



Preliminary Ecological Appraisal

Land on Drope Road, Cardiff, Vale of Glamorgan, CF5 6EP

Meadow Lands Estate Ltd

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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.

This approach is enshrined in Government planning guidance, for example, paragraph 174 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)

Executive Summary

Arbtech Consulting Limited was instructed by Meadow Lands Estate Ltd to undertake a Preliminary Ecological Appraisal (PEA) at Land on Drope Road, Cardiff, Vale of Glamorgan, CF5 6EP (hereafter referred to as “the site”). The survey was required to inform a planning application for nine social rented homes (hereafter referred to as “the proposed development”).

Recommendations

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.

Ref	Summary of Survey Findings	Recommendations <i>Measures required to adhere to guidance, legislation and planning policies.</i>
Designated sites	The site is not subject to any statutory designation. There are no statutory designated sites within 2km of the site.	None.
Habitats and flora	Both hedgerows, which are listed as habitats of principal importance under Section 7 of the Environment (Wales) Act 2016, will be retained under the current development proposals. Other priority habitats may exist within influencing distance of the site.	An Ecological Management Plan should be written to show how the hedgerows will be retained and enhanced for wildlife.
Amphibians	The scrub and hedgerows on site will offer suitable summer shelter/foraging and overwintering habitat for amphibians, including great crested newt. No BRD records exist for amphibians within commuting distance of the site; records exist to the north-east and south-west, but large roads will deter terrestrial commuting opportunities for amphibians in these directions. There is one pond ~250m south-west of the site which is connected via hedgerows and arable fields, and various streams extending from the river Ely, which runs ~300m to the north of the site; these freshwater habitats may offer habitat value for aquatic-stage amphibians, though running water is suboptimal for this taxon.	An Ecological Management Plan should be written, to include a precautionary working method to keep amphibians safe during the works.
Reptiles	The scrub and hedgerows on site will offer suitable shelter and hibernation habitat for common reptiles, while the margins of the arable field will offer basking and foraging opportunities. The BRD shows that slow worms and grass snakes have been found within 500m of the site, but all records are for sites on the opposite side of the A4232 motorway, which will effectively deter terrestrial commuting opportunities in this direction.	An Ecological Management Plan should be written, to include a precautionary working method to keep reptiles safe during the works.

	There is connectivity to arable fields and streams to the north which will also provide habitat value for reptiles.	
Roosting Bats	The trees on site are not mature enough to offer roosting value for bats, though the hedgerows could be used for commuting and foraging. The BRD shows that a number of bat species have been observed within 2km, including pipistrelles, noctules, brown long-eared bats and lesser horseshoe 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.
Foraging and Commuting Bats	Hedgerows and scrub 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 Ecological Management Plan should include lighting recommendations, to ensure that foraging and commuting bats are not negatively affected by the development.
Badger	The topography of the site is broadly level and so is unlikely to be suitable for sett excavation. No badger setts are known within 30m. The BRD shows that a badger latrine/run is present in the woodland ~1km south-west of the site, and badgers have been recorded as roadkill on the A4232 to the east. It is therefore likely that the site offers foraging habitat for badgers; it is connected, by hedgerows and arable fields, to woodland copses to the north which may provide sett-making habitat for badgers.	An Ecological Management Plan should be written, to include a precautionary working method to keep badgers safe during the works.
Hazel dormouse	The hedgerows on site are likely to offer suitable habitat for hazel dormouse breeding, hibernation and foraging. They are well-connected to other hedgerows and woodland copses to the north. There are no records of hazel dormouse within 2km of the site.	None.
Hedgehog	The site is likely to offer suitable foraging, shelter and hibernation value for hedgehogs. There are no records of hedgehogs within 2km of the site.	No further surveys required. The Ecological Management Plan should include precautionary working measures to keep hedgehogs safe during the works.
Otter	The site will not offer any suitable habitat for otters. There are no water bodies within influencing distance of the site that might host an otter population.	An Ecological Management Plan should be written, to include a precautionary working method to keep hedgehogs safe during the works.
Water vole	The site will not offer any suitable habitat for water voles. There are no water bodies within influencing distance of the site that might host a water vole population	None.
Birds	The site is likely to offer suitable nesting value for common birds. It is not expected to offer habitat value for Schedule 1 birds, such as barn owls <i>Tyto alba</i> , due to a lack of suitable nesting features for these species. It will offer some habitat suitability for breeding farmland birds or overwintering wildfowl, but this is true of many of the fields that surround	Vegetation removal should be undertaken outside of bird nesting season (March to August inclusive). If this timeframe cannot be avoided, a nesting bird check by a suitably qualified ecologist will be required immediately prior to the works starting. Any active nests will need to be retained until the chicks have fledged.

	<p>the site; it is not likely to be an important site for these taxa due to its relatively small size.</p> <p>The BRD shows over a hundred records of protected (Schedule 1 and BAP) birds within 2km of the site; the closest record to the site is for swallows, who are recorded to roost ~100m south-west of the site.</p>	
Invertebrates	<p>The habitats found on site are common and widespread. They are not expected to offer habitat value for rare invertebrates.</p> <p>There are no records of notable insects recorded within 500m of the site.</p>	None.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Meadow Lands Estate Ltd to undertake a Preliminary Ecological Appraisal (PEA) at Land on Drope Road, Cardiff, Vale of Glamorgan, CF5 6EP (hereafter referred to as “the site”). The survey was required to inform a planning application for nine social rented homes (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 obtain data on existing ecological conditions, and to conduct a preliminary 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 Context

The site is located at National Grid Reference ST 11059 75811 and has an area of approximately 0.6ha comprising an arable field surrounded by hedgerows, with the A4232 dual carriageway running close to the eastern boundary of the site.

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.
- Potential impacts on features of value, as a result of the proposed development, 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 2km radius review of the magic.gov.uk database for statutory designated sites. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

Existing biological records including notable species, habitats and non-statutory designated sites within a 2km radius have been requested from South-East Wales Biodiversity Records Centre (SEWBRc) and will be included in this report once they are available.

2.2 Field Survey

The survey was undertaken by Nicole Gullan BSc (Hons) AMRSB, Consultant on 12th January 2022.

An extended habitat survey was undertaken, following the methodology set out in *Phase 1 Habitat Survey Methodology* (JNCC, 2010). 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.

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.

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, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records (to be added once the data is obtained from SEWBRc).

The survey was completed during the sub-optimal survey period, limiting the identification of ground flora species.

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 Desk Study Results

A summary of desk study results is provided below.

The data search contains confidential information that is not suitable for public release and once received will be analysed and summarised for presentation in this report. Full records data can be provided upon request.

Designated Sites

Details of any statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in Table 1 below. Information on non-statutory sites will be added once it is available.

Table 1: Statutory designated sites within 2km radius of the site

Designated site name	Distance from site (approx.)	Reasons for notification from Natural Resources Wales
Ely Valley Site of Special Scientific Interest	300m	<i>The best station in Wales for Aconitum anglicum. This rare plant has a population alongside several miles of the River Ely.</i>
Nant-y-Plac Complex	300	<i>No information given by LRC.</i>
Michaelston Marsh & Woods	300m	<i>No information given by LRC.</i>
Former St. Fagans Branch line	700m	<i>No information given by LRC.</i>
Land South East of Fford Cottages	800m	<i>No information given by LRC.</i>
Land near Fford Cottages	900m	<i>No information given by LRC.</i>
Land North of Coedarhydyglyn	900m	<i>No information given by LRC.</i>
Ely Northwest	1000m	<i>No information given by LRC.</i>
River Ely	1000m	<i>No information given by LRC.</i>
The Downs	1300m	<i>No information given by LRC.</i>
Plymouth Great Wood	1400m	<i>No information given by LRC.</i>
North of Castle Farm	1600m	<i>No information given by LRC.</i>
Land South West of Fford Cottages	1600m	<i>No information given by LRC.</i>

Designated site name	Distance from site (approx.)	Reasons for notification from Natural Resources Wales
Former Penrhos Branch Line	1800m	No information given by LRC.
Sweldon Wood	1800m	No information given by LRC.
St Fagan's	1800m	No information given by LRC.
East of Glyncory Water Works	1900m	No information given by LRC.
East of Homri Farm	2000m	No information given by LRC.

Landscape

A review of aerial photographs (Google Earth) the magic.gov.uk database and OS maps has been undertaken. Collated together, the value of the landscape in terms of biodiversity is described below:

The site is in a semi-rural area on the outskirts of west Cardiff. The landscape is dominated by arable fields, with the village of Drope extending adjacent to the west. The hedgerows on site are well-connected to woodland copses - including patches of ancient woodland - further afield, and there is a pond ~250m south-west of the site and various streams extending from the river Ely, which runs ~300m to the north of the site and is designated as an SSSI. These freshwater habitats will provide foraging value for a number of mammals, including bats, and may also provide some habitat value for great crested newt *Triturus cristatus*.

Notable Habitats

Phase 1 habitats that may contain priority habitats, and are within 2km, are listed in Table 4.

Table 2: Phase 1 habitats that may contain priority habitats within 2km of the site. Distances are unknown – this information was not provided by the LRC.

Habitat	Closest distance from site
Planted broadleaved woodland	unknown
Semi-natural broadleaved woodland	unknown
Amenity grassland	unknown
Semi-improved neutral grassland	unknown
Planted coniferous woodland	unknown
Running water	unknown
Dense scrub	unknown
Bracken	unknown
Tall ruderal herb	unknown

Refuse-tip	unknown
Track (not comprehensively digitised)	unknown
Marshy grassland	unknown
Standing water	unknown
Planted mixed woodland	unknown
Swamp	unknown
Semi-improved calcareous grassland	unknown

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: 12/01/2022	
Temperature	20°C
Humidity	56%
Cloud Cover	100%
Wind	1mph
Rain	None


Habitats and Flora

The following habitats are present within and adjacent to the site: arable land [J1.1], scrub [A2], scattered broadleaved trees [A3] and a species-poor hedgerow with trees [J2.3]. A description and photograph of each habitat is provided in Table 4.

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

Habitat type	Habitat description	Photograph
Arable	<p>An arable field makes up the majority of the site. Most of the arable land still had wheat that was not harvested this year. A strip through the middle was cut short and showed a low sward diversity; only broadleaved dock <i>Rumex obtusifolius</i> and common nettle <i>Urtica dioica</i> were recorded. Arable land is not intrinsically valuable for protected species in the UK as it is both common and widespread.</p>	

Scrub	<p>At the southern side of the site, along Drope Road, is an area of scrub. Dogwood <i>Rubus canina</i> is common, as are blackthorn <i>Prunus spinosa</i>, hawthorn <i>Crataegus monogyna</i>, nettle and bramble <i>Rubus fruticosus</i>.</p>	
Scattered broadleaved trees	<p>Approximately seven trees are present along the north-west boundary of the site. Tree species include hazel <i>Corylus avellana</i> and sycamore <i>Acer pseudoplatanus</i>, with a species-poor understorey of bramble and common ivy <i>Hedera helix</i>.</p>	

Hedgerow with trees	A hedgerow with trees borders the site to the east and south. Hazel, sycamore and <i>Prunus</i> sp are present, with a species-poor understorey of bramble, nettle and common ivy. The hedgerow is likely to be a habitat of principal importance under Section 7 of the Environment (Wales) Act 2016.	
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No protected or non-native invasive plant species were identified on the 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 scrub and hedgerows on site will offer suitable summer shelter/foraging and overwintering habitat for amphibians, including great crested newt. No BRD records exist for amphibians within commuting distance of the site; records exist to the north-east and south-west, but large roads will deter terrestrial commuting opportunities for amphibians in these directions. There is one pond ~250m south-west of the site which is connected via hedgerows and arable fields, and various streams extending from the river Ely, which runs ~300m to the north of the site; these freshwater habitats may offer habitat value for aquatic-stage amphibians, though running water is suboptimal for this taxon.
Reptiles	The scrub and hedgerows on site will offer suitable shelter and hibernation habitat for common reptiles, while the margins of the arable field will offer basking and foraging opportunities. The BRD shows that slow worms and grass snakes have been found within 500m of the site, but all records are for sites on the opposite side of the A4232 motorway, which will effectively deter terrestrial commuting opportunities in this direction. There is connectivity to arable fields and streams to the north which will also provide habitat value for reptiles.
Bats	The trees on site are not mature enough to offer roosting value for bats, though the hedgerows could be used for commuting and foraging.

	The BRD shows that a number of bat species have been observed within 2km, including pipistrelles, noctules, brown long-eared bats and lesser horseshoe bats.
Badgers <i>Meles meles</i>	The topography of the site is broadly level and so is unlikely to be suitable for sett excavation. No badger setts are known within 30m. The BRD shows that a badger latrine/run is present in the woodland ~1km south-west of the site, and badgers have been recorded as roadkill on the A4232 to the east. It is therefore likely that the site offers foraging habitat for badgers; it is connected, by hedgerows and arable fields, to woodland copses to the north which may provide sett-making habitat for badgers.
Hazel Dormouse <i>Muscardinus avellanarius</i>	The hedgerows on site are likely to offer suitable habitat for hazel dormouse breeding, hibernation and foraging. They are well-connected to other hedgerows and woodland copses to the north. There are no records of hazel dormouse within 2km of the site.
Hedgehog <i>Erinaceus europaeus</i>	The site is likely to offer suitable foraging, shelter and hibernation value for hedgehogs. There are no records of hedgehogs within 2km of the site.
Otter <i>Lutra lutra</i>	The site will not offer any suitable habitat for otters. There are no water bodies within influencing distance of the site that might host an otter population.
Water Vole <i>Arvicola amphibius</i>	The site will not offer any suitable habitat for water voles. There are no water bodies within influencing distance of the site that might host a water vole population.
Birds	The site is likely to offer suitable nesting value for common birds. It is not expected to offer habitat value for Schedule 1 birds, such as barn owls <i>Tyto alba</i> , due to a lack of suitable nesting features for these species. It will offer some habitat suitability for breeding farmland birds or overwintering wildfowl, but this is true of many of the fields that surround the site; it is not likely to be an important site for these taxa due to its relatively small size. The BRD shows over a hundred records of protected (Schedule 1 and BAP) birds within 2km of the site; the closest record to the site is for swallows, who are recorded to roost ~100m south-west of the site.
Invertebrates	The habitats found on site are common and widespread. They are not expected to offer habitat value for rare invertebrates. There are no records of notable insects recorded within 500m of the site.

4.0 Conclusions, Impacts and Recommendations

4.1 Informative Guidelines

A summary of the relevant legislation and planning policies is provided in Appendix 4.

Likelihood of the Presence of Protected Species

Where physical evidence of the presence of protected species is indeterminate during the survey, the habitats on site are evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

Where this report supports a planning application, the ecological interest of the study area (i.e. the area covered by the desk study and field survey) and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity.

4.2 Evaluation

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 nine social rented homes.

Table 6: Evaluation of the site and any ecological constraints

Ref	Summary of Survey Findings	Foreseen impacts	Recommendations <i>Measures required to adhere to guidance, legislation and planning policies.</i>	Biodiversity Enhancements <i>The Local Planning Authority has a duty to ask for enhancements under Planning Policy Wales (2018)</i>
Designated sites	The site is not subject to any statutory designation. There are no statutory designated sites within 2km of the site.	No impacts to statutory sites are anticipated due to the small scale and distance of the proposed development from such sites (where known) as well as the urban location of the site with surrounding physical barriers.	None.	N/A.
Habitats and flora	Both hedgerows, which are listed as habitats of principal importance under Section 7 of the Environment (Wales) Act 2016, will be retained under the current development proposals.	No impacts to priority habitats are foreseen due to the small scale of the development, and the fact that the hedgerows on site are being retained.	An Ecological Management Plan should be written to show how the hedgerows will be retained and enhanced for wildlife.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development and formalised in the EMP:

	Other priority habitats may exist within influencing distance of the site.			<ul style="list-style-type: none"> • Native tree, hedgerow and shrub planting. • Creation of wildflower grassland. • The creation of a wildlife pond. • A green roof on new buildings. <p>Species-specific enhancement opportunities are detailed later in this table.</p>
Amphibians	<p>The scrub and hedgerows on site will offer suitable summer shelter/foraging and overwintering habitat for amphibians, including great crested newt. No BRD records exist for amphibians within commuting distance of the site; records exist to the north-east and south-west, but large roads will deter terrestrial commuting opportunities for amphibians in these directions.</p> <p>There is one pond ~250m south-west of the site which is connected via hedgerows and arable fields, and various streams extending from the river Ely, which runs ~300m to the north of the site; these freshwater habitats may offer habitat value for aquatic-stage amphibians, though running water is suboptimal for this taxon.</p>	The hedgerows are being retained, but cutting back scrub to allow room for the development could cause injury or death of protected amphibians.	An Ecological Management Plan should be written, to include a precautionary working method to keep amphibians safe during the works.	Enhancements will be recommended in the Ecological Management Plan.
Reptiles	The scrub and hedgerows on site will offer suitable shelter and hibernation habitat for common reptiles, while the margins of the arable field will offer basking and foraging opportunities. The BRD shows that slow worms and grass snakes have been found within	The hedgerows are being retained, but cutting back scrub to allow room for the development could cause injury or death of reptiles.	An Ecological Management Plan should be written, to include a precautionary working method to keep reptiles safe during the works.	Enhancements will be recommended in the Ecological Management Plan.

	<p>500m of the site, but all records are for sites on the opposite side of the A4232 motorway, which will effectively deter terrestrial commuting opportunities in this direction.</p> <p>There is connectivity to arable fields and streams to the north which will also provide habitat value for reptiles.</p>			
Roosting Bats	<p>The trees on site are not mature enough to offer roosting value for bats, though the hedgerows could be used for commuting and foraging.</p> <p>The BRD shows that a number of bat species have been observed within 2km, including pipistrelles, noctules, brown long-eared bats and lesser horseshoe bats.</p>	<p>Bats are very unlikely to be roosting on site and as such, there are not anticipated to be any impacts on roosting bats in this location as a result of the proposed development.</p>	<p>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.</p>	<p>Enhancements will be recommended in the Ecological Management Plan.</p>
Foraging and Commuting Bats	<p>Hedgerows and scrub 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.</p>	<p>Artificial lighting could disrupt commuting or foraging bats that are using the site, particularly light-sensitive species such as lesser horseshow bats.</p>	<p>The Ecological Management Plan should include lighting recommendations, to ensure that foraging and commuting bats are not negatively affected by the development.</p>	<p>Enhancements will be recommended in the Ecological Management Plan.</p>
Badger	<p>The topography of the site is broadly level and so is unlikely to be suitable for sett excavation. No badger setts are known within 30m. The BRD shows that a badger latrine/run is present in the woodland ~1km south-west of the site, and badgers have been recorded as roadkill on the A4232 to the east.</p> <p>It is therefore likely that the site offers foraging habitat for badgers; it is connected, by hedgerows and arable fields, to woodland copses to</p>	<p>The works are extremely unlikely to affect any badger setts, though foraging badgers could be injured or killed during the works if precautionary measures are not taken.</p>	<p>An Ecological Management Plan should be written, to include a precautionary working method to keep badgers safe during the works.</p>	<p>Enhancements will be recommended in the Ecological Management Plan.</p>

	the north which may provide sett-making habitat for badgers.			
Hazel dormouse	The hedgerows on site are likely to offer suitable habitat for hazel dormouse breeding, hibernation and foraging. They are well-connected to other hedgerows and woodland copses to the north. There are no records of hazel dormouse within 2km of the site.	Impacts on hazel dormice are extremely unlikely, as the hedgerows are being retained.	None.	Enhancements will be recommended in the Ecological Management Plan.
Hedgehog	The site is likely to offer suitable foraging, shelter and hibernation value for hedgehogs. There are no records of hedgehogs within 2km of the site.	Arable land will be removed during construction. The loss of such habitats is likely to be inconsequential to local hedgehog populations owing to the presence of more extensive habitat locally, but death or injury of hedgehogs during works is possible if precautionary measures are not followed.	No further surveys required. The Ecological Management Plan should include precautionary working measures to keep hedgehogs safe during the works.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs, and can be formalised in the EMP: <ul style="list-style-type: none"> • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses in shady areas. • Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.
Otter	The site will not offer any suitable habitat for otters. There are no water bodies within influencing distance of the site that might host an otter population.	No impacts are anticipated on otter as a result of the proposed development.	An Ecological Management Plan should be written, to include a precautionary working method to keep hedgehogs safe during the works.	None.
Water vole	The site will not offer any suitable habitat for water voles. There are no water bodies within influencing distance of the site that might host a water vole population	No impacts are anticipated on water vole as a result of the proposed development.	None.	None.

Birds	<p>The site is likely to offer suitable nesting value for common birds. It is not expected to offer habitat value for Schedule 1 birds, such as barn owls <i>Tyto alba</i>, due to a lack of suitable nesting features for these species. It will offer some habitat suitability for breeding farmland birds or overwintering wildfowl, but this is true of many of the fields that surround the site; it is not likely to be an important site for these taxa due to its relatively small size.</p> <p>The BRD shows over a hundred records of protected (Schedule 1 and BAP) birds within 2km of the site; the closest record to the site is for swallows, who are recorded to roost ~100m south-west of the site.</p>	Removal of scrub could harm nesting birds.	Vegetation removal should be undertaken outside of bird nesting season (March to August inclusive). If this timeframe cannot be avoided, a nesting bird check by a suitably qualified ecologist will be required immediately prior to the works starting. Any active nests will need to be retained until the chicks have fledged.	Enhancements will be recommended in the Ecological Management Plan.
Invertebrates	<p>The habitats found on site are common and widespread. They are not expected to offer habitat value for rare invertebrates.</p> <p>There are no records of notable insects recorded within 500m of the site.</p>	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	<p>The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates, and will be formalised in the EMP:</p> <ul style="list-style-type: none"> • Native tree, hedgerow and shrub planting. • Creation of wildflower grassland. • The creation of a wildlife pond. • A green roof on new buildings. • Retention of deadwood on the site.

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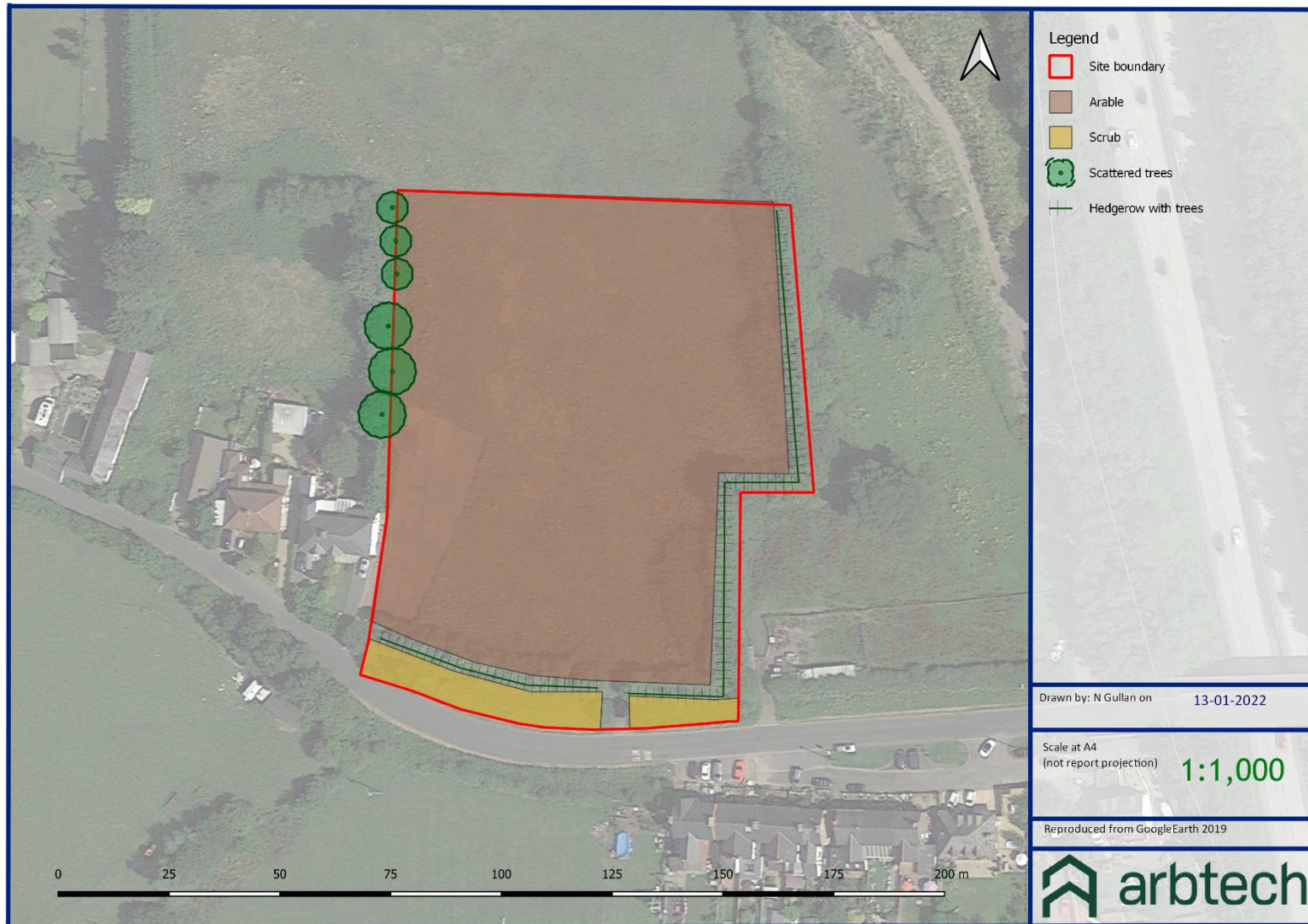
Appendix 1: Proposed Development Plan



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 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 Habitats Directive

The EC Habitats Directive aims to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore wild species listed on the Annexes to the Directive at a favourable conservation status, introducing robust protection for those species of European importance. The Directive is transposed into UK law by The Conservation of Habitats

and Species Regulations 2017 (the Conservation Regulations) and the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007 (as amended). This has been amended by the ***Conservation of Habitats and Species Regulations (amendment) (EU Exit) Regulations (2019)*** which continue the same provision for European protected species, licensing requirements and protected sites after the UK leaves the EU.

The following notes are relevant for all species protected under the EC Habitats Directive:

In the Directive, the term 'deliberate' is interpreted as being somewhat wider than intentional and may be thought of as including an element of recklessness.

The Habitats Regulations do not define the act of 'migration' and, therefore, as a precaution, it is recommended that short distance movement of animals for e.g. foraging, breeding or dispersal purposes are also considered.

In order to obtain a European Protected Species Licence (EPSL), the application must demonstrate that it meets all of the following three 'tests':

- The action(s) are necessary for the purpose of preserving public health or safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequence of primary importance for the environment;
- There is no satisfactory alternative; and
- The action authorised will not be detrimental to the maintenance of the species concerned at a favourable conservation status in their natural range.

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

Effects on development works:

A development licence will be required from the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 no 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 (or recklessly in Scotland) kill, injure or take any wild bird
- Intentionally (or recklessly in Scotland) take, damage or destroy (or, in Scotland, otherwise interfere with) 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.
- Intentionally or recklessly obstruct or prevent any wild bird from using its nest (Scotland only)

Certain species of bird, for example the barn owl, bittern and kingfisher receive additional protection under Schedule 1 of the WCA and Annex 1 of the European Community Directive on the Conservation of Wild Birds (2009/147/EC) 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
- In Scotland only, intentional or reckless disturbance whilst lekking
- In Scotland only, intentional or reckless harassment

Effects 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.

Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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

Effects on development works:

If development works are likely to affect habitats known to support water voles, the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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

Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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

Effects on development works:

A European Protected Species Licence (EPSL) issued by the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 EPSM licence. 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

Effects 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, Natural Resources Wales (NB: Hazel Dormouse are entirely absent from Scotland)). 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

It is also classified as Endangered in the IUCN Red List of Endangered Species. As a result of this and other relevant crayfish legislation such as the Prohibition of Keeping of Live Fish (Crayfish) Order 1996, a series of licences are needed for working with White-clawed and non-native crayfish. These are:

- A licence to handle crayfish (therefore survey work) in England
- A licence for the keeping of crayfish in England and Wales with an exemption for Signal crayfish (England).
- People in the post-code areas listed with crayfish present prior to 1996 do not need to apply for consent for crayfish already established. It does not, however, allow any new stocking of non-native crayfish into waterbodies. Consent for trapping of non-native crayfish for control or consumption is most likely to be granted in Thames and Anglian regions in the areas with "go area" postcodes.
- Harvesting of crayfish is prohibited in much of England and in any part of Scotland and Wales.

Effects on development works:

The relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) 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 (or recklessly in Scotland) picking, uprooting or destruction of any wild Schedule 8 species (or seed or spore attached to any such wild plant in Scotland only)
- 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.

Effects on development works:

A European Protected Species Licence (EPSL) will be required from the relevant countryside agency (i.e. Natural England, Natural Resources Wales, Scottish Natural Heritage) for works which are likely to affect species of plants 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 and Wales 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*

Effects 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*

Effects 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 (WALES)

Environment (Wales) Act 2016 and the Biodiversity Duty

The Environment (Wales) Act 2016 introduces a new biodiversity duty, which highlights biodiversity as an essential component of ecosystem resilience. This new duty replaces the biodiversity duty in the Natural Environment and Rural Communities Act 2006 (referred to as the NERC Act). Part 1 of the Act deals with Sustainable management of natural resources including Biodiversity and Resilience of Ecosystems Duty. The Environment Act enhances the current NERC Act duty to require all public authorities, when carrying out their functions in Wales, to seek to “maintain and enhance biodiversity” where it is within the proper exercise of their functions. In doing so, public authorities must also seek to “promote the resilience of ecosystems”. As under the NERC Act the new duty will apply to a range of public authorities such as the Welsh Ministers, local authorities, public bodies and statutory undertakers. This ensures that biodiversity is an integral part of the decisions that public authorities take in relation to Wales. It also links biodiversity with the long-term health and functioning of our ecosystems, therefore helping to align the biodiversity duty with the framework for sustainable natural resource management provided in the Act.

Planning Policy Wales (2021)

Paragraph 6.4.3 of the document refers to Biodiversity and Ecological Networks and states:

The planning system has a key role to play in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement. Addressing the consequences of climate change should be a central part of any measures to conserve biodiversity and the resilience of ecosystems. Information contained in The State of Natural Resources Report (SoNaRR) (published by Natural Resources Wales and Area Statements should be taken into account. Development plan strategies, policies and individual development proposals must consider the need to:

- support the conservation of biodiversity, in particular the conservation of wildlife and habitats;
- Ensure action in Wales contributes to meeting international responsibilities and obligations for biodiversity and habitats;

- Ensure statutorily designated sites are properly protected and managed;
- Safeguard protected species; and existing biodiversity assets from impacts which directly affect their nature conservation interests and compromise the resilience of ecological networks and the components which underpin them, such as water and soil; and
- Secure enhancement of and improvements to ecosystem resilience by improving diversity, condition, extent and connectivity of ecological networks.

Biodiversity and Resilience of Ecosystems Duty (Section 6 Duty)

Planning authorities must seek to maintain and enhance biodiversity in the exercise of their functions. Planning authorities must also take account of and promote the resilience of ecosystems, in particular the following aspects:

- a) Diversity between and within ecosystems;
- b) The connections between and within ecosystems;
- c) The scale of ecosystems;
- d) The condition of ecosystems (including their structure and functioning); and
- e) The adaptability of ecosystems.

In fulfilling this duty, planning authorities must have regard to:

- a) The list of habitats of principal importance for Wales, published under Section 7 of the Environment (Wales) Act 2016;
- b) The State of Natural Resources Report (SoNaRR), published by NRW; and
- c) Any Area Statement that covers all or part of the area in which the authority exercises its functions.

Planning Authorities should also refer to up to date ecological survey information (where appropriate).

A proactive approach towards facilitating the delivery of biodiversity and resilience outcomes should be taken by all those participating in the planning process. In particular, planning authorities should demonstrate that they have sought to fulfil the duties and requirements of Section 6 of the Environment Act by taking all reasonable steps to maintain and enhance biodiversity in the exercise of their functions.

The broad framework for implementing the duty and building resilience through the planning system includes addressing:

- **Diversity:** to ensure mechanisms are in place to minimise further loss and that circumstances allow for species' populations to expand and recolonise their natural range (former range) or adapt to future change. This means development should provide a net benefit for biodiversity, and at the very least, with no significant loss of habitats or populations of species, locally or nationally and must provide a net benefit for biodiversity;

- **Extent:** to ensure mechanisms allow for the maintenance of existing assets and networks and promote the restoration of damaged, modified or potential habitat and the creation of new habitat. This means that planning choices should incorporate measures which seek the creation and restoration of green networks and linkages between habitats and maintaining and enhancing other green infrastructure features and networks;
- **Condition:** Ecosystems need to be in a healthy condition to function effectively, to deliver a range of important ecosystem services. Planning decisions should not compromise the condition of ecosystems. By taking an integrated approach to development, for example, which considers both direct and wider impacts and benefits it should be possible to make a positive contribution. Planning for the long term management of retained habitats is key to maintaining condition through for example, the use of planning obligations;
- **Connectivity:** to take opportunities to develop functional habitat and ecological networks within and between ecosystems and across landscapes, building on existing connectivity and quality and encouraging habitat creation, restoration and appropriate management. The opportunities could include enlarging habitat areas, developing buffers around designated sites or other biodiversity assets or corridors, including transport and river corridors, and the creation of 'stepping stones' which will strengthen the ability of habitats and ecological networks to adapt to change, including climate change; and
- **Adaptability to change:** primarily in the form of climate change, for both species (diversity) and ecosystems requires action to protect the extent, condition and connectivity of habitats, features and ecological networks. Development plans, planning proposals and applications which build on protecting designated sites and securing and enhancing green infrastructure will be key ways of addressing the attributes of ecosystems resilience identified in the Environment Act as well as facilitating social and economic resilience aspirations of the Well-being of Future Generations Act.

Good Practice Guide GPG 3 (October 2015) NRW Approach to Bats and Planning

As explained in Planning Policy Wales (Chapter 5 - Conserving and Improving Natural Heritage and the Coast), the presence of a European protected species is a material consideration for a development proposal that would be likely to result in disturbance or harm to the species or its breeding sites or resting places. Planning Policy Wales also explains that planning authorities should seek the advice of Natural Resources Wales for all planning applications likely to result in disturbance or harm to bats and should always consult them before granting permission. Local Planning Authorities address this by screening applications to identify when there is a reasonable likelihood that bats may be present and, therefore, when to require a bat survey and report that will confirm if bats are present and if they likely to be disturbed or harmed by the proposal. The overall requirement on Local Planning Authorities, Natural Resources Wales and developers is to avoid harm or disturbance to bats and their breeding sites and resting places, unless Natural Resources Wales has given a licence to allow the harm or disturbance. Natural Resources Wales may only give a licence if the requirements for derogation are met, including that disturbance or harm to individual bats (or to their breeding sites and resting places) would not be detrimental to the maintenance of the population.

LOCAL PLANNING POLICY

Local Plan - TBC

None available. A new Local Plan is expected in 2022 and will be available to view here once it's released: <https://www.cardiffldp.co.uk/>

Local Biodiversity Action Plan 2008

The Cardiff Local Biodiversity Action Plan 2008 can be viewed here: <https://www.outdoorcardiff.com/wp-content/uploads/Cardiff-LBAP-2008.pdf>

The following habitats have been identified on or surrounding the site (based on the site survey and a review of the magic.gov.uk database) and are included in the plan:

- Arable field margins

The following species could be present on the site or in the surrounding area (based on the site survey and a review of the magic.gov.uk database) and are included in the plan:

- Soprano pipistrelle *Pipistrellus pipistrellus*
- Noctule *Nyctalus noctule*
- Brown long-eared bat *Plecotus auritus*
- Grey long-eared bat *Plecotus austriacus*
- Greater horseshoe bat *Rhinolophus ferrumequinum*
- Lesser horseshoe bat *Rhinolophus hipposideros*
- Childing pink *Petrorhagia glumacea*
- Dormouse *Muscardinus avellanarius*
- Great crested newt *Triturus cristatus*
- Hawfinch *Coccothraustes coccothraustes*
- Otter *Lutra lutra*
- Pied flycatcher *Ficedula hypoleuca*
- Slow worm *Anguis fragilis*
- Grass snake *Natrix natrix*
- Silver-washed fritillary *Argynnis paphia*
- Stag beetle *Lucanus cervus*
- Water vole *Arvicola amphibius*
- Waxcap species *Hygrocybe* sp

