

Habitat Management and Monitoring Plan

Site Address:

The Paddock, Shop Lane, Bursledon, Southampton, Hampshire, SO19 0QS

Client:

Shane Castle

Report Date:

28th August 2025

Project:

This report is prepared to inform a planning application with Eastleigh Borough Council. The proposal is described as:

“Use of land for one residential caravan plot.”

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Guidelines

This assessment has been designed to meet:

- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and 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.

This approach is enshrined in Government planning guidance, for example, paragraph 185 of the National Planning Policy Framework for England.

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)

In consequence of the scale and intensity of the proposed development, this plan-led report is considered adequate and proportionate. It communicates all relevant information necessary to determine a planning application or support the recommendations for further surveys.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Ltd were commissioned by Shane Castle to produce a Habitat Management and Monitoring Plan (HMMP) for a proposed development at The Paddock, Shop Lane, Bursledon, Southampton, Hampshire, SO19 0QS (hereafter referred to as the site).

The site has been subject to extensive previous ecological assessment of relevance to this report, comprising:

- Biodiversity Net Gain Assessment - The Paddock SO19 0QS (Arbtech Consulting Ltd, 11th August 2025)
- Biodiversity Metric Calculation Tool – The Paddock SO19 0QS (Arbtech Consulting Ltd, 10th August 2025)
- Preliminary Ecological Assessment – The Paddock SO19 0QS (Arbtech Consulting Ltd, 8th July 2025)
- Biodiversity Net Gain Assessment – The Paddock (David Archer Associates, July 2024)

1.2 Project Description

For the use of land for one residential caravan plot (hereafter referred to as “the proposed development”). A plan showing the proposed development is provided in **Appendix 1**.

1.3 Site Context

The site is located at National Grid Reference SU 47084 11083 and has an area of c. 0.24ha. The site comprises hard standing (an access track and unvegetated garden), a residential building and stable block, modified grassland and mixed scrub. The site is boarded by land within the wider ownership boundary along all aspects, comprising hardstanding, buildings and modified grassland. Beyond the wider side ownership boundary is Shop Lane to the northwest, grassland and pockets of trees to the north, east and south. The site is situated within an area of more rural character within an urban location to the eastern side of Southampton, the wider area comprises residential dwellings with associated garden space, industrial sites, and agricultural land, interspersed by hedgerows and lines of trees. A site location plan is provided in **Appendix 2**.

1.4 Scope of This Report

The aims of this HMMP are to provide definitive detail with regard to the ecological habitat creation and management prescriptions required to ensure the anticipated BNG is achieved in accordance with previous ecological assessments undertaken at the site.

2.0 Ecological Baseline Conditions Relevant to This Report

The baseline ecological conditions of relevance to this report were determined as a result of the PEA (Arbtech Consulting Ltd, July 2025), BNG Assessment (Arbtech Consulting Ltd, August 2025), and BNG Assessment (David Archer Associates, July 2024).

2.1 BNG and Proposed Habitat Creation

The development, as currently proposed, is anticipated to result in a +47.98% net gain for area-based habitat units. The post-development habitat coverage and their target conditions in accordance with the BNG Assessment are shown on the plan provided in **Appendix 3** and summarised below:

- **Urban: Artificial unvegetated, unsealed surface** - N/A – Other – 0.041ha retained
- **Urban: Developed land sealed surface** - N/A – Other – 0.0206ha created
- **Urban: Unvegetated garden** - N/A – Other – 0.093ha created
- **Urban: Vegetated garden** - N/A – Other – 0.0068ha created
- **Grassland: Other neutral grassland** – Moderate condition – 0.0621ha created
- **Individual trees** – Moderate condition – 0.1303ha created
- **Heathland and shrub: Mixed scrub** - Moderate condition – 0.0192ha enhanced

2.2 Scope for Mitigation, Compensation and Enhancement, and Management

Appropriate management of the proposed habitat creation are required to ensure the effective installation and long-term success of compensatory habitat creation and enhancement of ecological opportunities at the site. Specific management prescriptions for enhanced and newly created habitats is required to cover a 30-year management term to ensure habitats achieve their target habitat classification and condition to fulfil BNG objectives.

3.0 HMMP

3.1 Site Monitoring

Mitigation prescriptions to reduce adverse impacts to existing ecological features and biodiversity as identified through previous ecological assessment are detailed in **Table 1** below.

Table 1: Mitigation

Mitigation	Specification
Persons Responsible and Lines of Communication	A Development Biodiversity Champion will be selected for the site preparation, demolition, and construction phase of the development. The Development Biodiversity Champion will be someone with significant influence on-site, such as the contract or project manager. The Development Biodiversity Champion will be responsible for ensuring all actions outlined in this document are implemented. Any queries with regards to the mitigation and enhancement prescriptions will be addressed to the project ecologist and communication will be retained between the Development Biodiversity Champion and project ecologist throughout the project. The project ecologist's contact details are located on the title page of this report. Once the development is complete, a Post-Development Biodiversity Champion will be allocated who has influence on site during the operational phase, such as a long-term maintenance contractor or landowner. The Post-Development Biodiversity Champion will be responsible for ensuring all recommended management is undertaken and any associated remedial measures are completed where necessary.
Post-Development Site Visits	Post-development site visits by a Suitably Qualified Ecologist (SQE) will be undertaken covering a 30-year management term to confirm the successful installation and management of landscaping and species-specific enhancements. Visits will be completed on years 1, 2, 5, 10, 15, 20, 25, and 30 following development occupation. A report will be produced by the SQE detailing the results of each site visit including photographs and any remediation requirements as well as progressive metrics which will be submitted to the LPA. Where remediation is necessary, additional evidence may need to be provided to ensure remediation is applied effectively. Depending on the scale of the required remediation, additional evidence may comprise an additional site visit by an SQE or photographic evidence to be provided by the Post-Development Biodiversity Champion. This requirement will be defined based on the results of each site visit. Once the SQE confirms that the biodiversity enhancements have been installed correctly, no further site visits will be necessary following the year 5 visit. The Post-Development Biodiversity Champion will then be responsible for correctly managing ecological features at the site in accordance with this HMMP alongside identifying and implementing remediation measures as part of the ongoing management of the site.

3.2 Habitat Creation and Management

Best practice habitat creation and management over a 30-year term to ensure a BNG consistent with that reported within the BNG Assessment is provided in **Table 2** below. The final BNG Habitat Plan is provided in **Appendix 3**.

Table 2: Habitat Creation and Management Prescriptions

Ecological receptor	Specification
Habitats with N/A or pre-determined target conditions	It is noted that developed land; sealed surface, artificial unvegetated, unsealed surface, unvegetated and vegetated garden, do not require any specific management to achieve their BNG objective. Management prescriptions for these habitat types are not included in this HMMP.
Other neutral grassland	Overview: It is proposed to create 0.0621ha of moderate condition other neutral grassland. The planting specifications are shown on the landscape plans provided in Appendix 3. A fence will be constructed around the other neutral grassland to ensure it remains a separate part of the site and is not damaged. Objectives: - To achieve a moderate condition for planted grassland by passing condition criteria A, B and D (as a minimum) in accordance with the Grassland – Medium, High, and Very High distinctiveness Habitat Type Condition Sheet and BNG Assessment. - To create grassland that will provide pollination, foraging, and commuting opportunities for protected and/ or notable species groups including badgers, herptiles, hedgehogs, invertebrates, bats, and birds. - To undertake landscaping works in compliance with BS 4428:1989 – The Code of Practice for General Landscape Operation. Creation Method: Ground preparation A soft strip of the current vegetation present will be undertaken and removed from the area to provide a bare soil substrate for sewing the seed mix. The bare soil will be subject to light rolling or trampling to provide a firm base for seeding. Seeding Seeding is best undertaken in Spring during April/ May. Oversewing will be utilised to diversify the existing sward. Seed rates of 5-10kg/ha are recommended. Seeds can be spread more evenly in combination with an inert, bulking material such as sawdust or silver sand. Light trampling by foot within each germination opening should be completed to help bed-in the seeds. Recommended seed mix: It is recommended that the Emorsgate EM10F 'Tussock Wildflower Mix' (or similar specification) is utilised. This seed mix includes 21no. wildflower species suitable for neutral soil conditions. Notably, the species mix includes yellow rattle which is known to suppress dominant grass species which will allow existing grasses and herbs within the seed bank to colonise whilst preventing dominance and thus increase species and structural diversity. Recommended management prescriptions over a minimum 30-year term:

Table 2.1: Wildflower meadow creation management prescriptions.

Management	When	Rationale	BNG condition criteria compliance
Cut meadow twice annually	Late March / early April and– late August/ early Sept	This ensures the meadow does not grow excessively long and become rank but allows wildflowers to set seed and invertebrates to breed. This will also allow a diverse sward of varying lengths to naturally occur in accordance with growth characteristics of each species. Cutting twice annually will also prevent encroachment of scrub and bracken.	A, B, F, & G.
Cut grass as to provide a heterogeneous habitat structure aiming to maintain at least 20% of grass <7cm and 20% >7cm. As such, each cutting phase must cut 20% of the area to ground level, 60% of the area to 15cm, and the remainder to 30cm. These areas must be rotated each year to maintain a diverse sward.	Late March / early April and– late August/ early Sept	To retain a diverse sward whilst limiting impacts to protected species potentially present at ground level and ensuring the natural germination of seeds.	B
Turn and dry the cut grass over 3-5 days before removing arisings off Site	Post cut	This allows the seeds to drop encouraging species diversity and invertebrates to relocate unharmed.	A, B, & F.
Do not apply chemical fertilisers	At all times.	The use of chemical fertilisers will encourage vigorous grasses and weeds to grow or cause large areas of bare ground due to inhospitable growing conditions,	C
Ensure no bracken or bramble grows within the grassland	At all times	Remove any bracken and bramble by hand at the first sign of its appearance	D

Mixed scrub**Overview:**

It is proposed to enhance 0.0192ha of mixed scrub to moderate condition in accordance with the BNG. The planting specifications are shown on the landscape plans provided in **Appendix 3**.

Objectives:

- To maintain the existing poor condition of retained mixed scrub in accordance with the Scrub Habitat Type Condition Sheet and BNG Assessment.
- To achieve a poor condition for created mixed scrub by passing condition criteria A, C and D (as a minimum) in accordance with the Scrub Habitat Type Condition Sheet and BNG Assessment. Due to the location of the enhanced scrub, it will automatically pass criteria D as other neutral grassland will be created alongside it.
- To plant native shrubs that will provide pollinating, foraging, and refuge opportunities for protected and/ or notable species groups including amphibians, bats, birds, hedgehogs, invertebrates, and reptiles.
- Ensure that good horticultural practice is employed to encourage long-term health and vitality of all shrubs.
- Ensure well-balanced crowns and/ or natural shape by preventing over competition.

Creation Method:

- **Ground preparation and planting**

Each shrub should be planted within a hole three times as wide of the supplied pot and of a similar depth. Root balls should be soaked thoroughly in water before planting and root balls should be loosened to expose restricted roots before planting. The planted shrubs should then be backfilled ensuring there are no air pockets around roots or any roots protruding out of the ground.

- **Timing**

It is best to prepare the land during the summer ready for planting between November and March. Planting shrubs before the new year helps ensure better rooting and subsequent establishment including faster growth during the first growing season.

Recommended management prescriptions over a minimum 30-year term:

Table 2.2: New shrub planting management prescriptions.

Management	When	Rationale	BNG condition criteria compliance
Plant shrub species in dense clusters separated by open glades allowed to naturally colonise within the allocated scrub area. Open areas should comprise	When planting only. Open glades to be checked and cleared annually.	To create and maintain structural diversity within the scrub and to allow young specimens to colonise at vegetation edge.	B & E

	approximately 25% of the scrub coverage.			
	At the end of each growing season all plant failures are to be 100% replaced	When required; checked annually in Autumn.	To maintain amenity and wildlife value.	A
	If required, provision of stakes and guards. Guards to be left on for a minimum of 5 years	N/A	Protect from damage	A
	Stakes should be checked and any broken or damaged stakes during this time would be removed (as above) and replaced with ties re-fixed	When required; checked annually in Autumn.	Maintain protection	A
	Remove weeds	When required; checked twice annually in early spring and in Autumn.	Reduce competition for resources nutrients etc.by weeds	C
	Application of bark mulch at a depth of 50 mm	Immediately after planting and then when required; checked annually in Autumn.	Reduce competition for resources nutrients etc.by weeds	A & C
	Do not apply chemical fertilisers	At all times.	The use of chemical fertilisers will encourage vigorous grasses and weeds to grow	A & C
	Apply a light dressing of well-rotted manure	Annually in the winter	Note the overuse of manure fertilisers will encourage vigorous grasses and weeds to grow.	A
	Removal of spent flowers from perennial plants should be removed through 'deadheading'	Twice annually, late spring and in the Autumn.	Allows plants to place more energy into re-growth.	A
	Watering should be undertaken before and after planting out and as necessary for the continued thriving of all planting.	When required; provide more water during periods of draught and less water during times of prolonged rain.	Ensures plants do not dry out and subsequently fail.	A
	Check and replace any plant failures once a year	For the first 5 years	To ensure no gaps form.	A

Individual trees

Overview

It is proposed to create 0.1303ha of individual urban trees by planting 8 new heavy standard trees (with a girth of 12-14cm, and a height of 3.5-4m) as shown in the landscape plan provided in **Appendix 3**. Recommended heavy standard species include lime *Tilia x europaea*, silver birch *Betula pendula*, hornbeam *Carpinus betulus* and beech *Fagus sylvatica*. These species have been recommended as they are fast growing and will achieve a diameter at breast height of >30m in 30 years providing all steps within the management plan are followed correctly.

Objectives

- To create individual urban trees which achieve moderate condition in line with the BNG condition assessment for individual trees. It is considered that these trees will pass criteria A, B & D as a minimum.
- To plant trees that will provide pollinating, foraging, and refuge opportunities for protected and/ or notable species groups including invertebrates, bats, and birds.

Tree planting Creation Method

- Ground preparation and planting**

The locations for tree planting will be cleared and reduced to compacted permeable bare ground in preparation for planting. Planting substrate must comprise site won material with any deficiencies made up with imported topsoil compliant with BS 3883:2015. Each tree will be pit planted upright within the centre in accordance with BS 4428:1989, within a hole at least 500mm greater than the root system when fully spread and at a depth 250mm greater than the root system. Root balls will be soaked thoroughly in water and loosened to expose restricted roots before planting. The planted trees will then be backfilled ensuring there are no air pockets around roots or any roots protruding out of the ground.
- Timing**

The land will be prepared during the summer ready for planting between November and March. Planting trees before the new year helps ensure better rooting and subsequent establishment including faster growth during the first growing season.
- Species**

All tree species will be native and sourced from a nearby supplier to ensure local provenance.

Management prescriptions covering a 30-year term:

Table 2.3: New tree planting management prescriptions.

Management	When	Rationale	BNG condition criteria compliance
Prepare planting area in summer, in	Year 1 – June/ July/ August	To ensure the ground is dry and	n/a

	preparation from autumn/ winter planting.		workable.	
	Plant native trees only within prepped areas in Autumn, whereby the canopy over sails vegetation	Year 1 – September/ October/ November	To ensure trees take root and establish prior to the first growing phase the following spring.	A & F
	Standard trees will be staked and tied using a 75mm diameter stake with the bark removed. The stakes will be long enough to allow for 600mm of the stake to be driven into each pit. Stakes will be fitted prior to tree planting to prevent root damage.	Year 1 – Immediately prior-to planting.	Protect roots from damage.	B & D
	Ensure the steaks and ties are not restricting growth and are not damaged. Replace where necessary.	Year 2 onwards – Checked annually for the first 5 years.	Ensure growth isn't stunted.	B & D
	Remove steaks and ties.	Year 5 in Spring – April/ May	Allow trees to grow unperturbed once established.	B & D
	Removal of spent flowers to be removed through 'deadheading'	Years 1 – 5 - Twice annually, late spring and in the Autumn.	Allows trees to place more energy into re-growth.	B & D
	At the end of each growing season all plant failures are to be 100% replaced	Year 2 onwards - Checked Annually for the 30-year term after each growing season in Autumn.	To ensure the success of planted trees.	B & D
	Remove weeds	Year 2 onwards - Checked Annually for the 30-year term after each growing season in Autumn.	Reduce competition for resources nutrients etc.by weeds	B & D
	Application of bark mulch at a depth of 50 mm	Year 2 onwards - Checked Annually for the 30-year term after each growing season in Autumn.	Reduce competition for resources nutrients etc.by weeds	B & D
	Do not apply chemical fertilisers	At all times.	The use of chemical fertilisers will encourage vigorous grasses and weeds to grow	D

	Watering should be undertaken before and after planting out and as necessary for the continued thriving of all planting.	Annually for the 30-year term when required following prolonged periods of draught.	Ensures plants do not dry out and subsequently fail.	B
	Undertake any pruning requirements outside of the nesting bird season, which is between March and September inclusive.	At all times.	Ensure no active bird nests are impacted by maintenance works.	E

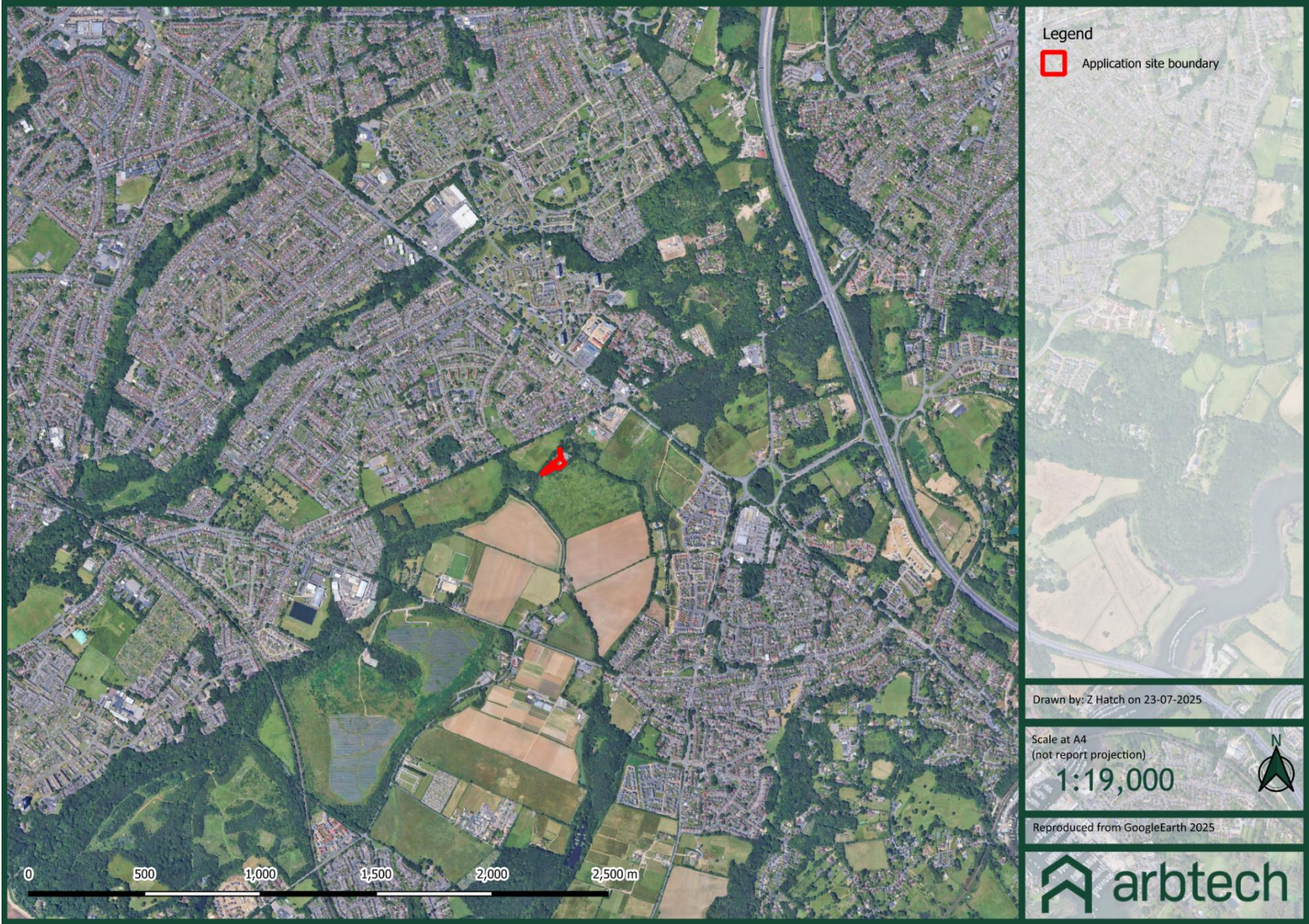
4.0 Bibliography

- CIEEM. (2013). Guidelines for Preliminary Ecological Appraisal Institute of Ecology and Environmental Management http://www.cieem.net/data/files/Resource_Library/Technical_Guidance_Series/GPEA/GPEA_April_2013.pdf
- HMSO: Wildlife and Countryside Act 1981 (as amended) <http://jncc.defra.gov.uk/page-1377>
- HMSO: Countryside & Rights of Way Act (2000) <http://jncc.defra.gov.uk/page-1378>
- HMSO: Natural Environmental and Rural Communities Act (2006) <http://www.legislation.gov.uk/ukpga/2006/16/contents>
- HMSO: The Conservation of Habitats and Species Regulations (2010) <http://www.legislation.gov.uk/uksi/2010/490/contents/made>
- HSE. (2002). Control of Substances Hazardous to Health (COSHH) regulations. <https://www.hse.gov.uk/coshh/basics/whatdo.htm>
- National Planning Policy Framework. (2021). <https://www.gov.uk/government/publications/national-planning-policy-framework--2>

Appendix 1: Proposed Development Plan

None available at the time of this report. Proposed development for BNG has been taken from the Preliminary Ecological Appraisal (Arbtech Consulting Ltd, July 2025) report as the development has already taken place.

Appendix 2: Site Location Plan



Appendix 3: Post Development Habitat Plan

