



Preliminary Ecological Appraisal

Swift Farm, Gravesend, Kent, DA13 OBS

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Industry Guidelines and Standards

This report has been written with due consideration to:

- 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 (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 (2017). Guidelines on Ecological Report Writing. 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.
- 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.

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 Tracey Marshall to undertake a Preliminary Ecological Appraisal (PEA) at Swift Farm, Gravesend, Kent, DA13 OBS (hereafter referred to as “the site”). The survey was required to inform a planning application for the construction of a detached stable block to the rear of the residential dwelling to provide 2 no. loose boxes, a tack/feed store and a hay/straw store and associated landscaping of yard area, for equestrian use (hereafter referred to as “the proposed development”).

The following is work you will need to commission to obtain planning permission and to comply with legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 6 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Designated sites	There are two statutory sites within 2km of the site, being Halling to Trottiscliffe Escarpment SSSI and North Downs Woodlands SAC, which are both located 1485m from the site. Non-statutory sites could be present in the vicinity. The presence of non-statutory designated sites within 2km of the site cannot be established without data from Kent and Medway Biological Records Centre (KMBRC).	No impacts to any statutory designated sites will occur as a result of the proposed development owing to their distance from the site and the small-scale nature of the proposed development. However, due to the possible presence of non-statutory designations in the vicinity, indirect effects such as pollution could occur during construction.	Best practice measures to minimise the possibility of pollution must be implemented during construction.
Habitats and flora	The site contains native hedgerow on the site's eastern boundary and field's boundary and deciduous woodland to the north of the field; which are listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). The deciduous woodland is located ~75m from the development area. A further five notable habitats are present within 2km. The site also contains habitats which are of good quality and could be of value to local wildlife populations (as detailed in subsequent	No impacts to any offsite notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats. The hedgerows are being retained, however, there could be risk of damage by grazing. The proposed development will result in impacts to existing hard standing ground only with regards to the construction of the stable block. Building materials will be carried to the site via existing pathways present on site with use of a small tractor to minimise impacts to the surrounding ground on site. The fields use will be changed to grazing for two horses. The field will not be fertilised or re-seeded, however, will	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees, woodland and hedgerows should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). Due to the survey being undertaken outside of the optimal period, the field being surrounded by an important habitat (e.g. woodland to the north and calcareous

	sections of this table). Such as the scrub and long grassland on site and the field. No invasive, protected or notable plant species were recorded during the survey.	be allowed to grow its natural habitat which include herbs. The applicant has provided a thought-out management plan for the grazing horses, which will include over-wintering of the horses in the stable and a strip grazing plan will be followed to minimise damage to diverse vegetation throughout the spring and summer. Horse grazing can be an important environmental resource. Additionally, the field's boundaries will be managed to provide a more secure boundary. This will include the removal, by hand, of any stray vegetation and re-wiring. However, due to the plant species currently present, it is noted that notable or protected plant species could be present which will only bloom at certain times of the year. Therefore, there is likely to be minimal impact on biodiversity on site due to careful management plans for grazing and construction work.	grassland), a detailed botanical survey is required to identify the full range of plants on site, and community composition, to include an assessment of impacts and their magnitude; as well to identify any protected, notable or invasive plant species not visible during the sub-optimal period. This survey must be undertaken between April and May when plant species will be most visible. A mitigation strategy, such as a woodland and grassland management plan, may be required to protect any protected or notable species on the site as well as the surrounding habitats and woodland soils, should such be present. The details of this will be confirmed following the botanical survey.
Foraging and commuting bats	The trees, scrub and hedgehogs could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. The proposed development may include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post-development, please refer to Table 6.
Protected Species	The site offers multiple habitats which are suitable for foraging, commuting and for seeking shelter for protected species such as amphibians, reptiles and hedgehogs. The hedgerows and scrub on the site's boundaries also provide suitable habitat for hazel dormice and nesting birds. The protected species will not be impacted with regards to the proposed development of the stable block, however, the boundary of the field will be managed and re-wired to secure the field. This will include the removal of the stray vegetation by hand to limit and minimise damage to the soil structure.	There will be no impacts on reptiles, amphibians, hedgehogs, birds and hazel dormice with regards to the construction of the stable block. However, the field's boundaries will be managed to provide a more secure boundary. This will include the removal, by hand, of any stray vegetation and re-wiring. The loss of such habitats is likely to be inconsequential to local populations of the protected species, due to the minimal impact it will have on such species. However, pre-cautionary working method should be conducted.	A precautionary working method will be implemented for common amphibians during construction, which will include ecological supervision. Please refer to Table 6 for an expanded description of what will be included.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Tracey Marshall to undertake a Preliminary Ecological Appraisal (PEA) at Swift Farm, Gravesend, Kent, DA13 OBS (hereafter referred to as “the site”). The survey was required to inform a planning application for the construction of a detached stable block to the rear of the residential dwelling to provide 2 no. loose boxes, a tack/feed store and a hay/straw store and associated landscaping of yard area, for equestrian use (hereafter referred to as “the proposed development”).

A plan showing the proposed development is provided in Appendix 1. The aim of the PEA was to conduct an assessment of the likely significance of ecological impacts on the proposed development. No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author’s knowledge, by any other consultancy.

1.2 Site Location and Landscape Context

The site is located at National Grid Reference TQ 65830 65196 and has an area of approximately 1.2ha comprising a main dwelling with outbuildings and an associated garden. A field which is owned by the applicants sibling will be included in the proposed development, and lies directly north of the site. It is directly surrounded by pastoral fields and woodlands to the north, residential dwellings to the east and west and a country road with agricultural fields to the south. The wider landscape comprises agricultural fields and woodland parcels in all directions, with the village of Priestwood ~830m south-west. A site location plan is provided in Appendix 2.

1.3 Scope of the Report

This report describes the baseline ecological conditions at the site, evaluates habitats within the survey area in the context of the wider environment and describes the suitability of those habitats for notable or protected species. It identifies possible ecological constraints as a result of the proposed development and summarises the requirements for further surveys and mitigation measures to inform subsequent mitigation proposals, achieve planning or other statutory consent and to comply with wildlife legislation. To achieve this, the following steps have been taken:

- A desk study has been carried out.
- A field survey has been undertaken to record baseline information on the site and surrounding area including habitat types and their suitability for notable or protected species.
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Recommendations for further surveys and mitigation have been made.
- Opportunities for the enhancement of the site for biodiversity have been set out.

2.0 Methodology

2.1 Desk Study

The desk study included a review of the magic.gov.uk database for statutory designated sites within a 2km radius of the site. Landscape value and the presence of notable habitats as well as granted European Protected Species Licence (EPSL) and notable species records held on magic.gov.uk database has also been considered where these are within influencing distance of the site.

2.2 Field Survey

The survey was undertaken by Megan Knapp BSc (Hons), Consultant Ecologist [Natural England Level 1 bat licence number 2022-10627-CL17-BAT, accredited agent to Natural England Level 2 bat licence number 2018-33540-CLS-CLS, Natural England Level 1 GCN licence number 2022-10628-CL08-GCN and Natural England Level 1 dormouse licence number 2023-11079-CL10A-DOR] on 17th July 2023.

An extended habitat survey was undertaken, following the methodology set out in *UK Habitat Classification User Manual* (UK Habitat Classification Working Group, 2018). All land parcels are described and mapped and, where appropriate, target notes provide supplementary information on habitat conditions, features too small to map to scale, species composition, structure and management. Botanical species lists were compiled with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).

During the survey, habitats were assessed for their suitability to support protected species, and field signs indicating their presence recorded. The assessment takes into consideration the findings of the desk study, the habitat conditions on site and in the context of the surrounding landscape, and the ecology of the protected species.

A visual inspection of the trees on the site was undertaken from ground level using binoculars. Trees were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a tree that are correlated with use by bats

Classification	Feature of tree and its context
Moderate to high	A tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat. Trees with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.
Low	A tree of sufficient size and age to contain potential roosting features but with none seen from the ground or features seen with only very limited roosting potential to be used sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators.
Negligible	Unsuitable for use by bats.

2.3 Limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape and the ecology and biology of species as currently understood.

No biological records data search had been authorised at the time of writing this report. Therefore, the presence of non-statutory designated sites or protected species in the wider landscape is unknown.

These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in Table 2 below. Non-statutory sites could be present in the vicinity but can't be confirmed without biological data.

The site lies within the impact risk zone for Halling to Trottiscliffe Escarpment Site of Special Scientific Interest (SSSI). The construction of a stable block is not listed as a possible high risk with regard to this designation.

Table 2: Statutory designated sites within 2km radius of the site

Designated site name	Distance from site	Reasons for notification from Natural England
Halling to Trottiscliffe Escarpment SSSI	1485m south-east	This site consists of an extensive area of the North Downs west of the 'Medway Gap'. The site is representative of Chalk grassland in west Kent and beech woodland on the chalk. Outstanding assemblages of plants and invertebrates are present.
North Downs Woodlands Special Area of Conservation (SAC)	1485m south-east	This site consists of mature beech forests and yew woods on steep slopes. The stands lie within a mosaic of scrub, other woodland types and areas of unimproved grassland on thin chalk soils. The beech and yew woodland is on thin chalk soils and where the ground flora is not shaded dog's mercury predominates. Associated with it is stinking iris and several very scarce species such as lady orchid and stinking hellebore. The chalk grassland, on warm south-facing slopes, is dominated by upright brome and sheep's-fescue but supports many other plants which are characteristic of unimproved downland, including the nationally rare ground pine. Qualifying habitats: The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: • <i>Taxus baccata</i> woods of the British Isles. (Yew-dominated woodland) • <i>Asperulo-Fagetum</i> beech forests. (Beech forests on neutral to rich soils) • Semi-natural dry grasslands and scrubland facies: on calcareous substrates (<i>Festuco-Brometalia</i>). (Dry grasslands and scrublands on chalk or limestone)

3.2 Field Survey Results

The results of the field survey are illustrated in Appendix 3. The weather conditions recorded at the time of the survey are shown in Table 3.

Table 3: Weather conditions during the survey

Date:	17/08/2023
Temperature	16°C
Humidity	48%
Cloud Cover	60%
Wind	3mph

Rain	None
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Habitats and Flora

The following habitats are present within and adjacent to the site:

- u1b5 Buildings
- g4 11 73 Modified grassland, scattered trees, bare ground
- g2 10 11 16 61 79 189 Calcareous grassland, scattered scrub, scattered trees, tall herb, horse grazed, ancient management, scattered grass
- h2a Hedgerow (Priority)
- h3h Other scrub

A description and photograph of each habitat is provided in Table 4.

No protected or non-native invasive plant species (as listed under Schedules 8 or 9 of the Wildlife and Countryside Act 1981) were identified on the site.

Table 4: Description and photographs of habitats within and adjacent to the site

Habitat type	Habitat description	Photograph
u1b5 Buildings	There are buildings on site, which were not fully assessed as these will not be impacted by the proposed development. There is a detached double storey brick built dwelling, with detached brick and wooden sheds. These are located towards the south of site.	 Figure 1 The main dwelling to the south of site.

g4 11 73 Modified grassland, scattered trees, bare ground

The majority of the site consists of modified grassland which has had wildflower and herb seed mix incorporated into the land. The site is left to grow long with sward length ~1m high. Log piles are also present in these areas. There are areas of the site which have been managed to a shorter level to allow for pathways. Species include false brome (A), cocks foot (A), common bent (F) with oregano (A), basil (F), scarlet pimpernel (F), creeping buttercup (F) and spear thistle (O). Other plant species are present on site, which include, willowherb (A), white campion (A), vetch (F), sow thistle (F), curly dock (F), red vervain (F), yellow mignonette (O), hawksbeard (O), poppy (O), sweet pea (O), parsley (O), common nettle (O), evening primrose (R) and mullein (R). There are areas of bare ground which consists of chalky rocks and soil. The concrete footprint of a previous outbuilding is present, which is where the newly proposed stable block will be situated. There are scattered trees on site which include whitebeam, ash and field maple.



Figure 2 Garden to the middle of site, which has been left to grown and incorporated with wildflower seed mix.



Figure 3 Existing hard standing area where the stable block will be built on.



Figure 4 Scattered tree present in the garden.

g2 10 11 16 61 79 189 Calcareous grassland, scattered scrub, scattered trees, tall herb, horse grazed, ancient management, scattered grass	There is a large field to the north of site, which is owned by the applicant's sibling. The field was under management by grazing of approximately six horses between 1982 – 2002. Since the site has been left to grow in its natural state. The field consists of basil (D), oregano (A), Yorkshire fog (F) birds foot trefoil (F) and selfheal (O). Other species within the field include cinquefoil (A), St johns wort (F), common eyebright (F), strawberry (O), common agrimony (O), clover (O), scarlet pimpernel (O) and scattered bramble (O). There is scattered scrub within the field which include dogwood, hawthorn and blackthorn.	 <i>Figure 5 Field to the north of site which will have a change of use to grazing.</i>
h2a Hedgerow (Priority)	There is an unmanaged native hedgerow located on the eastern and southern boundary, which includes hawthorn, sycamore, buckthorn and dogrose. Bindweed and common ivy are intertwined. The hedgerow is 100% native and is classed as a habitat of principal importance S41 of the NERC Act 2006.	 <i>Figure 6 Unmanaged hedgerow on the eastern boundary.</i>

h3h Other scrub

Scrub is present on the site’s northern and western boundary. Species include hawthorn, blackthorn, sycamore, field maple, cherry, elder and hazel. Bindweed and common ivy are intertwined in the scrub with presence of dog’s mercury on the ground.



Figure 7 Scrub separating the main site and the field.



Figure 8 Scrub on the western boundary of site.

Fauna

An assessment of the suitability of the site for protected or notable species is provided in Table 5.

Table 5: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability
Amphibians	The Magic database returned zero EPSL's, historic pond data and class licence returns for great crested newts (GCN) within 2km of site. GCN exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; GCN are typically found within terrestrial habitats up to 500m from breeding ponds (Langton <i>et al.</i> 2001). A review of aerial imagery indicates the presence of five ponds within 500m of the site, with two of these ponds present within 250m of site. One pond is ~185m north-west and the other is ~205m east of site. Both ponds connect to the site via fields, woodland parcels, hedgerows, with a country road between the site and the pond ~205m away. The site offers suitable habitat for GCN and common amphibians, due to the presence of untouched grassland, log piles, compost heaps, scrub, hedgerows and an untouched field with scattered scrub. These habitats allow amphibians to forage, commute, seek shelter and hibernate.
Reptiles	The site offers suitable habitat for reptiles, due to the presence of untouched grassland, log piles, compost heaps, scrub, hedgerows and an untouched field with scattered scrub. These habitats allow reptiles to forage, commute, seek shelter and hibernate.
Badgers	There are no known badger setts within 30m of site. There is no evidence of badgers on site with regards to foraging pits, latrines, footprints, hairs and mammal paths. Although the site is open to the wider landscape, therefore, badgers can commute and forage through site. The site offers suitable habitat which badgers can use for sett creation.
Bats	The Magic database returned zero EPSL's for bats within 2km of site. The site offers suitable habitat for foraging and commuting bats due to the presence of hedgerows, trees, scrub, long flowering vegetation and a field with scattered trees and scrub. The site has a moderate-high foraging and commuting habitat value. None of the standalone trees provide suitable features for roosting bats, therefore have a negligible roosting value.
Hazel Dormouse	The Magic database returned zero EPSL's for hazel dormice within 2km of site. Dormice typically utilise a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation; hedgerows and scrub within the site support this habitat structure. Furthermore, for isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright <i>et al.</i> 1994). Although 20ha of woodland is not present on or directly adjacent to the sites, the hedgerows present are connected to an extensive hedgerow network within the wider landscape, which in turn, are connected to multiple woodland pockets.
Hedgehog	The site offers suitable habitat for hedgehogs, due to the presence of untouched grassland, log piles, compost heaps, scrub, hedgerows and an untouched field with scattered scrub. These habitats allow hedgehogs to forage, commute, seek shelter and hibernate.
Otter and Water Vole	The site is not suitable for otters and water voles due to the lack of water courses on site and in the surrounding landscape.
Birds	The site offers suitable habitat for foraging and nesting birds, which include the hedgerows, trees and scrub. The site is not suitable for ground nesting birds or wintering birds. The field may be used by foraging barn owls.
Invertebrates	The site offers suitable habitat for common and possibly some notable invertebrate assemblages, due to the presence of untouched wildflower and herb grassland, log piles, compost heaps, scrub, hedgerows and an untouched field with scattered scrub.

4.0 Conclusions, Impacts and Recommendations

Taking the desk study and field survey results into account, Table 6 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise the construction of a detached stable block to the rear of the residential dwelling to provide 2 no. loose boxes, a tack/feed store and a hay/straw store and associated landscaping of yard area, for equestrian use.

Table 6: Evaluation of the site and any ecological constraints

Feature	Survey Results Summary	Impact Assessment	Recommendations	Biodiversity Enhancement Opportunities ¹
Designated sites	There are two statutory sites within 2km of the site, being Halling to Trottiscliffe Escarpment SSSI and North Downs Woodlands SAC, which are both located 1485m from the site. Non-statutory sites could be present in the vicinity. The presence of non-statutory designated sites within 2km of the site cannot be established without data from Kent and Medway Biological Records Centre (KMBRC).	No impacts to any statutory designated sites will occur as a result of the proposed development owing to their distance from the site and the small-scale nature of the proposed development. However, due to the possible presence of non-statutory designations in the vicinity, indirect effects such as pollution could occur during construction.	Best practice measures to minimise the possibility of pollution must be implemented during construction.	None.
Habitats and flora	The site contains native hedgerow on the site's eastern boundary and field's boundary and deciduous woodland to	No impacts to any offsite notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats. The hedgerows are being	Best practice measures to minimise the possibility of pollution must be implemented during construction.	The following habitat creation and enhancement opportunities could be

¹ The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021).

	the north of the field; which are listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). The deciduous woodland is located ~75m from the development area. A further five notable habitats are present within 2km. The site also contains habitats which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). Such as the scrub and long grassland on site and the field. No invasive, protected or notable plant species were recorded during the survey.	retained, however, there could be risk of damage by grazing. The proposed development will result in impacts to existing hard standing ground only with regards to the construction of the stable block. Building materials will be carried to the site via existing pathways present on site with use of a small tractor to minimise impacts to the surrounding ground on site. The fields use will be changed to grazing for two horses. The field will not be fertilised or re-seeded, however, will be allowed to grow its natural habitat which include herbs. The applicant has provided a thought-out management plan for the grazing horses, which will include over-wintering of the horses in the stable and a strip grazing plan will be followed to minimise damage to diverse vegetation throughout the spring and summer. Horse grazing can be an important environmental resource. Additionally, the field's boundaries will be managed to provide a more secure boundary. This will include the removal, by hand, of any stray vegetation and re-wiring. However, due to the plant species currently present, it is noted that notable or protected plant species could be present which will only bloom at certain times of the year. Therefore, there is likely to be minimal impact on biodiversity on site due to careful management plans for grazing and construction work.	Retained trees, woodland and hedgerows should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). Due to the survey being undertaken outside of the optimal period, the field being surrounded by an important habitat (e.g. woodland to the north and calcareous grassland), a detailed botanical survey is required to identify the full range of plants on site, and community composition, to include an assessment of impacts and their magnitude; as well to identify any protected, notable or invasive plant species not visible during the sub-optimal period. This survey must be undertaken between April and May when plant species will be most visible. A mitigation strategy, such as a woodland and grassland management plan, may be required to protect any protected or notable species on the site as well as the surrounding habitats and woodland soils, should such be present. The details of this will be confirmed following the botanical survey.	incorporated into the proposed development: Plantation and management of native tree and scrub species. Species-specific enhancement opportunities are detailed later in this table.
Amphibians	There are 2 ponds in 250m of site which connect to site, with the	There will be no impacts on amphibians with regards to the construction of the stable block as the development is subject to	A precautionary working method will be implemented for common amphibians during construction, including the following measures:	None.

	nearest located 185m. The site offers multiple habitats which are suitable for foraging, commuting and hibernating amphibians.	existing hard standing ground. The field's boundaries will be managed to provide a more secure boundary. This will include the removal, by hand, of any stray vegetation and re-wiring. The loss of such habitats is likely to be inconsequential to local amphibian populations due to the minimal impact it will have on such species. However, pre-cautionary working method should be conducted.	• Site clearance will be undertaken outside of the amphibian hibernation season (November to February) insofar as is possible. • The vegetation will be removed by hand. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any common amphibians are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a great crested newt is identified, works must cease and advise must be sought from a suitably qualified ecologist.	
Reptiles	The site offers multiple habitats which are suitable for foraging, commuting and hibernating reptiles.	There will be no impacts on reptiles with regards to the construction of the stable block as the development is subject to existing hard standing ground. The field's boundaries will be managed to provide a more secure boundary. This will include the removal, by hand, of any stray vegetation and re-wiring. The loss of such habitats is likely to be inconsequential to local reptile populations due to the minimal impact it will have on such species. However, pre-cautionary working method should be conducted.	A precautionary working method will be implemented during construction, including the following measures: • Site clearance will be undertaken outside of the reptile hibernation season (November to February) insofar as is possible. • Vegetation will be remove by hand. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • In the unlikely event that a reptile is identified, works must cease and advise must be sought from a suitably qualified ecologist.	None.

Roosting bats	The trees on the site have negligible value for roosting bats due to a lack of potential roost features.	The existing buildings and tree will not be impacted during the development. Therefore, there are not anticipated to be any impacts on roosting bats.	In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice.	The installation of one bat box at the site will provide additional roosting habitat for bats. The bat box will be installed on the newly developed stable block. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat boxes will be a specification suitable for crevice and void dwelling bats such as Vivara Pro WoodStone Bat Box, Eco Bat Box or a similar alternative brand.
Foraging and commuting bats	The trees, scrub and hedgerows could be used by local bat populations for foraging and commuting. These could also be used by bats dispersing from nearby roosts outside of the site.	The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. The proposed development may include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spill on to the northern, eastern or western boundary should be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be	None.

			of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only. • External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. • Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.	
Badger	There are no known badger setts within 30m of site. There is no evidence of badgers on site. The site is open to the wider landscape, therefore, badgers can commute and forage through site.	No impacts are anticipated on badgers as a result of the proposed development, as the footprint of the stable block already exists.	None.	None.

Hazel dormouse	The hedgerows and scrub on the site's boundaries, including the field, are assessed to provide foraging, commuting, and nest building opportunities for dormouse. These habitats are connected to an extensive hedgerow network and woodland parcels within the wider landscape.	There will be no impacts on hazel dormice with regards to the construction of the stable block as the development is subject to existing hard standing ground. The field's boundaries will be managed to provide a more secure boundary. This will include the removal, by hand, of any stray vegetation and re-wiring. The loss of such habitats is likely to be inconsequential to local hazel dormice populations due to the minimal impact it will have on such species. However, pre-cautionary working method should be conducted.	As the habitat will not be removed entirely, dormouse surveys are deemed disproportionate, a precautionary working method will be implemented during construction, including the following measures: • Site clearance will be undertaken outside of the dormouse hibernation season (November to March) insofar as is possible. • In the unlikely event that a dormouse or evidence of dormouse is identified, works must cease and advice must be sought from a suitably qualified ecologist.	None. The site offers high ecological value for dormice.
Hedgehog	The site offers multiple habitats which are suitable for foraging, commuting and hibernating hedgehogs.	There will be no impacts on hedgehogs with regards to the construction of the stable block as the development is subject to existing hard standing ground. The field's boundaries will be managed to provide a more secure boundary. This will include the removal, by hand, of any stray vegetation and re-wiring. The loss of such habitats is likely to be inconsequential to local hedgehog populations due to the minimal impact it will have on such species. However, pre-cautionary working method should be conducted.	A precautionary working method will be implemented during construction, including the following measures: • Site clearance will be undertaken outside of the hedgehog hibernation season (November to March) insofar as is possible. • The vegetation will be removed by hand. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Creation of brash piles or installation of hedgehog houses in shady areas.
Otter and Water Voles	The site is not suitable for otters and water voles due to the lack of	No impacts are anticipated on otters and water voles as a result of the proposed development.	None.	None.

	water courses on site and in the surrounding landscape.			
Birds	The site offers suitable habitat for foraging and nesting birds, which include the hedgerows, trees and scrub. The site is not suitable for ground nesting birds or wintering birds. The field could be used by foraging barn owls.	There will be no impacts on nesting birds with regards to the construction of the stable block as the development is subject to existing hard standing ground. The field's boundaries will be managed to provide a more secure boundary. This will include the removal, by hand, of any stray vegetation and re-wiring. The loss of such habitats is likely to be inconsequential to local nesting bird populations due to the minimal impact it will have on such species. However, pre-cautionary working method should be conducted, as works could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.	The installation of two bird boxes at the site will provide additional nesting habitat for birds. The bird boxes will be installed on the newly developed building. General purpose bird boxes should be positioned 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Species-specific bird boxes should be installed in line with manufacturers specifications.
Invertebrates	The site offers suitable habitat for common and possibly some notable invertebrate assemblages, due to the presence of untouched wildflower and herb grassland, log piles, compost heaps, scrub, hedgerows and an untouched field with scattered scrub.	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	None.

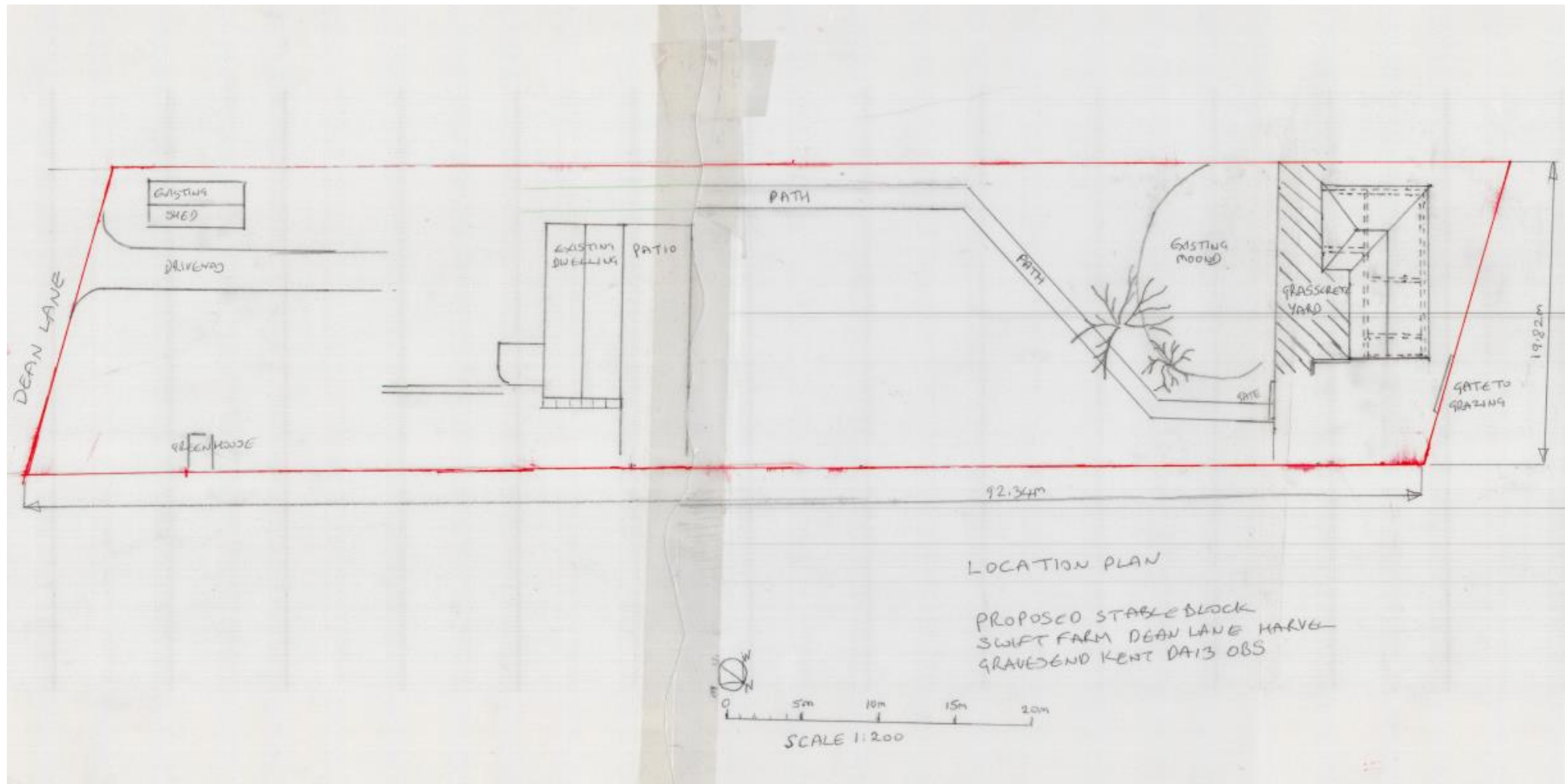
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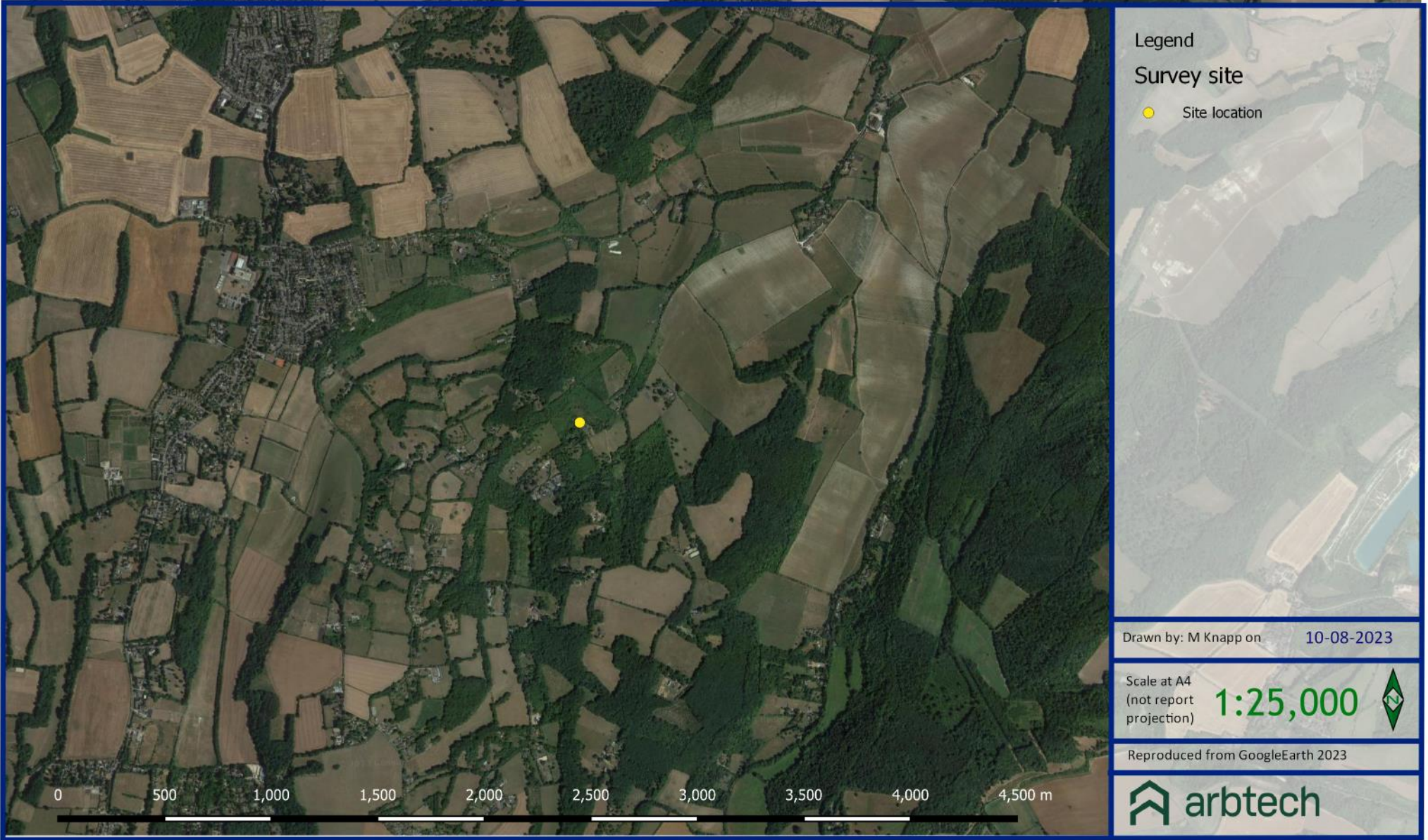
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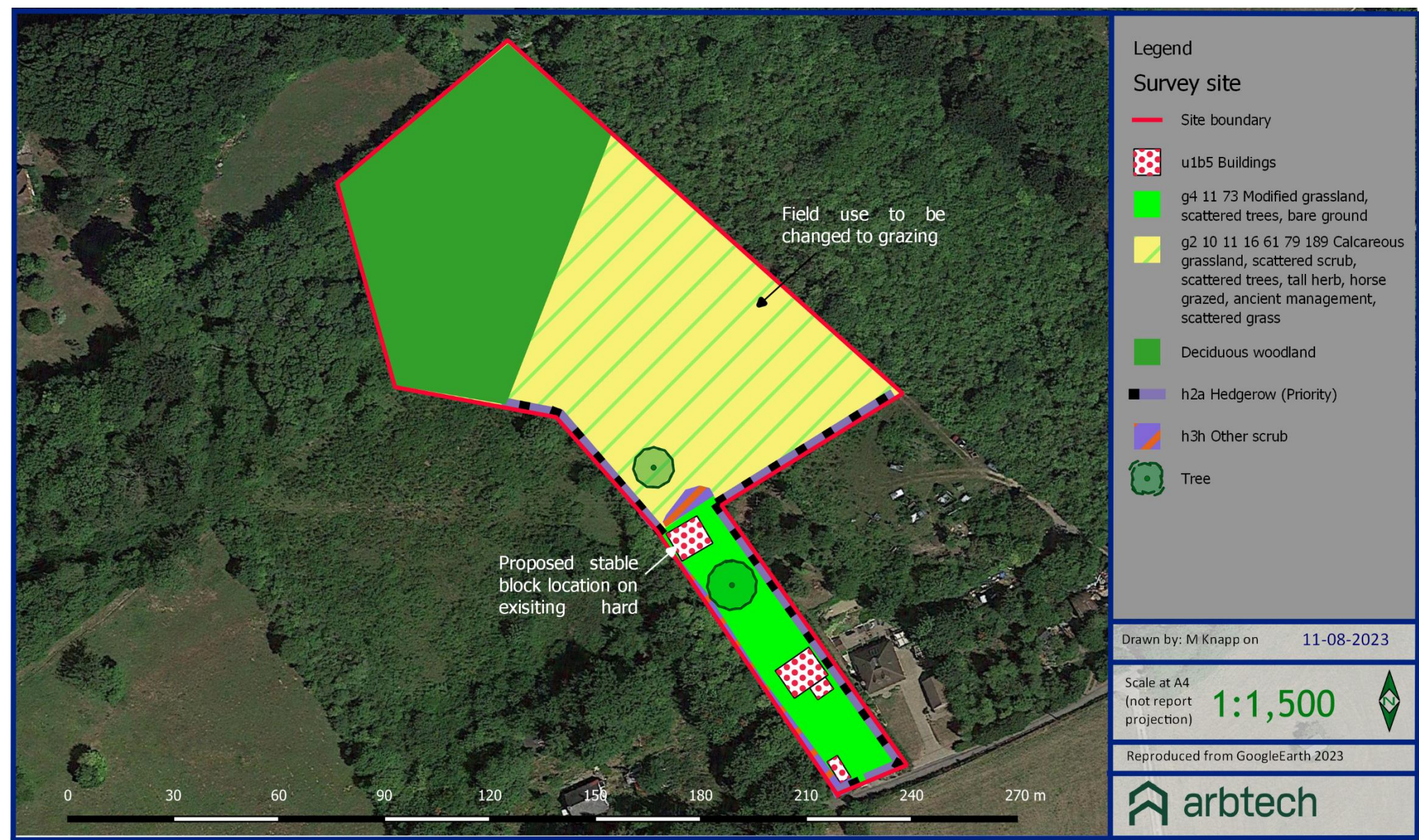
Appendix 1: Proposed Development Plan



Appendix 2: Site Location Plan



Appendix 3: Habitat Survey Plan



Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) are sites of European importance and are designated under the EC Habitats Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora (the Habitats Directive) and the EC Birds Directive 2009/147/EC on the conservation of wild birds (the Wild Birds Directive) respectively. Both form part of the wider Natura 2000 network across Europe.

Under the Habitats Directive Article 3 requires the establishment of a network of important conservation sites (SACs) across Europe. Over 1000 animal and plant species, as well as 200 habitat types, listed in the directive's annexes are protected in various ways:

Annex II species (about 900): core areas of their habitat are designated as Sites of Community importance (SCIs) and included in the Natura 2000 network. These sites must be managed in accordance with the ecological needs of the species.

Annex IV species (over 400, including many Annex II species): a strict protection regime must be applied across their entire natural range, both within and outside Natura 2000 sites.

Annex V species (over 90): their exploitation and taking in the wild is compatible with maintaining them in a favourable conservation status.

SPAs are classified under Article 2 of the Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds both for rare bird species (as listed on Annex I) and for important migratory species.

The Conservation of Habitats and Species Regulations 2017 (as amended) form the legal basis for the implementation of the Habitats and Birds Directives in terrestrial areas and territorial waters out to 12 nautical miles in England and Wales (including the inshore marine area) and to a limited extent in Scotland and Northern Ireland.

Ramsar sites are designated under the Convention on Wetlands of International Importance, agreed in Ramsar, Iran, in 1971. The Convention covers all aspects of wetland conservation and recognises the importance of wetland ecosystems in relation to global biodiversity conservation. The Convention refers to wetlands as “*areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres*”. However, they may also include riparian and coastal zones. Ramsar sites are statutorily protected under the Wildlife & Countryside Act 1981 (as amended 01.04.1996) with further protection provided by the Countryside and Rights of Way (CROW) Act 2000. Policy statements have been issued by the Government in England and Wales highlighting the special status of Ramsar sites. The Government in England and Wales has issued policy statements which ensure that Ramsar sites are afforded the same protection as areas designated under the EC Birds and Habitats Directives as part of the Natura 2000 network (e.g. SACs & SPAs). Further provisions for the protection and management of SSSIs have been introduced by the Nature Conservation (Scotland) Act 2004.

National Statutory Designations

Sites of Special Scientific Interest (SSSI) are designated by nature conservation agencies in order to conserve key flora, fauna, geological or physio-geographical features within the UK. The original designations were under the National Parks and Access to the Countryside Act 1949 but SSSIs were then re-designated under the Wildlife & Countryside Act 1981 (as amended). As well as reinforcing other national designations (including National Nature Reserves), the system also provides statutory protection for terrestrial and coastal sites which are important within the European Natura 2000 network and globally.

Local Statutory Designations

Local authorities in consultation with the relevant nature conservation agency can declare Local Nature Reserves (LNRs) under the National Parks and Access to the Countryside Act 1949. LNRs are designated for flora, fauna or geological interest and are managed locally to retain these features and provide research, education and recreational opportunities.

Non- Statutory Designations

All non-statutorily designated sites are referred to as Local Wildlife Sites (LWS) and can be designated by the local authority for supporting local conservation interest. Combined with statutory designation, these sites are considered within Local Development Frameworks under the Town and Country Planning system and are a material consideration during the determination of planning applications. The protection afforded to these sites varies depending on the local authority involved.

Regionally Important Geological Sites (RIGs) are the most important geological and geomorphological areas outside of statutory designations. These sites are also a material consideration during the determination of planning applications.

The Hedgerow Regulations 1997

The Hedgerow Regulations 1997 are designed to protect 'important' countryside hedgerows. Importance is defined by whether the hedgerow (a) has existed for 30 years or more; or (b) satisfies at least one of the criteria listed in Part II of Schedule 1 of the Regulations.

Under the Regulations, it is against the law to remove or destroy hedgerows on or adjacent to common land, village greens, SSSIs (including all terrestrial SACs, NNRs and SPAs), LNRs, land used for agriculture or forestry and land used for the keeping or breeding of horses, ponies or donkeys without the permission of the local authority. Hedgerows 'within or marking the boundary of the curtilage of a dwelling-house' are excluded.

National and European Legislation Afforded to Species

The Conservation of Habitats and Species Regulations 2017 (as amended)

The Conservation of Habitats and Species Regulations 2017 (as amended) aims to promote the maintenance of biodiversity by requiring the Secretary of State to take measures to maintain or restore wild species listed within the Regulations at a favourable conservation status.

The Regulations make it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2, or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 4. However, these actions can be made lawful through the granting of licenses by the appropriate authorities. Licenses may be granted for a number of purposes (such as science and education, conservation, preserving public health and safety), but only after the appropriate authority is satisfied that there are no satisfactory alternatives and that such actions will have no detrimental effect on wild population of the species concerned.

The Wildlife and Countryside Act (WCA) 1981 (as amended)

The Wildlife and Countryside Act (WCA) 1981 (as amended) implements the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention 1979, implemented 1982) and implements the species protection requirements of EC Birds Directive 2009/147/EC on the conservation of wild birds in Great Britain (the birds Directive). The WCA 1981 has been subject to a number of amendments, the most important of which are through the Countryside and Rights of Way (CROW) Act (2000).

Other legislative Acts affording protection to wildlife and their habitats include:

- Deer Act 1991
- Natural Environment & Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

Badgers

Badgers *Meles meles* are protected under The Protection of Badgers Act 1992 which makes it an offence to:

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof

- Intentionally or recklessly disturb a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A development licence will be required from the relevant countryside agency (i.e. Natural England) for any development works likely to affect an active badger sett, or to disturb badgers whilst they occupy a sett. Guidance has been issued by the countryside agencies to define what would constitute a licensable activity. It is not possible to obtain a licence to translocate badgers.

Birds

With certain exceptions, all birds, their nests and eggs are protected under Sections 1-8 of the WCA. Among other things, this makes it an offence to:

- Intentionally kill, injure or take any wild bird
- Intentionally take, damage or destroy the nest of any wild bird while it is in use or being built
- Intentionally take or destroy an egg of any wild bird
- Sell, offer or expose for sale, have in his possession or transport for the purpose of sale any wild bird (dead or alive) or bird egg or part thereof.

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and are commonly referred to as “Schedule 1” birds.

This affords them protection against:

- Intentional or reckless disturbance while it is building a nest or is in, on or near a nest containing eggs or young
- Intentional or reckless disturbance of dependent young of such a bird

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works should be planned to avoid the possibility of killing or injuring any wild bird or damaging or destroying their nests. The most effective way to reduce the likelihood of nest destruction in particular is to undertake work outside the main bird nesting season which typically runs from March to August. Where this is not feasible, it will be necessary to have any areas of suitable habitat thoroughly checked for nests prior to vegetation clearance.

Schedule 1 birds are additionally protected against disturbance during the nesting season. Thus, it will be necessary to ensure that no potentially disturbing works are undertaken in the vicinity of the nest. The most effective way to avoid disturbance is to postpone works until the young have fledged. If this is not feasible, it may be possible to maintain an appropriate buffer zone or standoff around the nest.

Amphibians and Reptiles

The sand lizard *Lacerta agilis*, smooth snake *Coronella austriaca*, natterjack toad *Epidalea calamita*, pool frog *Pelophylax lessonae* and great crested newt *Triturus cristatus* receive full protection under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

With the exception of the pool frog, these species are also listed on Schedule 5 of the WCA and they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection
- Selling, offering or exposing for sale, possession or transporting for purpose of sale.

Other native species of reptiles are protected solely under Schedule 5, Section 9(1) & (5) of the WCA, i.e. the adder *Vipera berus*, grass snake *Natrix natrix*, common lizard *Zootoca vivipara* and slow-worm *Anguis fragilis*. It is prohibited to:

- Intentionally or recklessly kill or injure these species.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect the breeding sites or resting places amphibian and reptile species protected under Habitats Regulations. A licence will also be required for operations liable to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, rear young and hibernate). The licences are to allow derogation from the relevant legislation, but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored.

Although not licensable, appropriate mitigation measures may also be required to prevent the intentional killing or injury of adder, grass snake, common lizard and slow worm, thus avoiding contravention of the WCA.

Water Voles

The water vole *Arvicola terrestris* is fully protected under Schedule 5 of the WCA. This makes it an offence to:

- Intentionally kill, injure or take (capture) water voles
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection
- Intentionally or recklessly disturb water voles while they are occupying a structure or place used for shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural England) must be consulted. It must be shown that means by which the proposal can be re-designed to avoid contravening the legislation have been fully explored e.g. the use of alternative sites, appropriate timing of works to avoid times of the year in which water voles are most vulnerable, and measures to ensure minimal habitat loss. Conservation licences for the capture and translocation of water voles may be issued by the relevant countryside agency for the purpose of development activities if it can be shown that the activity has been properly planned and executed and thereby contributes to the conservation of the population. The licence will then only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of works.

Otters

Otters *Lutra lutra* are fully protected under the Conservation Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Otters are also currently protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works likely to affect otter breeding or resting places (often referred to as holts, couches or dens) or for operations likely to result in a level of disturbance which might impair their ability to undertake those activities mentioned above (e.g. survive, breed, and rear young). The licence is to allow derogation from the relevant legislation but also to enable appropriate mitigation measures to be put in place and their efficacy to be monitored

Bats

All species are fully protected by Habitats Regulations 2010 as they are listed on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species (e.g. All bats)
- Deliberate disturbance of bat species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Bats are afforded the following additional protection through the WCA as they are included on Schedule 5:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England) will be required for works are likely to affect a bat roost or an operation which are likely to result in an illegal level of disturbance to the species will require an EPSL. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Hazel Dormice

Hazel dormice *Muscardinus avellanarius* are fully protected under Habitats Regulations through their inclusion on Schedule 2. Regulation 41 prohibits:

- Deliberate killing, injuring or capturing of Schedule 2 species
- Deliberate disturbance of species in such a way as:
 - To impair their ability to survive, breed, or reproduce, or to rear or nurture young;
 - To impair their ability to hibernate or migrate
 - To affect significantly the local distribution or abundance of the species
- Damage or destruction of a breeding site or resting place

Dormice are also protected under the WCA through their inclusion on Schedule 5. Under this Act, they are additionally protected from:

- Intentional or reckless disturbance (at any level)
- Intentional or reckless obstruction of access to any place of shelter or protection

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

Works which are liable to affect a dormice habitat or an operation which are likely to result in an illegal level of disturbance to the species will require a European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England). The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

White Clawed Crayfish

There is a considerable amount of legislation in place in an attempt to protect the White-clawed crayfish *Austropotamobius pallipes*. This species is listed under the European Union's (EU) Habitat and Species Directive and is listed under Schedule 5 of the Wildlife and Countryside Act (1981). This makes it an offence to:

- Protected against intentional or reckless taking
- Protected against selling, offering or advertising for sale, possessing or transporting for the purpose of sale

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

The relevant countryside agency (i.e. Natural England) will need to be consulted about development which could impact on a watercourse or wetland known to support white clawed crayfish. Conservation licences for the capture and translocation of crayfish can be issued if it can be shown that the activity has been properly planned and

executed and thereby contributes to the conservation of the population. The licence will only be granted to a suitably experienced person if it can be shown that adequate surveys have been undertaken to inform appropriate mitigation measures. Identification and preparation of a suitable receptor site will be necessary prior to the commencement of the works.

Wild Mammals (Protection Act) 1996

All wild mammals are protected against intentional acts of cruelty under the above legislation. This makes it an offence to mutilate, kick, beat, nail or otherwise impale, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering.

To avoid possible contravention, due care and attention should be taken when carrying out works (for example operations near burrows or nests) with the potential to affect any wild mammal in this way, regardless of whether they are legally protected through other conservation legislation or not.

Legislation Afforded to Plants

With certain exceptions, all wild plants are protected under the WCA. This makes it an offence for an 'unauthorised' person to intentionally (or recklessly in Scotland) uproot wild plants. An authorised person can be the owner of the land on which the action is taken, or anybody authorised by them.

Certain rare species of plant, for example some species of orchid, are also fully protected under Schedule 8 of the Wildlife and Countryside Act 1981 (as amended). This prohibits any person from:

- Intentionally picking, uprooting or destruction of any wild Schedule 8 species
- Selling, offering or exposing for sale, or possessing or transporting for the purpose of sale, any wild live or dead Schedule 8 plant species or part thereof
- In addition to the UK legislation outlined above, several plant species are fully protected under Schedule 5 of The Conservation of Habitats and Species Regulations 2010. These are species of European importance. Regulation 45 makes it an offence to:
 - Deliberately pick, collect, cut, uproot or destroy a wild Schedule 5 species
 - Be in possession of, or control, transport, sell or exchange, or offer for sale or exchange any wild live or dead Schedule 5 species or anything derived from such a plant.

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural England) for works which are likely to affect species of planted listed on Schedule 5 of the Conservation of Habitats and Species Regulations 2010. The licence is to allow derogation from the legislation through the application of appropriate mitigation measures and monitoring.

Invasive Species

Part II of Schedule 9 of the WCA lists non-native invasive plant species for which it is a criminal offence in England to plant or cause to grow in the wild due to their impact on native wildlife. Species included (but not limited to):

- Japanese knotweed *Fallopia japonica*
- Giant hogweed *Heracleum mantegazzianum*
- Himalayan balsam *Impatiens glandulifera*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is not an offence for plants listed in Part II of Schedule 9 of the WCA 1981 to be present on the development site, however, it is an offence to cause them to spread. Therefore, if any of the species are present on site and construction activities may result in further spread (e.g. earthworks, vehicle movements) then it will be necessary to design and implement appropriate mitigation prior to construction commencing.

Injurious weeds

Under the Weeds Act 1959 any landowner or occupier may be required prevent the spread of certain 'injurious weeds' including (but not limited to):

- Spear thistle *Cirsium vulgare*
- Creeping thistle *Cirsium arvense*
- Curled dock *Rumex crispus*
- Broad-leaved dock *Rumex obtusifolius*
- Common ragwort *Senecio jacobaea*

EFFECT OF LEGISLATION AND POLICY ON DEVELOPMENT WORKS

It is a criminal offence to fail to comply with a notice requiring such action to be taken. The Ragwort Control Act 2003 establishes a ragwort control code of practice as common ragwort is poisonous to horses and other livestock. This code provides best practice guidelines and is not legally binding.

NATIONAL PLANNING POLICY***Environment Act 2021***

The Environment Act 2021 (EA 2021) received Royal Assent on 9 November 2021 and is expected to become fully mandated within the next couple of years. The Act principally creates a post Brexit framework to protect and enhance the natural environment. Through amendments to the Town and Country Planning Act 1990, the Act will require all planning permissions in England (subject to exemptions which is likely to include householder applications) to be granted subject to a new general pre-commencement condition that requires approval of a biodiversity net gain plan. This will ensure the delivery of a minimum of 10% measurable biodiversity net gain. The principal tool to calculate this will be the Defra Biodiversity 3.0 Metric. Works to enhance habitats can be carried out either onsite or offsite or through the purchase of 'biodiversity credits' from the Secretary of State. However, this flexibility may be removed (subject to regulations) if the onsite habitat is 'irreplaceable'. Both onsite and offsite enhancements must be maintained for at least 30 years after completion of a development (which period may be amended).

National Planning Policy Framework 2021

The National Planning Policy Framework promotes sustainable development. The Framework specifies the need for protection of designated sites and priority habitats and species. An emphasis is also made on the need for ecological infrastructure through protection, restoration and re-creation. The protection and recovery of priority species (considered likely to be those listed as species of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006) is also listed as a requirement of planning policy.

In determining a planning application, planning authorities should aim to conserve and enhance biodiversity by ensuring that: designated sites are protected from harm; there is appropriate mitigation or compensation where significant harm cannot be avoided; measurable gains in biodiversity in and around developments are incorporated; and planning permission is refused for development resulting in the loss or deterioration of irreplaceable habitats including aged or veteran trees and also ancient woodland.

The Natural Environment and Rural Communities Act 2006 and the Biodiversity Duty

Section 40 of the Natural Environment and Rural Communities (NERC) Act 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'biodiversity duty'.

Section 41 of the Act requires the Secretary of State to publish a list of habitats and species which are of 'principal importance for the conservation of biodiversity'. This list is intended to assist decision makers such as public bodies in implementing their duty under Section 40 of the Act. Under the Act these habitats and species are regarded as a material consideration in determining planning applications. A developer must show that their protection has been adequately addressed within a development proposal.

EUROPEAN PROTECTED SPECIES POLICIES

In December 2016 Natural England officially introduced the four licensing policies throughout England. The four policies seek to achieve better outcomes for European Protected Species (EPS) and reduce unnecessary costs, delays and uncertainty that can be inherent in the current standard EPS licensing system. The policies are summarised as follows:

- Policy 1; provides greater flexibility in exclusion and relocation activities, where there is investment in habitat provision;
- Policy 2; provides greater flexibility in the location of compensatory habitat;
- Policy 3; provides greater flexibility on exclusion measures where this will allow EPS to use temporary habitat; and,
- Policy 4; provides a reduced survey effort in circumstances where the impacts of development can be confidently predicted.

The four policies have been designed to have a net benefit for EPS by improving populations overall and not just protecting individuals within development sites. Most notably Natural England now recognises that the Habitats Regulations legal framework now applies to 'local populations' of EPS and not individuals/site populations.