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Ecological Consultants
Environmental and Rural Chartered Surveyors

Biodiversity Net Gain

Flosh Meadows, Cleator, CA23 3AB

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ACCURACY OF REPORT

This report has been compiled based on the methodology as detailed and the professional experience of the surveyor. Whilst the report reflects the situation found as accurately as possible, all of the protected species this survey covers are wild and can move freely from site to site. Their presence or absence detailed in this report does not entirely preclude the possibility of a different past, current or future use of the site surveyed.

We would ask all clients acting upon the contents of this report to show due diligence when undertaking work on their site and/or in their interaction with protected species. If protected species are found during a work programme, and continuing the work programme could result in their disturbance, injury or death, either directly or indirectly an offence may be committed.

If in doubt, stop work and seek further professional advice.

Quality and Environmental Assurance

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Planning Portal Questions

Please provide the date the onsite pre-development biodiversity value was calculated (this should be either the date of the application, or an earlier proposed date)	**07/09/2026**	
If an earlier date, to the date of the planning application, has been used, please provide details why this date has been used.	**Site conditions have not changed between date of assessment and planning submission**	
When was the version of the biodiversity metric published?	**3 July 2025**	
Please provide the pre-development biodiversity value of onsite habitats on the date of calculation	**6.78**	**Habitat Units**
	0.57	**Hedgerow Units**
	0.52	**Watercourse Units**
Please provide the reference or supporting document/plan names for the: i. Biodiversity metric calculation ii. Onsite irreplaceable habitats (if applicable) iii. Onsite habitats existing on the date of the application for planning permission (if applicable)	**Biodiversity Net Gain-Flosh Meadows, Cleator R3**	
	N/A	
	Biodiversity Net Gain-Flosh Meadows, Cleator R3	
Do you believe that, if the development is granted permission, the general Biodiversity Gain Condition (as set out in Paragraph 13 of Schedule 7A of the Town and Country Planning Act 1990 (as amended)) would apply?	**Yes**	
Has there been any loss (or degradation) of any onsite habitat(s), resulting from activities carried out before the date of the onsite pre-development biodiversity value was calculated. Either: - On or after 30 January 2020 which were not in accordance with a planning permission; or - On or after 25 August 2023 which were in accordance with a planning permission?	**No**	
Does the development site have irreplaceable habitats (corresponding to the descriptions in column 1 of [Schedule to the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations (2023)) which are: i. On land to which the application relates; and	**No**	

ii.	Exist on the date of the application for planning permission (or an earlier agreed date)	

INTRODUCTION

Purpose of this Report

Envirotech were requested to carry out a biodiversity assessment of land at Flosh Meadows, Cleator. The aim was for an ecologist with botanical expertise to carry out a site visit to map the habitat types present at the site in order to establish the biodiversity baseline.

It is proposed new houses are constructed onsite.

Each habitat type was mapped using the standard habitat mapping convention using UK Habitat Classification V2 (Butcher et al., 2023) for the purposes of using the Defra metric.

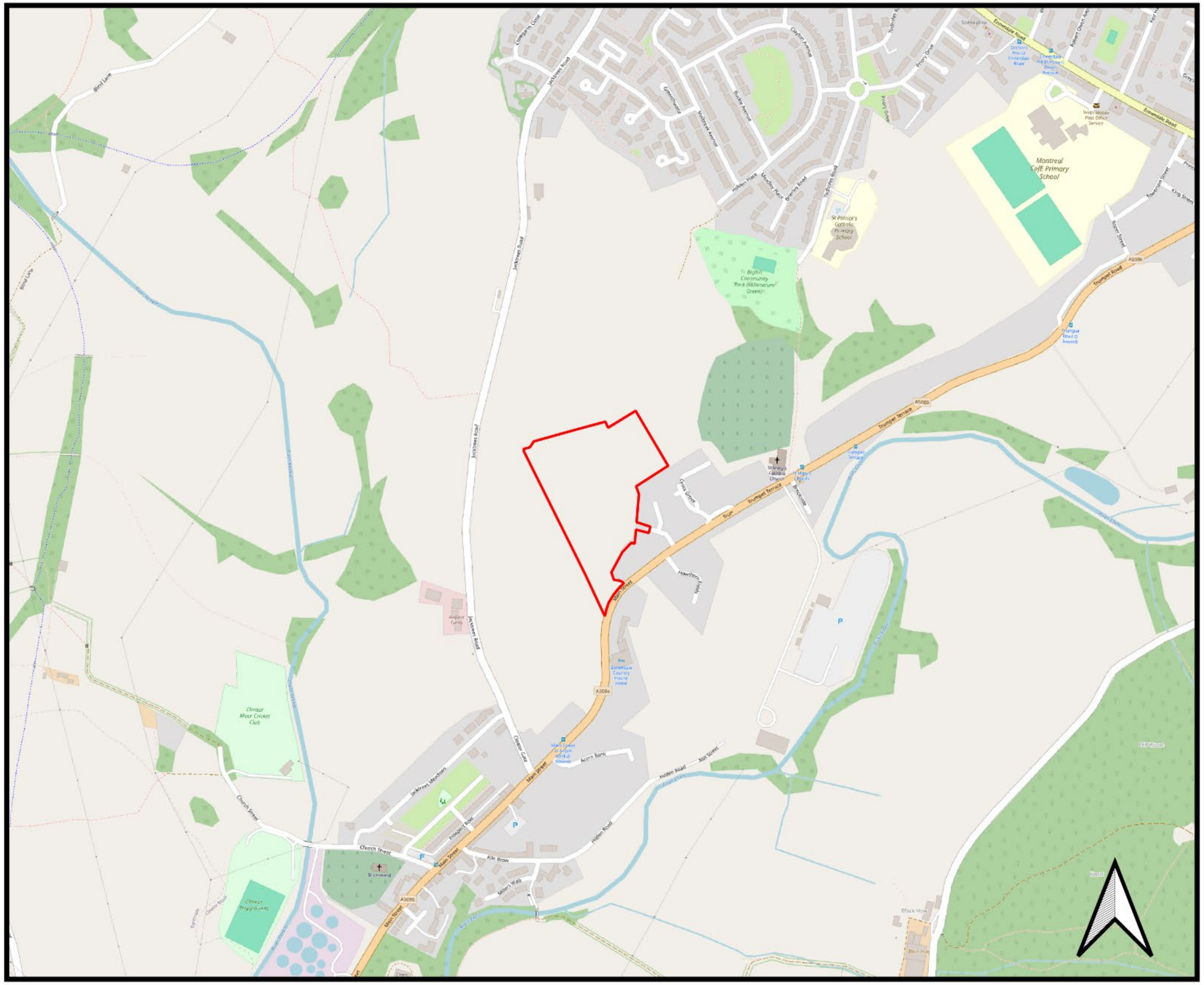
Using the findings of the baseline surveys, pre-construction ecology was measured against proposed habitat changes arising from future ecological enhancements based on an Illustrative Site Plan (post-construction) provided by the client.

This report presents the results of this desk-based study to assess net change in biodiversity 'units' in connection with the removal of habitats for the proposed development at the site.

Ecological Context

The site is ~3.42ha, comprising compartments of sheep-grazed grassland bordered by native hedgerow.

Figure 1 shows the site location, grid reference NY 01755 14059.



Red Line Boundary

Figure 1

Site Location

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Policy context

The primary aims of Biodiversity Net Gain are to secure a measurable improvement in habitat for biodiversity, to minimise biodiversity losses and to help to restore ecological networks whilst streamlining development processes.

The National Planning Policy Framework (NPPF) makes provisions for the delivery of biodiversity net gain. Additionally, there is a 10% net gain requirement in the Environment Bill.

METHODS

Introduction

The statutory biodiversity metric is designed to quantify biodiversity to inform and improve planning, design, land management and decision-making (Natural England, 2024).

This study has been carried out as a desk-based exercise, using the results of field surveys carried out at the site by Envirotech and an Illustrative Site Plan provided by the client.

Biodiversity Assessment Methods

To calculate biodiversity units for the site and assess any changes arising from the proposed development this study uses methods set out the latest Statutory Biodiversity Metric user guide (Natural England, 2024).

The biodiversity metric uses three core measurements:

- Habitat area
- Length of linear terrestrial habitats
- Length of linear aquatic habitats.

Consequently, a site can have three biodiversity unit values, which are assessed using the same metric, but cannot be summed together.

Habitat area is multiplied by several factors that indicate its quality: distinctiveness, condition, strategic location and connectivity, and this gives its biodiversity unit value. This can be used for existing and future created habitats. In addition, when habitats are to be enhanced or newly-created, the risk of failure is accounted for by applying multipliers for risk factors (difficulty, time to target condition, and off-site risk).

Habitat Distinctiveness

Habitats are classified using the UK habitat classification V2 system (Butcher et al., 2023).

The metric pre-assigns each habitat type to a distinctiveness band according to its distinguishing features, i.e. species richness, rarity (at local, regional, national and international scales), and the degree to which it supports species rarely found in other habitats. On rare occasions, the habitat distinctiveness of a habitat can be altered up or down from the preassigned value. Any

alterations must then be fully explained using evidence relevant to the site, e.g. an increase in distinctiveness because of rare flora or fauna or a decrease in distinctiveness because of significant damage to the habitat.

Habitat Condition

Habitat condition measures the varying quality of similar habitats against what is perceived to be their optimal state. The statutory biodiversity metric technical supplement (Natural England, 2023) contains condition sheets for all habitats to which the metric can apply. The condition sheets contain a habitat description, contextual information to aid the assessment, and the assessment criteria. The criteria describe what components need to be present for a habitat to be in good, moderate or poor condition.

Strategic Location

Strategic location - sometimes called 'strategic significance' – works at a landscape scale, allowing additional value to be added to habitats in 'priority' or 'biodiversity target areas'. They include statutory and non-statutory sites and other areas with biodiversity value or potential, and they are mainly identified from local plans and objectives. If a habitat is within such a target area, a multiplier is applied to increase its value.

Difficulty of Creation and Restoration

The risks associated with creating new or enhancing existing habitats, are known as difficulty factors; for example, where habitats fail to establish owing to natural changes in local conditions, incorrect management or for unknown reasons. The statutory biodiversity metric contains default values for each habitat based on the average difficulty of creating or enhancing a habitat. Occasionally, under exceptional circumstances, these can be modified, but any deviation from the default value must be fully justified.

Time to Target Condition

There is often a lag between a habitat being removed and the new compensation habitats achieving their target condition. This give~~s~~ reduced biodiversity value for a time. The statutory biodiversity metric preassigns the time to target condition based on good practice and typical conditions, and assigns a multiplier based on the number of years required to achieve it.

Using bespoke techniques under unique conditions, or creating compensation habitats prior to impacts taking place, the time to target condition can be adjusted. Any changes must again be fully justified.

Off-site Risk

Sometimes it is not possible to compensate adequately for loss of biodiversity within the site boundary, so off-site compensation is required. If the off-site compensation is a significant distance from the development site, then there will be a local loss of biodiversity and a multiplier is applied to any off-site compensation.

BIODIVERSITY ASSESSMENT

Baseline:

The sites baseline BNG value was calculated using the Statutory BNG metric and UKHabs v2 methodology. This was shown in the PEA report, as Figure 5, reproduced below.

The baseline value for the site is as at 07.09.2026. This is the date that our assessment was undertaken. We consider there will have been no substantive changes to habitat condition at the time of the planning application being made.

We are not aware of any habitat features which have been purposefully degraded after 30th January 2020.

We consider planning permission, if granted, would be subject to the biodiversity gain condition

The type, area and distinctiveness values are shown on Tables 1a and 1b.

Figure 2

UK Habs V2 Map
Pre- Development

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Habitat Reference	Habitat	Irreplaceable Habitat	Area (ha)	Distinctiveness	Notes
1	Modified grassland	No	3.3077	Low	The site comprises stock fenced compartments of modified grassland utilised for sheep grazing. Species include Perennial Ryegrass (*Lolium perenne) (A),* Rough-stalked Meadow Grass *(Poa trivialis) (F),* Creeping Bent *(Agrostis stolonifera) (O),* Timothy-grass *(Phleum pratense) (O)* and Soft Rush (*Juncus effusus) (O).* Field verges more diverse, with Crested Dog's-Tail *(Cynosurus cristatus) (O),* Sweet Vernal Grass *(Anthoxanthum oderatum) (O),* Common Bent (*Agrostis capillaris) (O)* and False oat grass *(Arrhenatherum elatius) (R).* Forbs include Dandelion *(Taraxacum officinale) (F),* Creeping thistle *(Cirsium arvense)* (F), Mouse ear *(Cerastium fontanum) (F)*, Creeping buttercup *(Ranunculus repens) (A),* White clover *(Trifolium repens)* (A) and Spear thistle *(Cirsium vulgare) (O).*
2	Developed land; sealed surface	No	0.0232	V.Low	Hardstanding road/pavement.

Table 1a- *Habitat, Area and Distinctiveness Values*

Habitat Reference	Habitat	Irreplaceable Habitat	Length (km)	Distinctiveness	Notes
3	Culvert	No	0.365	Low	Two underground field drains. These are not watercourses, rather they are ditches which are culverted.
4	Native Hedgerow	No	0.287	Low	The site is screened to the west by a line of native hedgerow. Woody species include Hawthorn *(Crataegus monogyna),* Elderberry (*Sambucus nigra),* Sycamore (*Acer pseudoplatanus)* and Holly (*Ilex aquifolium).* The hedgerow is tall and drawn up, with regular canopy gaps. Much of the ground is rutted and poached by livestock. Groundflora restricted to Nettle *(Urtica dioica),* Creeping thistle, Bramble *(Rubus fruticosus agg),* Cocksfoot and Male-Fern (*Dryopteris filix-Mas).*

Table 1b- *Hedgerows/watercourses, Length and Distinctiveness Values*

Avoidance: the first step of the mitigation hierarchy comprises measures taken to avoid creating impacts from the outset, such as careful spatial placement of infrastructure, or timing construction sensitively to avoid or disturbance. Examples include the placement of roads outside of rare habitats or key species' breeding grounds, or timing of seismic operations when aggregations of whales are not present. Avoidance is often the easiest, cheapest and most effective way of reducing potential negative impacts, but it requires biodiversity to be considered in the early stages of a project.

There are no irreplaceable habitats on the site.

There are no Very High distinctiveness habitats on the site.

There are no High distinctiveness habitats on the site.

There are no Medium distinctiveness habitats on the site.

Development is solely to Low and or Very low distinctiveness habitats.

Minimisation: these are measures taken to reduce the duration, intensity and/or extent of impacts that cannot be completely avoided. Effective minimisation can eliminate some negative impacts, such as measures to reduce noise and pollution, designing powerlines to reduce the likelihood of bird electrocutions, or building wildlife crossings on roads.

Gardens are backed onto boundary areas of open land so that there is connectivity across the site boundary. Pre-start checks will be made of habitats to ensure invasive species are not present on site and or are not spread off site. Build out of the scheme will be quickly as possible with landscaping prioritised in order that new habitats are created within two years of loss of baseline habitats.

Rehabilitation/restoration: The aim of this step is to improve degraded or removed ecosystems following exposure to impacts that cannot be completely avoided or minimised. Restoration tries to return an area to the original ecosystem that was present before impacts, whereas rehabilitation only aims to restore basic ecological functions and/or ecosystem services – such as through planting trees to stabilise bare soil. Rehabilitation and restoration are frequently needed towards the end of a project's life cycle but may be possible in some areas during operation.

New native tree planting will be undertaken. Grassland will be removed from agricultural production and enhanced. New boundary hedgerow will be planted. Buried land drains are to be replaced with a ditch/swale.

Whilst gardens are given a default low distinctiveness in BNG, they will be appropriately landscaped.

<u>Collectively, avoidance, minimisation and rehabilitation/restoration serve to reduce, as far as possible, the residual impacts that a project has on biodiversity. Typically, however, even after their effective application, additional steps will be required to achieve no overall negative impact or a net gain for biodiversity.</u>

Offset: offsetting aims to compensate for any residual, adverse impacts after full implementation of the previous three steps of the mitigation hierarchy. Biodiversity offsets are of two main types:

‘restoration offsets’ which aim to rehabilitate or restore degraded habitat, and ‘averted loss offsets’ which aim to reduce or stop biodiversity loss in areas where this is predicted. Offsets are often complex and expensive, so attention to earlier steps in the mitigation hierarchy is usually preferable.

Following avoidance, minimisation and rehabilitation/restoration, onsite BNG can be achieved. Purchase of offsite BNG units is not considered necessary at this time.

The UK Habs V2 habitat survey has been used to identify relevant habitat, hedgerow and watercourse units.

These habitats have been input into the statutory biodiversity metric calculator and indicate a total of 6.78 habitat units, 0.57 hedgerow units and 0.52 watercourse units. The results of the calculations are presented in the full biodiversity assessment calculation in the Excel document ‘Biodiversity Net Gain- Flosh Meadow, Cleator R3’.

The condition assessments for each of the habitat, hedgerow and watercourse types are presented in Appendix A. No deviations have been made from the default methods for baseline habitats assessment.

Post-development Habitat Creation and Enhancement

The Illustrative Site Plan has been used to identify that approximately ~72% of the site will be lost to 'developed land; sealed surface' and 'vegetated garden'.

Approximately 25% of the site's modified grassland (in poor condition) will be enhanced to neutral grassland in moderate condition to POS areas. This will require reduced mowing and oversowing with a suitable wildflower seed mix such as Emorsgate EM2. The grassland can be left to grow longer over summer, with cuts in August/September to 10cm. It is required that flowers be allowed to set seed, cutting should therefore not occur until late summer. Ideally arisings should be removed from the site.

A new SuDS pond (in moderate condition) will be established to the south of the site.

Approximately eight small urban trees (in moderate condition) will be planted to POS areas. Trees to be planted at 10-15m spacings. All tree planting demarcated in garden areas has been excluded from the BNG assessment.

The native hedgerow to the west of the site is to be retained. New native hedgerow planting totaling ~61m is to be established to the south of the site.

It is understood the buried land drains/culverts are to be abandoned. The flow of water within these culverts will cease and have therefore been assessed as 'lost'. A new ~221m-long ditch in poor condition will be established to the west of the site. The ditch is to be bordered on either side by an 8m buffer of sympathetically managed grassland.

These figures have been put in to the Statutory Biodiversity Metric and would comprise a total of 7.78 habitat units, 0.69 hedgerow units and 0.57 watercourse units.

There are no changes to default values for post development habitats.

Details of the assumptions made to achieve the proposed conditions are found in Appendix B.

Figure 3- *Illustrative site plan*

Red Line Boundary
Urban Tree
g3c Other Neutral Grassland
r1g Other Standing Water (SuDS)
u1 Built Up Areas and Gardens
u1b Developed Land Sealed surface
h2a Native Hedgerow
r2 Rivers and Streams (Ditch)

Figure 4

UK Habs V2 Map
Post- Development

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Change in Biodiversity Value

Under the current proposals set out in the Illustrative Site Plan there will be a GAIN of 1.00 habitat units (+14.73%), a GAIN of 0.12 Hedgerow units (+20.51%) and a GAIN of 0.06 watercourse units (+10.89%). This is shown in Table 2.

Table 2. *Change in Biodiversity Units Calculation*

On-site baseline	*Area habitat units*	**6.78**
	Hedgerow units	**0.57**
	Watercourse units	**0.52**
On-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	**7.78**
	Hedgerow units	**0.69**
	Watercourse units	**0.57**
On-site net change (units & percentage)	*Area habitat units*	**1.00**
	Hedgerow units	**0.12**
	Watercourse units	**0.06**
Off-site baseline	*Area habitat units*	**0.00**
	Hedgerow units	**0.00**
	Watercourse units	**0.00**
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Area habitat units*	**0.00**
	Hedgerow units	**0.00**
	Watercourse units	**0.00**
Off-site net change (units & percentage)	*Area habitat units*	**0.00**
	Hedgerow units	**0.00**
	Watercourse units	**0.00**
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	**1.00**
	Hedgerow units	**0.12**
	Watercourse units	**0.06**
Spatial risk multiplier (SRM) deductions	*Area habitat units*	**0.00**
	Hedgerow units	**0.00**
	Watercourse units	**0.00**
FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	**1.00**
	Hedgerow units	**0.12**
	Watercourse units	**0.06**
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Area habitat units*	**14.73%**
	Hedgerow units	**20.51%**
	Watercourse units	**10.89%**

REFERENCES

Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2023), UK Habitat Classification – Habitat Definitions V2.01 at http://ukhab.org

Natural England 2025. Natural England The Statutory Biodiversity Metric User Guide.

APPENDIX A – BASELINE DETAILED CONDITION ASSESSMENTS

This appendix presents the assessment of the post-development habitats against the condition sheets in the statutory biodiversity metric technical supplement published by Natural England, 2023. Any deviations from the published guidance is explained and justified.

UK Hab	Condition Sheet	Other Habitat Criteria Score									Total Score	Condition Assessment	Notes
		C1	C2	C3	C4	C5	C6	C7	C8	C9			
Modified Grassland	GRASSLAND: Low distinctiveness	F	F	P	F	P	P	P			4	Poor	Grassland fails C1.
Developed Land; Sealed Surface	URBAN										-	-	Hardstanding road/pavement.
Culvert	N/A										-	-	Underground land drains.

Key:
P – Criteria passed
F – Criteria failed

Appendix Table A1: Condition Assessment for Area Habitats

UK Hab	Hedgerow Criteria Score										Condition Assessment	Notes
	A1	A2	B1	B2	C1	C2	D1	D2	E1*	E2*		
Native Hedgerow	P	F	F	F	F	F	P	F			Poor	Hedgerow to west of site.

Key:
P – Criteria passed
F – Criteria failed
* - Application to Hedgerows with trees only

Appendix Table A2: Hedgerow Condition Assessment

APPENDIX B – POST DEVELOPMENT DETAILED CONDITION ASSESSMENTS

This appendix presents the assessment of the post-development habitats against the condition sheets in the statutory biodiversity metric technical supplement published by Natural England, 2023. Any deviations from the published guidance is explained and justified.

UK Hab	Condition Sheet	Other Habitat Criteria Score									Total Score	Condition Assessment	Notes
		C1	C2	C3	C4	C5	C6	C7	C8	C9			
Ditch	Ditches	P	F	P	F	F	F	F	P		3	Poor	Ditch to west of site.
Other neutral grassland	GRASSLAND: Medium-Very High distinctiveness	P	P	P	P	P	F				5	Moderate	Tall flowering grass to POS areas.
SuDS	Urban	P	P	F	P	F					3	Moderate	SuDS pond.
Developed Land; Sealed Surface	Not assessed										-	-	Buildings and hardstanding.
Garden	Vegetated Garden										-	-	Front and rear garden plots.
Urban trees	URBAN TREES	P	P	F	F	F	P				3	Moderate	8x small urban trees to POS areas.

Key:
P – Criteria passed
F – Criteria failed

Appendix Table B1: Condition Assessment for Area Habitats

UK Hab	Hedgerow Criteria Score										Condition Assessment	Notes
	A1	A2	B1	B2	C1	C2	D1	D2	E1*	E2*		
Native Hedgerow	F	P	F	F	P	F	P	F			Poor	New hedgerow planting to south of site.

Key:
P – Criteria passed
F – Criteria failed
* - Application to Hedgerows with trees only

Appendix Table B2: Hedgerow Condition Assessment