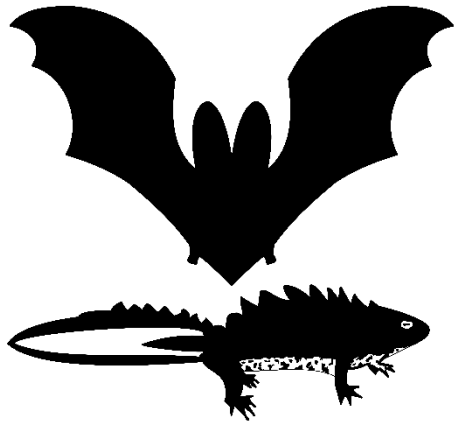




AEWC^{Ltd}

Animal Ecology & Wildlife Consultants

Biodiversity Net Gain Assessment

Plummerden Lodge

**North Lodge
Plummerden House
Park Lane
Haywards Heath
RH16 2QS**

Natalie Arscott

**21-086
October 2025**

**AEWC Ltd Birch Walk, Lower Street, Fittleworth, West Sussex, RH20 1JE
Tel: 08452 505585, info@aecwc.co.uk, www.aecwc.co.uk**

Registered in England and Wales No. 06527840

Contents

Summary	2
1. Introduction.....	3
2. Background	3
3. Method and Constraints	5
4. Habitat Data.....	6
5. Results	9
6. Conclusions & Recommendations.....	9
7. Habitat Management & Wildlife Enhancements.....	10
References	12
 FIGURE 1: SHOWING THE SITE LOCATION	 3
FIGURE 2: AERIAL VIEW OF THE SITE SHOWING THE BOUNDARY	4
FIGURE 3: PROPOSED WORKS	5
FIGURE 4: BASELINE ON-SITE HABITATS	8
FIGURE 5: POST-DEVELOPMENT ON-SITE HABITATS	8

Author	Natalie Arscott
Authorised by	Brigitte de Coriolis
Report and version number	21-086-BNG-V1
Survey Date	28/08/2025

Summary

- AEWCLtd were commissioned by HUB Architects and Designers Ltd on behalf of their client to undertake a Biodiversity Net Gain Assessment at Plummerden Lodge - North Lodge, Plummerden House, Park Lane, Haywards Heath, RH16 2QS at central grid reference TQ 36180 26885 to help inform the proposed development of the site.
- The estimated baseline and post-development biodiversity value of the habitats on the site is calculated using the Defra Statutory Biodiversity Metric Calculation Tool.
- The development includes the temporary clearance of areas of vegetated garden and modified grassland to install underground drainage pipes, a sewage treatment system, and a drainage field. There will be very small areas of permanent habitat loss, replaced with developed land; sealed surface, where inspection covers will be installed.
- Ecological enhancements built into the development design include the enhancement of the field in the east of the site from modified grassland to other neutral grassland. This will involve initial re-seeding with a wildflower meadow mix, and then appropriate long-term management.
- **In terms of the BNG metric, this is sufficient to offset the loss of the baseline habitats on the site and provide overall net gain. Trading rules have been satisfied.**
- **The headline results indicate that there is an estimated net gain of 10.10% for habitat units.**

This report has been prepared by AEWCLtd, with all reasonable skill, care and diligence within the terms of the Contract with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the 'Guidelines for Preliminary Ecological Appraisal' and 'Code of Professional Conduct' issued by the Chartered Institute of Ecology and Environmental Management (CIEEM). We confirm that the opinions expressed are our true and professional bona fide opinions.

1. Introduction

- 1.1 AEWCLtd were commissioned by HUB Architects and Designers Ltd on behalf of their client to undertake a Biodiversity Net Gain Assessment at Plummerden Lodge, Haywards Heath to help inform the proposed development of the site.
- 1.2 The purpose of this report is to give an estimate of the BNG units that may be achieved under the current development proposals, where a BNG of +10% is not achieved suggestions for additional ecological enhancement are provided.

2. Background

- 2.1 A habitat mapping and condition assessment survey was conducted by AEWCLtd in August 2025 for the application site. AEWCLtd have previously undertaken a Preliminary Ecological Appraisal and Bat Surveys for the wider Plummerden House ownership boundary between 2021 and 2022.
- 2.2 The proposed development site is located at North Lodge, Plummerden House, Park Lane, Haywards Heath, RH16 2QS at central grid reference TQ 36180 26885. The site is situated in a rural area on the outskirts of the village of Lindfield. The surrounding landscape comprises predominantly pasture, arable land, small blocks of woodland, and scattered residential properties. See Figure 1.

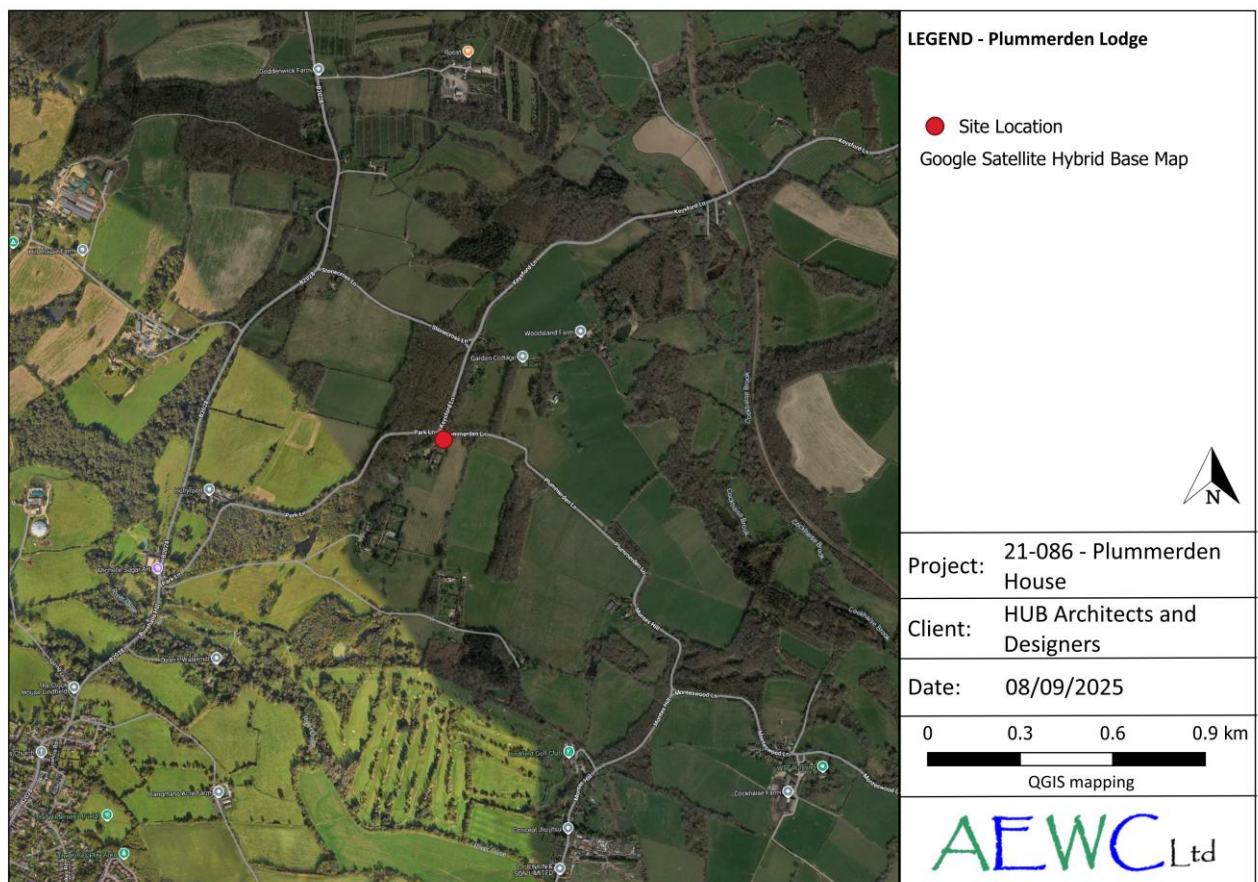


FIGURE 1: SHOWING THE SITE LOCATION

- 2.3 The proposed development site is approximately 0.18ha and includes a residential dwelling (North Lodge), surrounded by private garden with scattered trees, and a portion of the field adjacent to the east of the residential curtilage. See Figure 2.



FIGURE 2: AERIAL VIEW OF THE SITE SHOWING THE BOUNDARY

- 2.4 The proposed development consists of the installation of a sewage treatment system. This will involve the excavation of temporary trenches approximately 0.5m wide to install drainage pipes, and excavation for the sewage treatment plant and drainage fields which will both be underground. Vegetation will be reinstated following installation of these features, with the only permanent habitat loss associated with small inspection covers. Most of the habitat area on-site will be unimpacted by the proposals. See Figure 3.
- 2.5 It has been proposed that the field in the east of the site will be enhanced for BNG purposes.

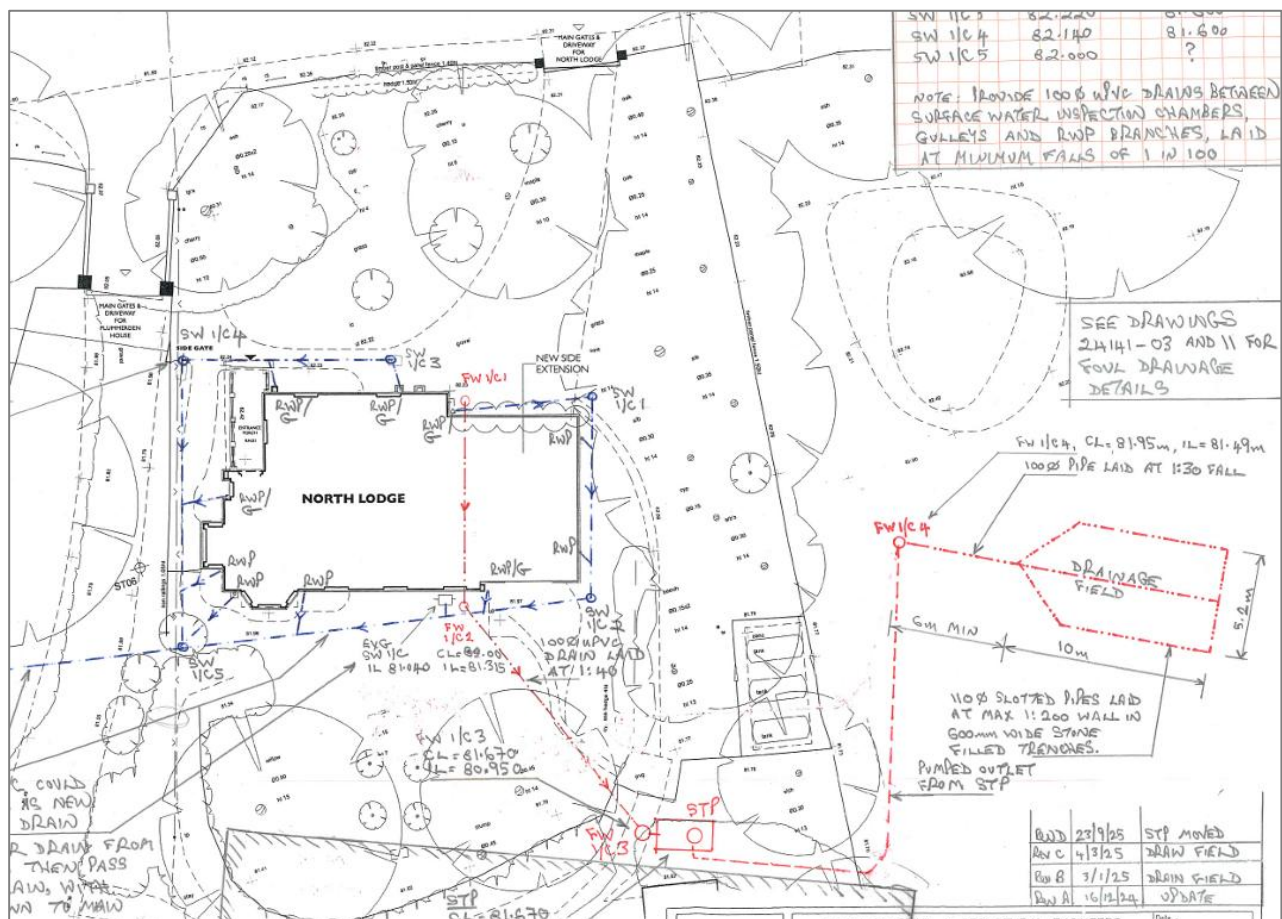


FIGURE 3: PROPOSED WORKS

3. Method and Constraints

UKHab Habitat Survey

- 3.1 A daytime ecological walkover assessment was carried out on the 28th August 2025 by qualified ecologist Natalie Arscott, to record, map, and condition assess the habitats present.
- 3.2 The survey involved a UK Habitat Classification System Survey which was carried out based on the standard methodology produced by UKHab Ltd (2023). This involves habitat mapping using a set of standard colour codes to indicate habitat types on a UK Habitat Classification Map.
- 3.3 Habitat condition was assessed using the Statutory Biodiversity Metric – Technical Annex 1 Condition Assessment Sheets where applicable.

Biodiversity Net Gain Calculation

- 3.4 The estimated baseline and post-development biodiversity value of the habitats on the site is calculated using the Defra Statutory Biodiversity Metric Calculation Tool.
- 3.5 The following assumptions have been made and therefore associated constraints should be considered when looking at BNG unit values obtained:

- The potential for protected and notable species is not covered within the scope of this report;
- Baseline habitats on-site are taken from those identified within the survey undertaken in August 2025;
- Post-development habitats have been inferred from those given with the Proposed Site Layout as shown in Figure 3 and as discussed with the client;
- All areas and lengths are approximate;
- Areas in hectares and lengths in km are both given to four decimal places, therefore rounding errors and occasional adjustments to values, to ensure consistency of total areas in baseline and post-development habitat size, are unavoidable;
- Habitat quality has been estimated in some instances (i.e. for post-development habitats); and
- Tree areas are calculated using the tree helper tool within the metric. Within private gardens only medium and large trees are included within mapping and calculations.

- 3.6 Given the above constraints the values for BNG obtained should be considered to be an **estimate** only.
- 3.7 Calculations may need to be adjusted in future should the BNG metrics or requirements be revised.

4. Habitat Data

- 4.1 The western section of the site comprises the residential curtilage of North Lodge, a private residential dwelling within the wider ownership boundary of Plummerden House. A gravel driveway (artificial unvegetated, unsealed surface) leads from the road to the residential dwelling. The dwelling itself (developed land; sealed surface) is situated within the centre of the residential curtilage. The dwelling is fully surrounded by a private amenity garden (vegetated garden), this mostly comprising lawn as well as some ornamental shrubs. The lawn is a low quality, species-poor modified grassland. There is a small area of hardstanding (developed land; sealed surface) near the southeast corner of the site where there are gas tanks. There are small and medium-sized trees (rural trees) scattered throughout the garden. In line with the BNG User Guide, only the medium-sized trees have been included in this assessment since they are within a private garden.
- 4.2 The eastern section of the site comprises a field of modified grassland, with no particular land-use. The southern portion of this field, outside of the red line boundary, has been converted to a large chicken run. The northwest portion of the field, inside of the red line, is unused other than for the storage of timber, rubble, and woodchips. The grassland species are characteristic of high nutrient, improved habitat, and there are typically 5 – 7 species per m². The field has been subject to considerable damage from machinery movements, resulting in a high proportion of bare ground. The sward height is fairly low and is consistent across the surveyed area.

4.3 At the time of the survey, construction works were underway at North Lodge, associated with a separate planning consent for a single storey side extension to replace an existing garage. These works have not and will not affect the overall habitat types and areas on the site, since the extension is in the location of previous hardstanding and a garage, and the garden areas had been cordoned off with Heras fencing to prevent damage.

4.4 Photos 1 – 4 below show the site in August 2025.



Photo 1: The residential dwelling (North Lodge).



Photo 2: Vegetated garden with scattered trees. Hardstanding area with gas tanks seen on the right.



Photo 3: Field of modified grassland in the east of the site.



Photo 4: Field of modified grassland in the east of the site – damage from machinery movements can be seen.

4.5 The baseline and post-development habitats used for this assessment are illustrated in Figures 4 and 5 respectively.

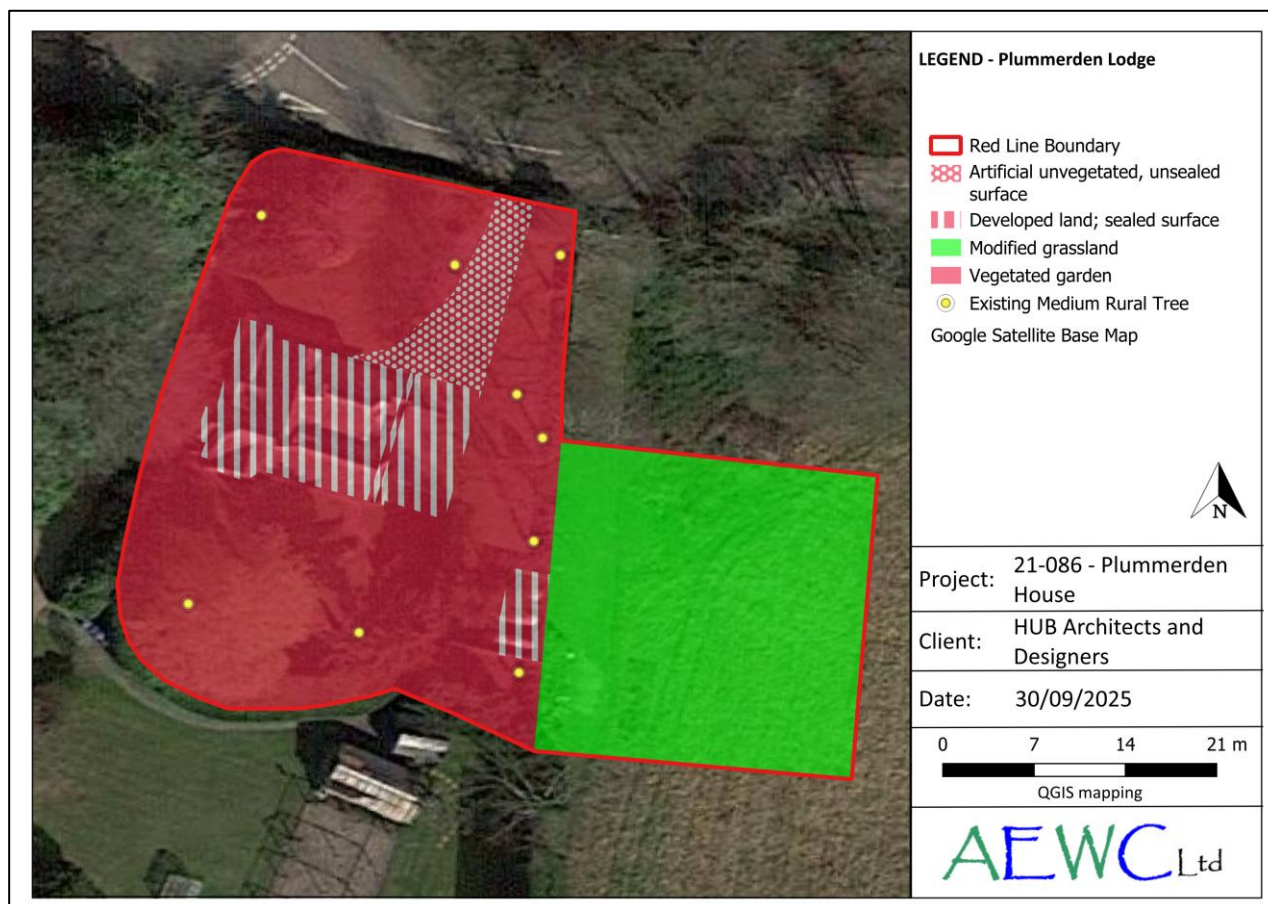


FIGURE 4: BASELINE ON-SITE HABITATS



FIGURE 5: POST-DEVELOPMENT ON-SITE HABITATS

5. Results

- 5.1 The headline results using the above habitats and calculations are given below (refer to the metric for full details).

Table 1: Headline estimated BNG values

FINAL RESULTS		
Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	0.16
	<i>Hedgerow units</i>	0.00
	<i>Watercourse units</i>	0.00
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	<i>Habitat units</i>	10.10%
	<i>Hedgerow units</i>	0.00%
	<i>Watercourse units</i>	0.00%
Trading rules satisfied?	Yes ✓	

6. Conclusions & Recommendations

- 6.1 The development includes the temporary clearance of areas of vegetated garden and modified grassland to install underground drainage pipes, a sewage treatment system, and a drainage field. There will be very small areas of permanent habitat loss, replaced with developed land; sealed surface, where inspection covers will be installed.
- 6.2 Ecological enhancements built into the development design include the enhancement of the field in the east of the site from modified grassland to other neutral grassland. This will involve initial re-seeding with a wildflower meadow mix, and then appropriate long-term management. In terms of the BNG metric, this is sufficient to offset the loss of the baseline habitats on the site and provide overall net gain. Trading rules have been satisfied.
- 6.3 **The headline results indicate that there is an estimated net gain of 10.10% in habitat units.**
- 6.4 In England BNG is mandatory under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). This came into force in February 2024 for major developments and April 2024 for minor developments. Under the legislation developers must deliver a biodiversity net gain of 10%.

7. Habitat Management & Wildlife Enhancements

Other Neutral Grassland

- 7.1 To create the other neutral grassland, prepare the field by close mowing and creating bare patches. Sow a local sourced native meadow mix suited to the soil type, and lightly roll or tread in. This is most effective carried out during spring (March – April) or autumn (August – October).
- 7.2 During the first year of establishment, cut regularly to a height of 40-60mm whenever growth reaches 150mm, and remove all cuttings.
- 7.3 After the first year, undertake an annual cut in late summer (around August), cutting to a height of 50-75mm and removing all cuttings.
- 7.4 Light grazing or mowing can be undertaken during the autumn and early spring if required to prevent rank growth.
- 7.5 Spot-remove thistles, docks, and nettles before they set seed. Avoid blanket herbicides.
- 7.6 Yellow rattle can be introduced to further help diversify the species present within the grassland. This is a semi-parasitic plant which feeds off the nutrients in the roots of nearby grasses, reducing the vigorous growth of the grass and allowing more delicate grassland herb species to develop.

Bats and Birds

- 7.7 To enhance the site for bats and birds known to be present within the local area it is recommended that one bat box and one bird box be installed within the site. Boxes could be installed on existing retained trees within the site.
- 7.8 Ideally bat boxes would be woodcrete or similar hard-wearing material (rather than the less durable wooden boxes) and should be installed at least 3m above the ground (where safe installation is possible), sheltered from strong winds and exposed to the sun for part of the day (usually south or south-west facing).
- 7.9 Example tree-mounted bat boxes are shown below: Schwegler 1FF bat box (below left, suitable for pipistrelle bats *Pipistrellus sp.*), and a Schwegler 2F bat box (below right, suitable for long-eared bats *Plecotus sp.*), or similar bat boxes.



- 7.10 Tree-hung bird boxes should comprise a mix of traditional ‘32mm round-holed’ (below left: which are suitable for tits, sparrows, redstarts and nuthatches) and open-fronted boxes (below right: these are suitable for pied wagtails, robins and wrens) and also ideally be woodcrete or similar hard wearing material (rather than the less durable traditional wooden boxes). Boxes should be installed with an aluminium nail or screw to prevent tree damage between 2m and 4m above ground for round-holed and low down, below 2m, well hidden in vegetation for open-fronted boxes and (unless shaded by buildings or trees) be facing north or east.



Reptiles and Amphibians

- 7.11 To enhance the site for reptiles and amphibians a ‘hibernaculum’ could be created in a sunny corner of the site. This will use materials such as logs, inert hardcore, bricks or building rubble to form the body of each hibernaculum, ensuring that materials likely to decompose are not placed beneath bricks or rubble to avoid collapse. Woodchips or soil may be incorporated to fill some of the larger cavities within the structure.

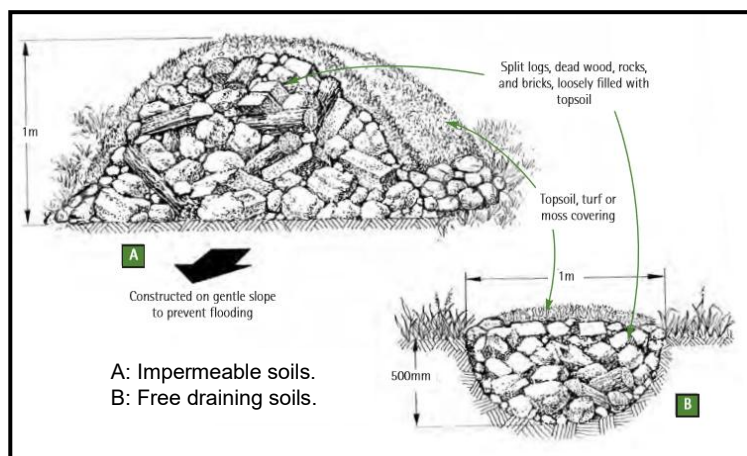


Diagram from Great Crested Newt Conservation Handbook



References

CIEEM (2013) *Competencies for Species Survey guidance documents*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2017) *Guidelines on Ecological Report Writing*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2021) *Good Practice Guidance for Habitats and Species*. Chartered Institute of Ecology and Environmental Management, Winchester

CIEEM (2022) *Code of Professional Conduct*. Chartered Institute of Ecology and Environmental Management, Winchester

Department for Communities and Local Government (2012). *National Planning Policy Framework*. Department of Communities and Local Government, London.

DEFRA (2023) *Defra Biodiversity Statutory Metric Auditing and accounting for biodiversity calculation Tool*

UKHab Ltd (2023). *The UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)