Preliminary Ecological Appraisal and Preliminary Roost Assessment Survey

Rustington Manor Hotel, 12 Broadmark Lane, Rustington, West Sussex, BN16 2HH

Leach Investments

Status	Issue	Name	Date
Draft	1	Megan Knapp BSc (Hons), Ecological Surveyor	29/10/2021
Reviewed	1.1	Lizi Pimlott BSc (Hons), MSc, MCIEEM, Senior Consultant	04/11/2021
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Guidelines

This assessment has been designed to take into account when forming a professional opinion:

- Chartered Institute of Ecology and Environmental Management 'Guidelines for Preliminary Ecological Appraisal Second Edition, December 2017';
- Chartered Institute of Ecology and Environmental Management 'Guidelines for Ecological Impact Assessment in the UK and Ireland. Terrestrial, Freshwater, Coastal and Marine, September 2018'; and
- British Standard 42020 (2013) 'Biodiversity – Code of Practice for Planning and Development'.

Proportionality

> The work involved in preparing and implementing all ecological surveys, impact assessments and measures for avoidance, mitigation, compensation and enhancement should be proportionate to the predicted degree of risk to biodiversity and to the nature and scale of the proposed development. Consequently, the decision-maker should only request supporting information and conservation measures that are relevant, necessary and material to the application in question. Similarly, the decision-maker and their consultees should ensure that any comments and advice made over an application are also proportionate.
>
> This approach is enshrined in Government planning guidance, for example, paragraph 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)

In consequence of the scale and intensity of the proposed development, the low impact on ecological receptors identified through both the site survey and search of local biological records, and the passive interface with the mitigation hierarchy, this plan-led report is considered adequate and proportionate. It communicates all relevant information necessary to determine a planning application or support the recommendations for further surveys.

Executive Summary

Arbtech Consulting Limited was commissioned by Leach Investments to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Rustington Manor Hotel, 12 Broadmark Lane, Rustington, West Sussex, BN16 2HH. The survey was completed on 28th October 2021 to inform a planning application for the demolition of the existing buildings with the replacement of a block of flats. The aim was to complete an Extended Phase 1 Habitat Survey of the survey area (all land that will be impacted by the proposals), to search for bats or field signs of bats and to consider the value and suitability of the structures for roosting bats and analyse this against a desk study to assess any ecological constraints.

Summary of Recommendations

Ecological factor	Survey assessment conclusions (with justification)	Recommendations
Bats	**B1** has a **low** likelihood of supporting roosting bats. There are tiles on the western elevation which are lifted which provide roosting suitability for crevice dwelling bats. **B2** is known to support roosting bats. Bat droppings were observed on the exterior of B2 under hanging tiles. They were observed on the floor on the western elevation and on the wall of the eastern elevation. Crevice dwelling bats will use hanging tiles as roosts. **B3** and **B4** have a negligible likelihood of supporting roosting bats. This is due to there being no potential roosting features on either building.	Three bat emergence and re-entry surveys are required during the active bat season (May – September) to characterise the roosts present in **B2**. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive. Sub-optimal: early May and September. One of these surveys must be a dawn re-entry survey. A single survey will also be required to **B1** to determine the presence or likely absence of roosting bats. Should a bat roost be required the full suite of three surveys would also be required for **B1**. Six surveyors are required to provide full coverage of the building. Three surveyors are required to provide full coverage of B1 and four surveyors are required to provide full coverage of B2.
Birds	The site contains evidence of nesting birds. The trees and vegetation on site can provide nesting suitability for birds. B2 contained evidence of birds using holes in the hanging tiles for nesting. Bird evidence was also observed in the loft spaces of B2. Feathers and skeletal remains were observed. B1, 3 and 4 had no evidence of nesting birds and have no potential nesting features.	Works should be undertaken outside the nesting bird period 1st March to 31st August. If this timeframe cannot be avoided, a nesting bird check by an ecologist will be undertaken immediately prior to the commencement of works. This involves a close inspection of the building and any vegetation to be removed. All active nests will need to be retained until the young have fledged.

The above is work you will need to commission to obtain planning permission and to comply with legislation.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was commissioned by Leach Investments to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Rustington Manor Hotel, 12 Broadmark Lane, Rustington, West Sussex, BN16 2HH. The survey was completed on 28th October 2021. The aim of the survey was to complete an Extended Phase 1 Habitat Survey of the survey area (all land that will be impacted by the proposals) and to consider the value and suitability of the structures for roosting bats.

No previous reports have been produced for this site by Arbtech Consulting Ltd or are known by others.

1.2 Project Description

The development proposals are for the demolition of the existing buildings with the replacement of a block of flats. A planning application is being prepared for submission to Arun District Council.

1.3 Site Context

The site is located at National Grid Reference TQ 05334 01935 and has an area of approximately 0.1ha. The site consists of two semi-detached buildings with a garage, a shed and front garden area. The buildings are designated as B1-4.

1.4 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. The PRA element of the survey the report provides a description of all features suitable for roosting bats and evaluates those features in the context of the site and wider environment. It further documents any physical evidence collected or recorded during the site survey that establishes the presence of roosting bats. It identifies significant ecological impacts as a result of the development proposals 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 were taken:

- The desk study area and field survey area (generally 50m from the site boundary or proposed footprint and including the 'zone of influence' of the scheme) have been identified.
- A desk study has been carried out.
- Baseline information on the site and surrounding area has been recorded through an 'extended phase 1 habitat survey' (JNCC 2010) and PRA.
- The ecological features present within the survey area have been evaluated where possible (CIEEM, December 2017).
- Invasive plant and animal species (such as those listed on Schedule 9 of the Wildlife & Countryside Act) have been identified.
- Likely impacts on features of value, as a result of the development proposals, have been identified.
- Recommendations for further survey and assessment have been made.

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- Recommendations for mitigation and enhancements of the developed site have been provided based on current information.

A survey plan is presented in Appendix 1, proposed plans in Appendix 2 (where available), desk study results in Appendix 3 and a summary of relevant legislation is presented in Appendix 4.

2.0 Methodology

2.1 Desk Study

The desk study included a 2km radius review of statutory and non-statutory designated sites, priority habitats under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 and granted European Protected Species Mitigation Licences (EPSML) records for bats held on magic.gov.uk database. An assessment of the surrounding landscape structure was also completed using aerial images from Google Earth and OS maps.

2.2 Site Survey

The survey was undertaken by Megan Knapp BSc (Hons), Ecological Surveyor [accredited agent to Natural England bat licence number 2018-33540-CLS-CLS] on 28th October 2021.

The methodology for the Phase 1 habitat survey is based on the best practice publication Phase 1 habitat survey methodology (JNCC, 2010). All land parcels are described and mapped according to JNCC Phase 1 habitat classification. 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. The likelihood of the presence of protected species is ranked; the habitats on site are evaluated against their likelihood to provide suitable habitat for protected species.

The ecological value of the survey area has been assessed based on the Guidelines for ecological impact assessment (CIEEM, 2018), and the Handbook of Biodiversity Methods: Survey, Evaluation and Monitoring (Hill, 2005), using geographic frames of reference. The biodiversity value of any identified designated sites, habitat types and associated species assemblages has been considered. The distribution and extent of invasive species listed on Schedule 9 of the Wildlife and Countryside Act (1981 as amended 1996) were also noted throughout the survey area.

The methodology for the PRA is informed by the Bat Conservation Trust (BCT) publication Bat Surveys for Professional Ecologists – Good Practice Guidelines (Collins, 2016). All features that will be impacted by the project proposals were assessed for their bat roosting and/or commuting habitat. The surveyor systematically surveyed all features suitable for bats and signs of bat activity.

<u>For any surveyed buildings:</u>

A non-intrusive visual appraisal from the ground using binoculars, inspecting the external features of the building(s) for potential access or egress points, and for signs of bat use. An internal inspection of the building was also made, including the living areas of derelict or abandoned buildings and the accessible roof spaces of all buildings, using an endoscope, torch and ladders. The surveyor paid particular attention to the floor and flat surfaces, window shutters and frames, lintels above doors and windows, and carried out a detailed search of numerous features within the roof space.

<u>For any surveyed trees</u>

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A visual inspection from ground level using binoculars and where accessible an internal inspection of suitable roosting features using an endoscope, torch and ladders.

The surveyor also made note of any other ecological constraints observed during the survey, notably the likelihood of presence or signs of breeding birds, and the suitability of the site for barn owls *Tyto alba*.

2.3 Suitability Assessment

The likelihood of occurrence of protected species is ranked according to the criteria listed in Table 1. The habitats on site were evaluated as to their likelihood to provide sheltering, roosting, foraging, basking or nesting habitat.

Table 1: Showing criteria considered when assessing the likelihood of occurrence of protected species

Likelihood of Occurrence	Criteria
High	Habitat and features of high quality for species or species assemblage. Species known to be present in wider landscape (desk study records). Good quality surrounding habitat and good connectivity.
Medium	Habitat and features of moderate quality. The site in combination with surrounding land provides all habitat or ecological conditions required by the species or assemblage. Within known national distribution of species and local records in desk study area. Limiting factors to suitability, including small area of suitable habitat, some severance or poor connectivity with wider landscape, poor to moderate habitat suitability in local area.
Low	Habitats within the survey area poor quality. Few or no records from data search. Despite above, presence cannot be discounted as within national range, all required features or conditions present on site and in surrounding landscape. Limiting factors could include isolation, poor quality landscape, or disturbance.
Negligible	Very limited poor-quality habitats and features. No local records from desk study; site on edge of, or outside, national range. Surrounding habitats considered unlikely to support species or species assemblage.

For the PRA element of the survey all affected survey features on site were categorised according to the likelihood of bats being present, in line with best practice guidelines (Collins, 2016). The features that dictate the likelihood of roosting bats are summarised in Tables 2 and 3 below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 2: Features of a building that are correlated with use by bats

Likelihood of bats being present	Feature of building and its context
Higher	Buildings or structures with features of particular significance for roosting bats e.g. mines, caves, tunnels, icehouses and cellars. Habitat on site and surrounding landscape of high quality for foraging bats e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting bats e.g. river and or stream valleys and hedgerows. Site is proximate to known or likely roosts (based on historical data).
Lower	A small number of possible roost sites or features, used sporadically by more widespread species. Habitat suitable for foraging in close proximity, but isolated in the landscape. Or an isolated site not connected by prominent linear features. Few features suitable for roosting, minor foraging or commuting.

Table 3: Features of a tree that are correlated with use by bats

Likelihood of bats being present	Feature of tree and its context
Higher	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.
Lower	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.

2.4 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 magic.co.uk.

A biological records data search was not commissioned by the client, therefore historical records of protected species have not been factored into this report. The recommendations in this report aim to compensate for the lack of biological records.

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

3.0 Results and Evaluation

3.1 Desk Study Results

A summary of the desk study results is provided below; full details are included in Appendix 3.

3.2 Designated Sites

There are no statutory designated sites within 2km of site.

3.3 Landscape

A review of aerial photographs (Figure 1), the magic.gov.uk database and OS maps has been undertaken. Collated together, the site's local habitat is described below:

The site is in a n urban area of West Sussex. The landscape is dominated by residential and commercial buildings, with the town of Littlehampton extending adjacent to the west. There are small, scattered woodland parcels, tree lines and ponds around the area, which could be used by wildlife for foraging and commuting.

Habitats of principal importance within 2km of the site are listed in Table 4.

Table 4: Habitats of principal importance within 2km (Magic.gov.uk)

Habitat	Closest distance from site
Deciduous woodland	~1215m south-west
Traditional orchards	~1835m east

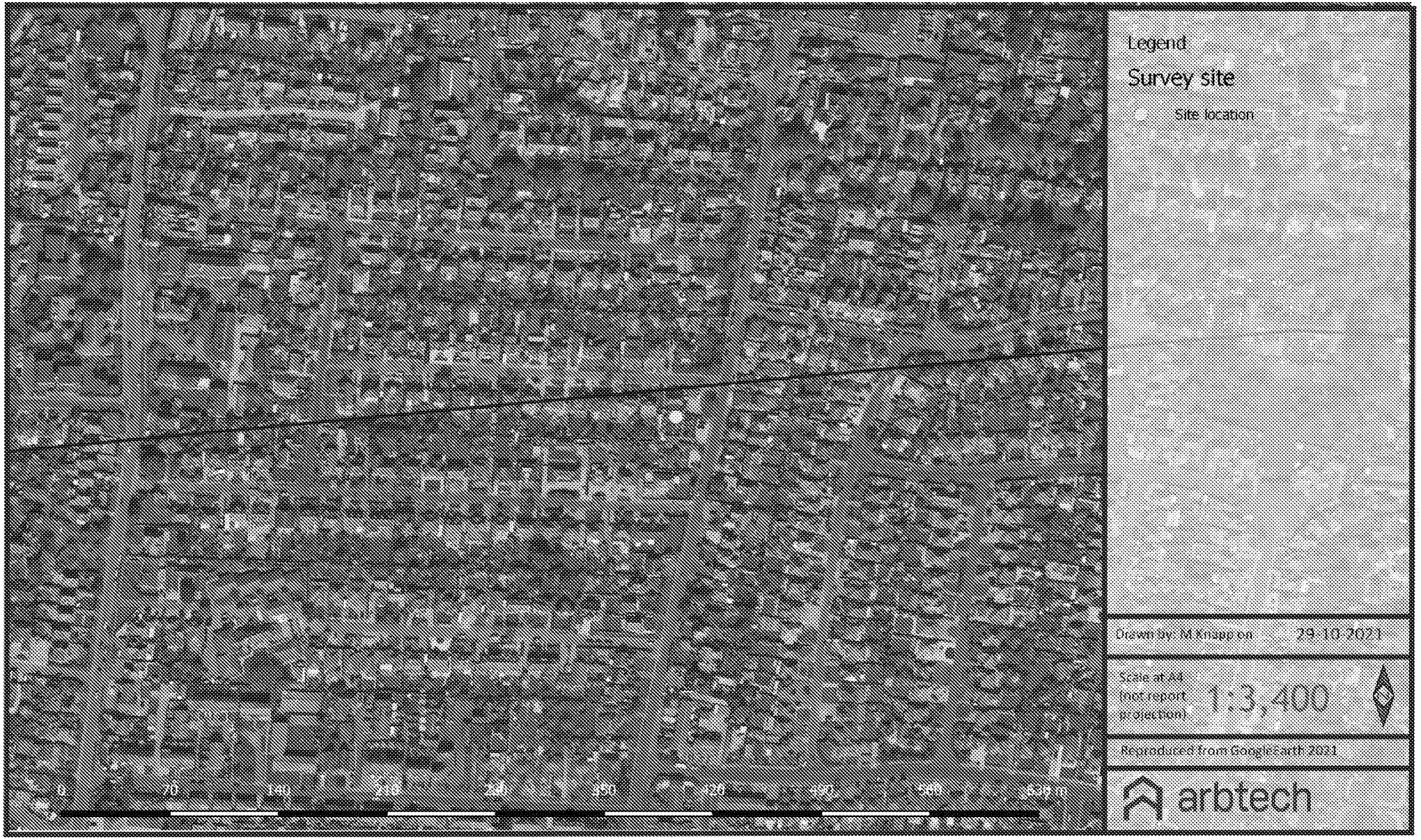


Figure 1: Aerial photo of site, showing landscape structure

3.4 Historical Records

A search of the magic.gov.uk database for granted EPSMLs within a 2km radius of the site has been completed. No licence records for protected species were returned and there were no pond survey data or class licence for great crested newts returned within 2km of the site.

3.5 Field Survey Results

The site consists of two semi-detached buildings with a garage, a shed and front garden area. The buildings are designated as B1-4. This is illustrated in the map in Appendix 1. The weather conditions recorded at the time of the survey are shown in Table 5.

Table 5: Weather conditions during the survey

Date: 28/10/2021	
Temperature	15°C
Relative Humidity	77%
Cloud Cover	30%
Wind	5mph
Rain	None

3.6 Site Feature Descriptions and Photos

J1.2 Amenity Grassland

There are two small areas of well managed grass to the front of the buildings, on the eastern elevation (Photo 1 and 2). The main species include perennial rye grass *Lolium perenne* and fescue grass *Festuca spp.*, with some white clover *Trifolium repens*.



Photo 1: Amenity and introduced shrub on the eastern boundary.



Photo 2: Amenity and introduced shrub on the eastern boundary.

J1.3 Short Perennial Vegetation

Short perennial vegetation is growing where the gravel is on the eastern boundary (Photo 3). Species include ribwort plantain *Plantago lanceolata*, field horsetail *Equisetum arvense*, barley *Hordeum vulgare*, purple toadflax *Linaria purpurea*, and Michaelmas daisy *Aster amellus*.

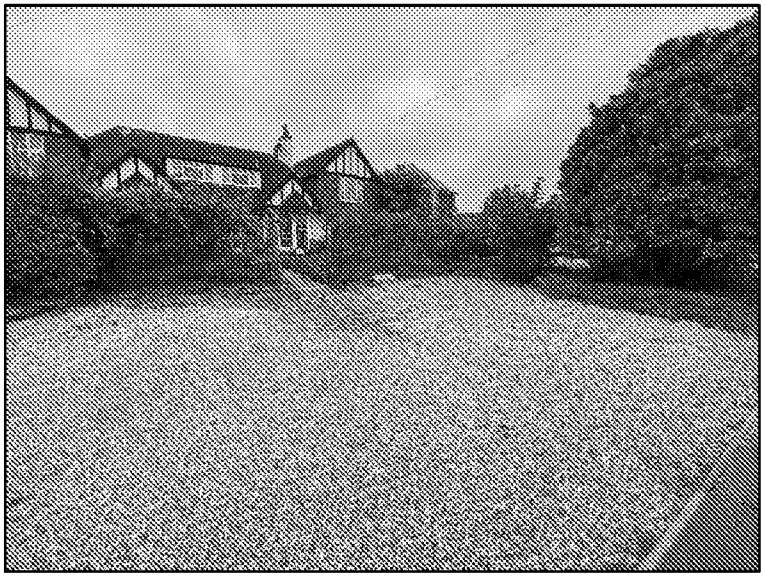


Photo 3: Short perennial vegetation and gravel on the eastern boundary.

J1.4 Introduced Shrub

The introduced shrub on site consists of mainly ornamental planting. These are scattered around the eastern and northern boundary (Photo 1 and 2). Species include common box *Buxus sempervirens*, sedge *Carex spp*., tree fuchsia *Fuchsia excorticata*, bracken *Pteridium spp*., bay laurel *Laurus nobilis*, *wisteria*, Portugal laurel *Prunus lusitanica*, rose *Rosa spp*., and calla lily *Zantedeschia aethiopica*.

C3.1 Tall Ruderal Vegetation

There is a patch of tall ruderal vegetation on the south-western boundary (Photo 4 and 5). Species include bramble *Rubus*, reed canary grass *Phalaris arundinacea*, hairy willowherb *Epilobium hirsutum*, calla lily and red valerian *Centranthus ruber.*

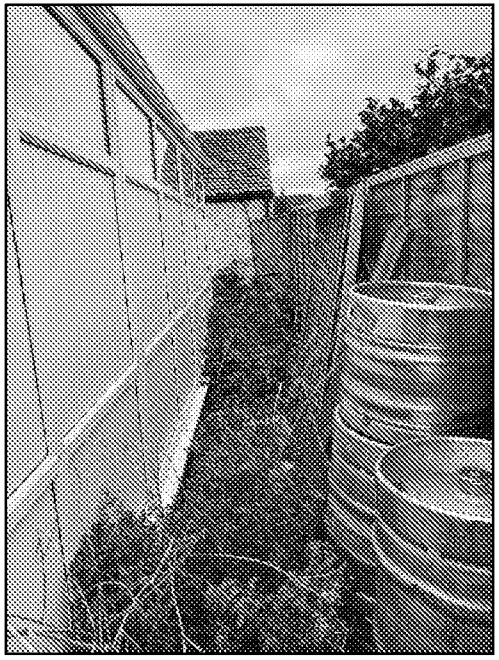


Photo 4: Tall ruderal vegetation on the western boundary.



Photo 5: Tall ruderal vegetation on the southern boundary.

A3.3 Mixed Scattered Trees

There are mixed native and ornamental trees scattered around the site. Species include sycamore *Acer pseudoplatanus*, cypress *Cupressus spp.*, *magnolia*, cherry laurel *Prunus laurocerasus*, ash *Fraxinus excelsior* and rowan *Sorbus aucuparia.*

J3.6 Buildings and Hardstanding

Majority of the site consists of hardstanding ground. This includes gravel parking area on the eastern elevation, paving stones on the eastern, northern, and western elevation and brick wall and wooden fencing to border the site. There are four buildings on site, two semi-detached houses/hotel, one garage and one shed.

B1 Description

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B1 is a double storey semi-detached house which is brick built with whitewash rendering. The hipped roof comprises of clay tiles and hanging clay tiles on the second storey. The windows and doors are UPVC which appear to be in good condition and tight fighting. The eaves are wooden which also appear to be in good condition. Both the roof and hanging tiles appear to be in good condition on all elevations of B1. The loft space of B1 comprises of bitumen felt which is not in a good condition and has tears and holes, this exposes the wooden boarding on the roof (Photo 10 and 11). Wooden beams are present in the loft space and cobwebs were observed around the wooden beams. No daylight is observed in the loft. Mouse and rat droppings are present.

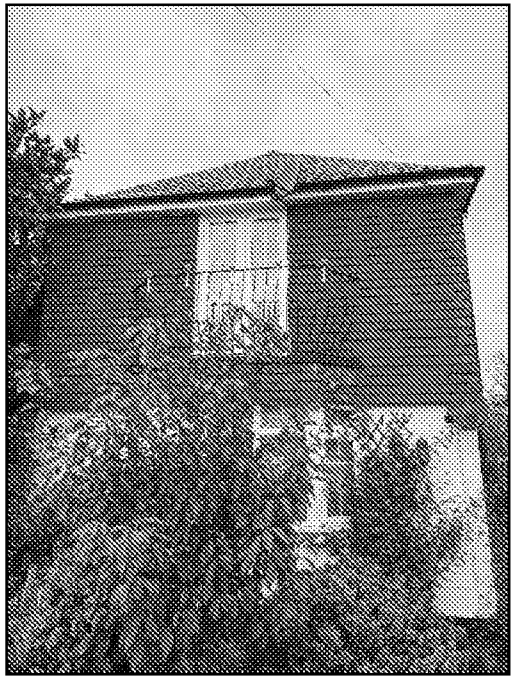


Photo 6: Eastern elevation of B1.



Photo 7: Eastern elevation of B1 which is partial blocked by a magnolia tree.

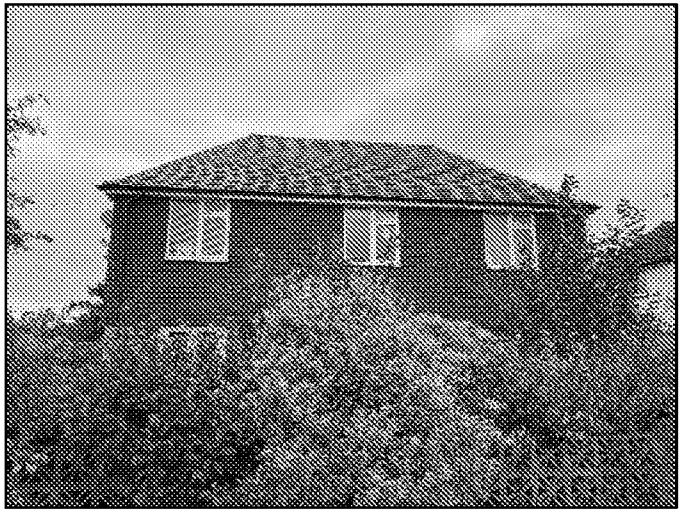


Photo 8: Northern elevation of B1.



Photo 9: Western elevation of B1 and B2.



Photo 10: Interior of B1's loft space.

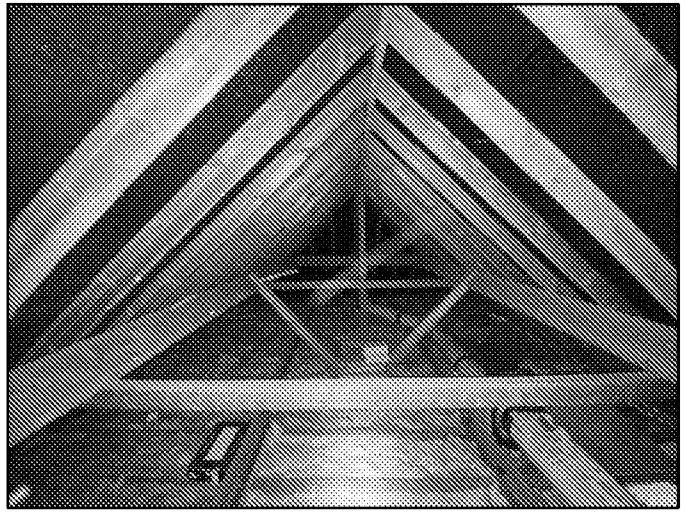


Photo 11: Interior of B1's loft space.

B2 Description

B2 is a double storey semi-detached pebble dash hotel which has hanging tiles on the second storey. The roof comprises of clay tiles and a section of flat felt roofing. There is a UPVC conservatory on the western elevation which appears to be in a good condition. The windows and doors are a mixture of UPVC and wooden framed which appear to be in good condition and tightfitting. The eaves are wooden and appear to be in good condition with no holes observed. The building has a mock Tudor approach and there are gaps where the Tudor boards meet the hanging tiles on the western and eastern elevation (Photo 12). The hanging tiles appear to be in a moderate condition, however, there are some missing, dislodged or lifted tiles on thee western and eastern elevation (Photo 13 and 22). The roof tiles are also in a moderate condition with some lifted or dislodged tiles on both the roof and the ridge (Photo 16 and 17).



Photo 12: Western elevation of B2.



Photo 13: Hanging tiles on the western elevation of B2, where bat droppings were found.



Photo 14: Eastern elevation of B1 and B2.



Photo 15: Eastern elevation of B2.

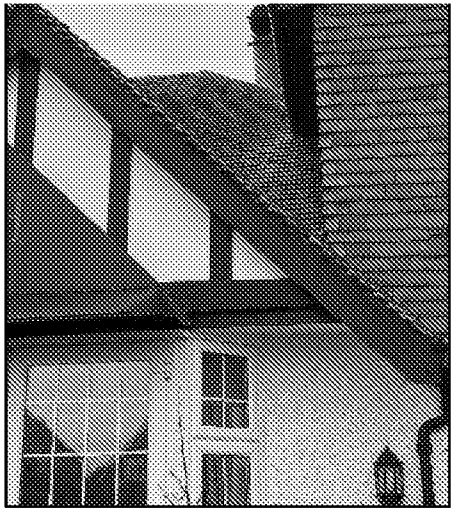


Photo 16: Example of lifted tiles on the roof ride of B2.



Photo 17: Examples of lifted tiles of the eastern roof elevation of B2.

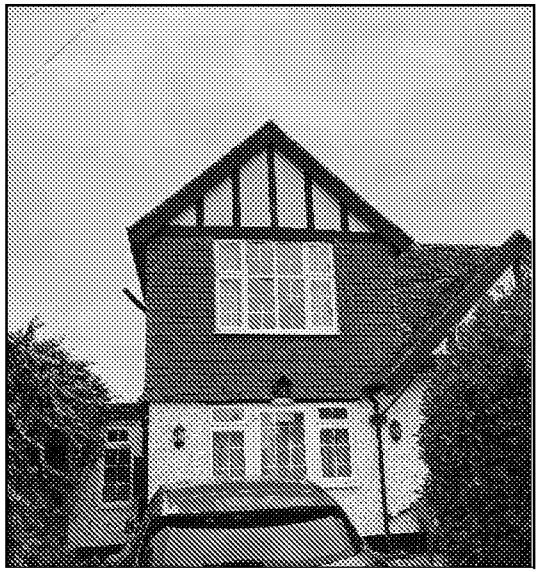


Photo 18: Eastern elevation of B2.



Photo 19: Southern elevation of B2.

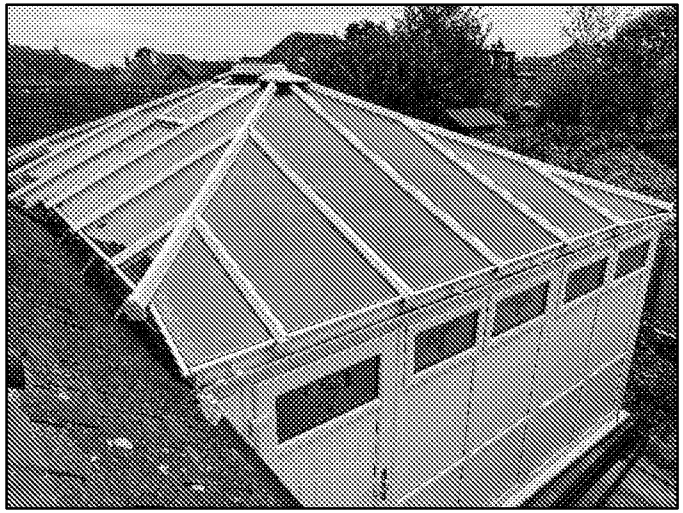


Photo 20: Conservatory on the western elevation of B2.



Photo 21: Western elevation of B2.



Photo 22: Example of lifted tiles on the western elevation of B2.



Photo 23: Western elevation of B2.

B2 has three loft spaces and four eaves. Loft one, located on the southern elevation of B2, is pitched with wooden boards for insulation and has wooden beams present (Photo 27 and 28). There are some wooden boards missing, however, no daylight was visible. Mouse droppings were observed and a bird skeleton. Loft two, located in the middle of B2, is pitched with chip boarding and wooden boarding for insultation and has wooden beams present (Photo 29 and 30). The chipboard is coming away in section or has damp holes. No daylight is visible. Mouse droppings were observed. Loft three, located on the northern elevation of B2, is pitched with chip boarding for insulation and has wooden beams present (Photo 31 and 32). Some of the boarding is peeling away and has holes in. There is no daylight visible. Mouse droppings were observed. Eaves one to four, are all a triangular shape with bitumen felt for insulation and have wooden beams present (Photo 24-26). The felt is tearing away in all eave's spaces with thick cobwebs present.

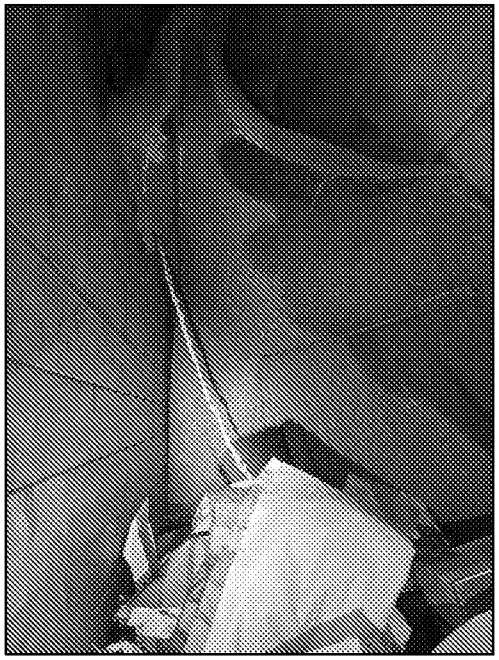


Photo 24: Eaves one in B2.

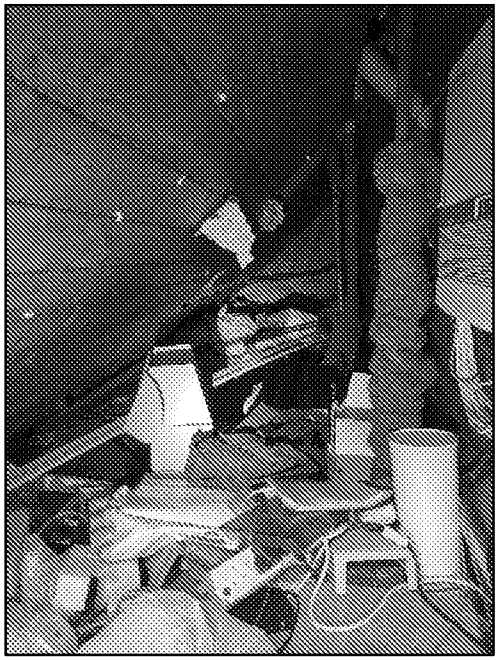


Photo 25: Eaves two in B2.

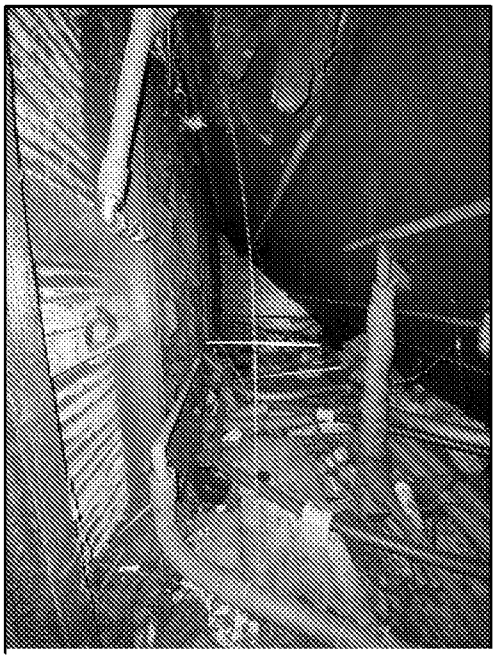


Photo 26: Eaves three in B2.

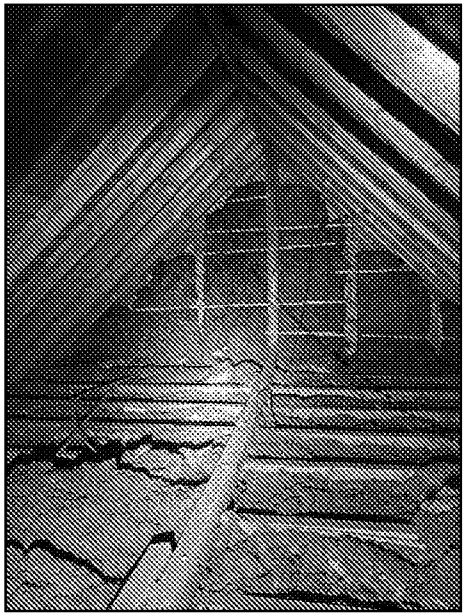


Photo 27: Loft one in B2.

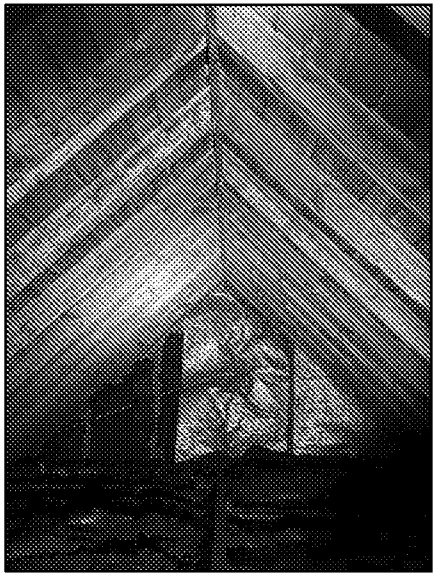


Photo 28: Loft one in B2.



Photo 29: Loft two in B2.

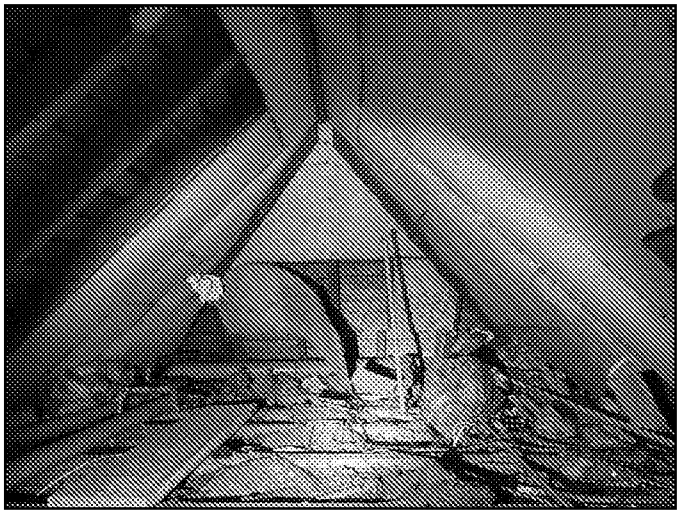


Photo 30: Loft two in B2.

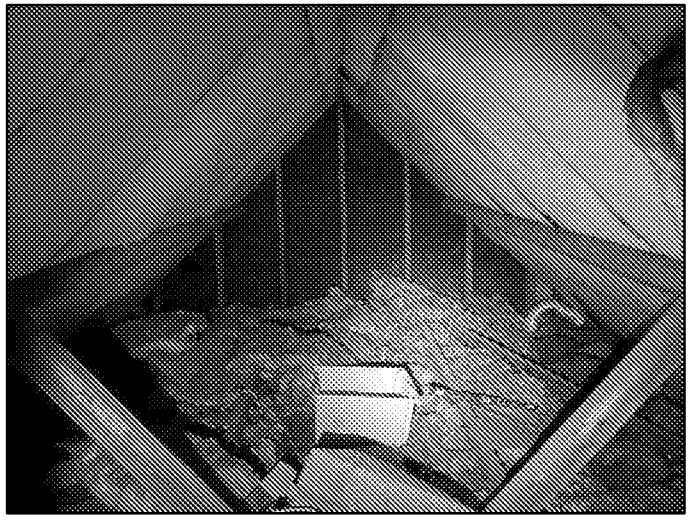


Photo 31: Loft three in B2.

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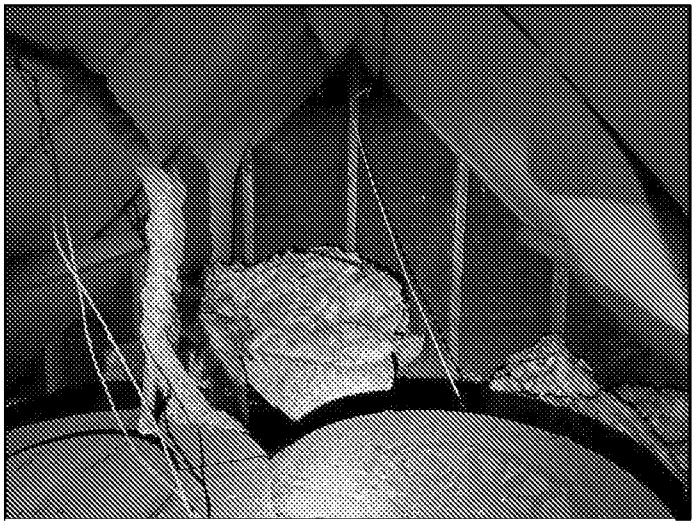


Photo 32: Loft three in B2.



Photo 33: Lifted boarding in loft three.



Photo 34: Hole in the boarding of loft three.

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B3 Description

B3 is a single storey detached garage which is whitewash rendered (Photo 35-37). It has a flat roof comprised of roofing felt. There are double metal doors with a wooden frame which appears to be in a good condition and are tight fitting. The eaves are UPVC and are in good condition. There are no potential roosting features for bats or birds on B3.

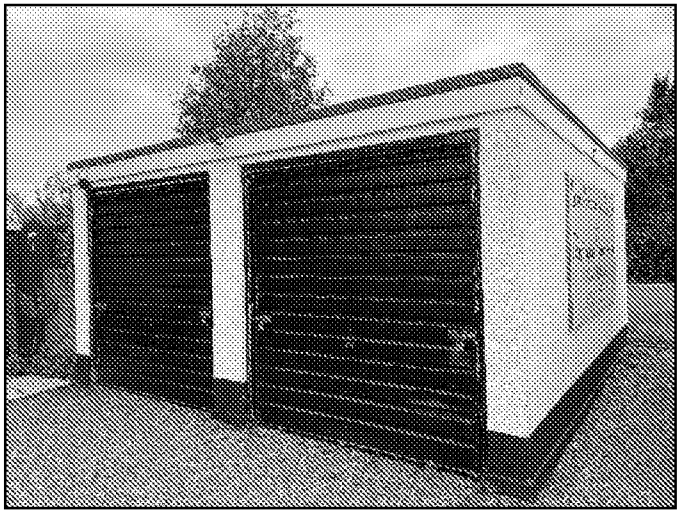


Photo 35: Southern and eastern elevation of B3.

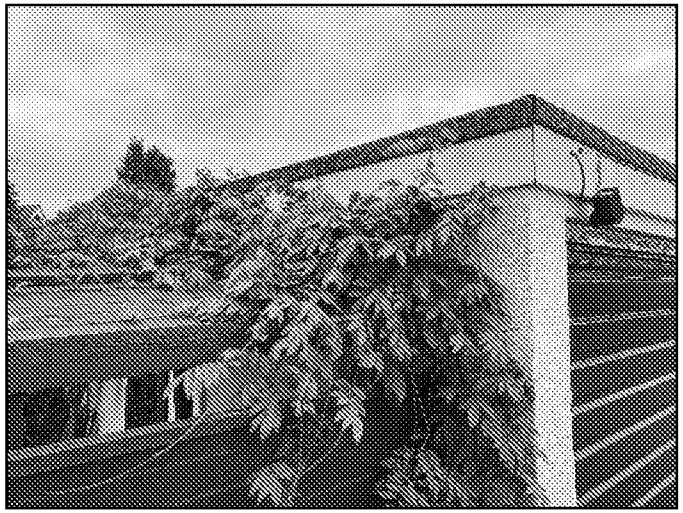


Photo 36: Western elevation of B3.

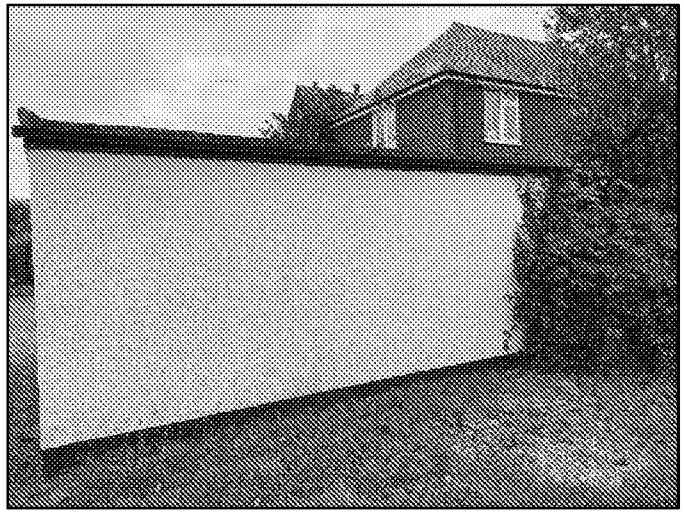


Photo 37: northern elevation of B3.

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B4 Description

B4 is a single storey detached shed which has a pebbledash style (Photo 38). The roof comprises of corrugated plastic sheeting. There are no eaves. There are no potential roosting features for bats or birds on B4.

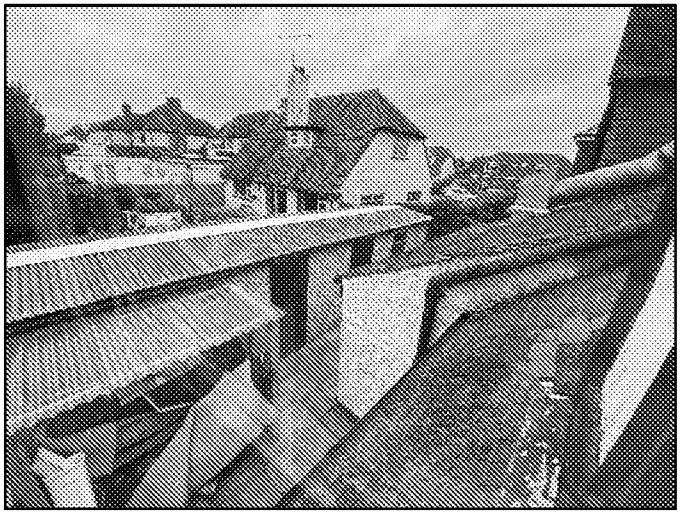


Photo 38: Eastern elevation of B4.

3.7 Protected Species Evidence

Bird droppings were observed on some hanging tiles below a gap in the hanging tiles on the western elevation of B2 (Photo 13), which suggests that birds are using this as a nesting area. Birds were also observed in the trees and introduced shrubs on site. Evidence of birds, feathers and skeletal remains, was observed in loft 1 and 3 of B2 (Photo 41). ~2 bat droppings were observed on the ground under hanging tiles on the western elevation (Photo 39) of B2 and ~5 bat droppings on the wall on the eastern elevation of B2 (Photo 40).

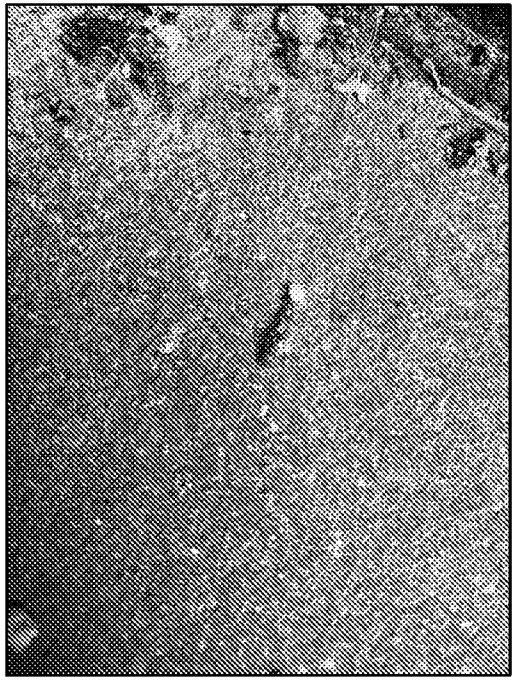


Photo 39: Bat dropping found on the ground under a hanging tile on the western elevation of B2.

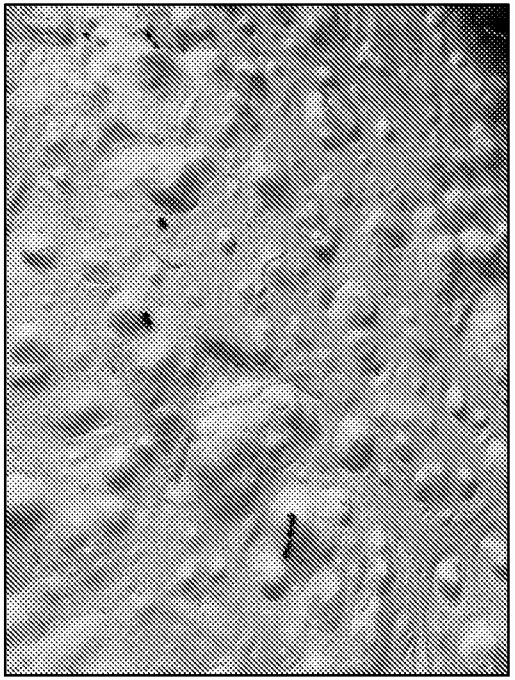


Photo 40: Bat dropping found on the eastern elevation wall of B2.



Photo 41: Bird feather observed in loft three of B2.

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4.0 Conclusions, Impacts and Recommendations

4.1 Informative Guidelines

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. The likelihood of occupancy of protected species is ranked according to the criteria listed in Table 1.

Where this report supports a planning application, the ecological interest of the study area (including the survey area) and the proposed development has also been evaluated in terms of the planning policies relating to biodiversity. It is clearly stated where a preliminary value can be given and where further information is required.

Likelihood of the presence of bats

There are three possible outcomes of the PRA element of the survey, each with specific recommendations. These are outlined below:

Confirmed bat roost

Best practice survey guidelines (Collins, 2016) recommend additional surveys for confirmed roosts. Three further surveys are required to characterise the bat roost present including species, roost type and access points to inform a European Protected Species Mitigation Licence (EPSML) application with Natural England. Surveys must be completed during the active bat season (May – September). At least two of the surveys should be completed during the optimal survey period mid-May to August, and at least on the surveys should be a dawn re-entry survey (Collins, 2016).

Low, moderate or high likelihood of a bat roost present

Best practice survey guidelines (Collins, 2016) recommend additional surveys for features assessed as having low to high suitability for roosting bats. One, two or three further surveys are required to confirm presence or likely absence of a bat roost, based on a low, medium or high roost likelihood evaluation. Surveys must be completed during the active bat season (May – September). If more than one survey is recommended, at least one of them should be completed during the optimal survey period mid-May to August, and at least one the surveys should be a dawn re-entry survey (Collins, 2016). If two or one further survey is recommended these surveys must be completed during the optimal survey period (mid-May to August). For low and moderate roost likelihood evaluation the survey effort recommended at this stage is iterative and if bats roosts are confirmed in the building, a further survey will be required to provide sufficient information to inform an EPSML application to Natural England.

Negligible likelihood of a bat roost present

Buildings assessed as comprising negligible suitability for roosting bats do not normally require further surveys. However, if bats are found during any stage of the development, work should stop immediately, and a suitably qualified ecologist should be contacted for further advice.

Appropriate justification for this assessment is provided in Section 2.3 of this report.

4.2 Evaluation

Taking the desk study and site survey results into account, the following conclusions for ecological factors has been reached.

Table 6: Evaluation of site

Ecological factor	Survey assessment conclusions (with justification)	Foreseen impacts	Recommendations	Enhancements The Local Planning Authority has a duty to ask for enhancements under the NPPF (2021)
Designated sites	The site is not subject to any designation, and there are no known designated sites within 2km of the site.	The proposed development is likely to be very low impact, given its urban location, and not of a sufficient scale to have an impact on any nearby designated sites.	None.	None.
Habitats and plants	The site is not subject to any habitats of principal importance. The nearest woodland parcel is 1215m south-west of site. The habitats on the site are common and widespread and are considered to have low ecological value.	No impacts on habitats of principal importance due to the scale of the development and the urban location and distance of the site from the notable in the wider landscape.	None.	Planting of UK native plant and tree species should be incorporated into the development.
Invasive / Non-native species	No invasive and non-native species recorded on site.	None.	None.	N/A
Bats	**B1** has a low likelihood of supporting roosting bats. There are tiles on the western elevation which are lifted which provide roosting suitability for crevice dwelling bats. **B2** is known to support roosting bats. Bat droppings were observed on the exterior of B2 under hanging tiles. They were observed on the floor on the western elevation and on the wall of the eastern elevation. Crevice dwelling bats will use hanging tiles as roosts.	As the proposals include the demolition of these buildings, any bat roosts present would be destroyed. This could result in death, injury and disturbance of bats.	Three bat emergence and re-entry surveys are required during the active bat season (May – September) to characterise the roosts present in **B2**. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive. Sub-optimal: early May and September. One of these surveys must be a dawn re-entry survey. A single survey will also be required to **B1** to determine the presence or likely absence of roosting bats. Should a bat roost be required the full suite of three surveys would also be required for **B1**. Six surveyors are required to provide full coverage of the building.	To be confirmed following further surveys.

	B3 and **B4** have a negligible likelihood of supporting roosting bats. This is due to there being no potential roosting features on either building.		Three surveyors are required to provide full coverage of B1 and four surveyors are required to provide full coverage of B2.	
Birds	The site contains evidence of nesting birds. The trees and vegetation on site can provide nesting suitability for birds. **B2** contained evidence of birds using holes in the hanging tiles for nesting. Bird evidence was also observed in the loft spaces of B2. Feathers and skeletal remains were observed. **B1**, **B3** and **B4** had no evidence of nesting birds and have no potential nesting features.	The demolition of the **B1** and **B2** could result in the destruction of active bird nests, if present.	Works should be undertaken outside the nesting bird period 1st March to 31st August. If this timeframe cannot be avoided, a nesting bird check by an ecologist will be undertaken immediately prior to the commencement of works. This involves a close inspection of the buildings and any vegetation to be removed. All active nests will need to be retained until the young have fledged.	Bird boxes could be installed on the new building or on mature trees on site, e.g. ○ 25mm bird box ○ 32mm bird box ○ Sparrow terraces ○ Swift bricks ○ Schwegler 2H robin boxes Nest boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole. Swift bricks and sparrow terraces should be positioned at the eaves of the new building and can be incorporated into the fabric of the building during construction.
Reptiles	There is no suitable habitat for reptiles on site or in the wider landscape. The tall ruderal vegetation on site is too minimal to support any terrestrial habitat for reptiles.	The proposed development will not result in the loss of habitat for common reptiles. Therefore, no impacts are anticipated.	None.	N/A
Amphibians	There is no suitable habitat for amphibians on site or in the wider landscape.	The proposed development will not result in the loss of habitat for amphibians.	None.	N/A

	There are no ponds with 500m of site and the tall ruderal vegetation on site is too minimal to support any terrestrial habitat for amphibians.	Therefore, no impacts are anticipated.		
Other Terrestrial Mammals	**Badgers** *Meles meles* There is no suitable habitat for badgers found on site e.g. foraging and refuge. There are not any badger setts known within 30m of site.	No impacts on any badger setts are anticipated however precautionary approach to work should be implemented to minimise impacts to badgers foraging or ranging across the site.	The following recommendations are given in order to mitigate against potential harm to badgers during the development works. • Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. • Security lighting to be directed away from the undergrowth. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.	Planting fruit trees on the developed site will provide additional foraging resources for badgers.
	Water Vole *Arvicola amphibius* There is no suitable habitat on site for water voles.	There are no impacts on water voles.	None.	None.
	Otter *Lutra lutra* There is no suitable habitat on site for otters.	There are no impacts on otters.	None.	None.
	Hedgehogs *Erinaceus europaeus* The site provides suitable habitat for hedgehogs. The rubbish piles and tall ruderal vegetation on site could provide suitable habitat for hedgehogs to forage and seek shelter.	No impacts on any hedgehog habitat, however, precautionary approach to work should be implemented to minimse impacts to hedgehog foraging or ranging across the site.	The following recommendations are given in order to mitigate against potential harm to hedgehogs during the development works. • Any trenches dug should either be covered at night or have a rough sawn plank placed in them to act as a ramp for any wildlife which may fall in. • Security lighting to be directed away from the undergrowth.	Gaps should be created in new boundary fences to provide commuting routes through the developed site for hedgehogs. Hedgehog houses should be incorporated into the developed site positioned at the site boundaries and in shady areas of the new gardens.

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			• Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.	
	Dormouse *Muscardinus avellanarius* There is no suitable habitat for dormice.	There are no impacts on dormice.	None.	None.

5.0 Bibliography

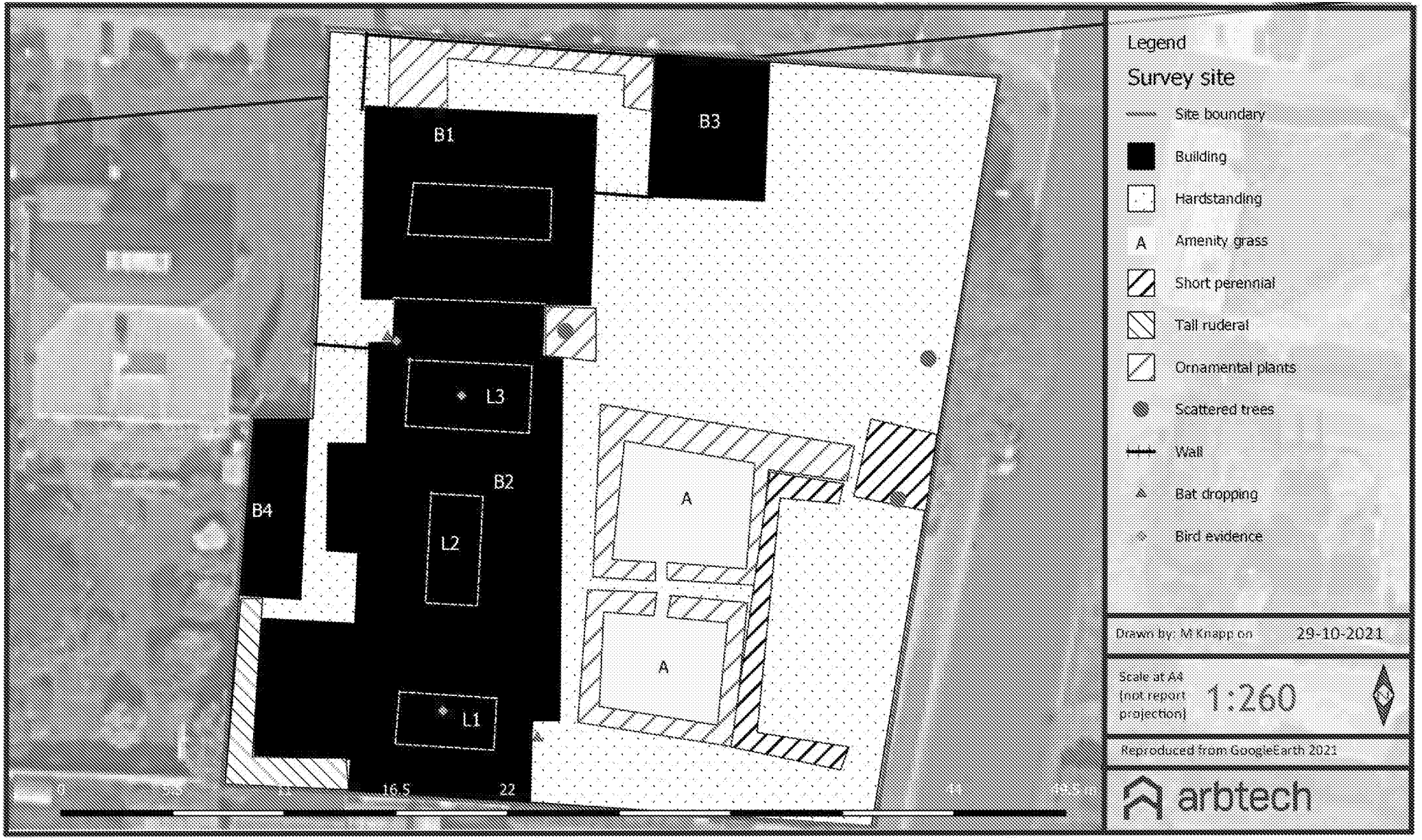
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Appendix 1: Phase 1 Habitat Survey and Preliminary Roost Assessment Map

L1-3 represent loft space for B2.



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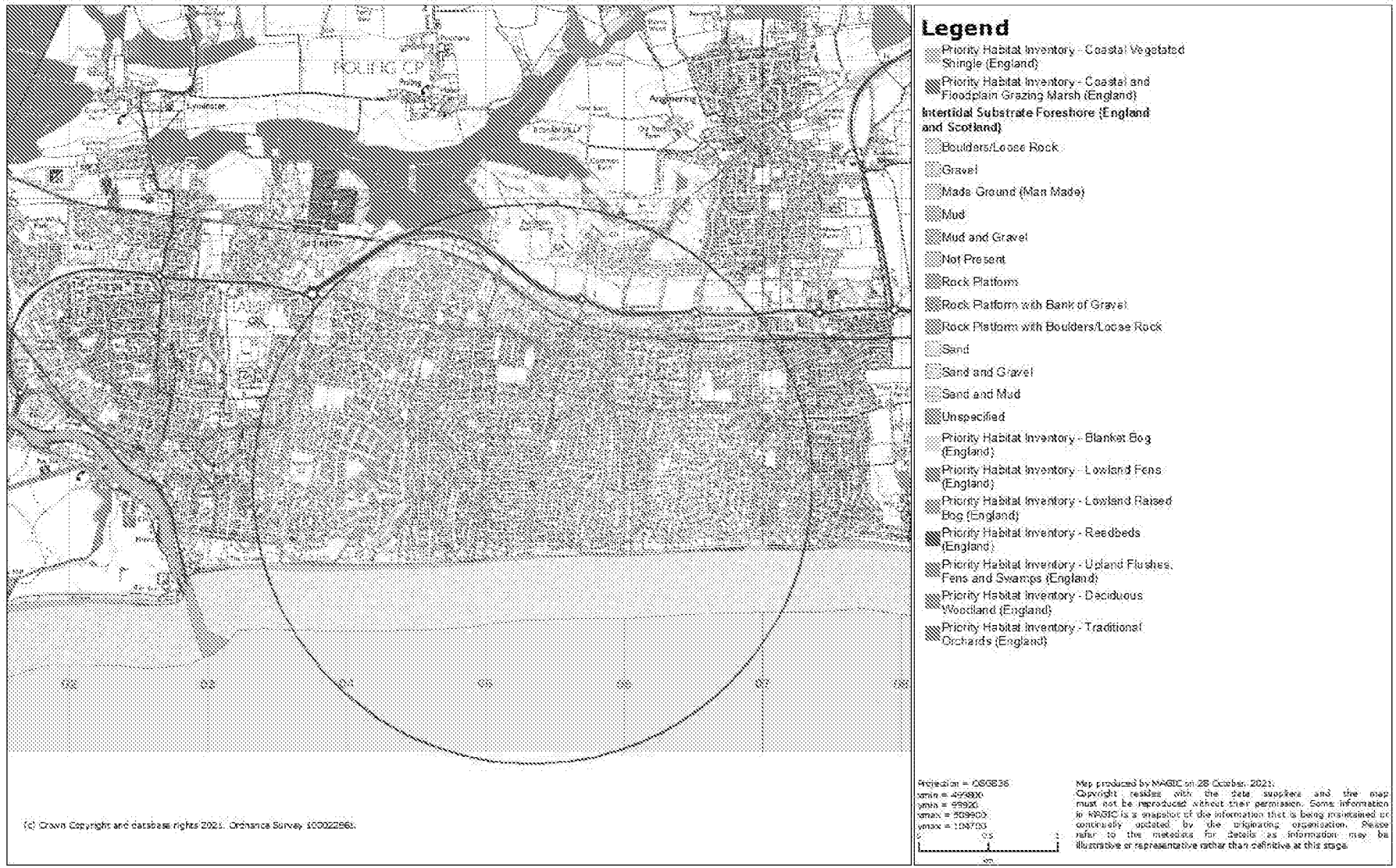
Appendix 2: Proposed Site Plan



Appendix 3: Desk Study Information

MAGIC

Habitats



Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

New legislation (2020)

*The **Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019** came into force when Britain left the European Union on 31st January 2020. It covered amendments relevant to this survey to:*

Wildlife and Countryside Act 1981: England and Wales (x1 amendment)

Conservation of Habitats and Species Regulations 2017 (x29 amendments)

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 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 1.000 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 within the EU, both within and outside Natura 2000 sites.

Annex V species (over 90): Member States must ensure that 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.

SACs and SPAs up to 12 nautical miles from the coast (i.e. 'territorial waters') are afforded protection in the UK under the Conservation of Habitats and Species Regulations 2017 which consolidate all amendments made to the Conservation (Natural Habitats, &c.) Regulations 1994.

The Conservation of Offshore Marine Habitats and Species Regulations 2017 consolidate and update the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007. The 2017 Regulations introduce amendments which transfer responsibility for European nature conservation in the Welsh offshore region to Welsh Ministers. This gives Welsh Ministers similar powers in Welsh offshore waters to those currently exercised by Scottish Ministers in Scottish offshore waters. These regulations transpose into national law Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (Habitats Directive), and elements of Council Directive 2009/147/EC on the conservation of wild birds (Wild Birds Directive) in the

UK offshore area. They came into force on 30th November 2017. These regulations apply to the UK's offshore marine area which covers waters beyond 12 nautical miles, within British Fishery Limits and the seabed within the UK Continental Shelf Designated Area. 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 12nm 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.

<u>The Hedgerow Regulations 1997</u>

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 Mitigation (EPSM) licence, 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) and Nature Conservation (Scotland) Act 2004.

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 agency's 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.

Reptiles (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 Mitigation (EPSM) Licence 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:

An EPSM Licence 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:

An EPSM Licence 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.

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 an EPSM licence 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:

An EPSM licence 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 planted listed on Schedule 5 of the Conservation or 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 Framework (England) 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 UK Biodiversity Action Plan priority species) 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; opportunities to incorporate biodiversity in and around developments are encouraged; 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 (Section 42 in Wales) 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.