.24', hereafter referred to as the 'BNG Metric'.

- 1.3.2 It is intended that this report provides a transparent assessment to demonstrate the calculation of net gain, based on the reasonable parameters assumed for the proposals (refer to **Section 2.3**). This approach has been applied on a number of other sites ERAP (Consultant Ecologists) Ltd has assisted with and has been accepted by the relevant Local Planning Authorities (LPA) and their ecological advisors to enable a planning application to progress.

2.0 METHOD OF SURVEY

2.1 Habitat Assessment and Mapping

Baseline Habitats

- 2.1.1 A Phase 1 Habitat Survey including an assessment in accordance with the UKHab and condition assessments of the habitats present was carried out by Victoria Burrows B.Sc. (Hons) M.Sc. CEnv MCIEEM on 24th August 2024. The weather conditions were mostly dry (there was a brief heavy shower partway through the survey) with sunny intervals, a light breeze (Beaufort scale 2) and an air temperature of 17°C.
- 2.1.2 On site habitat mapping was assisted via use of GPS technology using the topographical plan supplied by the client and *ESRI World Imagery* as base plans. The plan was provided to ERAP (Consultant Ecologists) Ltd without spatial referencing; the plan was inputted into QGIS and an affine transformation completed to ensure it is accurate in accordance with *ESRI World Imagery*.
- 2.1.3 Each of the habitats within the site and the off-site compensation area has been assessed in accordance with the UKHab to determine each habitat type present. This has allowed a reliable classification of habitats in accordance with those used by the BNG Metric.
- 2.1.4 The UKHab has been designed to function at two scales: fine scale (25m² or 5 metres length) and large scale (400m² or 20m² length). It has been considered for the purposes of this survey (where the UKHab has been used to inform the BNG calculation of a relatively small area) that a finer scale of 5m² is appropriate for the classification of habitats.
- 2.1.5 A plan showing the baseline habitats present within the site in accordance with UKHab symbology is appended at **Figure 2**.
- 2.1.6 The *Arboricultural Impact Assessment in Relation to Proposed Three-Unit Residential Development at Ramsden Farm, Roundthorn Road, Middleton, Greater Manchester M24 1ZB* (Bowland Tree Consultancy Limited, 2024) has been referred to.
- 2.1.7 Condition Assessments for each of the habitats present within the site have been completed in accordance with *The Statutory Biodiversity Metric – Technical Annex 1: Condition Assessment Sheets and Methodology* (Natural England, November 2023) and are appended at **Section 8.2**.

Post-development Habitats

- 2.1.8 The post development habitats have been calculated using the *Landscape Proposal* (TBA Landscape Architects, 2024). This plan was provided to ERAP (Consultant Ecologists) Ltd without spatial referencing; the plan has been inputted into QGIS and an affine transformation completed to ensure it is accurate in accordance with *ESRI World Imagery*.

- 2.1.9 A plan showing the proposed habitats in accordance with UKHab symbology is appended at **Figure 3**.

2.2 Survey and Reporting Limitations

- 2.2.1 All measurements have been either estimated whilst on site or measured using QGIS.
- 2.2.2 No survey limitations were experienced.

2.3 Evaluation Methods and Rules Applied

Habitats and Assessment

- 2.3.1 Habitats have been assessed to determine whether they meet those described in *UK Biodiversity Action Plan: Priority Habitat Descriptions* (Maddock, A (ed), 2008); these lists are used to help draw up the statutory lists of Priority Habitats, as required under Section 41 of the *Natural Environment and Rural Communities (NERC) Act 2006*. Where suitable, the ecological value of the habitats present have been assessed using the terms outlined in *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine* (CIEEM, 2018).
- 2.3.2 QGIS has been used to calculate the total area / length of each baseline habitat present within the site and the area / length of the proposed habitats at the site.
- 2.3.3 Each habitat have been assessed to determine whether they are 'irreplaceable habitat', defined in NPPF as '*Habitats which would be technically very difficult (or take a very significant time) to restore, recreate or replace once destroyed, taking into account their age, uniqueness, species diversity or rarity. They include ancient woodland, ancient and veteran trees, blanket bog, limestone pavement, sand dunes, salt marsh and lowland fen*'. The further detail presented in *The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024* (GOV.UK, 2023) draft document has also been referred to.

Relevant Guidance

- 2.3.4 Government advice on wildlife, as set out in the NPPF and associated government circulars has been taken into consideration.

Assumptions

- 2.3.5 It is assumed that vegetated garden will be included in the post-development calculation. It is recognised that there is limited control over what happens to the garden in the long term; vegetated gardens are scored accordingly in the BNG Metric. Inclusion of vegetated garden within the metric is in accordance with the guidance in relation to gardens issued during the Greater Manchester Combined Authority / CIEEM Webinar³. It is assumed that Rochdale Council will also take garden habitats into account in this manner.

³ Advice provided by Natural England in a recent (February 2021) Question and Answer Session on the Greater Manchester Combined Authority / CIEEM Webinar stated '*Q. How should gardens be treated within the metric? As no control of what happens within these areas is possible, should they be excluded? A. Gardens are included in the metric but the metric assumes that a significant number will disappear and decked over etc. over time. So they are scored accordingly. They still generate biodiversity units, but account has been taken of the fact that, as you say, there is limited control over what happens to them [Natural England]*' (GMEU / CIEEM, 2021).

3.0 BASELINE HABITATS: ON SITE

3.1 Habitat Evaluation

3.1.1 Refer to **Figure 2**.

3.1.2 None of the habitats at the site are an irreplaceable habitat or a Priority Habitat.

3.1.3 No areas of the site are a high or very high distinctiveness habitat. The site and adjacent land have no statutory or non-statutory designation for nature conservation.

3.1.4 No rare or uncommon species were detected at the site.

3.2 Assessment of On Site Baseline Habitats

3.2.1 **Table 3.1** provide a summary of the habitats present, their condition assessment result and their area within the site. Condition assessments for each habitat are appended at **Section 8.2**.

Table 3.1: Summary of Baseline Area Based Habitats within the Site

Habitat Reference	UK Habitat Classification Type	BNG Habitat Equivalent	Condition Assessment Result	Area (ha)
Habitat 1 <i>Seeded wildflower grassland</i>	g3c6 Lolium- Cynosurus neutral grassland	Grassland – Other neutral grassland	Good	0.0763
Habitat 2 <i>Sparsely vegetated land</i>	u – urban with the secondary code 81 ruderal / ephemeral	Sparsely vegetated land – ruderal / ephemeral	Moderate	0.0446
Habitat 3 <i>Wooded belt</i>	w1h – Other woodland - mixed	Woodland and forest – Other woodland; mixed	Poor	0.1180
Habitat 4 <i>Neutral grassland</i>	g3c Other neutral grassland	Grassland – Other neutral grassland	Poor	0.1447
Habitat 5 <i>Neutral grassland with Broom</i>	g3c Other neutral grassland with the secondary code 10 scattered scrub	Grassland – Other neutral grassland	Poor	0.1041
Habitat 6 <i>Neutral grassland</i>	g3c Other neutral grassland with secondary code: 16 tall forbs	Grassland – Other neutral grassland	Moderate	0.0857
Habitat 7 <i>Bramble scrub</i>	h3d – Bramble scrub	Heathland and shrub – Bramble scrub	Condition Assessment N/A	0.0044
			Total	0.58

Table 3.2: Summary of Individual Trees within the Site

Habitat Reference	UK Habitat Classification Type	BNG Habitat Equivalent	Condition Assessment Result	Area (ha) ⁴
Habitat 8 <i>2 x small trees in poor condition</i>	N/a	Individual trees – urban tree	Poor	0.0081
Habitat 9 <i>6 x small trees in moderate condition</i>	N/a	Individual trees – urban tree	Moderate	0.0244
Total:				0.0325

3.2.2 The baseline BNG score for the site is provided at **Section 6.0**, below.

4.0 POST DEVELOPMENT HABITATS: ON SITE

4.1 Consideration of Mitigation Hierarchy and Target Condition Assessments

4.1.1 In accordance with the mitigation hierarchy all trees and shrubs and woodland belts will be retained. However, as some of the wooded belt (Habitat 3) in the southern area of the site will be brought into a private garden, the habitats are effectively ‘lost’ and need to be counted as vegetated garden in accordance with *The Statutory Biodiversity Metric. User Guide* (Defra, July 2024).

4.1.2 Condition Assessments for each of the proposed habitats as specified on the Landscape Proposal are presented at **Section 8.3**. A long-term habitat management plan with an appropriate monitoring regime is required to secure the condition of the habitats that lie ownership of private residential ownership in the long-term.

4.1.3 The proposals comprise:

- Retention of as much of the other neutral grassland in good condition (Habitat 1) as possible;
- Retention and enhancement (poor to moderate condition) of as much of the wooded belt (Habitat 3) outside of private gardens as possible;
- Enhancement (poor to moderate) of the neutral grassland with self-seeded Broom (Habitat 5);
- Enhancement (moderate to good) of the neutral grassland at the western end of the site (Habitat 6) by appropriate management;
- Enhancement of the Bramble scrub (Habitat 7) to mixed scrub; and
- Retention of the existing individual trees (Habitats 8 and 9).

4.2 Consideration of Proposed Post-development Habitats

4.2.1 **Tables 4.1** and **4.2** list the post development habitats at the site and their target condition assessments. Please also refer to **Section 8.3** and **Figure 3**.

⁴ Due to the way individual trees are calculated by the metric they do not contribute to the total habitat area calculation, but are additional to it.

Table 4.1: Summary of Area-based Habitats to be Retained, Enhanced and Created at the Site

Habitat Type	BNG Equivalent Habitat	Target Condition	Area (ha)
Retained Habitats			
Habitat 1 <i>Seeded wildflower grassland</i>	Grassland – Other neutral grassland	Good	0.0143
Enhanced Habitats			
Habitat 3 <i>Wooded belt</i>	Woodland and forest – Other woodland; mixed	Poor to Moderate	0.048
Habitat 5 <i>Neutral grassland with Broom</i>	Grassland – Other neutral grassland	Poor to Moderate	0.0250
Habitat 6 <i>Neutral grassland</i>	Grassland – Other neutral grassland	Moderate to Good	0.0857
Habitat 7 <i>Bramble scrub</i>	Heathland and shrub – Bramble scrub to be enhanced to Mixed scrub	Moderate	0.0044
Proposed Habitats			
Habitat A <i>Buildings</i>	Urban – Developed land; sealed surface	N/A – Other	0.0491
Habitat B <i>Hardstanding</i>	Urban – Developed land; sealed surface	N/A – Other	0.0829
Habitat C <i>Vegetated garden</i>	Urban - Vegetated garden	Condition Assessment N/A	0.275
Total			0.58

Table 4.2: Summary of Individual Trees to be Retained at the Site

Habitat Reference	BNG Habitat Equivalent	Target Condition	Area (ha) ⁵
Retained Habitats			
Habitat 8 <i>2 x small trees in poor condition</i>	Individual trees – urban	Poor	0.0081
Habitat 9 <i>6 x small trees in moderate condition</i>	Individual trees – urban	Moderate	0.0277
Total			0.0325

5.0 OFF SITE HABITATS / COMPENSATION AREA

5.1 Introduction

- 5.1.1 During the preliminary assessment of BNG it was determined that 10% net gain was not achievable on the site. Land to the east under the same ownership has been examined (refer to **Figure 4**) and the relevant habitats have been assessed. These off site habitats contribute towards the assessment of BNG as demonstrated in the BNG Metric.
- 5.1.2 Condition assessments for off-site habitats at the baseline and target condition assessments are appended at **Section 8.4**.

⁵ Small urban trees have a diameter at breast height (DBH) of up to 30cm, medium urban trees have a DBH of 30 to 90cm, and large urban trees have a DBH of more than 90cm. Due to the way individual trees are calculated by the metric they do not contribute to the total habitat area calculation, but are additional to it.

5.2 Off Site Baseline

5.2.1 Photographs of the off-site areas proposed for compensation are appended at **Section 8.1**.

Table 5.1: Summary of Baseline Area Based Habitats within the Off-Site Area

Habitat Reference	UK Habitat Classification Type	BNG Habitat Equivalent	Condition Assessment Result	Area (ha)
Habitat 10 <i>Neutral grassland</i>	g3c Other neutral grassland	Grassland – Other neutral grassland	Poor	0.48
Habitat 11 <i>Bramble scrub</i>	h3d – Bramble scrub	Heathland and shrub – Bramble scrub	Condition Assessment N/A	0.11
			Total	0.59

5.3 Off Site Post-development

5.3.1 To secure 10% BNG and satisfy the trading rules the following is proposed, as annotated on **Figure 4**:

- Enhancement of 0.48ha of other neutral grassland (Habitat 10) in poor condition to moderate condition by the application of appropriate management; and
- Enhancement of 0.11ha of Bramble scrub with Indian Balsam (Habitat 11) by removal of invasive species and over planting of an area of 0.065ha with native shrubs to create of mixed scrub in moderate condition and planting of trees over the remainder to create 0.045ha area of wooded copse in poor condition.

5.3.2 These proposals have been discussed and agreed with the client and care has been taken to avoid other constraints such as the avoidance of tree planting beneath overhead lines in this area.

Table 5.2: Summary of Post-development Area Based Habitats within the Off-Site Area

Habitat Reference	BNG Habitat Equivalent	Condition Assessment Result	Area (ha)
Enhanced Habitats			
Habitat 10 <i>Neutral grassland</i>	Grassland – Other neutral grassland	Poor enhanced to	0.48
Habitat 11 <i>Bramble scrub enhanced to mixed scrub</i>	Heathland and shrub – Mixed scrub	Moderate	0.065
Created Habitat			
Habitat D <i>Wooded copse</i>	Woodland and forest – Other woodland; broadleaved	Poor	0.045
		Total	0.59

6.0 HEADLINE RESULTS, EVALUATION AND CONCLUSION

6.1 The headline results of the BNG Calculator are presented at **Table 6.1** below.

Table 6.1: Results of Statutory Biodiversity Metric Calculation Tool

On-site Baseline	Habitat units	3.49	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site Post Intervention	Habitat units	2.38	
	Hedgerow units	0.00	
	Watercourse units	0.00	
On-site net change (units % percentage)	Habitat units	-1.11	-31.72%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Off-site Baseline	Habitat units	2.36	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site Post Intervention	Habitat units	3.89	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units % percentage)	Habitat units	1.53	64.95%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined Net Unit Change	Habitat units	0.43	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Spatial Risk Multiplier (SRM) Reductions	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	

Total Net Unit Change	Habitat units	0.43
	Hedgerow units	0.00
	Watercourse units	0.00
Total Net % Change	Habitat units	12.18%
	Hedgerow units	0.00%
	Watercourse units	0.00%

Trading Rules Satisfied?	YES
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Unit Type	Target	Baseline Units	Units Required	Unit Deficit	Comment
Habitat units	10%	3.49	3.84	0.00	No additional habitat units required to meet target
Hedgerow units	10%	0.00	0.00	0.00	No additional hedgerow units required to meet target
Watercourse units	10%	0.00	0.00	0.00	No additional watercourse units required to meet target

6.2 A net gain for area-based habitats is demonstrated by the BNG Metric. The demonstrated gain is greater than 10% and, as such, the statutory BNG requirements are met.

- 6.3 It is also advised that the following recommendations as presented in the *Ecological Survey and Assessment* (ERAP (Consultant Ecologists) Ltd, 2024) report, and to be secured by suitably worded planning conditions, are also considered as part of the assessment of biodiversity net gain:
- Incorporation of opportunities for use by roosting bats at the new buildings (this is considered to provide additionality);
 - Incorporation of opportunities for use by nesting birds, including Priority Species such as house sparrow, at the developed site to include a net increase in number of opportunities for specific species;
 - Maximised use of native plants and plant species known to be a value for the attraction a wildlife in the garden habitats; and
 - Incorporation of trees within the garden habitats. Trees, particularly species that produce blossom and berries, are invaluable for the attraction of invertebrates and their predators such as bats and birds.
- 6.4 It is advised that the accommodation of the features listed above will demonstrate compliance with *Biodiversity Net Gain: Good Practice Principles for Development* (CIEEM, 2016).

7.0 REFERENCES

- Bowland Tree Consultancy Limited, 2024. *Arboricultural Impact Assessment in Relation to Proposed Three-Unit Residential Development at Ramsden Farm, Roundthorn Road, Middleton, Greater Manchester M24 1ZB*, Preston: Bowland Tree Consultancy Limited.
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UKHab Ltd, 2023. *The UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>), Stockport: UKHab Ltd.

8.0 APPENDIX: PHOTOGRAPHS, CONDITION ASSESSMENTS AND FIGURES

8.1 Photographs of Baseline Habitats (Taken in August 2024)



Photo 1: Habitat 1: Other neutral grassland in good condition



Photo 2: Habitat 2: Sparsely vegetated land



Photo 3: Habitat 3: Wooded belt



Photo 4: Habitat 4: Other neutral grassland in poor condition



Photo 5: Habitat 5: Other neutral grassland in poor condition



Photo 6: Habitat 6: Other neutral grassland in moderate condition and individual trees



Photo 7: Habitats 8 and 9: Individual trees



Photo 8: Habitats 8 and 9: Individual trees



Photo 9: Habitats 8 and 9: Individual trees



Photo 10: Habitats 8 and 9: Individual trees

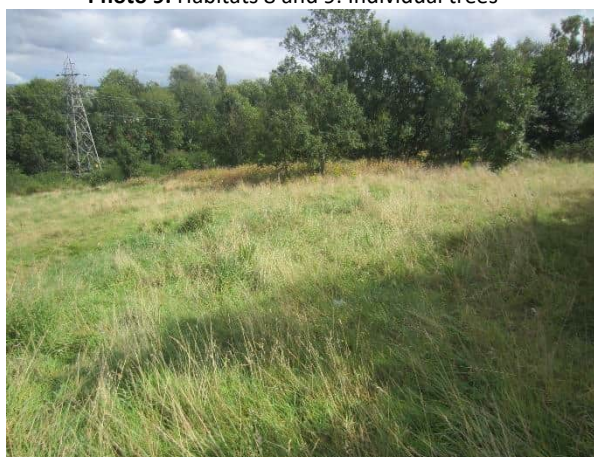


Photo 11: Habitat 10: Other neutral grassland (off-site)

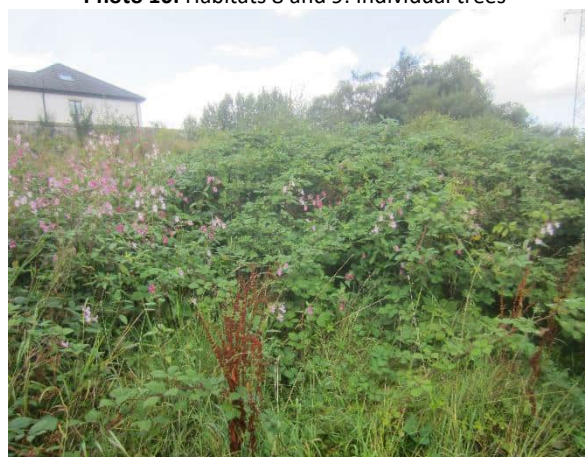


Photo 12: Habitat 11: Bramble scrub with Indian Balsam (off-site)

8.2 Condition Assessments of Baseline Habitats on Site

Table 8.1: Condition Assessments for Grasslands of Medium Distinctiveness

Condition Assessment Criteria	Habitat 1: Seeded Wildflower	Habitat 4: Self-seeded Grassland	Habitat 5: Grassland with Broom	Habitat 6: Grassland
A. The grassland is a good representation of the habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description) ¹ . <i>Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.</i>	✓	x	✓	✓
B. 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.	x	x	x	x
C. Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens ² .	✓	✓	x	x
D. Cover of Bracken less than 20% and cover of scrub (including Bramble) less than 5%.	✓	✓	x	x
E. Combined cover of species indicative of sub-optimal condition ³ 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 ⁴ (as listed on Schedule 9 of WCA ⁵) are present, this criterion is automatically failed.	✓	x	✓	✓
Additional Group – non-acid grassland types only				
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 3 and 5 cannot contribute towards this count). <i>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.</i>	✓	x	x	✓
Acid Grassland Types				
Good: passes 5 criteria	N/a	N/a	N/a	N/a
Moderate: passes 3 or 4 criteria	N/a	N/a	N/a	N/a
Poor: passes 2 or fewer criteria	N/a	N/a	N/a	N/a
Non-acid Grassland Types				
Good: passes 5 or 6 criteria, including essential criteria A and additional criterion F	✓	x	x	x
Moderate: passes 3 to 5 criteria, including essential criterion A	x	x	x	✓
Poor: passes 2 or fewer criteria; or passes 3 or 4 criteria excluding criterion A and F	x	✓	✓	x
Additional Information: Footnote 1: Professional judgement should be used alongside the UKHab description. Footnote 2: For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover. Footnote 3: 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>), Cow Parsley (<i>Anthriscus sylvestris</i>). There may be additional relevant species local to the region and / or site. Footnote 4: 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 5: <i>Wildlife and Countryside Act 1981</i> (as amended)				

Table 8.2: Condition Assessments for Sparsely Vegetated Land

Condition Assessment Criteria	Habitat 2: Ruderal / ephemeral
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.	x
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.	✓
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).	✓
If only 3 core Criteria Assessed (All except OMH, Bioswale, SuDS and green roofs):	
Good: Passes all 3 core criteria; AND Meets the requirements for Good condition within criterion C.	x
Moderate: Passes 2 core criteria; OR Passes 3 core criteria but does not meet the requirements for Good condition within criterion C.	✓
Poor: Passes 1 or fewer of core criteria	x
Additional notes: Footnote 1: Wildlife and Countryside Act 1981 (as amended) Footnote 2: Sources of information about detrimental non-native species can be found on the GB Non-native Species Secretariat (GBNNSS) website: Home » NNSS (nonnativespecies.org) and Natural England Access to Evidence page should also be checked for up-to-date information: Horizon-scanning for invasive non-native plants in Great Britain - NECR053 (naturalengland.org.uk). For criterion C – For green roof habitat types only – Buddleia (Buddleja davidii) should be assessed alongside Schedule 9 species. This species impairs the health of the local ecosystem and reduces the biodiversity potential of the roof. It is also a sign that a roof has not been planted and seeded correctly in subsequent years. 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: Use professional judgement. Sources of information about non-native species that are not detrimental to native wildlife can be found on the GBNNSS website: Alternative plants » NNSS (nonnativespecies.org).	

Table 8.3: Condition Assessments for Woodland

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Habitat 3: Wooded Belt	Habitat 3: <i>Enhanced</i>
A. Age distribution of trees ¹	Three age classes present.	Two age classes present.	One age class present.	2	2
B. Wild, domestic and feral herbivore damage ²	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in 40% or less of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.	3	3
C. Invasive plant species ³	No invasive species present in woodland.	Rhododendron or cherry laurel not present, other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species >10% cover.	1	3
D. Number of native tree species ⁴	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	None to two native tree or shrub species across woodland parcel.	2	3
E. Cover of native tree and shrub species ⁵	> 80% of canopy trees and >80% of understory shrubs are native.	50-80% of canopy trees and 50-80% of understory shrubs are native.	< 50% of canopy trees and <50% of understory shrubs are native.	1	1
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.	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 .	1	1
G. Woodland regeneration ⁸	All three classes present in woodland; trees 4-7cm DBH, saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.	1	2
H. Tree health ⁹	Tree mortality less than 10%, no pests or diseases and no crown dieback.	11% to 25% mortality and/or crown dieback or low risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.	2	3
I. Vegetation and ground flora ¹⁰	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	1
J. Woodland vertical structure ¹¹	Three or more storeys across all survey plots or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.	2	2

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Habitat 3: Wooded Belt	Habitat 3: Enhanced
K. Veteran trees ¹²	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.	1	1
L. Amount of deadwood ¹³	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs and stumps or an abundance of small cavities.	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, stubs and stumps or an abundance of small cavities.	1	2
M. Woodland disturbance ¹⁴	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground.	1 hectare or more of nutrient enrichment and / or more than 20% of woodland area has damaged ground.	1	2
Good (total score >32)				-	-
Moderate (total score 26 to 32)				-	26
Poor (total score 13 to 25)				19	-
Additional Information: Footnotes below refer to the EWBG woodland condition assessment methodology: EWBG (No date). <i>Assessing your Woodland's Condition</i> [online]. Available from Woodland Wildlife Toolkit (sylva.org.uk), When applying this condition sheet, good practice would be to use the methodology associated with the EWBG toolkit. Footnote 1 - See EWBG method INDICATOR 1 for more information. If tree species is not a birch (<i>Betula</i> sp.), cherry (<i>Prunus</i> sp.) or Sorbus sp.: 0 – 20 years (Young); 21 - 150 years (Intermediate); and >150 years (Old). For birch, cherry or Sorbus species; 0 - 20 years = Young; 21 - 60 years = Intermediate; >60 years = Old. A recognisable age-class should be a consistent recognisable layer across the woodland or stand being assessed. Presence of a few saplings would not indicate that the woodland has an 'age-class' of young trees. Footnote 2 - See EWBG method INDICATOR 2 for more information. Browsing pressure is considered to be significant where >20% of vegetation visible within each survey plot shows damage from any type of browsing pressure listed. Footnote 3 - See EWBG method INDICATOR 3 for more information. Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly. Check for the presence of all plant species listed on Schedule 9 of the <i>Wildlife and Countryside Act 1981</i> (as amended), particularly the following invasive non-native species: American Skunk Cabbage (<i>Lysichiton americanus</i>); Himalayan Balsam (<i>Impatiens glandulifera</i>); Japanese Knotweed (<i>Reynoutria japonica</i>); Cherry Laurel (<i>Prunus laurocerasus</i>); Shalton (<i>Gaultheria shallon</i>); Snowberry (<i>Symphoricarpos albus</i>); Variegated Yellow Archangel (<i>Lamiastrum galeobdolon</i> subsp. <i>Argentatum</i>); Rhododendron (<i>Rhododendron ponticum</i>); and Tree-of-heaven (<i>Ailanthus altissima</i>). Footnote 4 - See EWBG method INDICATOR 4 and Table 2 for more information. The number of different native tree or shrub species including young trees and shrubs. A list of commonly found native tree and shrub species is provided in Table 2. Not all species listed are native to all parts of the UK. Note a list of commonly found non-native tree species are also included and should be recorded if present. Footnote 5 - See EWBG method INDICATOR 5 and for more information. The abundance of native tree species in upper (>5 m) and understorey (up to 5 m) layers including young trees and shrubs. Footnote 6 - See EWBG method INDICATOR 6 for more information. Open space within woodland in this context is temporary open space in which trees can be expected to regenerate (for example, glades, rides, footpaths, areas of clear-fell). This differs from permanent open space where tree regeneration is not possible or desirable (for example, tarmac, buildings, rivers). Area is at least 10 m wide with less than 20% covered by shrubs or trees. Footnote 7 – Given the increased ratio of edge habitat to woodland where the woodland is <10ha. Footnote 8 - See EWBG method INDICATOR 8 for more information. This indicator measures regeneration potential of the woodland by considering three classes: seedlings; saplings; and young trees of 4-7 cm DBH. All three classes would fall in the 'young' category of the 'age distribution of trees' indicator, but the regeneration indicator gathers additional information by considering regeneration potential - if seedlings, saplings and young trees are all present that means natural regeneration processes are happening. Footnote 9 - See EWBG method INDICATOR 9 for more information and Table 3 for a list of diseases and pests and their risk level. Footnote 10 - See EWBG method INDICATOR 10 directing to NVC key for more information. The 'UKHab to NVC translation table' in the UK Habitat Classification resources may also be useful to assess this.					

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Habitat 3: Wooded Belt	Habitat 3: Enhanced
Footnote 11 – This criterion looks at structural diversity and is useful to understand in conjunction with the age of trees in a woodland. Vertical structure is defined as the number of canopy storeys present. Possible storey values are: 1) Upper; 2) Complex: recorded when the stand is composed of multiple tree heights that cannot easily be stratified into broad height bands (such as upper, middle or lower); 3) Middle; 4) Lower; and 5) Shrub layer. There might be no storeys where the woodland has been felled. See EWBG INDICATOR 11 for more information. Footnote 12 – See EWBG method INDICATOR 12 for more information. See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk). Footnote 13 – See EWBG method INDICATOR 13 for more information. This includes logs, large dead branches on the forest floor and stumps (<1 m tall) >20 cm diameter at narrowest point and >50 cm long. Also includes standing dead trees (>1 m tall) and also deadwood on standing live trees. Diameter is measured at the narrowest point on the stem. Minimum diameter of 20 cm. Footnote 14 – See EWBG method INDICATOR 15 for more information. Examples of disturbance are: significant nutrient enrichment; soil compaction from trampling, machinery, animal poaching or litter.					

Table 8.4: Condition Assessments for Individual Trees

Tree Reference	Species	A	B	C	D	E	F	Size Category	Total No. of Criterion Passed	Condition Assessment Result
Habitat 9: T7	Goat Willow	✓	✓	x	x	x	✓	Small	3	Moderate
Habitat 9: T8	Silver Birch	✓	✓	x	x	x	✓	Small	3	Moderate
Habitat 9: T9	Silver Birch	✓	✓	x	x	x	✓	Small	3	Moderate
Habitat 9: T10	Silver Birch	✓	✓	x	x	x	✓	Small	3	Moderate
Habitat 8: T11	Cherry	x	✓	x	x	x	✓	Small	2	Poor
Habitat 8: T12	Cherry	x	✓	x	x	x	✓	Small	2	Poor
Habitat 9: T13	Silver Birch	✓	✓	x	x	x	✓	Small	3	Moderate
Habitat 9: T14	Silver Birch	✓	✓	x	x	x	✓	Small	3	Moderate
Good: Passes 5 or 6 criteria Moderate: Passes 3 or 4 criteria Poor: Passes 2 or fewer criteria										
Condition Assessment Criteria										
A. The tree is a native species (or more than 70% within the block are native species)										
B. Tree canopy is predominantly continuous with gaps in canopy cover making up less than 10% of total area and no individual gap being more than 5 metres wide. Individual trees automatically pass this criterion.										
C. The tree is mature (or more than 50% within the block are mature). See gov.uk standing advice on ancient and veteran trees, available from: <i>Keepers of time: ancient and native woodland and trees policy in England</i> (publishing.service.gov.uk) and <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions</i> (www.gov.uk). Enhancement of this habitat type is only possible by improving the habitat so that it meets Criteria B, D and F. It is not possible or appropriate to enhance individual trees through meeting just one of those Criteria, nor by meeting Criteria A, C or E.										
D. There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.										
E. Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.										
F. More than 20% of the tree canopy area is oversailing vegetation beneath										

8.3 Target Condition Assessments of Enhanced and Created Habitats on Site

Table 8.5: Condition Assessments for Grasslands of Medium Distinctiveness

Condition Assessment Criteria	Habitat 5: Grassland with Broom <i>Enhanced</i>	Habitat 6: Grassland <i>Enhanced</i>
A. The grassland is a good representation of the habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description)¹. <i>Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.</i>	✓	✓
B. 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.	x	x
C. Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens².	x	✓
D. Cover of Bracken less than 20% and cover of scrub (including Bramble) less than 5%.	✓	✓
E. Combined cover of species indicative of sub-optimal condition³ 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 species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	✓	✓
Additional Group – non-acid grassland types only		
F. There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). <i>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.</i>	x	✓
Acid Grassland Types		
Good: passes 5 criteria	N/a	N/a
Moderate: passes 3 or 4 criteria	N/a	N/a
Poor: passes 2 or fewer criteria	N/a	N/a
Non-acid Grassland Types		
Good: passes 5 or 6 criteria, including essential criteria A and additional criterion F	x	✓
Moderate: passes 3 to 5 criteria, including essential criterion A	✓	x
Poor: passes 2 or fewer criteria; or passes 3 or 4 criteria excluding criterion A and F	x	x
Additional Information: Footnote 1: Professional judgement should be used alongside the UKHab description. Footnote 2: For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover. Footnote 3: 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>), Cow Parsley (<i>Anthriscus sylvestris</i>). There may be additional relevant species local to the region and / or site. Footnote 4: 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 5: <i>Wildlife and Countryside Act 1981</i> (as amended)		

Refer to **Table 8.3** for woodland habitat enhancement criteria.

Table 8.6: Condition Assessments for Scrub

Condition Assessment Criteria	Habitat 7: Bramble Scrub to Mixed scrub
A. The scrub is a good representation of the habitat type – the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). ¹ At least 80% of scrub is native, and there are at least three native woody species ² , with no single species comprising more than 75% of the cover, except Hazel (<i>Corylus avellana</i>), Common Juniper (<i>Juniperus communis</i>), Sea Buckthorn (<i>Hippophae rhamnoides</i>) or Box (<i>Buxus sempervirens</i>), which can be up to 100% cover.	✓
B. Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	x
C. There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of sub-optimal condition ⁶ make up less than 5% of ground cover.	✓
D. The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	✓
E. There are clearings, glades or rides present within the scrub, providing sheltered edges.	x
Good: passes 5 criteria	x
Moderate: passes 3 or 4 criteria	✓
Poor: passes 2 or fewer criteria	x
Additional Information:	
Footnote 1 – Professional judgement should be used alongside the UKHab description.	
Footnote 2 – Native woody species as defined and listed in the Hedgerow Survey Handbook: DEFRA (2007) <i>Hedgerow Survey Handbook: A standard procedure for local surveys in the UK. 2nd ed.</i> [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk).	
Footnote 3 - See gov.uk standing advice on ancient and veteran species. Available from <i>Keepers of time: ancient and native woodland and trees policy in England</i> (publishing.service.gov.uk) and <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions</i> (www.gov.uk).	
Footnote 4 – 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 5 – <i>Wildlife and Countryside Act 1981</i> (as amended)	
Footnote 6 - Species indicative of sub-optimal condition for this habitat type may include: non-native conifers, Tree-of-heaven (<i>Ailanthus altissima</i>), Holm Oak (<i>Quercus ilex</i>), European Turkey Oak (<i>Quercus cerris</i>), Cherry Laurel (<i>Prunus laurocerasus</i>), Snowberry (<i>Symphoricarpos</i> spp.), Shalton (<i>Gaultheria shallon</i>), American Skunk Cabbage (<i>Lysichiton americanus</i>), Buddleia (<i>Buddleja</i> spp.), Cotoneaster (<i>Cotoneaster</i> spp.), Spanish Bluebell (<i>Hyacinthoides hispanica</i>) and Hybrid Bluebells (<i>Hyacinthoides x massartiana</i>). There may be additional relevant species local to the region and or site.	

8.4 Baseline and Target Condition Assessments: Off Site

Table 8.7: Condition Assessments for Grasslands of Medium Distinctiveness

Condition Assessment Criteria	Habitat 10: Grassland Baseline	Habitat 10: Grassland Enhanced
A. The grassland is a good representation of the habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description)¹. <i>Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.</i>	✓	✓
B. 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.	x	✓
C. Cover of bare ground between 1% and 5%, including localised areas, for example, rabbit warrens².	x	x
D. Cover of Bracken less than 20% and cover of scrub (including Bramble) less than 5%.	✓	✓
E. Combined cover of species indicative of sub-optimal condition³ 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 species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	x	x
Additional Group – non-acid grassland types only		
F. There are 10 or more vascular plant species per m² present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). <i>Note - this criterion is essential for achieving Good condition for non-acid grassland types only.</i>	x	✓
Acid Grassland Types		
Good: passes 5 criteria	N/a	N/a
Moderate: passes 3 or 4 criteria	N/a	N/a
Poor: passes 2 or fewer criteria	N/a	N/a
Non-acid Grassland Types		
Good: passes 5 or 6 criteria, including essential criteria A and additional criterion F	x	x
Moderate: passes 3 to 5 criteria, including essential criterion A	x	✓
Poor: passes 2 or fewer criteria; or passes 3 or 4 criteria excluding criterion A and F	✓	x
Additional Information: Footnote 1: Professional judgement should be used alongside the UKHab description. Footnote 2: For example, this could include small, scattered areas of bare ground allowing for plant colonisation, or localised patches not exceeding 5% cover. Footnote 3: 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>), Cow Parsley (<i>Anthriscus sylvestris</i>). There may be additional relevant species local to the region and / or site. Footnote 4: 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 5: <i>Wildlife and Countryside Act 1981</i> (as amended)		

Table 8.8: Condition Assessments for Scrub

Condition Assessment Criteria	Habitat 11: Bramble Scrub to Mixed scrub
A. The scrub is a good representation of the habitat type – the appearance and composition of the vegetation closely matches its UKHab description (where in its natural range). ¹ At least 80% of scrub is native, and there are at least three native woody species ² , with no single species comprising more than 75% of the cover, except Hazel (<i>Corylus avellana</i>), Common Juniper (<i>Juniperus communis</i>), Sea Buckthorn (<i>Hippophae rhamnoides</i>) or Box (<i>Buxus sempervirens</i>), which can be up to 100% cover.	✓
B. Seedlings, saplings, young shrubs and mature (or ancient or veteran ³) shrubs are all present.	x
C. There is an absence of invasive non-native plant species ⁴ (as listed on Schedule 9 of WCA ⁵) and species indicative of sub-optimal condition ⁶ make up less than 5% of ground cover.	✓
D. The scrub has a well-developed edge with scattered scrub and tall grassland and or forbs present between the scrub and adjacent habitat.	✓
E. There are clearings, glades or rides present within the scrub, providing sheltered edges.	x
Good: passes 5 criteria	x
Moderate: passes 3 or 4 criteria	✓
Poor: passes 2 or fewer criteria	x
Additional Information: Footnote 1 – Professional judgement should be used alongside the UKHab description. Footnote 2 – Native woody species as defined and listed in the Hedgerow Survey Handbook: DEFRA (2007) <i>Hedgerow Survey Handbook: A standard procedure for local surveys in the UK. 2nd ed.</i> [online]. Defra, London. PB1195. Available from: Hedgerow Survey Handbook (publishing.service.gov.uk). Footnote 3 - See gov.uk standing advice on ancient and veteran species. Available from <i>Keepers of time: ancient and native woodland and trees policy in England</i> (publishing.service.gov.uk) and <i>Ancient woodland, ancient trees and veteran trees: advice for making planning decisions</i> (www.gov.uk). Footnote 4 – 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 5 – <i>Wildlife and Countryside Act 1981</i> (as amended) Footnote 6 - Species indicative of sub-optimal condition for this habitat type may include: non-native conifers, Tree-of-heaven (<i>Ailanthus altissima</i>), Holm Oak (<i>Quercus ilex</i>), European Turkey Oak (<i>Quercus cerris</i>), Cherry Laurel (<i>Prunus laurocerasus</i>), Snowberry (<i>Symphoricarpos</i> spp.), Shallon (<i>Gaultheria shallon</i>), American Skunk Cabbage (<i>Lysichiton americanus</i>), Buddleia (<i>Buddleja</i> spp.), Cotoneaster (<i>Cotoneaster</i> spp.), Spanish Bluebell (<i>Hyacinthoides hispanica</i>) and Hybrid Bluebells (<i>Hyacinthoides x massartiana</i>). There may be additional relevant species local to the region and or site.	

Table 8.9: Condition Assessments for Woodland

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Habitat D: Wooded copse
A. Age distribution of trees ¹	Three age classes present.	Two age classes present.	One age class present.	2
B. Wild, domestic and feral herbivore damage ²	No significant browsing damage evident in woodland.	Evidence of significant browsing pressure is present in 40% or less of whole woodland.	Evidence of significant browsing pressure is present in 40% or more of whole woodland.	3
C. Invasive plant species ³	No invasive species present in woodland.	Rhododendron or cherry laurel not present, other invasive species <10% cover.	Rhododendron or cherry laurel present, or other invasive species >10% cover.	1
D. Number of native tree species ⁴	Five or more native tree or shrub species found across woodland parcel.	Three to four native tree or shrub species found across woodland parcel.	None to two native tree or shrub species across woodland parcel.	2
E. Cover of native tree and shrub species ⁵	> 80% of canopy trees and >80% of understory shrubs are native.	50-80% of canopy trees and 50-80% of understory shrubs are native.	< 50% of canopy trees and <50% of understory shrubs are native.	1
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.	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 .	1
G. Woodland regeneration ⁸	All three classes present in woodland; trees 4-7cm DBH, saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland.	No classes or coppice regrowth present in woodland.	1
H. Tree health ⁹	Tree mortality less than 10%, no pests or diseases and no crown dieback.	11% to 25% mortality and/or crown dieback or low risk pest or disease present.	Greater than 25% tree mortality and or any high-risk pest or disease present.	2
I. Vegetation and ground flora ¹⁰	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 ¹¹	Three or more storeys across all survey plots or a complex woodland.	Two storeys across all survey plots.	One or less storey across all survey plots.	2
K. Veteran trees ¹²	Two or more veteran trees per hectare.	One veteran tree per hectare.	No veteran trees present in woodland.	1
L. Amount of deadwood ¹³	50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, branch stubs	Between 25% and 50% of all survey plots within the woodland parcel have standing deadwood, large dead branches/	Less than 25% of all survey plots within the woodland parcel have standing deadwood, large dead branches/ stems, stubs and	1

Indicator	Good (3 points)	Moderate (2 points)	Poor (1 point)	Habitat D: Wooded copse
	and stumps or an abundance of small cavities.	stems, branch stubs and stumps or an abundance of small cavities.	stumps or an abundance of small cavities.	
M. Woodland disturbance¹⁴	No nutrient enrichment or damaged ground evident.	Less than 1 hectare in total of nutrient enrichment across woodland area and/or less than 20% of woodland area has damaged ground.	1 hectare or more of nutrient enrichment and / or more than 20% of woodland area has damaged ground.	1
Good (total score >32)				-
Moderate (total score 26 to 32)				-
Poor (total score 13 to 25)				19
Additional Information: Footnotes below refer to the EWBG woodland condition assessment methodology: EWBG (No date). <i>Assessing your Woodland's Condition</i> [online]. Available from Woodland Wildlife Toolkit (sylva.org.uk), When applying this condition sheet, good practice would be to use the methodology associated with the EWBG toolkit. Footnote 1 - See EWBG method INDICATOR 1 for more information. If tree species is not a birch <i>Betula</i> sp., cherry (<i>Prunus</i> sp.) or Sorbus sp.: 0 – 20 years (Young); 21 - 150 years (Intermediate); and >150 years (Old). For birch, cherry or Sorbus species; 0 - 20 years = Young; 21 - 60 years = Intermediate; >60 years = Old. A recognisable age-class should be a consistent recognisable layer across the woodland or stand being assessed. Presence of a few saplings would not indicate that the woodland has an 'age-class' of young trees. Footnote 2 - See EWBG method INDICATOR 2 for more information. Browsing pressure is considered to be significant where >20% of vegetation visible within each survey plot shows damage from any type of browsing pressure listed. Footnote 3 - See EWBG method INDICATOR 3 for more information. Assess this for each distinct habitat parcel. If the distribution of invasive non-native species varies across the habitat, split into parcels accordingly. Check for the presence of all plant species listed on Schedule 9 of the <i>Wildlife and Countryside Act 1981</i> (as amended), particularly the following invasive non-native species: American Skunk Cabbage (<i>Lysichiton americanus</i>); Himalayan Balsam (<i>Impatiens glandulifera</i>); Japanese Knotweed (<i>Reynoutria japonica</i>); Cherry Laurel (<i>Prunus laurocerasus</i>); Shalloon (<i>Gaultheria shallon</i>); Snowberry (<i>Symphoricarpos albus</i>); Variegated Yellow Archangel (<i>Lamium galeobdolon</i> subsp. <i>Argentatum</i>); Rhododendron (<i>Rhododendron ponticum</i>); and Tree-of-heaven (<i>Ailanthus altissima</i>). Footnote 4 - See EWBG method INDICATOR 4 and Table 2 for more information. The number of different native tree or shrub species including young trees and shrubs. A list of commonly found native tree and shrub species is provided in Table 2. Not all species listed are native to all parts of the UK. Note a list of commonly found non-native tree species are also included and should be recorded if present. Footnote 5 - See EWBG method INDICATOR 5 and for more information. The abundance of native tree species in upper (>5 m) and understorey (up to 5 m) layers including young trees and shrubs. Footnote 6 - See EWBG method INDICATOR 6 for more information. Open space within woodland in this context is temporary open space in which trees can be expected to regenerate (for example, glades, rides, footpaths, areas of clear-fell). This differs from permanent open space where tree regeneration is not possible or desirable (for example, tarmac, buildings, rivers). Area is at least 10 m wide with less than 20% covered by shrubs or trees. Footnote 7 - Given the increased ratio of edge habitat to woodland where the woodland is <10ha. Footnote 8 - See EWBG method INDICATOR 8 for more information. This indicator measures regeneration potential of the woodland by considering three classes: seedlings; saplings; and young trees of 4-7 cm DBH. All three classes would fall in the 'young' category of the 'age distribution of trees' indicator, but the regeneration indicator gathers additional information by considering regeneration potential - if seedlings, saplings and young trees are all present that means natural regeneration processes are happening. Footnote 9 - See EWBG method INDICATOR 9 for more information and Table 3 for a list of diseases and pests and their risk level. Footnote 10 - See EWBG method INDICATOR 10 directing to NVC key for more information. The 'UKHab to NVC translation table' in the UK Habitat Classification resources may also be useful to assess this. Footnote 11 - This criterion looks at structural diversity and is useful to understand in conjunction with the age of trees in a woodland. Vertical structure is defined as the number of canopy storeys present. Possible storey values are: 1) Upper; 2) Complex: recorded when the stand is composed of multiple tree heights that cannot easily be stratified into broad height bands (such as upper, middle or lower); 3) Middle; 4) Lower; and 5) Shrub layer. There might be no storeys where the woodland has been felled. See EWBG INDICATOR 11 for more information. Footnote 12 - See EWBG method INDICATOR 12 for more information. See gov.uk standing advice on ancient and veteran trees. Available from: Keepers of time: ancient and native woodland and trees policy in England (publishing.service.gov.uk) and: Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk). Footnote 13 - See EWBG method INDICATOR 13 for more information. This includes logs, large dead branches on the forest floor and stumps (<1 m tall) >20 cm diameter at narrowest point and >50 cm long. Also includes standing dead trees (>1 m tall) and also deadwood on standing live trees. Diameter is measured at the narrowest point on the stem. Minimum diameter of 20 cm. Footnote 14 - See EWBG method INDICATOR 15 for more information. Examples of disturbance are: significant nutrient enrichment; soil compaction from trampling, machinery, animal poaching or litter.				

8.5 Figures

Figure 1: Aerial Image of the Site

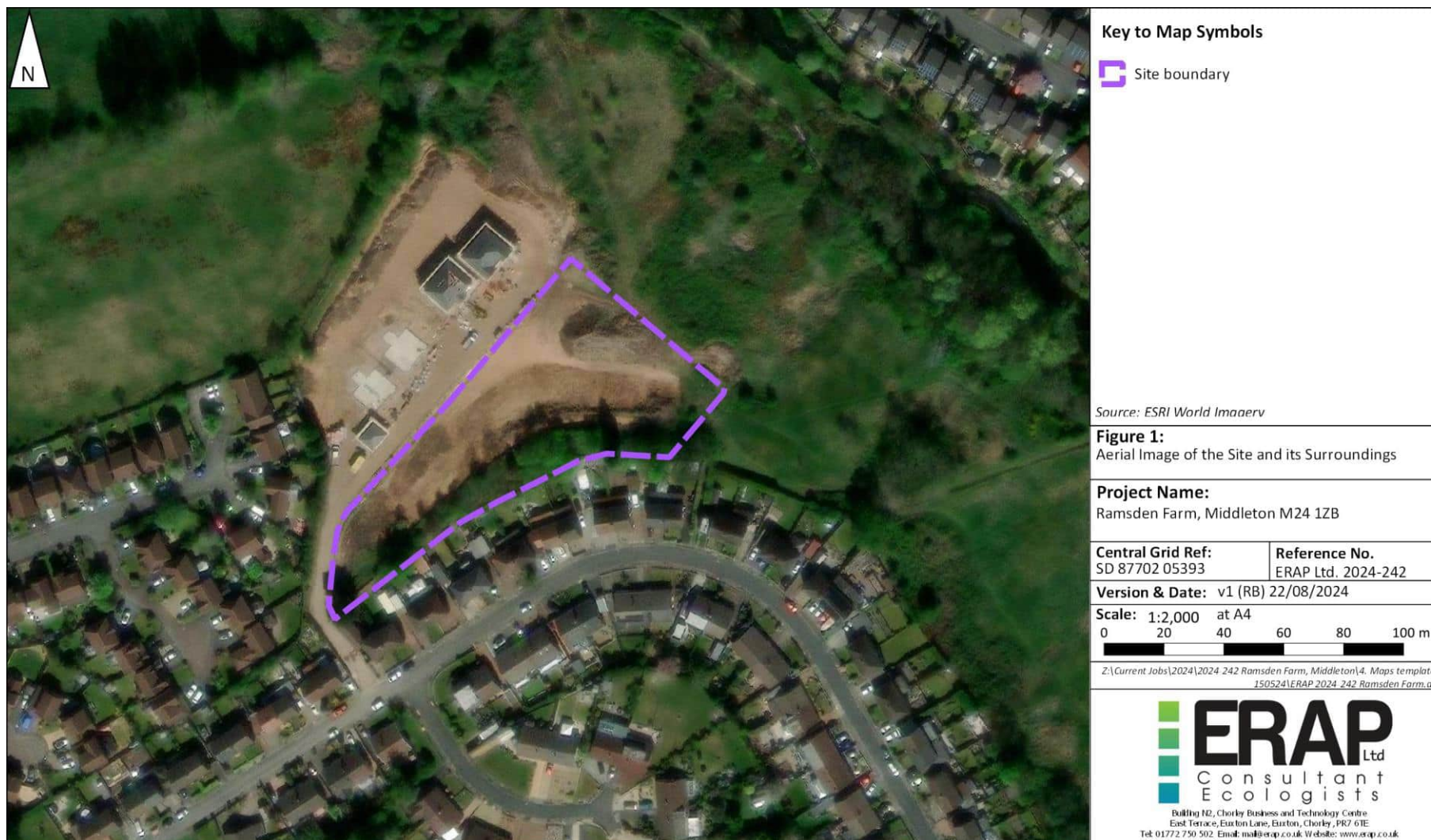


Figure 2: UKHab: Baseline Habitats on Site

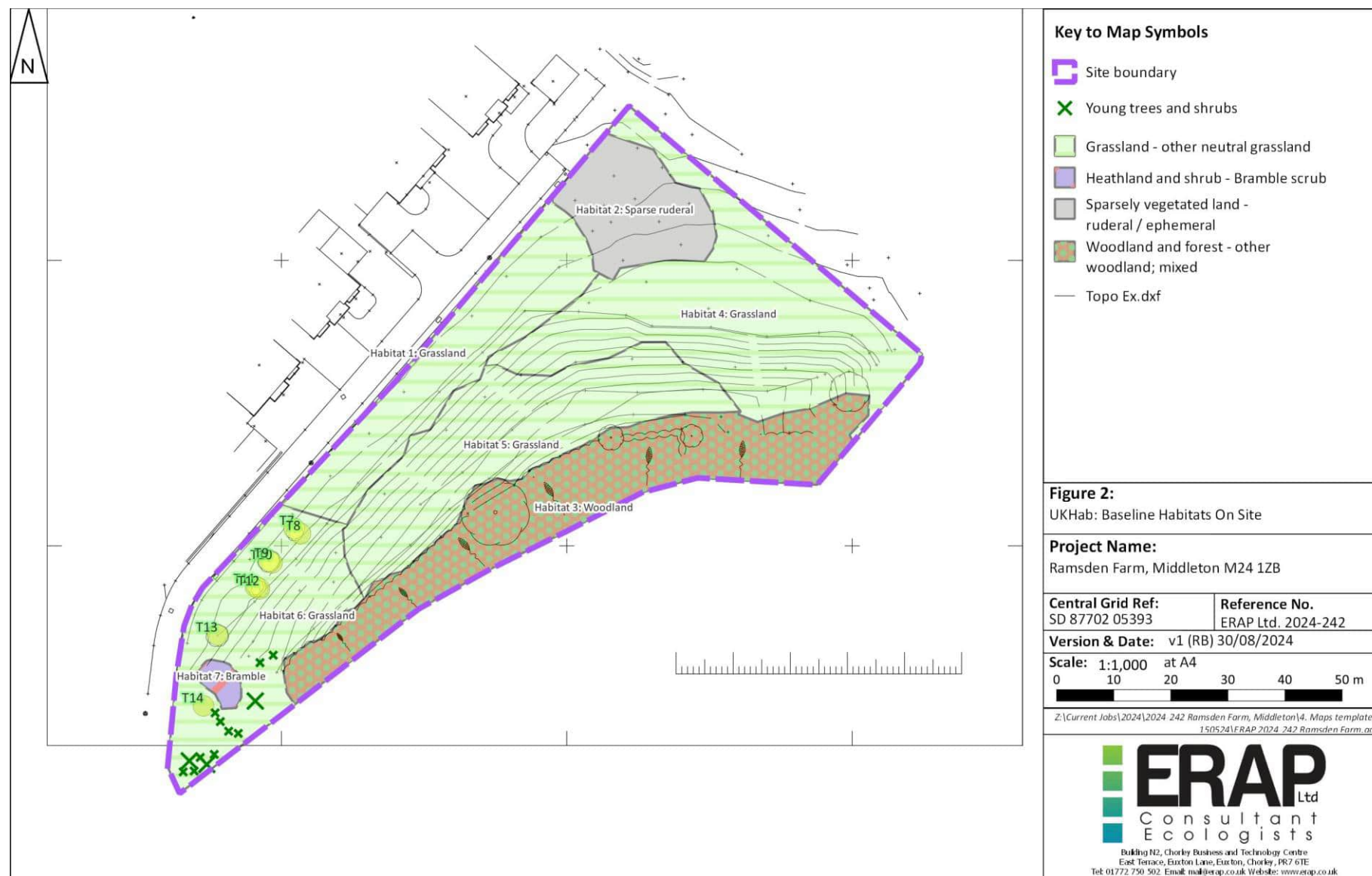


Figure 3: UKHab: Post-development Habitats On Site

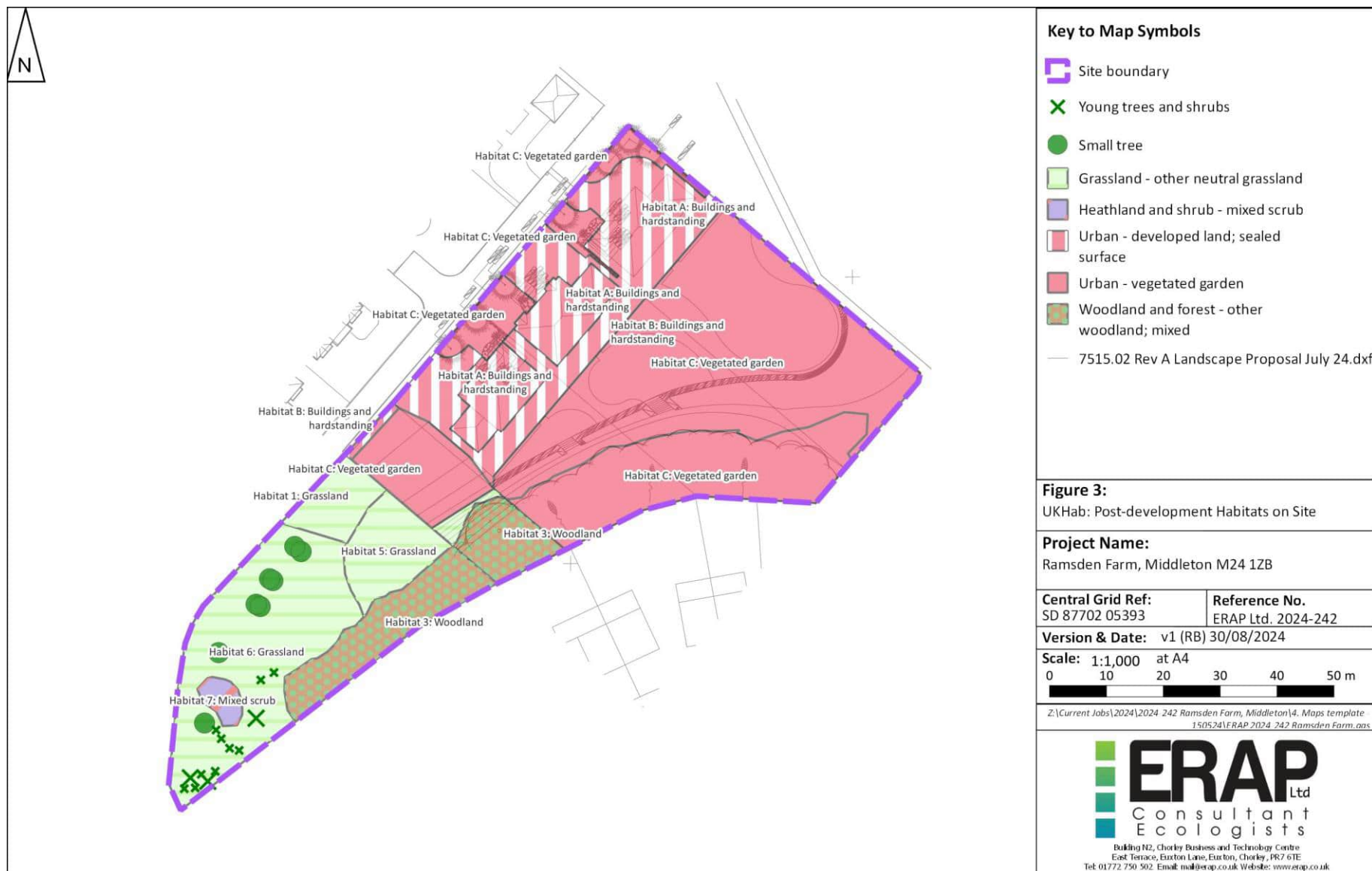


Figure 4: Areas of Off-site Habitat Enhancement / Intervention Areas

