



TECHNICAL NOTE:

- (BASIC LEVEL) PRELIMINARY ECOLOGICAL APPRAISAL
- BIODIVERSITY NET GAIN ASSESSMENT

SITE NAME	Aisled Barn, Downham
DEVELOPMENT PROPOSAL	Mixed use development
PLANNING REFERENCE	Not yet registered
DATE	8 January 2026

1. INTRODUCTION & BACKGROUND

Knight Sky Ecology Ltd was commissioned to provide ecological consultancy services to support the proposed development of the Aisled Barn, Downham. The commission comprised a basic level Preliminary Ecological Appraisal (including desk study and site-based assessment) and a Biodiversity Net Gain (BNG) assessment which was supported by the following documents:

- The Statutory Biodiversity Metric calculation tool (hereafter referred to as ‘the Biodiversity Metric’)
- Habitat condition assessment
- UK Habitat Classification map – Baseline (Figure 1)
- UK Habitat Classification map – Post-development (Figure 2)

This technical note has been produced to accompany the above listed information and provide an overview of the BNG assessment results along with a baseline of all relevant ecological information for the site. A report of bat surveys completed at the site has been submitted separately.

In England, the primary legislation for the statutory framework for BNG is principally set out under Schedule 7A (Biodiversity Gain in England) of the Town and Country Planning Act 1990. This legislation was inserted into the 1990 Act by Schedule 14 of the Environment Act 2021, and was amended by the Levelling Up and Regeneration Act 2023.

Under the statutory framework for BNG, subject to some exceptions, every planning permission is subject to a condition that the biodiversity gain objective is met (“the biodiversity gain condition”). This objective is for development to deliver at least a 10% increase in biodiversity value relative to the pre-development biodiversity value of the on-site habitat. This increase can be achieved through on-site biodiversity gains, registered off-site biodiversity gains or through statutory biodiversity credits.

2. METHODS

The ecology data including the Biodiversity Metric along with the pre and post development habitat maps have been based on the red line planning boundary provided by the agent. All land within the red line boundary is referred to as ‘the site’.

The latest version of the Biodiversity Metric and User Guide (3 July 2025) have been accessed from: <https://www.gov.uk/government/publications/statutory-biodiversity-metric-tools-and-guides>



Desk Study

The Multi-Agency Geographic Information for the Countryside (MAGIC) mapping tool (Available from: <https://magic.defra.gov.uk/>) was used to search for ecological information contained within the following datasets:

- Statutory designated sites for nature conservation (e.g. Sites of Special Scientific Interest (SSSI)) including SSSI Impact Risk Zones - to assess for likely impacts on SSSI.
- Priority habitats (as listed within Section 41 of the Natural Environment and Rural Communities Act 2006) within a 250m radius.

Geospatial datasets for Biological Heritage Sites and the Lancashire Ecological Network were accessed from [here](#).

Basic initial information about the site and surrounding area was also obtained from aerial imagery and Ordnance Survey maps in order to provide further contextualised information to the site survey findings.

Site Surveys

General Walkover and Habitat Survey

The site has been subject to several visits over the course of 2024 and 2025. The latest site walkover to inform the BNG assessment was undertaken on 27th August 2025 by Ryan Knight MCIEEM (Full member of the Chartered Institute of Ecology and Environmental Management).

The aim of the site visit was to gather sufficient baseline information of the habitats within the site and to identify any habitats or features of potential ecological significance. All habitats within the site were described and mapped using UK Habitat Classification (UKHab) Version 2 definitions (UKHab Ltd, 2023).

In addition, the site visit included a search for incidental evidence of protected / notable species and an assessment of the sites potential to support protected / notable species.



3. RESULTS

BASELINE CONDITIONS

Nationally / Internationally Designated Sites

The nearest SSSI is located 155m south and comprises Clitheroe Knoll Reefs. However, this SSSI has been designated for geological interests only. It can be confirmed that the development type does not require any further consultation with Natural England regarding this SSSI.

The Impact Risk Zones for SSSI indicate that the proposed development is unlikely to have a harmful effect on any SSSI in the wider area.

Locally Designated Sites

The nearest Biological Heritage Site (BHS) comprises Town End Croft Wood located 42m north-east (across Downham Road). This BHS has been designated for its woodland interests (including ancient woodland – see below). There are no further BHS within 500m.

Priority & Irreplaceable Habitats

The nearest priority habitat comprises deciduous woodland located 42m north-east. This woodland (Town End Croft Wood) is also classified as Ancient & Semi-Natural Woodland which is an 'irreplaceable habitat'.

Lancashire Ecological Network

The site is within the woodland ecological network. In accordance with BNG guidance, the baseline strategic significance values for all habitat parcels within the site are scored as low.

Habitat Degradation

No evidence of habitat degradation was identified within the proposed development area.

Habitats

Photos which provide a general overview of the site and supporting data for the Biodiversity Metric are provided in Appendix A. Figures 1a and 1b in Appendix B provides an overview of the habitat baseline as existing in August 2025.

u1b5 Buildings & u1b6 Other developed land

The red line boundary for the site includes the buildings, an access road and yard areas around the buildings.

Mosaic of u1b6 Other developed land and u1f Sparsely vegetated urban land

Areas of hardstanding were present immediately west and south of the Aisled Barn. These areas were largely unused other than for the temporary storage of building materials and farm equipment. Owing to the lack of recent disturbance, a suite of early-successional, colonising species had established across with willowherb species *Epilobium* sp. occurring dominantly. Other frequent species included prickly sow-thistle *Sonchus asper*, broad-leaved plantain *Plantago major*, herb-Robert *Geranium robertianum*, pineapple weed *Matricaria discoidea*, dandelion *Taraxacum* sp. and black medick *Medicago lupulina*. Approximately 60% of this area was assessed as aligning with habitat type u1f within the Biodiversity Metric.



g4 Modified grassland

The proposed new access would result in the loss of a small area of grassland situated between the Aisled Barn and the existing access track off Downham Road. Although the grassland had been cut prior to the survey, the sward was identifiable as being dominated by perennial rye-grass *Lolium perenne*, with abundant cocks-foot *Dactylis glomerata*, red fescue *Festuca rubra*, rough meadow-grass *Poa trivialis* and sweet vernal-grass *Anthoxanthum odoratum*. Forbs present within the sward included common sorrel *Rumex acetosa* and creeping buttercup *Ranunculus repens*, alongside occasional low-growing ruderal species typical of managed agricultural grassland.

32 Scattered trees and h3h Mixed scrub

The creation of the proposed new access would necessitate the removal of one medium-sized beech *Fagus sylvatica* tree, together with a small area of associated scrub. The scrub component comprised elder *Sambucus nigra*, holly *Ilex aquifolium* and possibly yew *Taxus baccata*, with bramble *Rubus fruticosus agg.* also present.

BNG Planting Area (g4 Modified grassland and 32 Scattered tree)

The applicant has set aside a section of an existing pasture field to deliver net gain. The field comprises species-poor, agriculturally improved grassland characterised by a typical assemblage of productive grasses and forbs associated with enrichment. A single apple tree, assessed as being in good condition, is also present within this area.

The combined biodiversity value of the existing habitats within the site equates to **0.45 habitat units**.

Hedgerows

There were no hedgerows within the site boundary.

Watercourses

There were no rivers within 10m of the site boundary or ditches within 5m.

Protected and Notable Species of Fauna

Nesting Birds

Nesting birds were covered in the submitted bat survey report (Knight Sky Ecology, 2025). However, in addition to buildings, the nesting bird risks extend to the tree and scrub area which are to be cleared.

Amphibians

No ponds with suitability to support breeding amphibians including great crested newts were identified within a 250m radius.

Other

A separate assessment for bats has been submitted. Based on the data obtained, no other ecological constraints are likely to be encountered. This is due to the likely absence of certain species from the site or it has been assessed that the works will not significantly affect the distribution or abundance of any such species or result in actions that may be in breach of the relevant legislation.

HABITAT ENHANCEMENTS AND / OR CREATION

Habitats

Figures 2a and 2b in Appendix B provide UK Habitat Classification maps of the site as proposed.



During the project design stage, Knight Sky Ecology advised that the application was required to provide some set aside land within the development plans for BNG purposes. With respect to the BNG trading rules, the creation of a 40m² area of mixed scrub is required along with the planting of at least 13 native trees was considered to be the most feasible and practical option to achieve net gain on-site.

Therefore, the Biodiversity Metric has accounted for this habitat creation. The combined value of the created habitats post-development would be **0.5 habitat units**.

4. EVALUATION AND SUMMARY

DESIGNATED SITES & HABITATS

There are no identifiable impact pathways by which the proposed development could adversely affect any designated sites, priority habitats or irreplaceable habitats.

BNG

The development proposals will result in a net gain of biodiversity value for habitats comprising **0.05 habitat units (10.95%)**.

The development will therefore meet the biodiversity net gain condition for habitats as the 10% net gain would be achieved. The time to target condition of the trees is 27 years and mixed scrub one year.

The information contained within this document and the metric tool demonstrates that the mandatory BNG condition is capable of being discharged successfully at the site.

5. RECOMMENDATIONS

BNG

The statutory framework for biodiversity net gain requires a Biodiversity Gain Plan (BGP) to be submitted and approved by the planning authority to discharge the biodiversity gain condition prior to the commencement of development. The BGP should detail the measures undertaken to achieve the required 10% net gain as stated in the Biodiversity Metric.

A Habitat Management and Monitoring Plan is typically required where net gain is to be achieved on-site.

NESTING BIRDS



It is advised to complete any vegetation clearance outside of the nesting bird season of March to August (inclusive). If it is necessary to undertake vegetation clearance within the nesting bird season, any such works should be preceded by a nesting bird check conducted by a suitably qualified ecologist. Where active nests are encountered, the nest must be left in-situ and all works in the immediate area must cease until the chicks have fledged.

SPECIES ENHANCEMENTS

Birds

Bird boxes can be installed at the site to provide nesting opportunities. Three boxes are recommended. The locations of the boxes along with siting advice and box models are provided below.

Table 5.1. Bird box models and siting advice


Bird Boxes	
Numbers and Models	<p>The following models are recommended:</p> <ul style="list-style-type: none"> • 1no. Vivara Pro Seville 32mm Woodstone Net Box • 1no. Vivara Pro Barceloan Woodstone Open nest Box • 1no. Eco Sparrow Tower <p>All boxes can be sourced from https://www.nhbs.com/ . In the event that a certain bird box model is unavailable for purchase, a suitable like for like replacement should be sourced.</p>
Positioning	<p>The boxes can be fitted onto mature trees or buildings.</p> <p>Each box should be faced between north and east, thereby avoiding the strongest sunlight and the wettest winds.</p> <p>The boxes should be sited to ensure birds will have a clear flight path to the nest entrance. Boxes to be placed on the main stem of a tree or on the wall of the new build at over 2m height.</p>
Maintenance	<p>Cleaning of the boxes should be undertaken from <u>October to January, outside of the nesting bird season (March to August inclusive)</u>. Rubber gloves must be worn. The old nesting material which accumulates after every breeding season and the droppings from earlier in the season should be removed along with any egg shells or unhatched eggs.</p>
Examples	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>WoodStone Nest Box</p> </div> <div style="text-align: center;">  <p>Eco Sparrow Tower</p> </div> </div>

Bats

Bat boxes can be installed at the site to provide additional roosting opportunities. These are enhancements for bats and not related to the submitted bat report. The locations of the boxes along with siting advice and box models are provided below.



Table 5.2. Bat box models and siting advice

BAT BOXES	
Numbers and Models	<p>Bat box numbers and models along with the locations for purchasing are provided as follows:</p> <ul style="list-style-type: none">• 2no. Greenwoods Two Crevice Bat Box. <p>Boxes can be sourced from https://www.greenwoodsecohabitats.co.uk/shop</p>
Positioning	<p>To be fixed onto mature trees adjacent to the site. The boxes should be placed at least 3.5m height on the main stem of a tree. The boxes should have a clear flight path to the box entrance (i.e., not cluttered by foliage).</p>
Maintenance	<p>The models chosen do not require cleaning as bat droppings do not typically accumulate within these types of boxes to a level likely to cause problems for future habitation.</p>
Examples	<p>TWO CREVICE BAT BOX</p> 



APPENDIX A: PHOTOS

Photo 1.
View of proposed access to the site from Downham Rd.



Photo 2.
View of area proposed for new access including tree required to be removed.





Photo 3.
Area of u1f
habitat to rear of
barn.



Photo 4.
Aisled Barn and
yard.





Photo 5.
BNG planting
area.



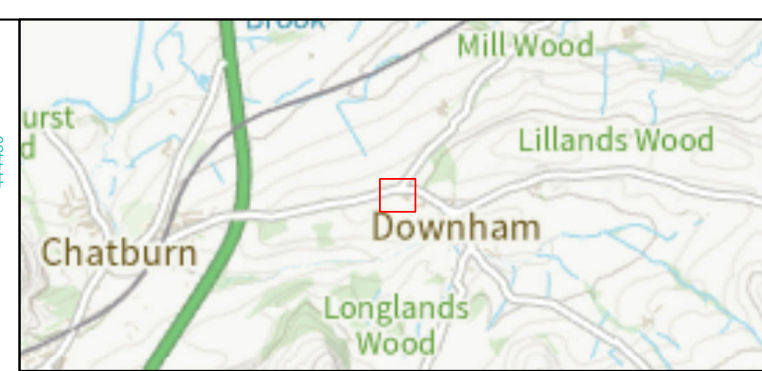
Photo 6.
Single apple tree
in BNG planting
area.










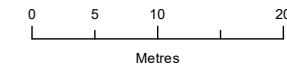


APPENDIX B: FIGURES (NEXT PAGE)

- **FIGURES 1a & 1b. UK HABITAT CLASSIFICATION MAPS (BASELINE)**
FIGURE 2a & 2b. UK HABITAT CLASSIFICATION MAPS (POST-DEVELOPMENT)



Survey Information	
	Site boundary (2,025.6m ²)
UKHab Habitat Survey	
	g4 - Modified grassland (85.4m ²)
	h3h - Mixed scrub (31.3m ²)
	u1b5 - Building (554.9m ²)
	u1b6 - Other developed land (956.5m ²)
	u1f - Sparsely vegetated urban land (397.5m ²)
	32 - Scattered tree (3)



PROJECT TITLE
AISLED BARN, DOWNHAM

DRAWING TITLE
Figure 1A: UK Habitat Classification Map (Pre-Development)

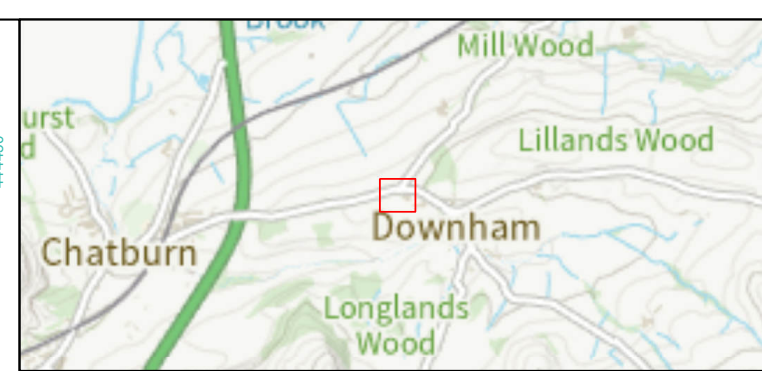
VER	DATE	REMARKS	Drawn	Checked
2.0	08/01/26	Pre-Development	MP	RK

DRAWING NUMBER:
KSEcology/AisledBarn/Pre-Development

SCALE	1:600	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG
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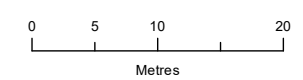
Source:
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Survey Information

	Site boundary (2,025.6m ²)
UKHab Habitat Survey	
	g4 - Modified grassland (9.2m ²)
	u1b5 - Building (554.9m ²)
	u1b6 - Other developed land (1,276.0m ²)
	828 - Vegetated garden (185.5m ²)



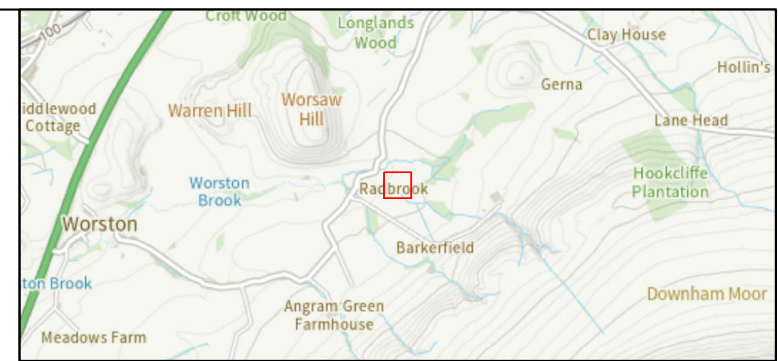
PROJECT TITLE
AISLED BARN, DOWNHAM

DRAWING TITLE
Figure 2A: UK Habitat Classification Map (Post-Development)




VER	DATE	REMARKS	Drawn	Checked
2.1	08/01/26	Post-Development	MP	RK

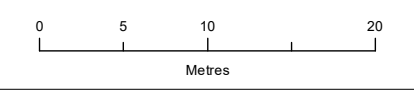
DRAWING NUMBER:
KSEcology/AisledBarn/Post-Development

SCALE	1:600	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG
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Survey Information

	Site boundary (1,200.2m ²)
UKHab Habitat Survey	
	g4 - Modified grassland (1,200.2m ²)
	32 - Scattered tree (1)



PROJECT TITLE
AISLED BARN, DOWNHAM

DRAWING TITLE
Figure 1B: UK Habitat Classification Map (Pre-Development)

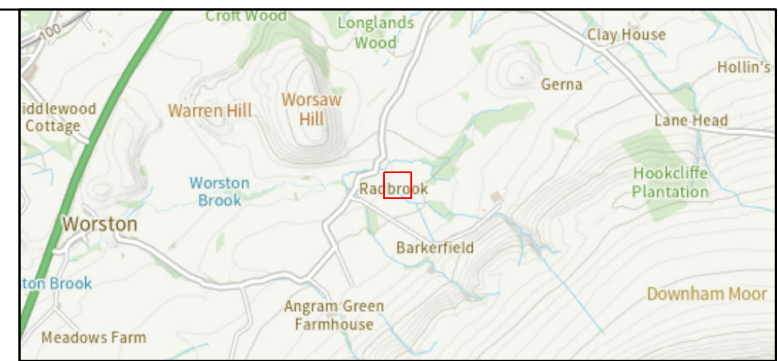
VER	DATE	REMARKS	Drawn	Checked
2.1	08/01/26	Pre	MP	RK

DRAWING NUMBER:
KSEcology/AisledBarn/Pre






SCALE	1:450	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG
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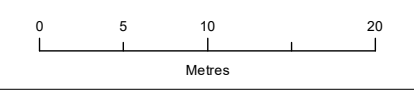
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Survey Information

	Site boundary (1,200.2m ²)
UKHab Habitat Survey	
	g4 - Modified grassland(1,160.2m ²)
	h3h - Mixed scrub(40.0m ²)
	32 - Scattered tree (1)
	32 - Scattered tree, newly planted



PROJECT TITLE
AISLED BARN, DOWNHAM

DRAWING TITLE
Figure 2B: UK Habitat Classification Map (Post-Development!)

VER	DATE	REMARKS	Drawn	Checked
2.1	08/01/26	Post	MP	RK

DRAWING NUMBER:
KSEcology/AisledBarn/Post

SCALE	1:450	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG
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