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28 November 2024

Jordan Moyle
J L Faynum Limited
9 Victoria Grove
Hove
East Sussex
BN3 2LJ

Ref: 24052

Dear Jordan

Biodiversity Net Gain Assessment: Land at Stanbridge Industrial Park, Staplefield Lane Staplefield, RH17 6AS.

Introduction

CT Ecology was commissioned by J L Faynum Limited to undertake a biodiversity net gain assessment in relation to the proposed scheme for the above site in order to inform the planning application submission. Proposals are to demolish two existing agricultural units to facilitate construction of a replacement building for commercial use. No trees or hedgerows will require removal to facilitate the works and access will remain as existing. The application site covers 0.07 hectares (ha).

Site Description

The site is within a semi-rural location within the south-western extent of Staplefield in the Mid Sussex District of West Sussex at British National Grid TQ270 272. The application site is located within the southern extent of the wider industrial park; dominated by two agricultural buildings together with discrete areas of grassland and tall ruderal vegetation. Vehicular access is through the existing industrial park to the east.

Grazed fields extend to the south and west and the industrial park extends to the north and east. In the wider surrounds, a combination of pasture and arable fields are located in all directions together with areas of woodland and scattered residential properties. The centre of Staplefield is approximately 2km to the north-east. The A23 is approximately 400m to the west.

Methodology

Baseline Assessment

The BNG assessment has been informed by a Preliminary Ecological Appraisal, undertaken in September 2023 (CT Ecology 2023) by Carly Teague, a suitably qualified ecologist with over 16 years' experience as a professional ecologist.

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Biodiversity Net Gain Assessment

The biodiversity value of the site has been quantified applying the Statutory Biodiversity Metric (2024). The metric uses habitats to describe biodiversity, which is converted into measurable 'biodiversity units' according to the area of each type of habitat. The metric scores different habitat types according to their relative biodiversity value and adjusts this according to the condition and location of the habitat. Where new habitat is created or existing habitat is enhanced then the associated risks of doing so are factored into the metric. The metric can then be used to quantify the biodiversity value of habitats and it can be used to calculate the losses and gains in biodiversity from proposed activities including development or site management.

The biodiversity 'value' of each habitat type is evaluated using the area and the relative 'quality' of the habitat. This assessment of quality comprises four components:

* Distinctiveness
* Condition
* Strategic significance
* Habitat connectivity

The calculation then gives a number of biodiversity units that represents the baseline biodiversity value of that habitat parcel.

A further calculation is then obtained to provide a post development score (to include measures to retain, enhance or create additional biodiversity features) and additional factors to account for the risk associated with these actions are also taken into account to include:

* Difficulty of creating or restoring a habitat
* Temporal risk
* Spatial Risk

The post development biodiversity units are then deducted from the baseline units to provide a value for 'the extent of change'. If a net gain is achieved then there is no need to consider additional potential off-site measures however if the calculation does not result in a sufficient net gain in biodiversity units, proposals may need to be revised or additional enhancement measures employed or off-site enhancement measures may need to be considered.

The current biodiversity net gain assessment has been based on existing habitat areas and proposed habitat types post development, based on discussions with the client.

Results

Baseline Assessment

A summary of the existing habitats is provided in the table below.

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Table 1.0: Habitat Descriptions

Habitat Type	UK Habitats Code (secondary codes in brackets)	Description	Area (ha)
Modified grassland	g4	A small area of regularly managed grassland was to the south of the buildings. Dominant grassland species were indicative of regular, long-term management and included Yorkshire fog (*Holcus lanatus*) and fescues (*Festuca* sp.). Forbs were limited to discrete areas within the sward. Species included creeping buttercup (*Ranunculus repens*), white clover (*Trifolium repens*) and dandelion (*Taraxacum* agg.). A discrete area of tall ruderal vegetation had developed adjacent to the west of building 2. Common nettle (*Urtica dioica*) dominated this area.	0.022
Developed Land; Sealed Surface. Buildings	u1b5	A series of two agricultural units dominated the site.	0.048
Developed Land; Sealed Surface. Hardstanding	u1b6	A tarmacadam area was to the east of the buildings.	0.001

Biodiversity Net Gain Assessment

The total net % change for the proposed development area when applying the Statutory Biodiversity Metric is **-41.53%** (habitat units) which indicates a loss in biodiversity as a result of the Scheme.

The total area of habitat to be lost to facilitate the development equates to 0.02ha which comprises modified grassland.

Based on the size and nature of the application site, a 10% gain could not be achieved within the site itself, therefore off-site gains were then explored within the wider site (within the wider landownership) to the east, through discussions with the design team. Incorporating off-site enhancement of existing habitats has resulted in the score of -41.53% being reached which explores all on-site and off-site opportunities.

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The current scheme results in a unit shortfall of 0.05 (Tier A1). A habitat bank (Environment Bank) was approached and following discussions, they confirmed they are able to supply the appropriate units from a local habitat bank in order to off-set the loss at the site. As the habitat bank is local to the site, the spatial risk multiplier (SRM) does not need to be applied to the unit purchase.

The following habitat features will be incorporated post development:

On-site

* 0.003ha planted shrubbery will be incorporated into the scheme, located around the proposed parking area.

Off-site

* Area A: Grassland adjacent to the east of the application site is species-poor (0.0097ha). Overseeding with an appropriate wildflower grassland mix will serve to enhance the sward with long-term meadow management promoting a diverse range of flowering species to develop throughout the growing season and improve the visual amenity value of the site adjacent to the proposed new building and parking areas.

A summary of the biodiversity metric score is shown in the table below.

Table 1.1: Statutory Biodiversity Metric Headline Results Summary

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-0.04
	Hedgerow units	0.00
	Watercourse units	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	-41.53%
	Hedgerow units	0.00%
	Watercourse units	0.00%
Trading rules satisfied?		No - Check Trading Summaries ▲

Unit Type	Target	Baseline Units	Units Required	Unit Deficit
Habitat units	10.00%	0.09	0.10	0.05
Hedgerow units	10.00%	0.00	0.00	0.00
Watercourse units	10.00%	0.00	0.00	0.00

Conclusions and Recommendations

The total net % change for the proposed development area when applying the Statutory Biodiversity Metric is **-41.53%** (habitat units) which indicates a loss in biodiversity as a result of the Scheme. All

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possible on-site and off-site opportunities have been explored, with constraints posed based on the limited scope for habitat creation and enhancement within the application site once the building footprint and parking have been factored in and the limited options adjacent to the site due to landownership constraints.

Management of the off-site grassland will be undertaken by the applicant who is the landowner of this parcel of land within which the off-site enhancements have been agreed (J L Faynum). Appropriate units to off-set the on-site loss have been secured with an appropriate land manager and providing these units, or equivalent equal distinctness habitat units, are secured then **the scheme will be achieving the 10% Net Gain** through the purchase of off-site units. More information on the off-site units can be obtained directly from Environment Bank, as required.

In addition, a series of targeted enhancement measures in relation to protected species will be integrated into the proposals within the site, which will serve to improve the overall biodiversity value of the site post development. Although these cannot be factored into the Biodiversity Metric, these features will add to the overall biodiversity value to the site. These measures will include:

Bird Box

A series of two bird boxes will be installed on the new building. These could include the following specifications (or suitable alternative makes/models):

* Schwegler 1B x 1; and
* Schwegler Sparrow Terrace x 1

Bat Box

A single bat box will be installed at the site as part of the proposals in order to provide additional roosting opportunities post works. The box will be installed on the new building. This must be on a different elevation to the bird boxes and ideally on the western elevation. The following is recommended:

* Greenwood's Ecohabitats small, single crevice bat box x 1

In order to ensure the success of implementation and establishment of the biodiversity net gain measures, a long-term management plan will be required in accordance with current BNG guidance.

I trust the above information relating to land at Stanbridge Industrial Park, is satisfactory however if you have any queries, please do not hesitate to contact me.

Yours sincerely

Carly Teague BSc (Hons) MSc MCIEEM

Director

References

* CIEEM – Chartered Institute of Ecology and Environmental Management (2016). *Guidelines for Ecological Impact Assessment in the UK and Ireland – Terrestrial, Freshwater and Coastal.* Winchester: CIEEM [On-line]. Available from http://www.cieem.net/data/files/Publications/EcIA_Guidelines_Terrestrial_Freshwater_and_Coastal_Jan_2016.pdf [Accessed on 21/11/2024].

* CIEEM – Chartered Institute of Ecology and Environmental Management (2013). *Guidelines for Preliminary Ecological Appraisal.* Winchester: CIEEM [On-line]. Available from http://www.cieem.net/data/files/Resource_Library/Technical_Guidance_Series/GPEA/GPEA_April_2013.pdf [Accessed on 21/11/2024].

* GOV.UK (2024). *The Statutory biodiversity metric tools and guides* [on-line]. Available from Statutory biodiversity metric tools and guides - GOV.UK (www.gov.uk) [Accessed on 20/11/2024].

* UKHab Ltd (2023). *UK Habitat Classification Version 2.0* [on-line]. Available from: https://www.ukhab.org [Accessed on 15/08/2024 & 21/11/2024].

Appendix A
Site Maps

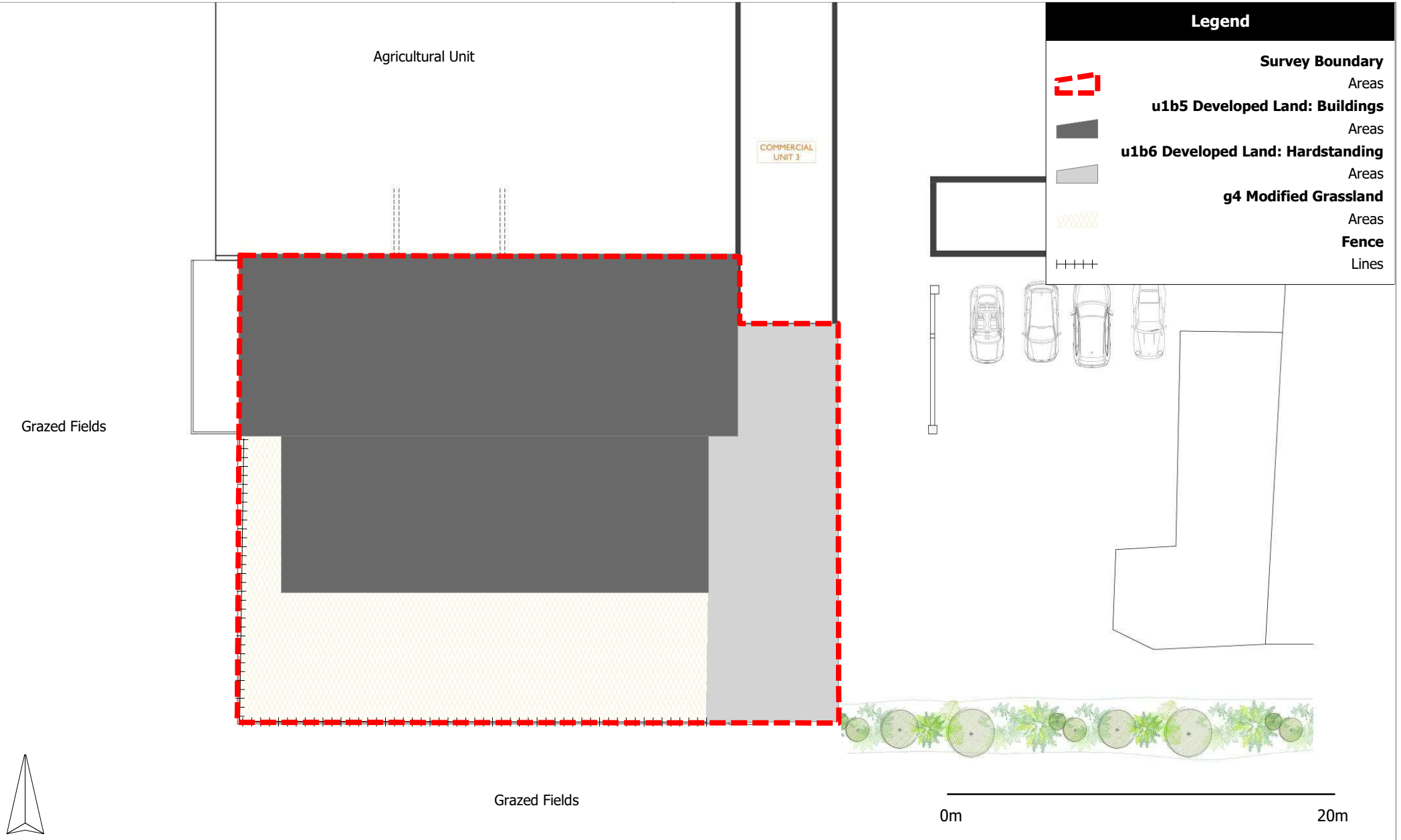
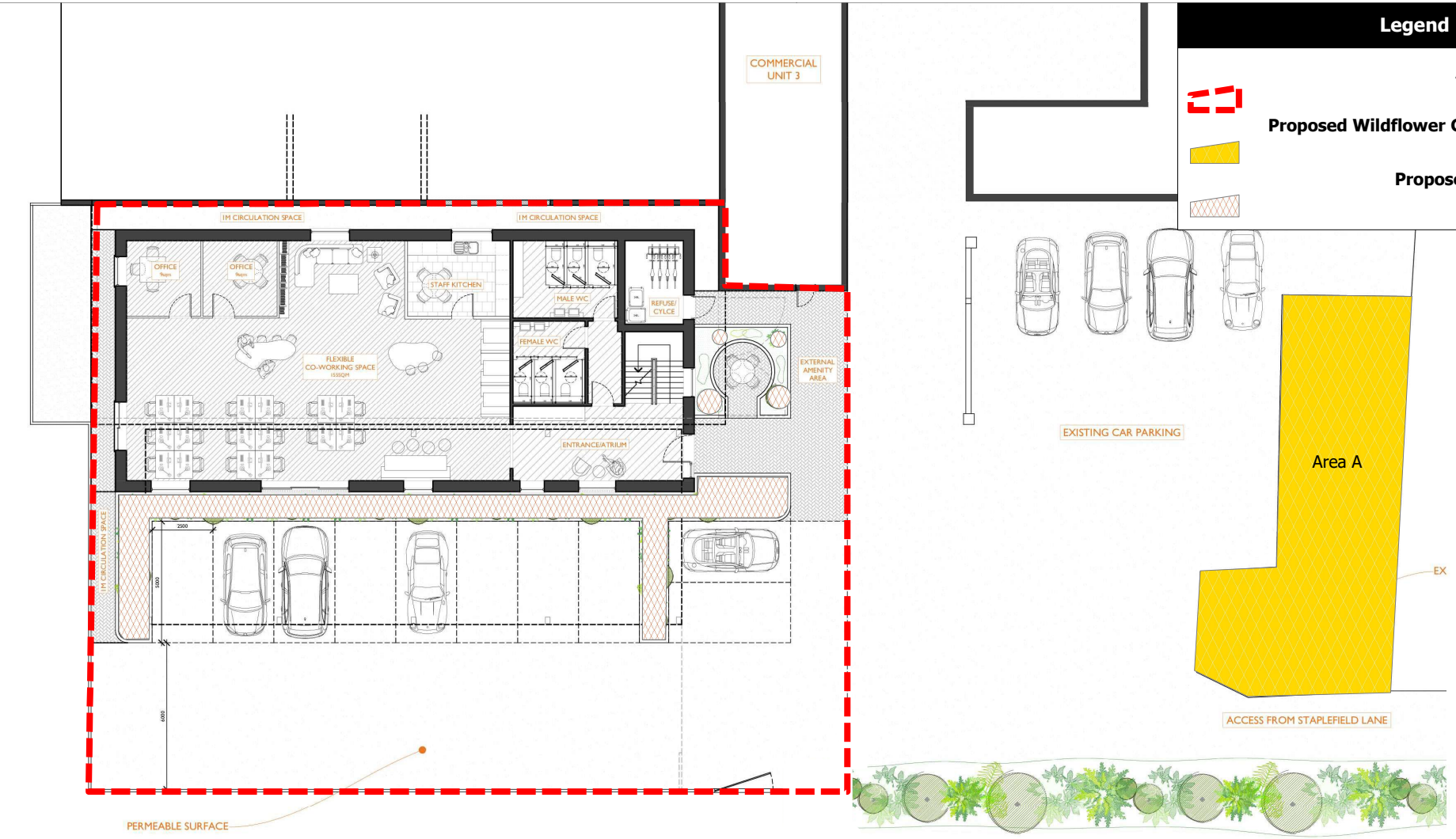


Figure 1: Stanbridge Industrial Park Habitat Survey Plan

Drawn by: CT
Date: 28/11/2024
Scale: See Plan

CT Ecology



+SP Proposed site plan - scale 1:200 at A3

Scale in Metres

10 15 20

N

Figure 2: Stanbridge Industrial Park Habitat Enhancement Plan

Drawn by: CT
Date: 28/11/2024
Scale: See Plan

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Appendix B

Baseline Habitat Condition Assessment Sheets

Condition Sheet: GRASSLAND Habitat Type (low distinctiveness)			
UK Habitat Classification (UKHab) Habitat Type			
Grassland - Modified grassland			
On-site or off-site, site name and location	Stanbridge Industrial Park	**Survey date and Surveyor name**	Carly Teague. September 2023
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference	TQ270 272	**Habitat parcel reference**	

Habitat Description

A small area of regularly managed grassland was to the south of the buildings. Dominant grassland species were indicative of regular, long-term management and included Yorkshire fog (Holcus lanatus) and fescues (Festuca sp.). Forbs were limited to discrete areas within the sward. Species included creeping buttercup (Ranunculus repens), white clover (Trifolium repens) and dandelion (Taraxacum agg.).
A discrete area of tall ruderal vegetation had developed in the west of the site. Common nettle (Urtica dioica) dominated this area.

ukhab – UK Habitat Classification

	Condition Assessment Criteria	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.	Y	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for vertebrates and invertebrates to live and breed.	N	
C	Any scrub present accounts for less than 20% of the total grassland area. (Some scattered scrub such as bramble *Rubus fruticosus* agg. may be present). Note - patches of scrub with continuous (more than 90%) cover should be classified as the relevant scrub habitat type.	Y	
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.	N	
E	Cover of bare ground is between 1% and 10%, including localised areas (for example, a concentration of rabbit warrens)[2].	Y	
F	Cover of bracken *Pteridium aquilinum* is less than 20%.	Y	
G	There is an absence of invasive non-native plant species[3] (as listed on Schedule 9 of WCA[4]).	Y	
	Essential criterion achieved (Yes or No)		YES
	Number of criteria passed		5

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)	YES	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)		

Suggested enhancement interventions to improve condition score

Footnotes

Footnote 1 – Creeping thistle *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).

Appendix C

Post Development
Habitat Condition Assessment Sheets

Condition Sheet: GRASSLAND Habitat Type (medium, high and very high distinctiveness)

UK Habitat Classification (UKHab) Habitat Types

Grassland - Lowland calcareous grassland
Grassland - Lowland dry acid grassland
Grassland - Lowland meadows
Grassland - Other lowland acid grassland
Grassland - Other neutral grassland
Grassland - Tall herb communities (H6430) [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.]
Grassland - Upland acid grassland
Grassland - Upland calcareous grassland
Grassland - Upland hay meadows
Sparsely vegetated land - Calaminarian grassland

On-site or off-site, site name and location	Stanbridge Industrial Park	**Survey date and Surveyor name**	Carly Teague. September 2023
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference	TQ270 272	**Habitat parcel reference**	

Habitat Description

Overseeding with a suitable wildflower mix with a percentage of yellow rattle to supress dominant grasses during establishment. After the first year of establishment, the grassland will be subject to meadow management with one or two cuts a year to promote wildflowers.

ukhab – UK Habitat Classification

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its 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] **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	Y	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	Y	
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[2].	Y	
D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	Y	
E	Combined cover of species indicative of suboptimal 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.	Y	

Additional Criterion - must be assessed for all non-acid grassland types			
F	There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**	Y	
	Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)	YES	
	Number of criteria passed	6	

Condition Assessment Result	Condition Assessment Score	Score Achieved ×/✓
Acid grassland types (Result out of 5 criteria)		
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	
Non-acid grassland types (Result out of 6 criteria)		
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)	YES
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	

Suggested enhancement interventions to improve condition score

Notes

Footnote 1 - 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 suboptimal condition for this habitat type include: 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* . 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 – Wildlife and Countryside Act 1981 (as amended).