



TECHNICAL NOTE:

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

SITE NAME & ADDRESS	Land at Eastham House Barn, Clitheroe Road, Mitton BB7 9PH
DEVELOPMENT PROPOSAL	Proposed stables and storage building
PLANNING REFERENCE	Not yet registered
DATE	8 September 2025
AUTHOR	Ryan Knight BSc (Hons) MCIEEM - Principal Ecologist

INTRODUCTION & BACKGROUND

Knight Sky Ecology Ltd was commissioned to provide ecological consultancy services to support the proposed development on land at Eastham House Barn. The commission included a basic level Preliminary Ecological Appraisal (including desk study and site-based assessment) and a Biodiversity Net Gain (BNG) assessment which included the following documents:

- The Statutory Biodiversity Metric calculation tool (hereafter referred to as ‘the metric tool’)
- 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. Details of post-development species enhancements in the form of bird and bat boxes are also provided.

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.

Since the advent of mandatory net gain, every development proposal which is not exempt from BNG requires a certain level of ecological information to feed into the metric tool and ensure compliance with both national and local policy frameworks. This obligation extends to certain minor developments that would often not have previously required ecological input.

A small sites metric (SSM) tool was developed for such sites and for use by applicants without input from ecologists. However, the SSM tool remains little used.



In response to the unprecedented demand for ecological services driven by BNG, Knight Sky Ecology has developed an appropriately scaled survey approach tailored to minor development proposals. The level of ecological information presented in this document is considered proportionate to the scale of the project, the existing site conditions and the limited complexity of potential impacts that may arise as a result of the construction of the development.

METHODS

The ecology data including the metric tool 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 metric tool and User Guide (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

A site walkover was undertaken on 25th July 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.



RESULTS

BASELINE CONDITIONS

Nationally / Internationally Designated Sites

The nearest designated site comprises Hodder River Section SSSI located 475m west. However, this SSSI is designated for its geological interest only. The Impact Risk Zones for SSSI (SSSI IRZs) indicate that the proposed development is unlikely to have a harmful effect on any terrestrial SSSI and the Special Areas of Conservation (SACs), Special Protection Areas (SPAs) or Ramsar sites that they underpin. Consultation with Natural England is not required (Natural England, 2023¹).

Locally Designated Sites

Moyser Wood and Angerham Wood Biological Heritage Site (BHS) is located 340m south-west. The BHS has been designated for its woodland interest (including ancient woodland components). No significant impacts to the BHS are anticipated as a result of the proposed development.

Priority & Irreplaceable Habitats

Excluding hedgerows, there are no priority or irreplaceable habitats on the site or within 250m. There are not considered to be any potential pathways for significant adverse impacts to occur on any priority listed habitats.

Lancashire Ecological Network

The site is within the woodland and grassland components of the ecological network. A high strategic significance has been set on all habitats within the site.

Habitat Degradation

No habitat degradation was identified within the area of the proposed development. The land owners had undertaken measures to improve the pasture field to the direct south / south-east and the field had been cultivated; thereby temporarily removing the grassland layer. This included an area of the field in which trees are proposed to be planted to achieve the required net gain. The field has been categorised as modified grassland.

Habitats

Photos which provide a general overview of the site and supporting data for the metric tool are provided in Appendix A. Figure 1 in Appendix B provides an overview of the habitat baseline as existing in July 2025.

u1b6 – Other developed land

The red line boundary for the site includes the existing access road, entrance and driveway.

g4 – Modified grassland

The building is proposed to be sited along a field boundary and within an area used to store agricultural machinery at the time of survey. This area and the field access track within the development area had previously been covered with a gravel sub-base. However, these areas have since been colonised by grasses to such an extent that a modified grassland category was assigned. As part of the site is on a field access track, sections of the ground were bare due to frequent use by tractors.

¹ Natural England (2023). Natural England's Impact Risk Zones for Sites of Special Scientific Interest. User Guidance. Version: v4.1. Issue Date: 7 March 2023.



The field sward was dominated by Rye-grass (*Lolium perenne*), comprising approximately 40% of the vegetative cover. The following species and their frequency within the proposed development area were also recorded:

- Smooth meadow-grass (*Poa pratensis*) – frequent
- Yorkshire fog (*Holcus lanatus*) – occasional
- Cocks-foot (*Dactylis glomerata*) – occasional
- Field horsetail (*Equisetum arvense*) – frequent to locally dominant
- White clover (*Trifolium repens*) – abundant to frequent
- Hogweed (*Heracleum sphondylium*) – occasional
- Creeping thistle (*Cirsium arvense*) – occasional
- Self-heal (*Prunella vulgaris*) – occasional
- Cut-leaved cranesbill (*Geranium dissectum*) – rare
- Dandelion (*Taraxacum agg.*) – occasional
- Hoary willowherb (*Epilobium parviflorum*) – rare
- Great willowherb (*Epilobium hirsutum*) – rare

In addition to the proposed development area, a corner of the field is to be used for BNG purposes. This section of the field had been tilled, and has been categorised as modified grassland. However, based on aerial imagery (before field management), the field does appear to have a species mix associated with poorly draining land which can possibly be associated with neutral grassland types (dependent on several factors). Nonetheless, the assignment of a habitat of greater value (e.g., neutral grassland) would not have a significant difference on the BNG calculations as this section of land is to be retained.

The combined biodiversity value of the existing habitats within the development boundary is **0.17 habitat units**.

Hedgerows

There were no hedgerows within the site boundary.

Watercourses

There were no watercourses within the site or within 10m.

Protected and Notable Species of Fauna

The proposed development site was largely unsuitable to support ground nesting birds and the development proposals do not require the removal of any trees, hedgerows or scrub. The nearest pond with suitability to support breeding amphibians (including great crested newts) was located 230m north-east with no distinctive habitat features connecting the site and this pond. The site is largely unsuitable to support amphibians due to an absence of cover and refuge features. No further assessment or mitigation measures are advised regarding amphibians.

Based on the data obtained, no other ecological constraints such as badgers or bats 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 notable species or result in actions that may be in breach of the relevant legislation.



Invasive Non-native Species (INNS)

A small stand of Himalayan balsam *Impatiens glandulifera* was located on the eastern edge of the site and a single, small plant was identified centrally within the site. The species is listed on Schedule 9, Part II of the Wildlife and Countryside Act 1981 making it an offence Under Section 14 of the Act to plant or otherwise cause this species to grow in the wild.

HABITAT ENHANCEMENTS AND / OR CREATION

Habitats

Figure 2 in Appendix B provides a UK Habitat Classification map of the site as proposed. The development layout includes the stables and storage building, a muck midden and hardstanding.

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 low distinctiveness habitats to be lost, the planting of native trees was considered to be the most feasible and practical option to achieve net gain on-site.

Therefore, the metric tool has accounted for the planting of 9 native trees within a field area. The combined value of the created habitats post-development would be **0.2 habitat units**.

EVALUATION AND SUMMARY

HABITATS

The development proposals will result in a net gain of biodiversity value for habitats comprising **0.03 habitat units (14.97%)**. The assessment can confirm that no designated sites, irreplaceable habitats, priority habitats or habitats of medium or high distinctness will be impacted.

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.

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

RECOMMENDATIONS

BNG - POST-CONSENT REQUIREMENTS & RECOMMENDATIONS

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 metric tool.

The created habitats do not represent significant net gain and the habitat creation is not considered significant enough to warrant the provision of a 30-year Habitat Management and Monitoring Plan. However, a Biodiversity Retention and Enhancement Plan (or similar) is recommended with respect to the tree planting.

INNS

The proposed development is unlikely to require the transportation of any material containing Himalayan balsam off-site or cause its spread in the 'wild'. Nonetheless, it is recommended to treat the species prior to construction.



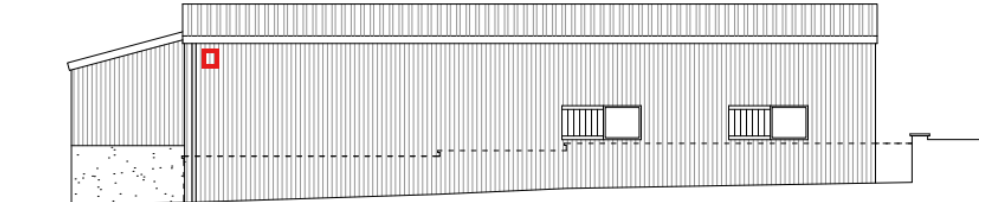
In order to control Himalayan Balsam in-situ, it must be prevented from producing seeds until the seed bank is exhausted (i.e. no viable seeds remain in the soil). Seed bank longevity is one to two years. The existing plants can be killed relatively quickly via the following methods:

- **Hand Pulling.** This method is particularly useful for smaller stands of balsam. Hand pulling should ideally commence in late May / June when plants can be easily identified and they will not have set seed. The optimum time for control is when the Himalayan balsam is just starting to develop flowering buds. The plants should not be pulled when in seed (August to October). The whole plant must be uprooted.
- **Cutting or Mowing.** Cutting can be done before the flowering stage in June. Plants must be cut at ground level, below the lowest node. Any cuts above the lowest node will lead to regrowth and re-flowering. Cutting too early will promote greater seed production from the plants that re-grow.
- **Chemical Control.** Where access to pull / cut the plants is not possible, then the infestation can be sprayed with a Glyphosate-based herbicide. Spraying should be undertaken by an appropriately trained and licensed contractor. Chemical control is often most practical for high density stands of Himalayan balsam. Caution should always be taken where potential damage to surrounding vegetation may result from the use of herbicides, as glyphosate is a non-selective herbicide that will kill the plant and others around it. Use of a weed wiper or spot treatment with a hand lance can increase the selectivity of this herbicide (particularly useful in mixed stands). Fitting the hand lance with a guard can direct the spray to the target more accurately.

SPECIES ENHANCEMENTS

The development proposal presents a good opportunity to deliver ecological enhancements for bats and birds in accordance with national and local policy. Details of the **1 bird box and 1 bat box** to be installed at the site are provided in Tables 1.1 and 1.2 respectively.

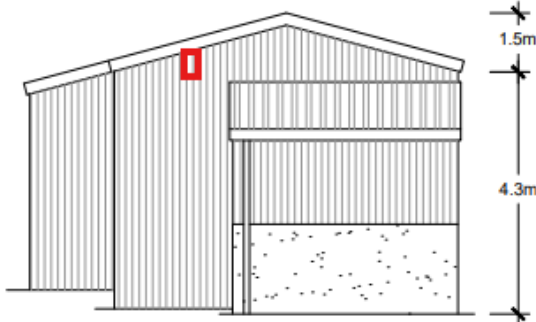
Table 1.1. Bird box models and siting advice

Location & positioning	One box can be fixed onto the building and positioned at least 2.5m in height on the north-east elevation.  North East Elevation 1:100
Models	The following model can be used:



	Vivara Pro Seville 32mm WoodStone Nest Box		These nestboxes are manufactured from WoodStone which is a mix of concrete and FSC certified wood fibres and are guaranteed for 10 years. Available from https://www.nhbs.com/
	In the event that a certain bird box model is unavailable for purchase, a suitable like for like replacement will be sourced.		
Maintenance	Where required, cleaning of the boxes should be undertaken from <u>October to January</u>, outside of the nesting bird season (March to August inclusive). 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.		

Table 1.2. Bat box models and siting advice

Location and positioning	One box can be placed under the roof eaves on the south-west elevation at a height of at least 2.5m.  South East Elevation 1:100
Bat Box Models	Bat box models along with the locations for purchasing are provided below. There can be a considerable waiting time for delivery for certain models, therefore, two options have been provided.



	Elisa Bat Box		These boxes are manufactured from wood and concrete and provide an ideal summer roost space for a variety of bat species, including pipistrelles, Daubenton's, noctule bat, and brown long-eared bat. Available from: https://www.nhbs.com/
	Beaumaris Woodstone Bat Box		This bat box is also made entirely from WoodStone. The Beaumaris box has a single narrow cavity which makes it suitable for crevice roosting bats such as common pipistrelle. Available from: https://www.nhbs.com/



APPENDIX A: PHOTOS

Photo 1.

View east over to existing field entrance gate.



Photo 2.

View east from field entrance gate.





Photo 3.
View west
towards field
entrance gate.



Photo 4.
View north
towards
development site.





Photo 5.
Grassland within
the site.



Photo 6.
Area of proposed
tree planting.





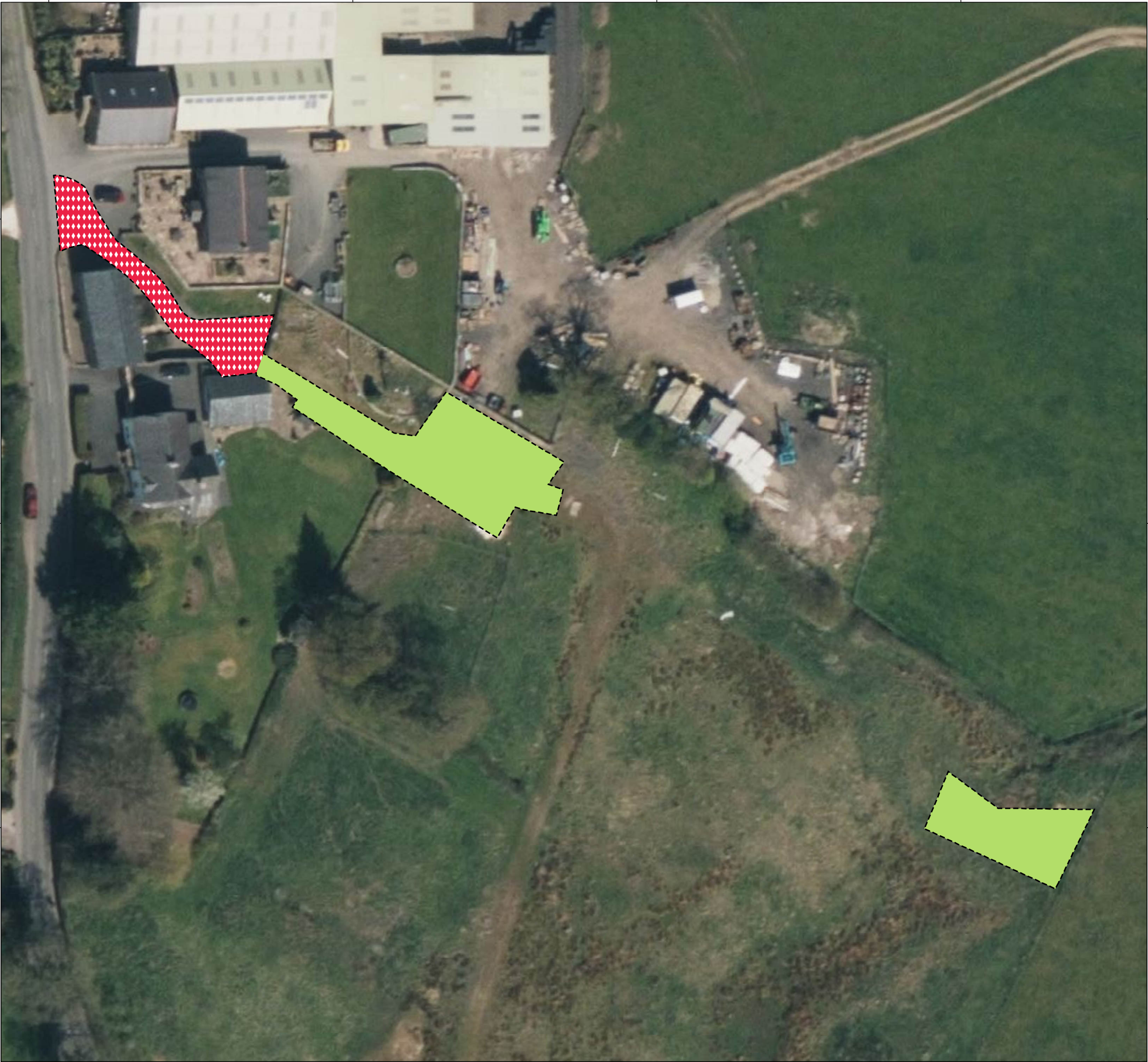
Photos 7a & 7b.
Himalayan
balsam





APPENDIX B: FIGURES (NEXT PAGE)

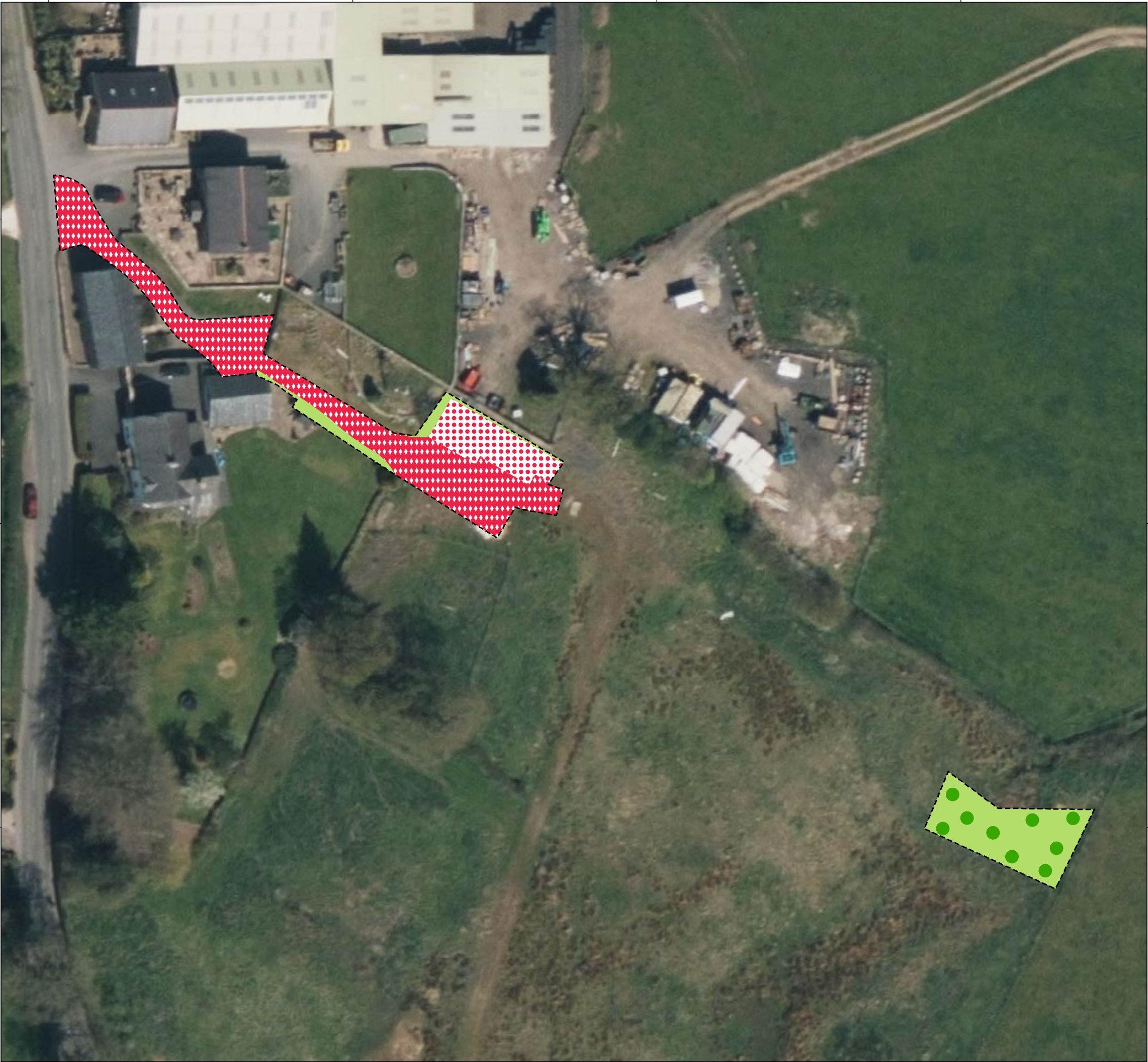
- **FIGURE 1. UK HABITAT CLASSIFICATION MAP (BASELINE)**
FIGURE 2. UK HABITAT CLASSIFICATION MAP (POST-DEVELOPMENT)



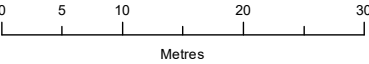
Survey Information	
	Site boundary (1,004.8m ²)
UKHab Habitat Survey	
	g4 - Modified grassland (753.7m ²)
	u1b6 - Other developed land (251.1m ²)



PROJECT TITLE							
LAND AT EASTHAM HOUSE BARN, MITTON							
DRAWING TITLE							
Figure 1: UK Habitat Classification Map (Pre-Development)							
VER	DATE	REMARKS	Drawn	Checked			
2.0	08/09/25	Pre-Development	MP	RK			
DRAWING NUMBER:							
KSEcology/EasthamHouse/Pre							
SCALE	1:625	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG
Source: Ordnance Survey © Crown copyright 2025, All rights reserved. Licence Number 100049837.			 		KNIGHT SKY ECOLOGY		



Survey Information	
	Site boundary (1,004.8m ²)
UKHab Habitat Survey	
	g4 - Modified grassland (307.0m ²)
	u1b5 - Building (131.5m ²)
	u1b6 - Other developed land (566.3m ²)
	32 - Scattered tree (9)



PROJECT TITLE

LAND AT EASTHAM HOUSE BARN, MITTON

DRAWING TITLE

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

VER	DATE	REMARKS	Drawn	Checked
2.0	08/09/25	Post-Development	MP	RK

DRAWING NUMBER:

KSEcology/EasthamHouse/Post

SCALE	1:625	PLOT SIZE	A3	DATUM	OSGB	PROJECTION	BNG
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Source:
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