



Biodiversity Net Gain Assessment

Sutton Bridge Memorial Park, Bridge Road, Sutton Bridge, Spalding, Lincolnshire, PE12 9SD

Sutton Bridge Parish Council

Status	Issue	Name	Date
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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 Sutton Bridge Parish Council to undertake a Biodiversity Net Gain (BNG) Assessment at Sutton Bridge Memorial Park, Bridge Road, Sutton Bridge, Spalding, Lincolnshire, PE12 9SD (hereafter referred to as “the site”). The assessment was required to inform a planning application for the construction of a new pavilion and play zone (hereafter referred to as “the proposed development”).

BNG change summary:

	Habitat (area) units	Hedgerow (linear) units
Change in units	13.83%	11.34%
Units required for a 10% net gain	N/A	N/A

The proposed plan with the addition of an area of other neutral grassland and a section of hedgerow results in a 13.83% net gain in habitat units and a 11.34% net gain in hedgerow units. This is more than the 10% target of biodiversity net gain. 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 to ensure that biodiversity net gain is delivered.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Sutton Bridge Parish Council to undertake a Biodiversity Net Gain (BNG) Assessment at Sutton Bridge Memorial Park, Bridge Road, Sutton Bridge, Spalding, Lincolnshire, PE12 9SD (hereafter referred to as “the site”). The assessment was required to inform a planning application for the construction of a new pavilion and play zone (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.
- Preliminary Ecological Appraisal and Roost Assessment of Sutton Bridge Memorial Park, Bridge Road, Sutton Bridge, Spalding, Lincolnshire, PE12 9SD.

1.2 Site Location, Geology and Landscape Context

The survey site is centred on National Grid Reference TF 47707 21169 and has an area of approximately 2.4ha. The site comprises an area of parkland, associated with Sutton Bridge Memorial Park, and is formed by a large area of grassland, bound by a line of trees. On the northern boundary of the site is a pavilion building, utilised as changing rooms for recreational activities at the site. The red-line boundary forms the main section of the memorial park, which extends further south and west of the site. The site is bound by residential development to the north, east and west, with an industrial unit to the south. The wider landscape comprises further areas of residential development and agricultural land. The River Nene lies 400m east of the site, with the Wash and associated coastline located 7.8km north-east of the site. The site has loamy and clayey soils. 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 (Commencement No. 6) Regulations 2023 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 requirement for biodiversity net gain is enshrined within the National Planning Policy Framework (NPPF, 2023).

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 Preliminary Ecological Appraisal and Roost Assessment of Sutton Bridge Memorial Park, Bridge Road, Sutton Bridge, Spalding, Lincolnshire, PE12 9SD (Arbtech, 2025). A baseline habitat plan is provided in Appendix 3.

Habitat Classification

The Preliminary Ecological Appraisal and Roost Assessment of Sutton Bridge Memorial Park, Bridge Road, Sutton Bridge, Spalding, Lincolnshire, PE12 9SD 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 the Statutory Biodiversity Metric User Guide (Natural England, 2024).

Habitat Condition

Habitat condition was assessed using the relevant condition assessment sheets found in the Statutory Biodiversity Metric User Guide (Natural England, 2024).

Strategic Significance

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

- Ecological value
- Function within the landscape

2.2 *Post Development Biodiversity Value*

The post development BNG Calculation was informed by 'Proposed Site Layout - Drawing no. EX-100 - Revision P2' 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 'Proposed Site Layout - Drawing no. EX-100 - Revision P2'.

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 the Statutory Biodiversity Metric User Guide (Natural England, 2024).

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, 2024). 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

2.3 Limitations

No limitations were identified.

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. Appendix 5a provides a full condition assessment for each habitat (where relevant).

Table 1: Baseline Biodiversity Value

Habitat	Area / Length	Description	Condition Assessment	Strategic Significance
Modified grassland	2.314 ha	The site is dominated by an area of modified grassland, which is regularly maintained by mowing. Species composition is low and includes: (Dominant): perennial ryegrass. (Abundant): white clover, dandelion. (Occasional): creeping buttercup, broad-leaved dock, common nettle. Approximately 3 vascular plant species per square metre on average. The sward height is consistently short across the parcel ranging from 4cm-8cm, less than 20% is more than 7cm. No scrub or bracken is present in the parcel. Physical damage across the grassland parcel is less than 5% of the total grassland area. There are several mole hills and desire lines present throughout the site, but the total cover of bare ground does not exceed 10%. No invasive schedule 9 plant species were noted.	Poor The condition assessment was assessed as poor due to failing the essential criteria.	Low strategic significance Area/compensation is not in the local strategy, and there is no local strategy or evidence to suggest that the habitat could be of medium strategic significance (not part of a habitat corridor or steppingstone).
Developed land sealed surface	0.0108 ha	There is one building present at the site. The building is a brick and concrete built structure, with a corrugated metal roof structure. The roof structure has recently been replaced, formerly comprising asbestos sheeting. The buildings suitability for roosting bats is discussed further within this report.	Condition Assessment N/A Developed land, sealed surface is excluded from habitat condition assessments.	Low strategic significance Area/compensation is not in the local strategy, and there is no local strategy or evidence to suggest that the habitat could be of medium strategic significance (not part of a habitat corridor or steppingstone).
Line of trees	0.297 km	Encapsulating the site are lines of trees, comprising a mix of mature and semi-mature species. The northern boundary of the site largely comprises semi-mature ash (D), cherry (O), with specimens approximately 20m tall, with DBHs ranging between 30-35cm. The western boundary of trees comprise beech, cherry and ash, which co-dominate and are of a similar structure to the	Poor The condition assessment was assessed as poor due to the lack of age classes, no undisturbed vegetation and poor health.	Low strategic significance Area/compensation is not in the local strategy, and there is no local strategy or evidence to suggest that the habitat could be of medium strategic significance (not

		northern boundary. The southern boundary comprises more mature specimens, entirely dominated by poplar specimens, which are of a similar structure to the northern and western boundaries. Tree canopy is generally continuous, throughout the lines of trees, with no individual gap being >5m wide. There is no undisturbed naturally vegetated strip present on both sides of any of the lines of trees, with the site dominated by regularly mown, regularly disturbed ground. Finally, >95% of the trees within the lines show signs of disease.		part of a habitat corridor or steppingstone).
Line of trees	0.17 km	Encapsulating the site are lines of trees, comprising a mix of mature and semi-mature species. The northern boundary of the site largely comprises semi-mature ash (D), cherry (O), with specimens approximately 20m tall, with DBHs ranging between 30-35cm. The western boundary of trees comprise beech, cherry and ash, which co-dominate and are of a similar structure to the northern boundary. The southern boundary comprises more mature specimens, entirely dominated by poplar specimens, which are of a similar structure to the northern and western boundaries. Tree canopy is generally continuous, throughout the lines of trees, with no individual gap being >5m wide. There is no undisturbed naturally vegetated strip present on both sides of any of the lines of trees, with the site dominated by regularly mown, regularly disturbed ground. Finally, >95% of the trees within the lines show signs of disease.	Poor The condition assessment was assessed as poor due to the lack of age classes, no undisturbed vegetation and poor health.	Moderate strategic significance Location is ecologically desirable but not in local strategy (connected to deciduous woodland), and there is no evidence to suggest that the habitat is of high strategic significance.

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 developed land sealed surface, a section of the line of trees and areas of modified grassland.

Table 2: Post-Development Biodiversity Value

Habitat	Area / Length	Description	Target Condition	Strategic Significance
Modified grassland	0.006 ha created	A new section of modified grassland will be created to replace the existing building once it is removed.	Poor To achieve poor condition assessment, the criteria must include no bracken/scrub and no invasive species.	Low strategic significance Area/compensation is not in the local strategy, and there is no local strategy or evidence to suggest that the habitat could be of medium strategic significance (not part of a habitat corridor or steppingstone).
Modified grassland	2.0151 ha retained	The majority of the site will be retained as poor-condition modified grassland.	Poor	Low strategic significance
Other neutral grassland	0.1832 ha created	To compensate for the loss of modified grassland, an area of other neutral grassland will be created and retained as a biodiversity area.	Moderate To achieve moderate condition assessment, the criteria must include a diversity of vascular species, scrub below 20%, bracken cover below 20%, and no invasive species.	Low strategic significance Area/compensation is not in the local strategy, and there is no local strategy or evidence to suggest that the habitat could be of medium strategic significance (not part of a habitat corridor or steppingstone).
Developed land sealed surface	0.1205 ha created	The proposed development will create a new building and a sports play area.	Condition Assessment N/A Developed land and sealed surfaces are excluded from habitat condition assessments.	Low strategic significance Area/compensation is not in the local strategy, and there is no local strategy or evidence to suggest that the habitat could be of medium strategic significance (not part of a habitat corridor or steppingstone).
Line of trees	0.218 km retained	The majority of the line of trees will be retained for the proposed development.	Poor	Low strategic significance
Line of trees	0.17 km retained	The line of trees will be retained as part of the development.	Poor	Moderate strategic significance
Native hedgerow	0.08 km created	A section (80m) of native hedgerows will be created to compensate for the loss of the line of trees. Native species include blackthorn, hawthorn, spindle, hazel, beech, ash, and oak.	Moderate To achieve the condition assessment of moderate, the	Low strategic significance Area/compensation is not in the local strategy, and there is no local

			criteria must include no gaps, be in a healthy condition and be over 1.5m width.	strategy or evidence to suggest that the habitat could be of medium strategic significance (not part of a habitat corridor or steppingstone).
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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.

Areas of Habitat

The site's baseline habitat value is 4.63 units, comprising 4.63 units of modified grassland and developed land sealed surface (no unit value).

The site's post-development habitat value is 5.27 units, comprising the creation of buildings and hardstanding (no value), modified grassland (0.01 units), and other neutral grassland (1.23 units), as well as the retention of modified grassland (4.03 units).

This results in a net change in biodiversity of 13.83% (i.e. a net gain).

Hedgerows

The baseline hedgerow value of the site is 0.97 units, comprising 0.97 units of lines of trees.

The post-development habitat value of the site is 1.08 units, comprising the retention of existing lines of trees (0.81 units) and the creation of 0.27 units of new native hedgerows.

This results in a net change in biodiversity of 11.34% (i.e. a net gain).

4.0 Recommendations to Deliver BNG

4.1 Discussion

The proposed plan, with the addition of an area of other neutral grassland and a section of hedgerow, results in a 13.83% net gain in habitat units and an 11.34% net gain in hedgerow units. This is more than the 10% target of biodiversity net gain.

A Biodiversity Net Gain (BNG) Management Plan must be produced for the site. This should include recommendations for implementing, managing and monitoring the site for at least 30 years to ensure that biodiversity net gain is delivered.

5.0 Bibliography

- Arbtech (2025). Preliminary Ecological Appraisal and Roost Assessment of Sutton Bridge Memorial Park, Bridge Road, Sutton Bridge, Spalding, Lincolnshire, PE12 9SD.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.
- 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 (2024). The Statutory Biodiversity Metric.
- Natural England (2024). The Statutory Biodiversity Metric User Guide.
- The UK Habitat Classification Habitat Definitions Version 2.0 (The UK Habitat Classification Working Group, July 2023)

Appendix 1: Proposed Development Plan



- NOTES**
1. DO NOT SCALE FROM THIS DRAWING. ALL DIMENSIONS ARE GIVEN, AND MUST BE CHECKED ON SITE.
 2. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE SURVEYOR CONSULTANT.
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10	PROPOSED SITE LAYOUT	11/11/2019	10/11/2019
11	ISSUED FOR APPROVAL	12/11/2019	12/11/2019
12	ISSUED FOR APPROVAL	12/11/2019	12/11/2019



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LINCOLNSHIRE

NEW PLAYZONE & SPORTS PAVILION

PROPOSED SITE LAYOUT

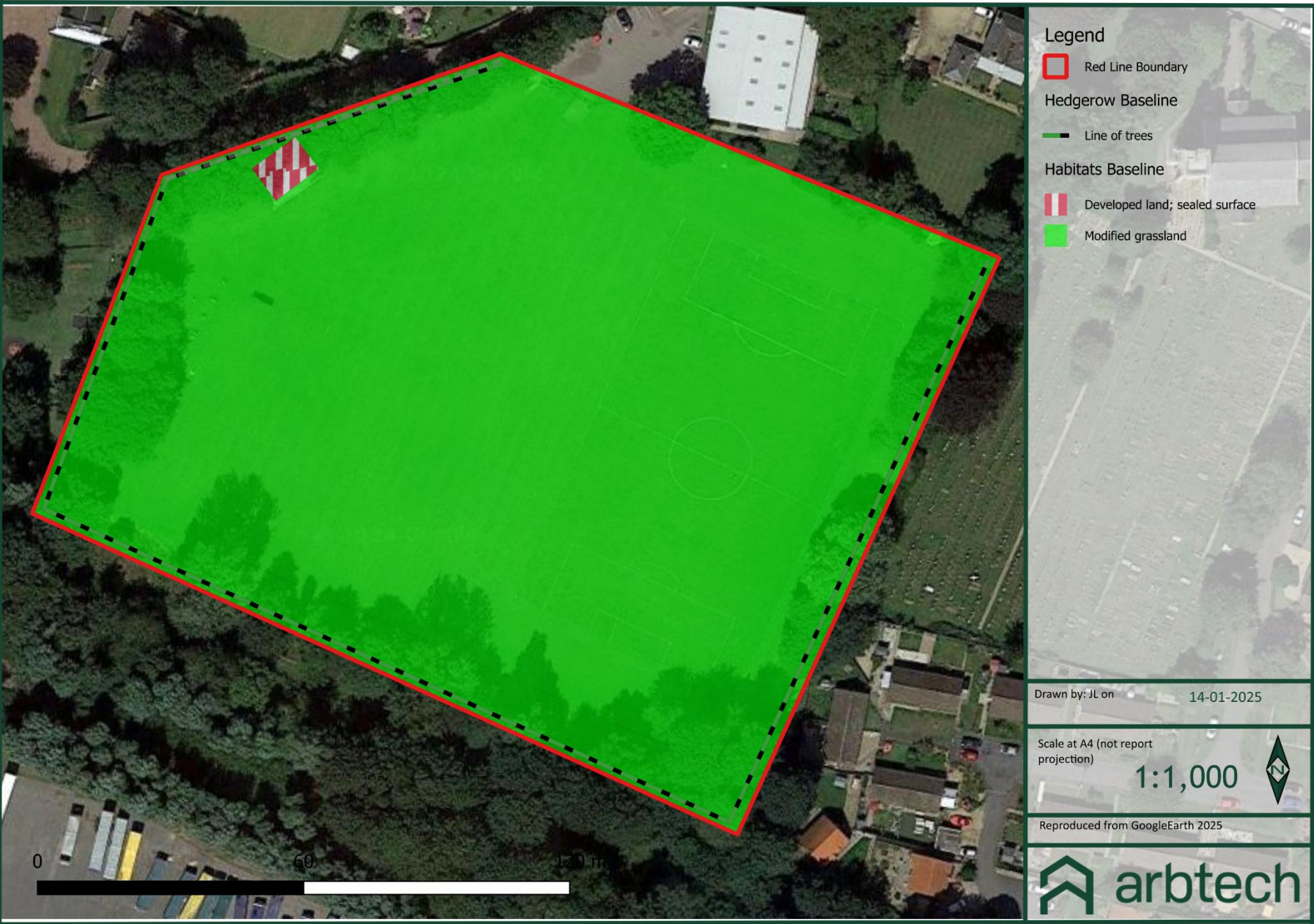
Drawn	Rev	Date	By	Check	Approved	Auth
LE-079	1	12/11/2019	LE-079	LE-079	LE-079	LE-079

ISSUED FOR APPROVAL

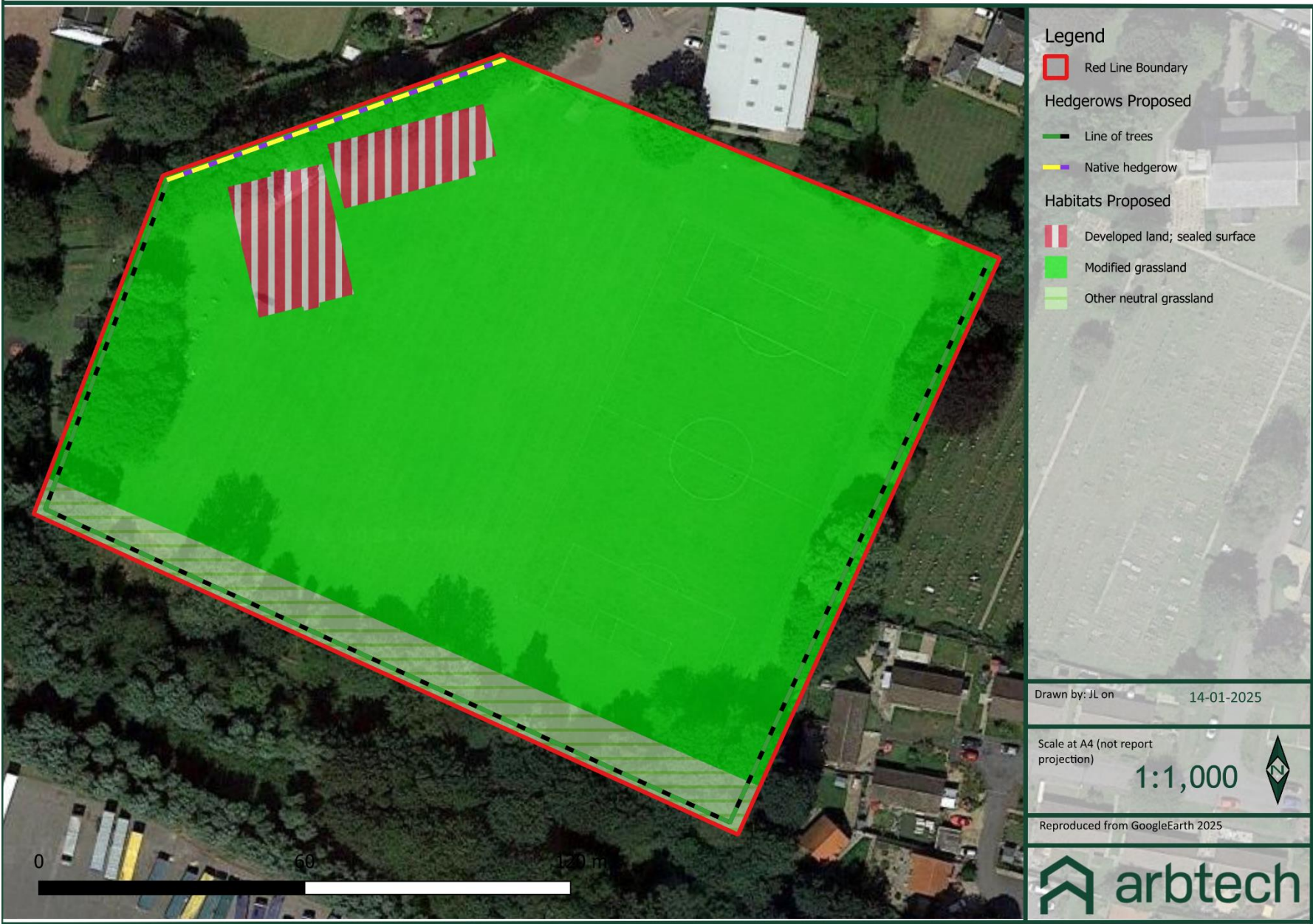
Appendix 2: Site Location Plan



Appendix 3: Baseline Habitat Plan



Appendix 4: Post Development Habitat Plan



Appendix 5a: Habitat Condition Assessment Sheets - Baseline

Modified grassland; assessed using the 'Grassland low distinctiveness' habitat condition assessment sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)
A	There are 6-8 vascular plant species per m² 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 m² (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.	N
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 <i>Rubus fruticosus</i> 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.	Y
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 <i>Pteridium aquilinum</i> 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)		N
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)	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	X (failed criteria A)

Line of trees; assessed using the 'Line of trees' habitat condition assessment sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)
A	At least 70% of trees are native species.	Y
B	Tree canopy is predominantly continuous with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide.	Y
C	One or more trees has veteran features and or natural ecological niches for vertebrates and invertebrates, such as presence of standing and attached deadwood, cavities, ivy or loose bark.	N
D	There is an undisturbed naturally-vegetated strip of at least 6 m on both sides to protect the line of trees from farming and other human activities (excluding grazing). Where veteran trees are present, root protection areas should follow standing advice ² .	N

E	At least 95% of the trees are in a healthy condition (deadwood or veteran features valuable for wildlife are excluded from this). 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.	N
Number of criteria passed		2
Condition Assessment Result (out of 5 criteria)	Condition Assessment Score	Score Achieved x/√
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	X

Appendix 5b: Habitat Condition Assessment Sheets - Proposed

Proposed other neutral grassland; assessed using the 'Grassland medium, high and very high distinctiveness' habitat condition assessment sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)
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.	N
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens ² .	Y
D	Cover of bracken <i>Pteridium aquilinum</i> is less than 20% and cover of scrub (including bramble <i>Rubus fruticosus</i> agg.) is less than 5%.	Y

E	Combined cover of species indicative of suboptimal condition³ 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 species⁴ (as listed on Schedule 9 of WCA⁵) are present, this criterion is automatically failed.	N
F	There are 10 or more vascular plant species per m² 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.	N
Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)		N
Number of criteria passed		3
Condition Assessment Result	Condition Assessment Score	Score Achieved ×/√
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)	X

Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	
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Proposed modified grassland; assessed using the 'Grassland low distinctiveness' habitat condition assessment sheet:

Condition Assessment Criteria		Criterion passed (Yes or No)
A	There are 6-8 vascular plant species per m² 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 m² (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.	N
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 <i>Rubus fruticosus</i> 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 .	N
F	Cover of bracken <i>Pteridium aquilinum</i> 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)		N
Number of criteria passed		3
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)	
Passes 3 or fewer criteria; OR Passes 4 - 6 criteria (excluding criterion A)	Poor (1)	X

Proposed native hedgerow; assessed using the 'Hedgerow' habitat condition assessment sheet:

Attributes and functional groupings (A, B, C, D and E)		Criteria - the minimum requirements for 'favourable condition'	Criteria description	Criterion passed (Yes or No)
Core groups - applicable to all hedgerow types				N
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 <i>Prunus spinosa</i> 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).	Y
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).	N
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).	Y

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.	N
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 <i>Urtica</i> spp., cleavers <i>Galium aparine</i> and docks <i>Rumex</i> spp. Their presence, either singly or together, does not exceed the 20% cover threshold.	Y
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 WCA ³) 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.	Y

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).	N
E1.	Tree class	There is more than one age-class (or morphology) of tree present (for example: young, mature, veteran and or ancient ⁸), 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.	
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 <u>Does not fail both attributes</u> 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 <u>Fails both attributes</u> in more than one functional group (for example, fails attributes A1, A2, B1 and B2 = Poor condition).	1		
Score achieved:		Moderate		

Appendix 6: Headline BNG Results

The Defra Statutory Biodiversity Metric is provided as a separate excel spreadsheet.

Sutton Bridge Memorial Park, Bridge Rd		Return to results menu	
Headline Results			
Scroll down for final results ▲			
On-site baseline	Habitat units	4.63	
	Hedgerow units	0.97	
	Watercourse units	0.00	
On-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	5.27	
	Hedgerow units	1.08	
	Watercourse units	0.00	
On-site net change (units & percentage)	Habitat units	0.64	13.83%
	Hedgerow units	0.11	11.34%
	Watercourse units	0.00	0.00%
Off-site baseline	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	Habitat units	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	Habitat units	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%
Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	0.64	
	Hedgerow units	0.11	
	Watercourse units	0.00	
Spatial risk multiplier (SRM) deductions	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)	Habitat units	0.64	
	Hedgerow units	0.11	
	Watercourse units	0.00	
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	Habitat units	13.83%	
	Hedgerow units	11.34%	
	Watercourse units	0.00%	
Trading rules satisfied?	Yes ✓		