

Technical Note



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Project: The Old Barn, Drayton Lane, Fenny Drayton CV13 6AY

Our Reference: 240910.BNG

To: Mr & Mrs Smith

Date: 26 November 2024

Subject: Biodiversity Net Gain Statement

Prepared by: Anna Scott-Swift MCIEEM

Introduction and methodology

It is understood that the proposed planning permission for an agricultural building would be subject to the biodiversity gain condition.

Mr & Mrs Smith commissioned Croft Ecology to provide the necessary supporting information on Biodiversity Net Gain for a forthcoming planning application at The Old Barn, Drayton Lane, Fenny Drayton CV13 6AY (central grid reference: SP 34299 96548) for the erection of an agricultural building.

The purpose of this Technical Note is to present the on-site baseline information for the Site that was used as the basis for the Statutory Metric Biodiversity Net Gain (BNG) calculations as well as the post-development figures and BNG solution.

A baseline habitat survey at the site was undertaken on 8 October 2024 and included the following:

- An assessment of the baseline habitats within the red line boundary
- A UK Hab Map of the baseline habitats at the Site is provided in Appendix A.
- A condition assessment of all impacted habitats (Appendix B).

This data was then used to complete the on-site baseline information of the Statutory Biodiversity Metric and the associated condition assessment sheets. Post-development calculations for on-site habitats were also undertaken and are summarised in the Indicative Biodiversity Gain Plan for The Old Barn (Croft Ecology, November 2024) which should be read in conjunction with this Technical Note.

Personnel

The survey and assessment were undertaken by Anna Scott-Swift MCIEEM, Owner and Principal Ecologist at Croft Ecology. Anna has over 20 years of experience working in the field of ecology and has undertaken and reviewed dozens of walkover surveys/baseline habitat surveys and has been using UK Hab survey methodology for the last three years.

Survey Date and Conditions

The Site was visited on 8 October 2024 and included land within the red line boundary (see Figure 1).

Weather conditions at the time of the survey were dry and sunny with a light breeze, 20% cloud cover and a temperature of 20°C.

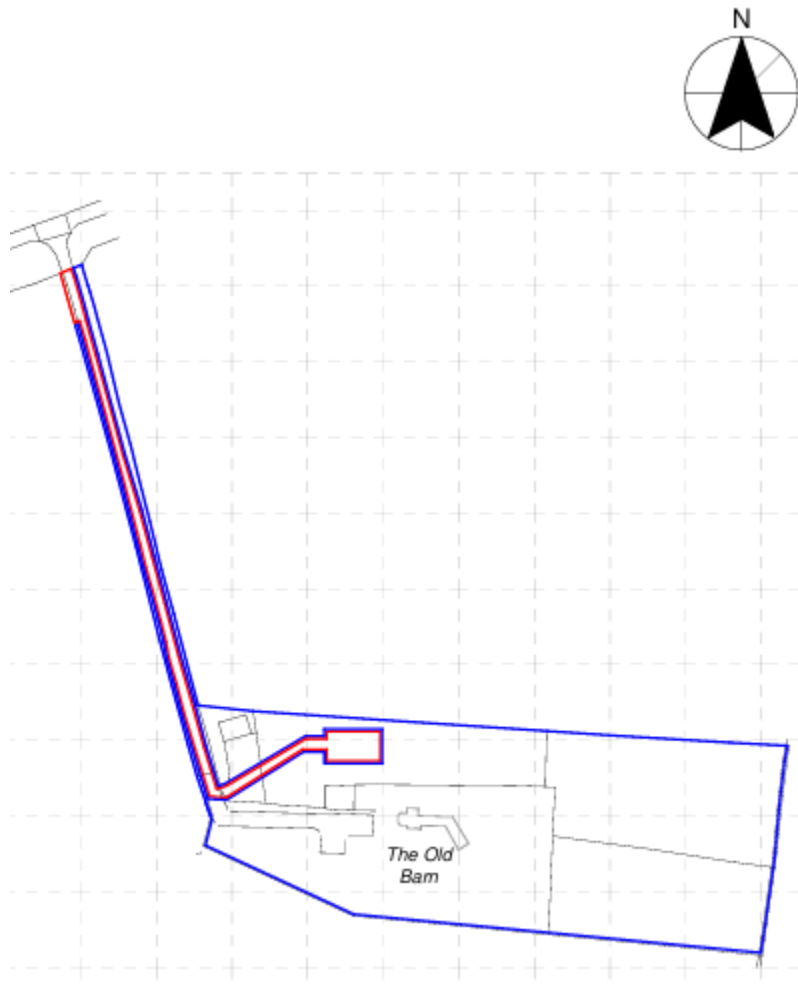


Figure 1. Site boundary

UK Hab Field Survey

A UK Hab¹ Field Survey was undertaken following the methodology described within v2.0 documentation (2023). It was used as the basis for subsequent completion of the Statutory Biodiversity Metric and its associated condition sheets.

A fine-scale minimum mapping unit (of 25m² or 5m) was deemed appropriate for use at the Site given its relatively small scale, consequently, only habitats with an area of 25m² or greater, or linear features 5m in length or greater, were mapped.

¹ UKHab Ltd (2023) <https://www.ukhab.org/>

The UK Hab uses primary codes whereby habitats are categorised by an increasingly detailed hierarchy until a match is discovered. Secondary codes describe environmental factors that provide additional information such as management regime, hydrology or similar. In this case, each habitat was assigned a Primary Code¹ at the Level 4 hierarchy and secondary codes were applied where these could provide greater context.

During the field survey, all habitats within the Site were thoroughly observed, described, and mapped. A DAFOR abundance (D = dominant, A = abundant, F = frequent, O = occasional, R = rare) was assigned to each botanical species identified in each habitat and nomenclature followed Stace (Stace, 2019).

Results

Artificial unvegetated, unsealed surface

Parcel Reference: Track

This included an existing gravel track off Drayton Lane together with a gravel parking area in front of a garage block (outside of the red line boundary). Some vegetated areas of cat's ear *Hypochaeris radicata*, mosses, selfheal *Prunella vulgaris* and common ragwort *Senecio jacobaea* were present within this gravelled area, but this was patchy, and it generally constituted <10% of the area.



Photo 1. Entrance to the track off Drayton Lane. Gravel track visible with small stretch of modified grassland verge to the right within the red line boundary



Photo 2. Gravel parking area

It should be noted that 2x mature white poplar trees *Populus alba* were located next to the gravel track and gravel parking area but these were outside of the red line boundary.

Likewise, 2x silver birch trees were located at the edge of the gravelled parking area and the modified grassland to the east but the red line boundary fits between these two trees, hence they are not recorded within the baseline.

Modified grassland

Parcel Reference: G1 and G2

Around one third of the Site supported modified grassland in poor condition. The bulk of this was located in the east of the Site (Photo 3), whilst a small strip was also present at the entrance to the Site as part of the access track verge (Photo 1). In both areas, it was mown regularly as a lawn and was dominated by perennial rye-grass *Lolium perenne* with frequent creeping buttercup *Ranunculus repens* and white clover *Trifolium repens* as well as occasional selfheal.

It averaged 3-4 species/sqm failing the first, essential, grassland condition criteria and it also failed the sward height criteria as it was all short mown.

A small brash pile was present within the lawn.



Photo 3. Modified grassland in the east of the Site with brash pile in foreground as well as individual trees outside of the red line boundary in the background.

There was a species-rich hedgerow to the north of the Site, but as it is outside of the red line boundary, further details are not provided here. Nevertheless, it should be noted that the proposed location of the building has been deliberately moved away from this hedgerow in order to ensure it is not adversely affected.

There were also two silver birch *Betula pendula* trees at the edge of the modified grassland and gravel parking area, just outside the red line boundary on either side of the proposed access to the new building. The access track has been designed to purposefully avoid these trees and no decrease in their condition is anticipated.

Two mature poplar trees *Populus sp.* were located at the end of the track before it turned into the gravel parking area. The track will be unchanged here and these urban trees are not anticipated to have any decrease in condition as a result of a slight increase in vehicle movements along the track.

Discussion and Recommendations

Development is already focused on areas of low distinctiveness habitats and has been amended to ensure the footprint of the agricultural building does not encroach on the nearby hedgerow to the north, and nor does the access impact any existing trees. The footprint of the building has also been kept to a minimum impacting only a small area of modified grassland in poor condition.

Consequently, proportionate compensation and enhancement measures are included below:

- The loss of a small area of modified grassland in poor condition will be compensated for with the planting of 5x small, native trees targeting moderate condition along the track verge as you enter the Site (Figure 2). There are existing individual trees along the access driveway (but outside of the red line boundary) including horse chestnut *Aesculus hippocastanum*, hazel *Corylus avellana* and sycamore *Acer pseudoplatanus* and the provision of any of the smaller species and/or other smaller trees (if preferred) such as holly *Ilex aquifolium*, field maple *Acer campestre*, rowan *Sorbus aucuparia* or similar would deliver a gain of 0.02 habitat units (34.45% BNG) and satisfying trading rules. This compensation is also considered suitable for the setting of the Site.



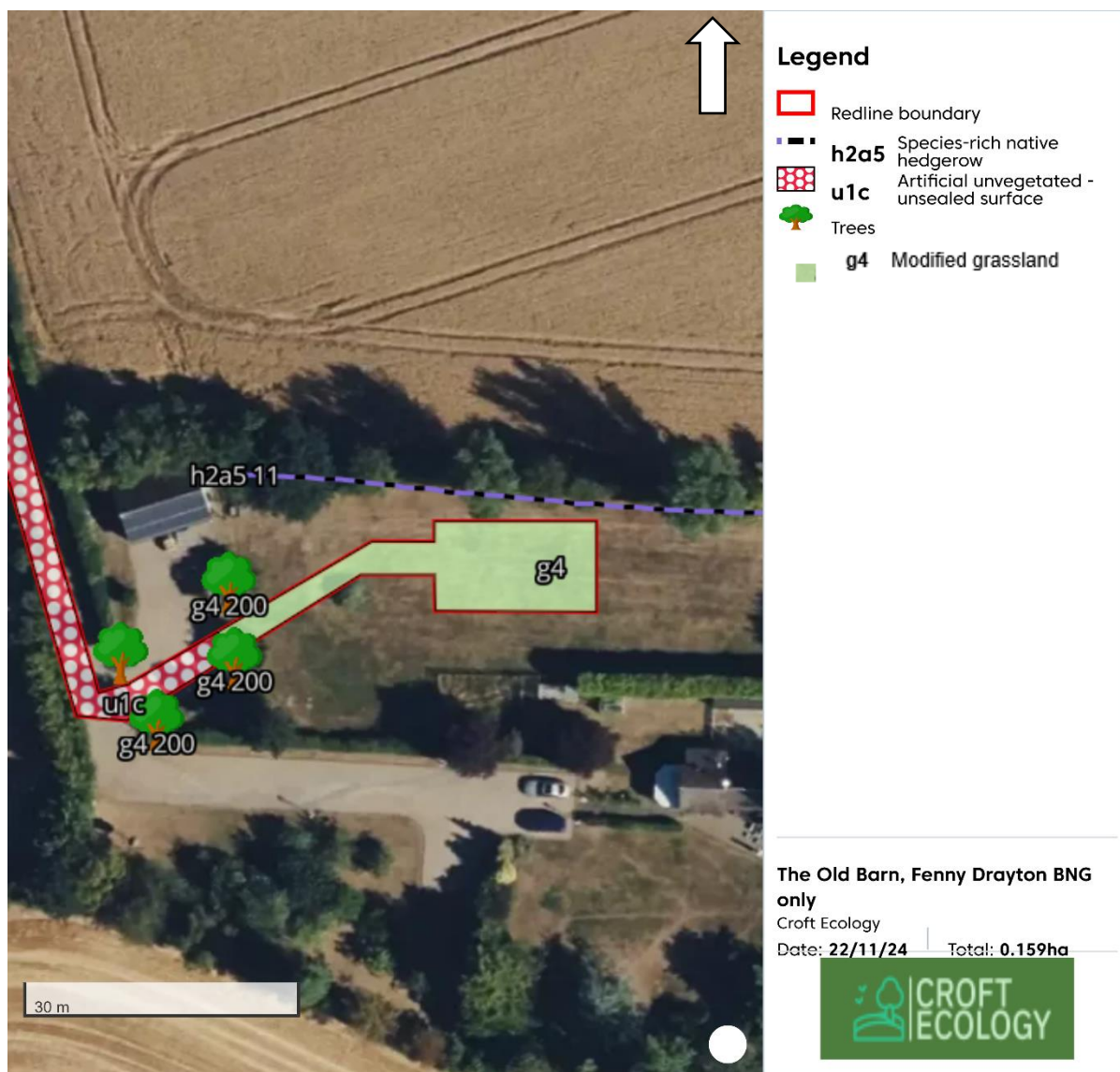
Figure 2. Proposed location of 5no. newly planted small, native broadleaf trees

APPENDIX A – The Old Barn Baseline Habitats Map

Full Site



Zoomed Site



APPENDIX B – Condition Assessment Sheets

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)													
UK Habitat Classification (UKHab) Habitat Type													
Grassland - Modified grassland													
Habitat Description													
Modified grassland in poor condition. Species poor and regularly mown - for both grassland parcels.													
ukhab – UK Habitat Classification													
On-site or off-site, site name and location	On-site, The Old Barn, Fenny Drayton	Survey date and Surveyor name		08.10.24 Anna Scott-Swift									
		Survey reference (if relating to a wider survey)		n/a									
Limitations (if applicable)	n/a	Habitat parcel reference											
		G1	G2										
Condition Assessment Criteria		Grid reference											
		SP 34299 96548	SP 34225 96688										
		Criterion passed (Yes or No)										Notes (such as justification)	
A	There are 6-8 vascular plant species per m ² present, including at least 2 forbs (these may include those listed in Footnote 1). Note - this criterion is essential for achieving Moderate or Good condition. 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.	No	No									3-4 species average	
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.	No	No									All same height; regularly mown	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble <i>Rubus fruticosus</i> agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Yes	Yes									No scrub	
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.	No	No									Excessive mowing	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens) ² .	Yes	Yes										
F	Cover of bracken <i>Pteridium aquilinum</i> is less than 20%.	Yes	Yes									Absent	
G	There is an absence of invasive non-native plant species ³ (as listed on Schedule 9 of WCA ⁴).	Yes	Yes									Absent	
Essential criterion achieved (Yes or No)		No	No										
Number of criteria passed		4	4										
Condition Assessment Result (out of 7 criteria)	Condition Assessment Score	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)	Yes	Yes										
Suggested enhancement interventions to improve condition score													

Relax the mowing regime and allow other species to flourish.

Footnotes

Footnote 1 – Creeping thistle *Cirsium arvense* , spear thistle *Cirsium vulgare* , curled dock *Rumex crispus* , broad-leaved dock *Rumex obtusifolius* , common nettle *Urtica dioica* , creeping buttercup *Ranunculus repens* , greater plantain *Plantago major* , white clover *Trifolium repens* and cow parsley *Anthriscus sylvestris* .

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).