Biodiversity Net Gain Assessment

Land Off The Common, The Common, Fritchley, Belper, Derbyshire DE4 5BW

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Industry Guidelines and Standards

This report has been written with due consideration to:

- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management, Construction Industry Research and Information Association & Institute of Environmental Management and Assessment (2019). Biodiversity Net Gain – Good Practice Principles for Development.

Proportionality

> The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.
>
> The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.
>
> (BS 42020, 2013)

Executive Summary

Arbtech Consulting Limited was instructed by James Filer to undertake a Biodiversity Net Gain (BNG) Assessment at Land Off The Common, The Common, Fritchley, Belper, Derbyshire DE4 5BW (hereafter referred to as "the site"). The assessment was required to inform an outline planning application for the erection of up to 17 dwellings and associated infrastructure (hereafter referred to as "the proposed development").

BNG Change Summary

	Area/habitat units	Linear Units	Watercourse Units
% change	**-78.81%**	**+0.00 %**	**N/A**
More units required for 10% net gain	**10.79 units to include 7.37 units of lowland meadows**	**1.05**	**N/A**

The baseline habitat value of the site is 9.81 area-based habitat units and 0.96 hedgerow units with the proposed development resulting in a -78.81% area-based net loss and a 0.00% net change for hedgerows.

Current plans have been submitted under an outline planning application therefore accurate landscaping has not been produced. It is anticipated that with accurate landscaping the proposed development may meet the minimum target of 10% biodiversity net gain and thus is compliant with legislation (Environment Act 2021).

Contents

1.0 Introduction and Context 6
1.1 Background 6
1.2 Site Location, Geology and Landscape Context 6
1.3 BNG Informative 6
2.0 Methodology 8
2.1 Baseline Biodiversity Value 8
2.2 Post Development Biodiversity Value 8
2.3 Limitations 9
3.0 Results 10
3.1 Baseline Habitats 10
3.2 Post Development Habitats 11
3.3 Change in Biodiversity Value of the Site 12
4.0 Recommendations to Deliver BNG 14
4.1 Discussion 14
4.2 Landscaping 14
4.3 Biodiversity Offsetting 14
4.4 Post Development 15
5.0 Bibliography 16
Appendix 1: Proposed Development Plan 17
Appendix 2: Site Location Plan 18
Appendix 3: Baseline Habitat Plan 19
Appendix 4: Baseline Condition assessments 20
Appendix 5: Post Development Habitat Plan 29
Appendix 6: Headline BNG Results 30

1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by James Filer to undertake a Biodiversity Net Gain (BNG) Assessment at Land Off The Common, The Common, Fritchley, Belper, Derbyshire DE4 5BW (hereafter referred to as "the site"). The assessment was required to inform an outline planning application for the construction of up to 17 dwellings and associated infrastructure (hereafter referred to as "the proposed development"). A plan showing the proposed development is provided in Appendix 1.

This report should be read in conjunction with the following documents:

- Defra Statutory Biodiversity Metric
- Baseline Habitat Condition Assessment (BHCA), Land off The Common, The Common, Fritchley, Belper, Derbyshire, DE4 5BW, (Arbtech Consulting Ltd, 2024).

1.2 Site Location, Geology and Landscape Context

The site is located at National Grid Reference SK35285291 and has an area of approximately 0.9ha comprised of lowland meadow with bordering tree lines. It is located ~1km east of the River Derwent and ~650m south Crich Common village. The wider landscape comprises blocks of woodland, agricultural land and residential dwellings to the east. A site location plan is provided in Appendix 2.

1.3 BNG Informative

BNG is a specific, measurable outcome of project activities that deliver demonstrable and quantifiable benefits to biodiversity compared to the baseline situation. In order to achieve BNG, a project must be able to demonstrate that it has followed all 10 of the Principles of Biodiversity Net Gain (as outlined in the British Standard 8683:2021 Process for Designing and Implementing Biodiversity Net Gain).

The legalised Environment Act (2021) requires developments in England to demonstrate a measurable net gain in biodiversity and sets a target of a minimum of 10% BNG for all developments. It also stipulates that a management plan with a minimum 30-year term, should be adopted to ensure biodiversity net gain can be delivered. The Environment Act (2021) states biodiversity net gain is mandatory for sites over 0.5ha as of February 2024. The requirement for biodiversity net gain is also enshrined within the National Planning Policy Framework (NPPF, 2021). The DEFRA Statutory Biodiversity Metric is the widely accepted tool used to calculate BNG. It enables the calculation of habitat value pre- and post-development in order to determine the overall change in biodiversity value as a result of the proposed development. The Biodiversity Metric has separate BNG assessments for areas of habitat, hedgerows and watercourses. The biodiversity value of a site should be maximised. However, it may not always be possible to achieve a 10% biodiversity net gain within a site and therefore the Statutory Biodiversity Metric can also account

for offsite habitat creation, where land is available. Alternatively, developers can seek to provide an agreed financial contribution to an appropriate third party (such as the Local Authority, the UK Government or another landowner) to deliver the required biodiversity net gain elsewhere on their behalf.

2.0 Methodology

2.1 Baseline Biodiversity Value

The baseline BNG Calculation was informed by BHCA, Land off The Common, The Common, Fritchley, Belper, Derbyshire, DE4 5BW, (Arbtech Consulting Ltd, 2024). A baseline habitat plan is provided in Appendix 3.

Habitat Classification

The BHCA classified the habitats on site according to The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023).

Habitat Area/Length

The area or length of each habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of a similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or lost (i.e. destroyed by proposed development).

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric. Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Habitat Condition

Habitat condition was assessed using the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Strategic Significance

Strategic significance was assigned for each habitat based upon a review of the following:

- Ecological value
- Function within the landscape
- Any site or habitat allocations under the Amber Valley Borough Local Plan 2022-2040

2.2 Post Development Biodiversity Value

The post development BNG Calculation was informed by the development plan by Filer Williamson Limited (2023) which is included in Appendix 1. A post development habitat plan is provided in Appendix 4.

Habitat Classification

Proposed habitats were translated to their equivalents in the UK Habitat Classification using The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023) and the information provided within the development plan by Filer Williamson Limited (2023).

Habitat Area/Length

The area or length of each proposed habitat was calculated using qGIS software. In calculating the area or length of each habitat, habitats which occur as two or more isolated parcels across the site were combined, where they were deemed to be of similar composition and condition. Distinctions were made between habitats to be retained (i.e. left as found in baseline), enhanced (i.e. improved condition) or newly created.

Areas of scattered trees were calculated using the Tree Helper tool within the Statutory Biodiversity Metric. Class sizes for urban trees are set out in Table 8-1 of the Statutory Biodiversity Metric User Guide (Natural England, 2023).

Habitat Condition

Target habitat condition for each proposed habitat was determined assessed using the Temporal Multipliers Tool and the Enhancement Temporal Multipliers Tool included in the Statutory Biodiversity Metric spreadsheet as well as the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2023). This is based on the assumption that a 30-year management plan will be adopted for the site.

Strategic Significance

Strategic significance was assigned for each proposed habitat based upon a review of the following:

- Likely ecological value
- Function within the landscape
- Any site or habitat allocations under the Amber Valley Borough Local Plan 2022-2040

2.3 Limitations

The post development habitats and thus units have been assumed as a result of the outline nature of the application. Therefore the post development calculations are likely to reflect a worse result than likely on the site once accurate landscaping has been agreed.

3.0 Results

3.1 Baseline Habitats

Table 1 details the baseline habitats present within the site along with their area/length, condition and strategic significance. A full condition assessment for each habitat (where relevant) is provided in Appendix 5a.

Table 1: Baseline Biodiversity Value

Type	Habitat	Area / Length	Description	Condition Assessment	Strategic Significance
Area-Based	**g3a6** Other lowland meadow (northern field)	0.33495 ha	The site comprises of two fields of lowland meadow grassland. The grassland on the northern field was dominated by Yorkshire fog and false oat grass with frequent cocksfoot, common bent, occasional meadow foxtail, common sorrel, ribwort plantain, meadow vetchling and rarely present common knapweed, common hogweed, meadow buttercup, bush vetch, ox-eye daisy, red clover and white clover. The sward was consistently over 7cm with <less 5% bare ground and ~6sp/m2.	**Moderate Condition** Habitat was assessed using the Grassland Habitat type Condition Sheet (Appendix 4). The grassland was assessed to pass criteria C, D and E and fail criteria A, B, and F. The grassland is therefore assessed to be of poor condition.	**Moderate Strategic Significance** Ecologically desired but not formally identified
	g3a6 Other lowland meadow (southern field)	0.34705 ha	The site comprises of two fields of lowland meadow grassland. The grassland on southern field was dominated by yorkshire fog and false oat grass with frequent sweet vernal grass, meadow vetchling, common bent, occasional common knapweed, meadow buttercup, cocksfoot, and rarely present bush vetch, red clover, common sorrel, ribwort plantain, catsear, pignut, tufted vetch, broad-leaved dock, yellow oat grass, meadow foxtail and red clover. The sward was consistently over 7cm with <less 5% bare ground and ~6sp/m2.	**Moderate Condition** Habitat was assessed using the Grassland Habitat type Condition Sheet. The grassland was assessed to pass criteria A and E and fail criteria B, C, D and F.	**Moderate Strategic Significance** Ecologically desired but not formally identified
	h3d Bramble scrub	0.18782ha	An area of scrub dominated by bramble was present on the western boundary of the site. Further species recorded within	Habitat condition pre-determined as **'N/A'** as detailed within the Statutory	**Low Strategic Significance**

			the scrub consisted abundant rosebay willowherb, false oat grass, occasional common nettle, curled dock, sowthistle, broad-leaved willowherb and ragwort.	Biodiversity Condition Assessment Supplement.	Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
	u1b5 Buildings	0.001ha	An overgrown disused train carriage structure was present on site.	Habitat condition pre-determined as **'N/A'** as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low Strategic Significance** Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
Linear Based	**h2a** Native hedgerow	0.145km	Along the western boundary is a hedgerow with a scrub understorey. The hedgerow is >1.5m wide and >1.5m in height. The hedgerow is sparse with continuous gaps throughout the canopy. Species within the hedgerow consist of frequent elder and bramble and rarely present wild cherry and holly.	**Good Condition** Habitat was assessed using the Hedgerow type condition sheet (Appendix 4). The hedgerow is assessed to pass A1, A2, B1, C1, C2, D1 and D2 failed criteria B2.	**Medium Strategic Significance** Habitat type formally identified in local strategy, Policy EN8 Biodiversity.

3.2 Post Development Habitats

Table 2 details the post development habitats present within the site along with their area/length, condition and strategic significance. An assessment of the anticipated condition for each habitat (where relevant) is provided in Appendix 5b, which is based on the assumption that a 30-year management plan will be implemented for the site. The proposed development will result in the loss of 4.24 units.

Table 2: Post Development Biodiversity Value

Habitat			**Area / Length**	**Description**	**Target Condition**	**Strategic Significance**
Created	Area-Based	**u1b5** Buildings **u1b6** Developed land, sealed surface	0.45628ha	The construction of up to 17 residential dwellings and associated hardstanding.	Habitat condition pre-determined as **'N/A'** as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low Strategic Significance** Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic

						significance (not part of a habitat corridor or steppingstone).
		u 828 Vegetated Garden	0.22283ha	Newly created garden area for each of the 17 residential dwellings.	Habitat condition pre-determined as **'N/A'** as detailed within the Statutory Biodiversity Condition Assessment Supplement.	**Low Strategic Significance** Area/compensation not in local strategy/no local strategy and no evidence to suggest the habitat is of medium strategic significance (not part of a habitat corridor or steppingstone).
Retained	Area-Based	**g3a6** Other lowland meadow (northern field)	0.19199ha	Area of the northern meadow retained as part of the development along with a scratch of meadow where the dry-stone wall is present.	Anticipated to retain its **Poor** condition assessment	**Moderate Strategic Significance** Ecologically desired but not formally identified
	Linear Based	**h2a** Native hedgerow	0.145km	Native hedgerow is expected to be retained as part of the development.	Anticipated to retain its **Good** condition assessment	**Medium Strategic Significance** Habitat type formally identified in local strategy, Policy EN8 Biodiversity.

3.3 Change in Biodiversity Value of the Site

Full details are provided in the Defra Statutory Biodiversity Metric. The headline results are presented in Appendix 6.

Area Based Habitat Units

The baseline habitat value of the site is 9.81 units, comprising 9.06 units of other lowland meadow, 0.75 units of bramble scrub and 0.0 units of building.

The post development habitat value of the site is 2.08 units, comprising the:

- creation of buildings and hardstanding (no value), and vegetated garden (0.46 units)
- retention of other lowland meadow (1.69 units)

This results in a net change in biodiversity of -78.81% (i.e. a net loss).

Linear-Based Habitat Units

The baseline linear-based habitat value of the site is 0.96 units, comprising 0.96 units native hedgerow.

The post development habitat value of the site is 0.96 units, comprising the:

- retention of existing species native hedgerow (0.96 units)

This results in a net change in biodiversity of 0.00% (i.e. a no net gain).

4.0 Recommendations to Deliver BNG

4.1 Discussion

The current proposed plan results in a -78.81% net loss in habitat and 0.00% change in hedgerow units. This is less than the 10% target of biodiversity net gain and therefore does not meet the required trading rules currently.

In order to achieve the required minimum 10% net gain in biodiversity as a result of the proposed development, the provision of additional or alternative landscaping should be explored and the proposed plans amended accordingly to either achieve a 10% net gain on site or to reduce off-site compensation requirements that may be required to achieve a 10% net gain.

4.2 Landscaping

Due to the outline nature of the application detailed landscaping has not been provided and will be unlikely to be provided at this stage therefore it is not possible to propose alterations in the landscaping in relation to habitats and required habitat units. Although it should be noted that due to the presence of lowland meadows on site bespoke compensation may be required. However the following recommendations could be included to achieve the 10% gain required in relation to hedgerow/linear units on site;

Table 3: Suggested linear landscaping areas

Habitat	Area / Length	Description	Target Condition	Strategic Significance
h2a Native hedgerow	Created: 0.048km	Extending the existing native hedgerow along the northwestern boundary of the site.	Anticipated to be **Moderate**	**Medium Strategic Significance** Habitat type formally identified in local strategy, Policy EN8 Biodiversity.

With the recommended enhancements, the hedgerow value of the site is 1.13 units, comprising the creation of 0.18 of native hedgerow and the retention of 0.96 units of native hedgerow This results in a net change in biodiversity of 18.47% (i.e. a net gain).

Should these alterations be incorporated this BNG Assessment will need to be updated to accurately reflect the change in biodiversity value of the site pre- and post-development.

4.3 Biodiversity Offsetting

If the landscaping plans are not altered or if the above alterations still do not deliver a 10% net gain, the deficit will need to be delivered in a suitable offsite location i.e. biodiversity offsetting.

According to the Defra Statutory Biodiversity Metric there is a unit deficit of 4.96 habitat units and 0.10 hedgerow units. This will need to be provided to offset the loss in biodiversity and achieve a 10% biodiversity net gain.

The mechanism for securing this off-setting will need to be proposed to, and confirmed by the LPA e.g., purchasing conservation credits though a registered provider, habitat creation directly through the client owned or LPA offered land or a financial contribution towards another provider such as a local nature reserve or park. As well as the creation of new habitats, this should also secure the management of the proposed habitats to help achieve the desired condition for at least 30 years. This would be linked to the application through a planning obligation Section 106 (S106) agreement. The proposed habitat compensation should be of an appropriate distinctiveness to meet the trading rules of BNG. An ecology survey of the baseline habitat of any off-site land will be required to inform the baseline conditions of any land subject to off-site compensation measures.

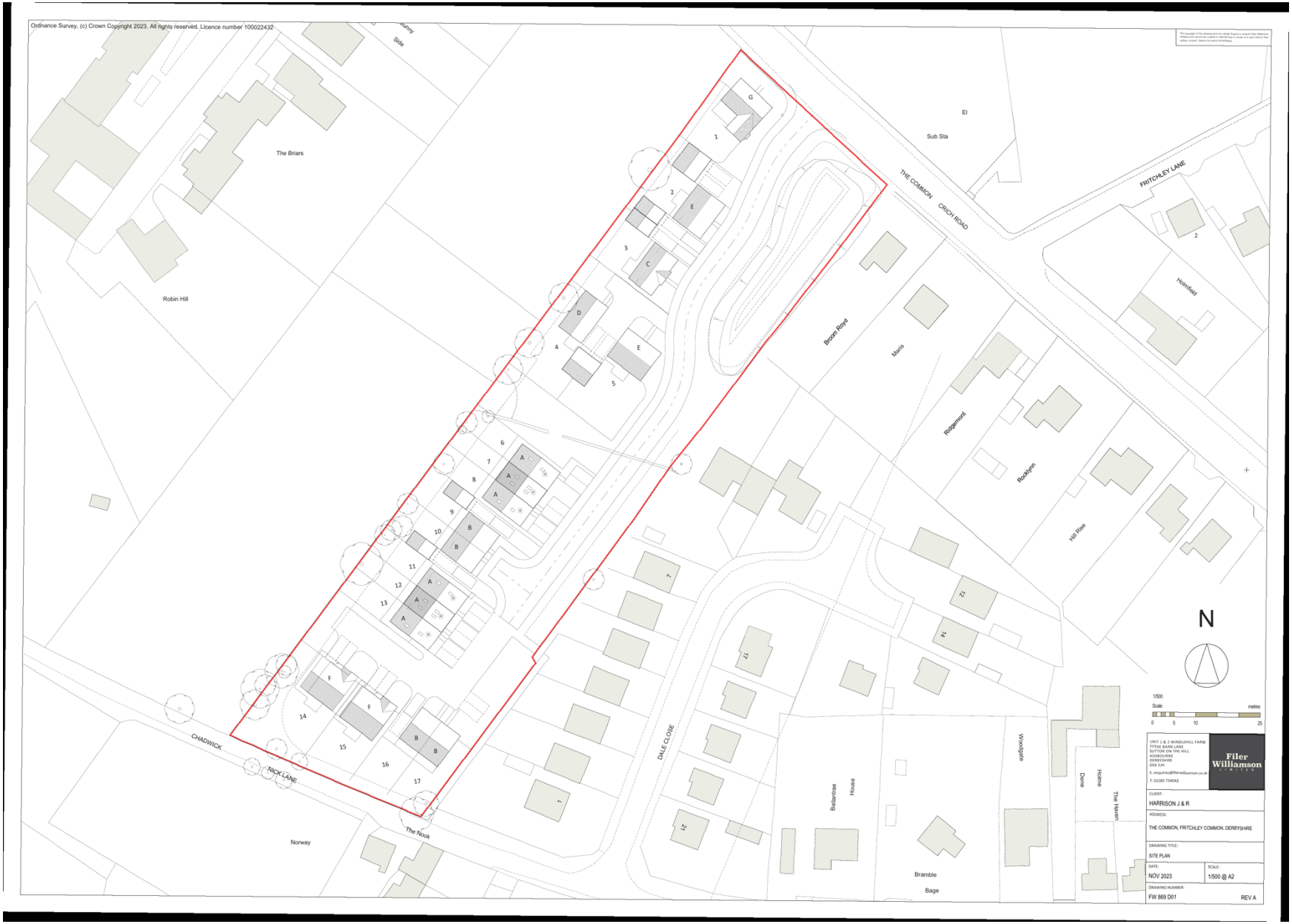
4.4 Post Development

A Biodiversity Net Gain (BNG) Management Plan must be produced for the site. This should include recommendations for the implementation, management and monitoring of the site for at least 30 years.

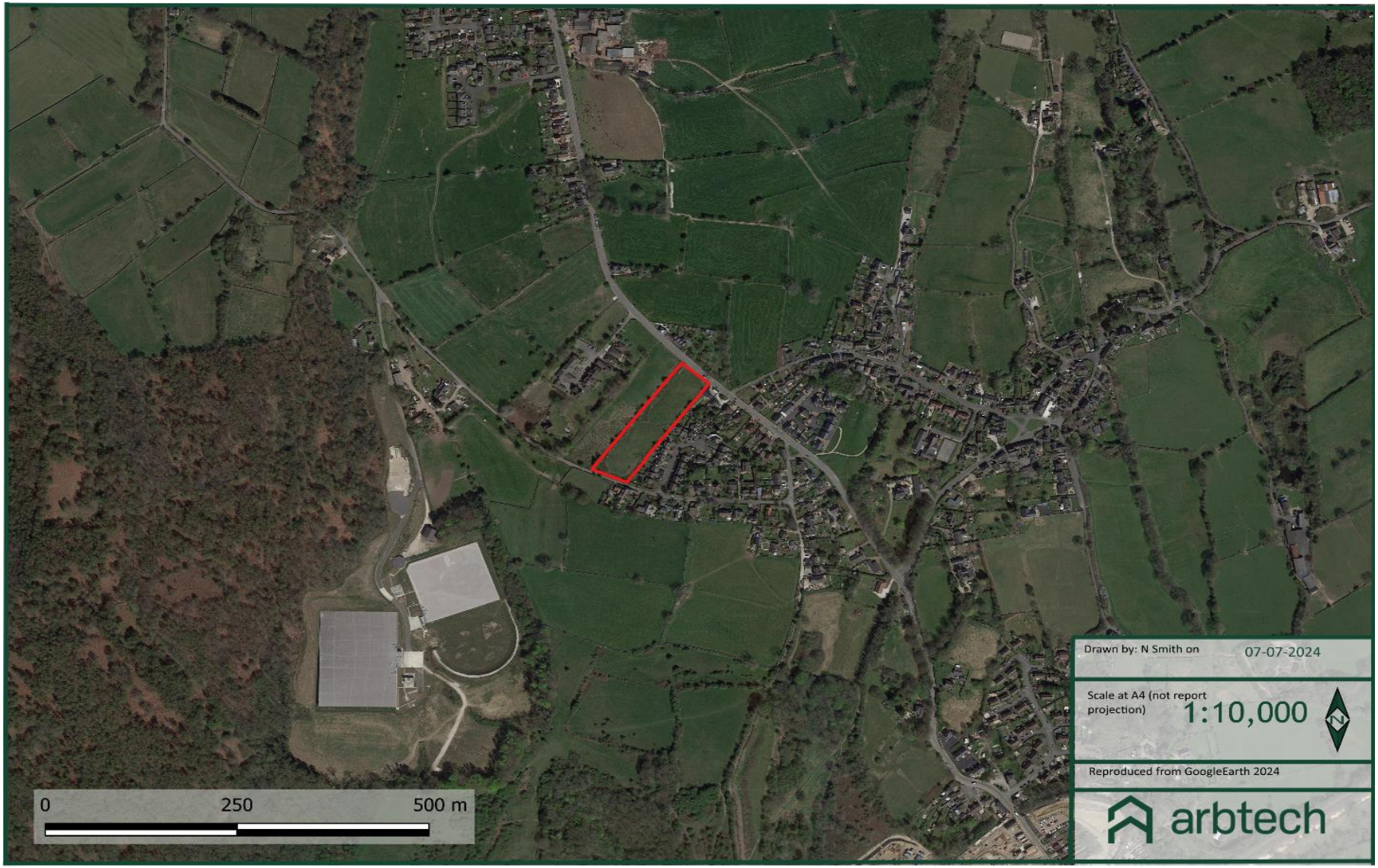
5.0 Bibliography

- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- Amber Valley Borough Local Plan 2022-2040: https://info.ambervalley.gov.uk/docarc/docviewer.aspx?docguid=4f90603569e841be827ba722c54b7cd2
- CIEEM-CIRIA-IEMA (2019) Biodiversity Net Gain – Good Practice Principles for Development.
- Joint Nature Conservation Committee (2010). Handbook for Phase 1 habitat survey a technique for environmental audit. http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf
- Natural England (2023). The Statutory Biodiversity Metric (JP039).
- Natural England (2023). The Statutory Biodiversity Metric User Guide (JP039).
- Natural England (2023). The Statutory Biodiversity Metric Technical Annex 1 - Condition Assessment Sheets and Methodology (JP039).
- Natural England (2023). The Statutory Biodiversity Metric Technical Annex 2 – Technical Information (JP039).
- The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023)

Appendix 1: Proposed Development Plan



Appendix 2: Site Location Plan



Appendix 3: Baseline Habitat Plan



Appendix 4: Baseline Condition assessments

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**			
Habitat Description			
ukhab – UK Habitat Classification			
On-site or off-site, site name and location	On site assessment.	**Survey date and Surveyor name**	Nick Smith 25/06/2024
		Survey reference (if relating to a wider survey)	
Limitations (if applicable)		**Habitat parcel reference**	
		northern field / southern field	

Condition Assessment Criteria		Grid reference										
		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.**	no	yes									
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.	no	no									
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[2].	no	yes									

D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	no	yes									
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.	yes	yes									
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.**	no	no									
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		no	no									
Number of criteria passed		1	4									
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)											
Passes 3 - 5 criteria, including essential criterion A.		Moderate (2)		yes									
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.		Poor (1)	yes										

Condition sheet: HEDGEROW Habitat Types
Habitat Type
Native hedgerow **Native hedgerow - associated with bank or ditch** **Native hedgerow with trees** **Native hedgerow with trees - associated with bank or ditch** **Species-rich native hedgerow** **Species-rich native hedgerow - associated with bank or ditch** **Species-rich native hedgerow with trees** **Species-rich native hedgerow with trees - associated with bank or ditch**

Habitat Description			
ukhab – UK Habitat Classification			
On-site or off-site, site name and location		**Survey date and Surveyor name**	
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	

Condition Assessment Details
A series of ten attributes, representing key physical characteristics are used for this assessment. Each attribute is assigned to one of five functional groups (A – E) and the condition of a hedgerow is assessed according to the number of attributes from these functional groups which pass or fail the 'favourable condition' criteria. This assessment is based on the Hedgerow Survey Handbook1 and Favourable Conservation Status document2. For further clarification please refer to the Hedgerow Survey Handbook. Best practice would be to record the species, age, spacing and other key information about all trees present along a hedgerow within the 'Habitat Description' box, as well as other key features of the hedgerow.

Hedgerow favourable condition attributes				
Attributes and functional groupings (A, B, C, D and E)	**Criteria - the minimum requirements for 'favourable condition'**	**Criteria description**	**Criterion passed (Yes or No)**	**Notes (such as justification)**
Core groups - applicable to all hedgerow types				

A1.	Height	>1.5 m average along length	The average height of woody growth estimated from base of stem to the top of the shoots, excluding any bank beneath the hedgerow, any gaps or isolated trees. Newly laid or coppiced hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice). A newly planted hedgerow does not pass this criterion (unless it is >1.5 m height).		
A2.	Width	>1.5 m average along length	The average width of woody growth estimated at the widest point of the canopy, excluding gaps and isolated trees. Outgrowths (such as blackthorn *Prunus spinosa* suckers) are only included in the width estimate when they are >0.5 m in height. Laid, coppiced, cut and newly planted hedgerows are indicative of good management and pass this criterion for up to a maximum of four years (if undertaken according to good practice).		
B1.	Gap - hedge base	Gap between ground and base of canopy <0.5 m for >90% of length	This is the vertical 'gappiness' of the woody component of the hedgerow, and its distance from the ground to the lowest leafy growth. Certain exceptions to this criterion are acceptable (see page 65 of the Hedgerow Survey Handbook).		

B2.	Gap - hedge canopy continuity	Gaps make up <10% of total length; and No canopy gaps >5 m	This is the horizontal 'gappiness' of the woody component of the hedgerow. Gaps are complete breaks in the woody canopy (no matter how small). Access points and gates contribute to the overall 'gappiness' but are not subject to the >5 m criterion (as this is the typical size of a gate).		
C1.	Undisturbed ground and perennial vegetation	>1 m width of undisturbed ground with perennial herbaceous vegetation for >90% of length: · Measured from outer edge of hedgerow; and · Is present on one side of the hedgerow (at least).	This is the level of disturbance (excluding wildlife disturbance) at the base of the hedgerow. Undisturbed ground is present for at least 90% of the hedgerow length, greater than 1 m in width and must be present along at least one side of the hedgerow. This criterion recognises the value of the hedgerow base as a boundary habitat with the capacity to support a wide range of species. Cultivation, heavily trodden footpaths, poached ground etc. can limit available habitat niches.		
C2.	Nutrient-enriched perennial vegetation	Plant species indicative of nutrient enrichment of soils dominate <20% cover of the area of undisturbed ground.	The indicator species used are nettles *Urtica* spp., cleavers *Galium aparine* and docks *Rumex* spp. Their presence, either singly or together, does not exceed the 20% cover threshold.		

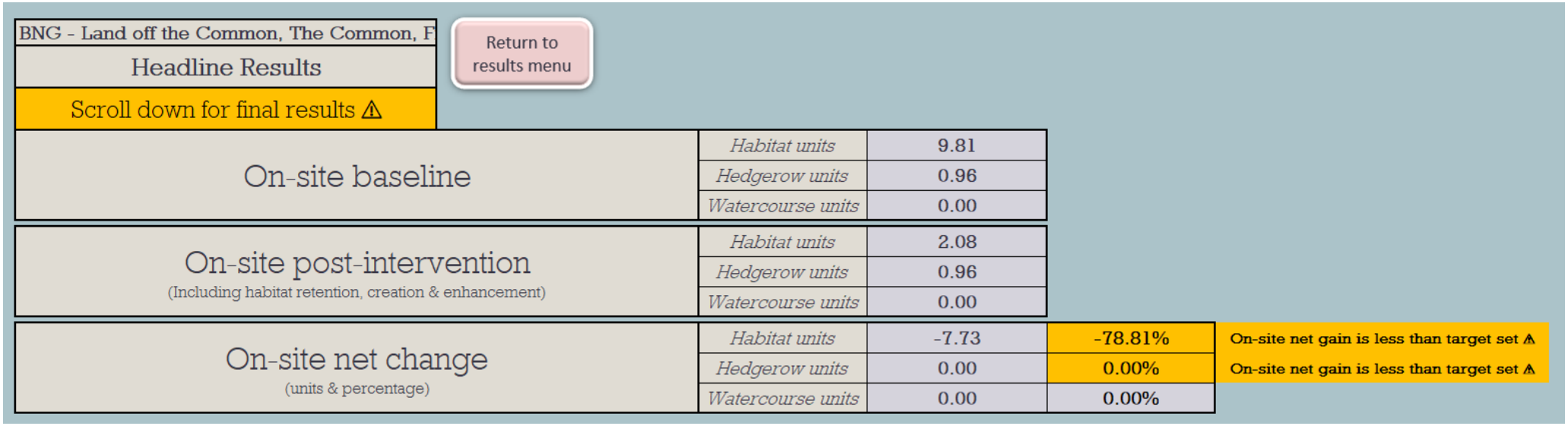
D1.	Invasive and neophyte species	>90% of the hedgerow and undisturbed ground is free of invasive non-native plant species (including those listed on Schedule 9 of WCA3) and recently introduced species.	Recently introduced species refer to plants that have naturalised in the UK since AD 1500 (neophytes). Archaeophytes count as natives. For information on archaeophytes and neophytes see the JNCC website4, as well as the BSBI website5 where the 'Online Atlas of the British and Irish Flora'6 contains an up-to-date list of the status of species. For information on invasive non-native species see the GB Non-Native Secretariat website7.		
D2.	Current damage	>90% of the hedgerow or undisturbed ground is free of damage caused by human activities.	This criterion addresses damaging activities that may have led to or lead to deterioration in other attributes. This could include evidence of pollution, piles of manure or rubble, or inappropriate management practices (for example, excessive hedgerow cutting).		
Additional group - applicable to hedgerows with trees only					
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient8), and there is on average at least one mature, ancient or veteran tree present per 20 - 50m of hedgerow.	This criterion addresses if there are a range of age-classes or morphologies which allow for replacement of trees and provide opportunities for different species.		
E2.	Tree health	At least 95% of hedgerow trees are in a healthy condition (excluding veteran features valuable for wildlife). There is little or no evidence of an adverse impact on tree health by damage from livestock or wild animals, pests or diseases, or human activity.	This criterion identifies if the trees are subject to damage which compromises the survival and health of the individual specimens.		
The hedgerow condition assessment generates a weighting (score) ranging from 1 - 3, which is used within the Statutory Biodiversity Metric. The scores for each are set out in the tables below.					

Condition categories for hedgerows without trees		
Category	**Category Requirements**	**Metric Score**
Good	No more than 2 failures in total; **AND** No more than 1 failure in any functional group.	3
Moderate	No more than 4 failures in total; **AND** Does not fail both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and C2 = Moderate condition).	2
Poor	Fails a total of more than 4 attributes; **OR** Fails both attributes in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1
	Score achieved:	

Appendix 5: Post Development Habitat Plan



Appendix 6: Headline BNG Results



BNG - Land off the Common, The Common, F

Return to results menu

Headline Results

Scroll down for final results ⚠

On-site baseline	*Habitat units*	9.81		
	Hedgerow units	0.96		
	Watercourse units	0.00		
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	2.08		
	Hedgerow units	0.96		
	Watercourse units	0.00		
On-site net change (units & percentage)	*Habitat units*	-7.73	-78.81%	On-site net gain is less than target set ⚠
	Hedgerow units	0.00	0.00%	On-site net gain is less than target set ⚠
	Watercourse units	0.00	0.00%	