



Preliminary Ecological Appraisal and Preliminary Roost Assessment

Fortis Green Tennis Club, 31 Southern Road, N2 9LH

Fortis Green LLP

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Industry Guidelines and Standards

This report has been written with due consideration to:

- Chartered Institute of Ecology and Environmental Management (2017). Guidelines for Preliminary Ecological Appraisal. 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.1. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2017). Guidelines on Ecological Report Writing. Chartered Institute of Ecology and Environmental Management, Winchester.
- Chartered Institute of Ecology and Environmental Management (2020). Guidelines for Accessing, Using and Sharing Biodiversity Data in the UK. 2nd Edition. Chartered Institute of Ecology and Environmental Management, Winchester.
- British Standard 42020 (2013). Biodiversity – Code of Practice for Planning and Development.
- British Standard 8683:2021 (2021). Process for Designing and Implementing Biodiversity Net Gain.

Proportionality

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

The desk studies and field surveys undertaken to provide a Preliminary Ecological Appraisal (PEA) might in some cases be all that is necessary.

(BS 42020, 2013)

This report has been marked confidential due to the inclusion of sensitive information regarding badgers but a redacted report suitable for the public domain can be provided upon request.

Executive Summary

Arbtech Consulting Limited was instructed by Fortis Green LLP to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Fortis Green Tennis Club, 31 Southern Road, N2 9LH (hereafter referred to as “the site”). The survey was required to inform a planning application for the demolition of the existing pavilion and 2 tennis courts, and construction of a new tennis pavilion with 3 apartments, 1 new tennis court and 5 new dwellings (hereafter referred to as “the proposed development”).

The following is work you will need to commission to obtain planning permission and to comply with legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Table 8 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Designated sites	The site is not subject to any statutory or non-statutory designation. There are 6 statutory sites within 2km of the site, the closest being Parkland Walk Local Nature Reserve located ~790m east from the site. Cherry Tree Wood SINC is located immediately to the south of the site.	No construction related impacts are anticipated to statutory designated sites due to their distance from site. Cherry Tree Wood lies adjacent to the site and could be at risk of damage through construction activities such as tree damage or pollution. The proposed development results in an increase in dwellings and therefore this could lead to an increase in visitor numbers and recreational pressure to nearby designated sites.	A Construction Environmental Management Plan (CEMP) should be considered, which would outline mitigation measures to limit indirect impacts to Cherry Tree Wood as a result of increased pollution during the construction phase of the development.
Habitats and flora	On-site Habitats The scattered trees and woodland on-site are planned to be removed under the proposed development, as well as significant disturbance to other vegetated areas. Notable Habitats There are no notable habitats within the site but 4 habitats are present within 2km of the site, the closest being lowland mixed deciduous woodland located in Cherry Tree Wood immediately to the south of the site.	On-site Habitats The clearance of trees and vegetation on-site will result in a reduction in available habitats for protected species. Notable Habitats No direct impacts to any notable habitats will occur as a result of the proposed development. However, due to the proximity of the site to lowland mixed deciduous woodland, indirect effects such as pollution or tree damage could occur during construction.	On-site Habitats A Biodiversity Net Gain (BNG) is being conducted for the site. Notable Habitats The CEMP recommended above will provide the necessary level of protection for the woodland within Cherry Tree Wood.

Reptiles	The woodland at the southern end of the site and planted shrubs around the site likely provide suitable habitat for reptile foraging, basking and sheltering activities. This is connected to deciduous woodland beyond the site's southern boundary, therefore it is possible that reptiles may be present on site.	~195m ² woodland will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to the presence of more extensive, better quality, habitat locally. However, site clearance could result in the death or injury of reptiles, if present.	Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction. Further details are included in Table 8.
Roosting bats (B1)	3 bat EPSLs were identified within 2km of the site, the closest being ~1.5km to the southwest. In line with Good Practice Guidelines (Collins, J. (Ed) 2016), B1 has moderate value for roosting bats, due to the presence of numerous features and access points around the building, including lifted roofing felt, loose cladding and gaps between the corrugated plastic roofing and the exterior walls.	The proposed development will result in the complete demolition of this building which would destroy any bat roosts present within. It may also could cause disturbance, death or injury to bats.	Two bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely absence of a bat roost in the building. Further details are included in Table 8.
Foraging and commuting bats	The woodland and scattered trees 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 adjacent Cherry Tree Wood will also provide similar benefits for foraging and commuting bats.	The proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat, in particular around Cherry Tree Wood (adjacent to the site). This could deter bats from using these areas.	A low impact lighting strategy will be adopted for the site during and post-development. Further details are included in Table 8.
Badger	A badger sett consisting of ~4 entrance holes, mamma trails and badger hairs were identified at the southern end of the site.	The 5 new dwellings proposed for the site are located approximately 11m from the entrance holes of the badger sett, therefore development works could result in the damage, destruction and/or disturbance of the badger sett on the site and could kill or injure any badgers present.	Badger surveys will be required to characterise the sett types present and the usage of the site by badgers. Further details are included in Table 8.
Hedgehog	The woodland and planted shrubs around site provide foraging, sheltering and commuting opportunities for hedgehogs. The site is also well connected to Cherry Tree Wood beyond the site's southern boundary.	Woodland, scattered trees and planted shrubs 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. However, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction. Further details are included in Table 8.

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1.0 Introduction and Context

1.1 Background

Arbtech Consulting Limited was instructed by Fortis Green LLP to undertake a Preliminary Ecological Appraisal (PEA) and Preliminary Roost Assessment (PRA) at Fortis Green Tennis Club, 31 Southern Road, N2 9LH (hereafter referred to as “the site”). The survey was required to inform a planning application for the demolition of the existing pavilion and 2 tennis courts, and construction of a new tennis pavilion with 3 apartments, 1 new tennis court and 5 new dwellings (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. The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging or commuting.

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 TQ 27674 89212 and has an area of approximately 0.3ha comprising 1 building (designated as B1), 3 sheds (designated as B2, B3 & B4), clay tennis courts and amenity garden. It is surrounded by suburban dwellings with amenity gardens, woodland copses and parkland with Cherry Tree Wood adjacent to the southern boundary of the site and East Finchley underground station ~425m to the East.

A site location plan is provided in Appendix 2.

1.3 Scope of the Report

The PEA element of 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.

The PRA element of this report provides a description of all features suitable for roosting, foraging and commuting 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 provides information on possible constraints to the proposed development as a result of bats and summarises the requirements for any further surveys 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, including roosting bats.
- 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.

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2.0 Methodology

2.1 Desk Study

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

2.2 Field Survey

The survey was undertaken by Benjamin Newbery (Accredited Agent to Natural England Bat Licence Number: 2019-41480-CLS-CLS) on 14th February 2023.

Preliminary Ecological Appraisal

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

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

Preliminary Roost Assessment

The PRA focussed on 4 built structures and all trees on-site which will be affected by the proposed development as well as providing an overview of the wider site and the surrounding landscape for bat roosting, foraging and commuting habitat.

For any surveyed buildings:

A non-intrusive visual appraisal was undertaken from the ground, using binoculars to inspect the external features of the buildings for features which bats could use for roosting, including access or egress points and for signs of bat use including droppings, scratch marks, insect remains and urine smear marks. An internal inspection of the buildings was also made, including the living areas and any accessible roof spaces, using a 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. An endoscope was used to complete a close-up inspection of any accessible features, where appropriate.

For any surveyed trees:

A visual inspection was undertaken from ground level using binoculars and, where accessible and safe to do so, an internal inspection of any features which bats could use for roosting was completed using an endoscope, torch and ladders.

Suitability Assessment

Built structures and trees were categorised according to the likelihood of bats being present and the types of roost that the identified features could support. This is summarised in Table 1 for buildings and Table 2 for trees below. Roost suitability is classified as high, moderate, low and negligible and dictates any further surveys required before works can proceed.

Table 1: Features of a building that are correlated with use by bats Delete if no buildings surveyed and renumber below table

Classification	Feature of building and its context
Moderate to high	Buildings or structures with features of particular significance for larger numbers of 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). Buildings with high suitability could support roosts of high conservation value such as maternity or hibernation roosts.
Low	A small number of possible roost sites or features, used sporadically by individual or small numbers of bats. Potential roost features may be suboptimal for reasons such as shallow depth, poor thermal qualities or upwards orientation with exposure to inclement weather or predators. 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.
Negligible	Unsuitable for use by bats.

Table 2: Features of a tree that are correlated with use by bats Delete if no trees surveyed

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

2.3 Limitations

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

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

Specific PEA Limitation

- The survey was completed outside of the optimal survey period (April to October) limiting the identification of ground flora species.

This limitation has been taken into account during the evaluation of the site and requirement for further surveys and mitigation.

3.0 Results and Evaluation

3.1 Designated Sites

Details of any statutory designated sites within a 2km radius of the site, including their reasons for notification, are provided in Table 3 below.

The site lies within the impact risk zone for Hamstead Heath Woods Site of Special Scientific Interest (SSSI). The proposed development type is not listed as a possible high risk with regard to this designation.

Table 3a: Statutory designated sites within 2km radius of the site

Designated site name	Distance from site (approx.)	Reasons for notification from Natural England
Parkland Walk Local Nature Reserve (LNR)	~790m to the east	The predominant habitat at Parkland Walk is secondary woodland. A large area of naturalised wild plum are present in the Islington section of Parkland Walk. English elm is occasionally present and most abundant in the Islington section. The Islington stretch is also very important for a range of wildlife and includes the borough's only area of acidic grassland which is home to several rare plants and insects.
Coldfall Wood LNR	~795m to the north	Ancient Oak-Hornbeam woodland with coppice, wetland area and stream.
Queen's Wood LNR	~915m to the southeast	The wood is an ancient oak-hornbeam woodland. English oak and occasional beech stand above hornbeam, midland hawthorn, hazel, mountain ash, field maple, cherry, holly and both species of lowland birch. The ground flora is particularly rich for somewhere so close to central London. It includes a large population of wood anemone, native bluebells, wood goldilocks and a thriving population of wood sorrel. Over one hundred species of spiders have been spotted and a nationally rare jewel beetle is widespread.
Alexandra Palace & Park (LNR)	~1.35km to the northeast	There are a good range of habitats to see, for an urban area. The reserve is particularly well known for its bird species.
Hampstead Heath Woods SSSI	~1.61km to the southwest	Hampstead Heath Woods are examples of long-established high forest woodlands with an exceptional structure comprising an abundance of old and over-mature trees providing dead wood habitat for a range of invertebrate species. The site also includes an adjacent small valley containing an acidic flush with developing bog-moss communities. The abundance of over-mature trees with decaying heartwood and dead standing and fallen timber provides suitable conditions for specialist invertebrate fauna. Several beetles which are dependent on dead wood have been recorded here, including the nationally rare jewel beetle <i>Agrilus pannonicus</i> whose larvae develop in and under the bark of oak. This species is rare in Britain and is listed as vulnerable in the British Red Data Book.
Coppetts Wood and Glebelands LNR	~1.86km to the northwest	The Glebelands is a remnant of Finchley Common and is a strip of woodland and ponds. The site is home to a variety of wild flowers and birds and slow worms.

Table 3b: Other notable Sites of Importance for Nature Conservation (SINCs) nearby

SINC name	Distance from site (approx.)	Reasons for notification from Natural England
Cherry Tree Wood	Adjacent to the site's southern boundary	Cherry Tree Wood is an ancient woodland managed as an attractive local park. It is a fragment of a once much larger woodland in Great Hornsey Park. The many-stemmed appearance of the hornbeam trees is evidence of the wood's historic management as 'coppice with standards'. The hornbeams were cut back every few years to provide wood for charcoal, whilst the oaks would be left to grow to their full height for timber. Since this practice ceased the hornbeams have grown tall and the wood has become rather heavily shaded. Barnet Council have re-introduced coppicing in places to encourage new growth. Wood anemone can be found here in spring with other ancient woodland plants including ramsons and wood-sedge. Nuthatch and great spotted woodpecker can often be sighted, and mistle thrushes forage on the open lawns.
Highgate Wood	~450m to the southeast	Highgate Wood forms a SINC in association with the nearby Parkland Walk and Queen's Wood. It is a 28 hectare area of ancient woodland in North London, and was originally part of the ancient Forest of Middlesex. Predominantly an oak, hornbeam and holly wood, Highgate Wood is also home to more than 50 other tree and shrub species which have self-seeded there, including the wild service tree (a rare deciduous tree with brown berries) which is an indicator of ancient woodland, can be found in Highgate Wood.

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 4.

Table 4: Weather conditions during the survey

Date: 09/02/2023	
Temperature	11°C
Humidity	73%
Cloud Cover	0%
Wind	4mph
Rain	None

Habitats and Flora

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

- **u1b5** – Buildings
- **u1c 531** – Clay tennis courts
- **u1d 10 11 66 231** – Amenity garden
- **u1e 69** – Fences
- **w1g 17** – Broadleaved woodland
- **w1g6** – Line of trees

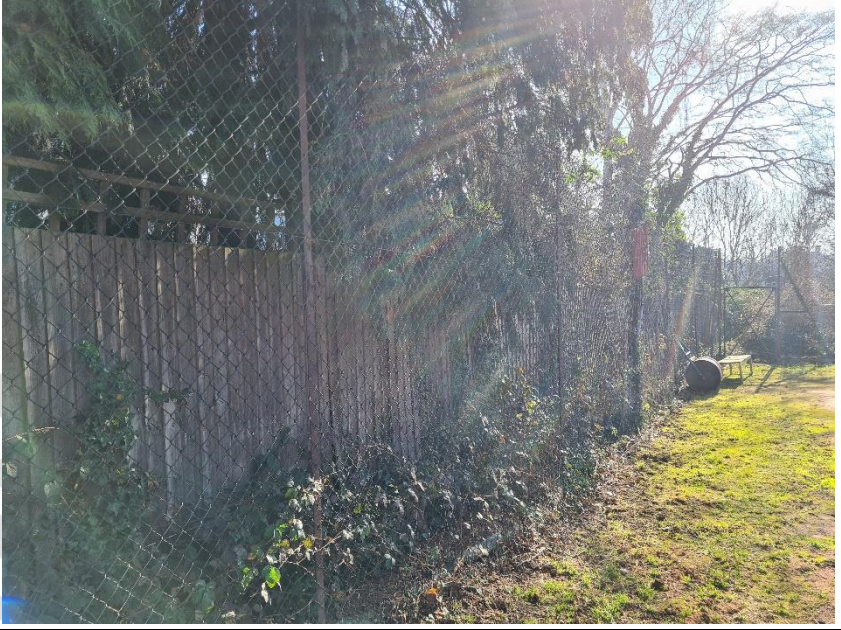
A description and photographs of each habitat are provided in Table 5.

No protected or non-native invasive plant species (as listed under Schedules 8 or 9 of the Wildlife and Countryside Act 1981) were identified on the site, however *Buddleja davidii* (LISI Category 3 species) was recorded in two locations on the site (see Target Note 1; Appendix 3).

Table 5: Description and photographs of habitats within and adjacent to the site

Habitat Type	Habitat description	Photograph
u1b5 – Buildings	There are 7 buildings located within the site boundary. B1 is the existing tennis pavilion (pictured opposite), B2 – B5 are garden sheds of various sizes, B6 is part of an outbuilding extending from a neighbouring property at 42 Cherry Tree Road and B7 is the garage of a property at 32 Summerlee Gardens.	

u1c 531 – Clay tennis courts	There are 4 shale clay tennis courts on site. Two in a fenced compound towards the north of the site and two in a separate fenced compound to the south.	
u1d 10 11 66 231 – Amenity garden	There is an amenity garden in the centre of the site and extending around the edges of the tennis courts. It is predominantly a lawn of grasses and herbaceous species, including perennial rye grass (D), clover (A), rye grass (F), creeping buttercup (O), cranesbill (O), comfrey (O), cat's ear (R), spear thistle (R), ragwort (R), lords and ladies (R) and <i>Crocus sp.</i> (R). There are also planted borders containing larger shrubs and native species, such as brambles (F), Japanese boxwood (A), laurel (A), ivy <i>Hedera sp.</i> (A), buddleia (O), cleavers (O), wood avens (R), hyacinth (R), Laurestine <i>Viburnum sp.</i> (R). Buddleia is a London Invasive Species Initiative (LISI) Category 3 species. Scattered trees around the garden include ash, cypress <i>Cupressus sp.</i>, laurel, apple and oak.	

u1e 69 - Fences	There are tall chain-link fences with metal posts surrounding both tennis court compounds and wooden fences which mark the site boundaries.	
w1g – Broadleaved woodland	The southern portion of the site is an overgrown area of woodland, with connectivity to Cherry Tree Wood beyond. There were several ash trees within this area as well as overgrown creeping plant species: honeysuckle <i>Lonicera sp.</i> (D) and ivy <i>Herera sp.</i> (F). Nettles (F) and dandelion (O) are also present in the understorey.	

Fauna

Bats

A search of the MAGIC database returned three granted EPSLs, the closest being 1.5km to the southwest which allowed the destruction of resting place of common pipistrelles (2019-39047-EPS-MIT; 2019-39047-EPS-MIT-1; 2019-39047-EPS-MIT-2). The second EPSL record (1.6km to the north) allowed the destruction of resting place of common pipistrelles (2018-36809-EPS-MIT; 2018-36809-EPS-MIT-1), and the third EPSL (1.7km to the west) allowed the destruction of resting place of common pipistrelles (2020-50669-EPS-MIT).

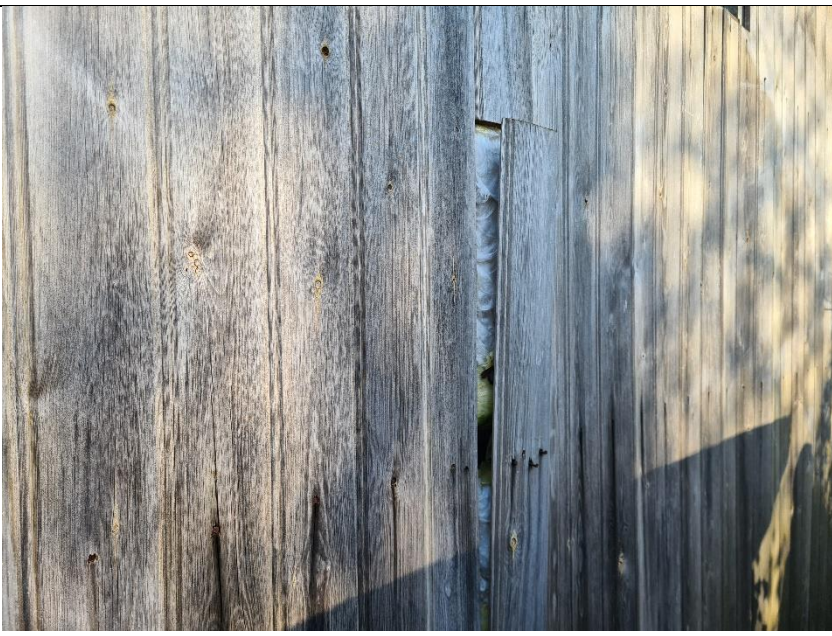
The site is currently a tennis club located in the London Borough of Haringey, in Greater London. It is surrounded by suburban dwellings and amenity gardens on three boundaries. The gardens contain numerous scattered trees which will provide foraging and commuting habitat for bats. Furthermore, the southern site boundary is connected to Cherry Tree Wood which contains sizeable areas of woodland which, alongside several other woodlands and golf courses nearby, provide additional areas of foraging and roosting for local bat populations.

The results of the PRA are provided in Table 6. No evidence of roosting bats was identified during the survey.

Table 6: Assessment of the suitability of the site for bats

Feature Ref	Description	Photographs
Picture 1 B1 – west and north elevations	The main building on site is currently used as a tennis pavilion. It is a single storey building of timber construction with a gabled roof at the rear covered in bitumen felt. This roof is in poor condition due to numerous lifted sections of felt along the roof verges (example in Picture 4). The front half of the building is covered with a corrugated plastic roof. This leaves numerous gaps along the western and northern roof verges (see Picture 2). This would allow bats access into the interior of B1. There is a flat roof section above the storage shed attached to the northern elevation of B1. This is in poor condition due to an open area of roof verge on the northern elevation and a hole in the roof which provides access into the interior (see Picture 6). The property is clad in timber panels which are in moderate condition. One loose panel was identified on the southern elevation of B1 (see Picture 5). This creates an access point for bats into the wall cavity where they can roost. There is also a gap in the cladding on the eastern elevation of B1. The doors and windows are UPVC framed and in good condition, leaving no gaps or cracks in which bats may roost. There are timber bargeboards at the front of the property which are in excellent condition and leave no gaps for bats to roost in.	

Picture 2 B1 – east elevation	The eastern elevation of B1 is pictured opposite. There is a gap in the cladding on this wall, the location of which is indicated by a yellow arrow. This provides bats with access into the cavity wall to roost.	
Picture 3 B1 – corrugated plastic roof (west elevation)	The corrugated plastic roofing above the front half of B1 leaves gaps above the wall. This provides bats with access into the interior of B1 where they might roost in features detailed in Picture 9.	

Picture 4 B1 - Lifted roofing felt	There are numerous areas of lifted bitumen felt along the roof verges of B1. One example is shown opposite. These gaps allow bats to either access wall tops, where they can roost, or allow bats to roost underneath the roofing felt.	
Picture 5 B1 – Cladding gaps	One timber panel was visibly loose on the southern elevation of B1. The wall cavity is visible behind where bats can roost.	

Picture 6 B1 - Roof hole	There is a hole in the roof of the attached shed on the northern side of B1. This creates an access point for bats to enter into the interior and roost within.	
Picture 7 B1 - Bird's nest	A bird nest was identified just beneath the roof verge of the attached shed on B1. This likely belongs to either a robin or wren. The location is marked on the PRA Survey Plan (see Appendix 3b).	

Picture 8 B1 - Interior	There are no loft spaces within the interior of B1. The interior was generally very bright due to the corrugated plastic ceiling and numerous windows. There interior walls had a cavity which was accessible through several gaps in the wooden cladding (example shown in Picture 9). Bats can roost within these cavity walls. The approximate internal dimensions of the building are: 11.6m (L) x 11.0m (W) x 7.7m (H) [Height is measured to the highest point of the room]. At the time of the survey the internal temperature was 14.8°C and humidity was recorded as 50%.	
Picture 9 B1 – Interior cladding gaps	An example of gaps in the cavity wall is shown in the picture opposite. There were also gaps towards the ridge of the roof which allow bats to roost above the internal ceilings. Overall, it is assessed that B1 provides moderate habitat value for roosting bats.	

Picture 10 B2 (right) & B3 (left) – Garden sheds	There are several sheds on site. B2 and B3 are wooden-clad, single-skinned shed with bitumen felt roofs located along the western border of the site. There are some access points into both sheds, however anecdotal evidence from one of the tennis club committee suggests that both sheds are used frequently during summer when bats may roost in there causing significant disturbance. Overall, it is assessed that B2 and B3 provide negligible habitat value for roosting bats.	
Picture 11 B4 – Garden shed (used as a toilet block)	B4 is a wooden cabin with bitumen felt roofing tiles. The building is well-sealed and used frequently as the site toilet. Overall, it is assessed that B4 provides negligible habitat value for roosting bats.	

Picture 12 B5 – Garden shed	B5 is wooden-clad, single-skinned shed with bitumen felt roofs located along in the northwest corner of the site. This shed is in a derelict state with several large gaps, visible in the picture opposite. Overall, it is assessed that B5 provides negligible habitat value for roosting bats.	
Picture 13 B6 – Neighbour's outbuilding	B6 is part of an outbuilding in a neighbouring property which extends into the southwest corner of the site. It is brick-built and rendered with wooden soffits and bargeboards, and a flat bitumen felt roof. The building appears to have been recently built and in excellent with no gaps or cracks in which bats can roost or access the interior of the building. Overall, it is assessed that B6 provides negligible habitat value for roosting bats.	

Picture 14 B7 – Neighbour's garage	B7 falls within the site boundary in the northwest corner. It appears to be a garage/outbuilding for a neighbouring property. It is brick-built and rendered with wooden soffits and bargeboards, and a gabled roof clad in bitumen felt roofing tiles. There are also two skylights in the roof. The building appears to be in good condition and well-sealed with no gaps or cracks in which bats can roost or access the internal structure to roost. Overall, it is assessed that B7 provides negligible habitat value for roosting bats.	
Picture 15 T1 and other Scattered trees	All trees on site were inspected for roosting features using binoculars. No suitable features could be identified on any of the trees on site. T1, an ash tree, is pictured opposite as an example. Overall, it is assessed that the scattered trees on site provide negligible habitat value for roosting bats.	

Other Species

An assessment of the suitability of the site for protected or notable species is provided in Table 7.

Table 7: Assessment of the suitability of the site for protected or notable species

Species	Assessment of suitability
Amphibians	A review of the MAGIC database returned no granted EPSL records or historic pond survey data for great crested newts within 2km of the site. However, one GCN Class licence return is located ~2km to the northwest. This positive record is located on the far side of the A406, so any great crested newts present there would have a significant barrier to dispersal in the direction of the site. Furthermore, great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). This record is therefore likely to be isolated from the site. There are no ponds on site, and only one standing waterbody within 500m of the site. This waterbody is a decorative fountain within the courtyard of an office block adjacent to East Finchley Underground Station. Due to significant amounts of hardstanding and dispersal barriers surrounding this pond, it would not be suitable to support great crested newts or other protected amphibians. There is suitable terrestrial habitat for amphibians within the areas of woodland and areas of planted shrubs on site. These areas would allow sheltering and foraging opportunities. The woodland may also provide sites for hibernation. Due to the lack of ponds within commutable distance of the site and significant dispersal barriers to identified nearby populations it seems unlikely that GCN are present.
Reptiles	There is suitable habitat for the basking, sheltering and foraging activities of reptiles within the planted shrubs around the site as these would provide refuge from predation, with opportunities for basking around the fringes. The woodland at the southern end of the site may also provide some hibernation opportunities.
Badgers	A badger sett consisting of ~4 holes was identified within the wooded area at the southern end of the site (the location of badger sett entrances is marked in Appendix 3a). The entrances were positioned in an earth bank and appeared to extend northwards towards the tennis courts. There were frequently trodden paths leading to each of the holes. These paths converged and went underneath a gate on the site's southern boundary. Badger hairs were identified along these paths and caught in the wire fences of the gate (pictured below). The site, and particularly the area where badger holes were identified, is well connected to Cherry Tree Wood to the south. This area provides suitable foraging opportunities for badgers. A walkover of Cherry Tree Wood and Highgate Wood (~450m southeast of the site) was conducted to search for any other badger setts which may be connected to those on-site, however no sett entrances were found. Mammal trails were identified within both woodlands which continued beyond boundary fences into inaccessible land. Those within Cherry Tree Wood lead towards inaccessible railway land to the southeast and those within Highgate Wood lead towards a fenced-off area in the southwest corner of the wood. It is possible that further badger setts are present within these areas.

Badgers (cont.)	 Picture 1: Badger holes, indicated by yellow arrows	 Picture 2: Badger hairs beneath the gate on the southern boundary of the site, indicated by yellow circles
Hazel Dormouse	A review of the MAGIC database returned no granted EPSL records for dormice within 2km of the site. The woodland at the southern end of the site is assessed to provide foraging, commuting, and nest building opportunities for dormice. This habitat is connected to woodland in Cherry Tree Wood beyond the site's southern boundary. Dormice typically utilise a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation; the woodland and overgrown creeping vegetation support this habitat structure. However, for isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright et al. 1994). The woodland on site and that within Cherry Tree Wood provide ~5.6Ha of habitat for dormice and a review of aerial imagery shows no connectivity to other areas of woodland in the wider urban landscape, thus the available habitat would be insufficient to support a viable population. The presence of hazel dormice on site is, therefore, unlikely.	
Hedgehog	The trees and overgrown creeping vegetation at the southern end of the site provides opportunities for hedgehog sheltering, foraging and hibernating activities. This area also has connectivity to Cherry Tree Wood beyond the site's southern boundary and therefore hedgehogs could commute around the area easily. Other scattered trees and shrubs (such as the apple tree) around the site also provide foraging opportunities. The gardens of properties neighbouring the site also likely provide numerous foraging opportunities for local hedgehog populations. The presence of hedgehogs on-site, therefore, cannot be discounted.	
Otter	A review of the MAGIC database returned no granted EPSL records for otters within 2km of the site. There is no connectivity to water courses or riparian habitats in the wider landscape. The site is not suitable for otters.	
Water Vole	There is no connectivity to water courses or riparian habitats in the wider landscape. The site is not suitable for water voles.	

Birds	The scattered trees on-site and trees within the woodland provide suitable foraging and nest-building resources for nesting birds. One bird nest was also identified within T1. One bird nest was also identified within the soffit box of B1. The site is not suitable for Barn Owls.
Invertebrates	The site likely promotes populations of common invertebrates.

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 8 presents an evaluation of the ecological value of the site and also details any ecological constraints identified in relation to the proposed development which will comprise the demolition of the existing pavilion and 2 tennis courts, and construction of a new tennis pavilion with 3 apartments, 1 new tennis court and 5 new dwellings.

Table 8: 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 the NPPF (2021) and Haringey's Local Plan (2013)</i>
Designated sites	The site is not subject to any statutory or non-statutory designation. There are 6 statutory sites within 2km of the site, the closest being Parkland Walk Local Nature Reserve located ~790m east from the site. Cherry Tree Wood SINC is located immediately to the south of the site.	No construction related impacts are anticipated to statutory designated sites due to their distance from site. Cherry Tree Wood lies adjacent to the site and could be at risk of damage through construction activities such as tree damage or pollution. The proposed development results in an increase in dwellings and therefore this could lead to an increase in visitor numbers	A Construction Environmental Management Plan (CEMP) should be considered, which would outline mitigation measures to limit indirect impacts to Cherry Tree Wood as a result of increased pollution during the construction phase of the development.	None.

	The presence of non-statutory designated sites within 2km of the site cannot be established without data from Greenspace Information for Greater London CIC (GiGL).	and recreational pressure to nearby designated sites.		
Habitats and flora	On-site Habitats The scattered trees and woodland on-site are planned to be removed under the proposed development, as well as significant disturbance to other vegetated areas. Notable Habitats There are no notable habitats within the site but 4 habitats are present within 2km of the site, the closest being lowland mixed deciduous woodland located in Cherry Tree Wood immediately to the south of the site. Invasive Species Buddleia (<i>Buddleja davidii</i>) was identified on the site which is listed as an invasive, non-native species under Category 3 of the London Invasive Species Initiative (LISI).	On-site Habitats The clearance of trees and vegetation on-site will result in a reduction in available habitats for protected species. Notable Habitats No direct impacts to any notable habitats will occur as a result of the proposed development. However, due to the proximity of the site to lowland mixed deciduous woodland, indirect effects such as pollution or tree damage could occur during construction. Invasive Species Construction could result in the spread of Buddleia.	On-site Habitats A Biodiversity Net Gain (BNG) is being conducted for the site. Notable Habitats The CEMP recommended above will provide the necessary level of protection for the woodland within Cherry Tree Wood. Invasive Species Buddleia should be dug up, including roots, and disposed of in line with appropriate controlled waste measures.	Proposed habitat creation and enhancement will be detailed within the BNG assessment. Species-specific enhancement opportunities are detailed later in this table.
Amphibians	No Great Crested Newt (GCN) EPSLs are present within 2km of the site however 1 class licence return is located ~2km northwest from the site. This record is located on the far side of a main road which	No impacts are anticipated on amphibians, including great crested newt, as a result of the proposed development.	None.	None.

	would create a significant barrier to dispersal in the direction of the site. There are no suitable ponds within 500m of the site, therefore it is unlikely that GCN will be present.			
Reptiles	The woodland at the southern end of the site and planted shrubs around the site likely provide suitable habitat for reptile foraging, basking and sheltering activities. This is connected to deciduous woodland beyond the site's southern boundary, therefore it is possible that reptiles may be present on site.	~195m² woodland will be removed during construction. The loss of such habitats is likely to be inconsequential to local reptile populations owing to the presence of more extensive, better quality, habitat locally. However, site clearance could result in the death or injury of reptiles, if present.	Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented during construction, including the following measures: • Site clearance will be undertaken outside of the reptile hibernation season (November to February) insofar as is possible. • A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any reptiles to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter reptiles from the working area. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for reptiles: • Creation of reptile refugia and hibernacula towards the southern end of the site using debris and brash from site clearance. • Planting of native scrub and grassland to increase foraging opportunities. • The creation of basking areas such as rock piles or areas of cleared ground with shelter nearby.

Roosting bats (B1)	3 bat EPSLs were identified within 2km of the site, the closest being ~1.5km to the southwest. In line with Good Practice Guidelines (Collins, J. (Ed) 2016), B1 has moderate value for roosting bats, due to the presence of numerous features and access points around the building, including lifted roofing felt, loose cladding and gaps between the corrugated plastic roofing and the exterior walls.	The proposed development will result in the complete demolition of this building which would destroy any bat roosts present within. It may also could cause disturbance, death or injury to bats.	Two bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely absence of a bat roost in the building. Both of the surveys should be completed during the optimal survey period mid-May to August inclusive. Infra-red cameras should be used as an aid. Surveys should be a minimum of two weeks apart. Four surveyors are required to provide full coverage of the building. If bat roosts are confirmed in the building one additional survey may be required to characterise the roost and to inform an EPSL application to Natural England. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission.	To be confirmed upon completion of the surveys.
Roosting bats (B2-B7)	Buildings B2 – B7 have negligible value for roosting bats due to a lack of potential roost features (Collins, J. (Ed) 2016).	Bats are very unlikely to be roosting within this building or tree and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development.	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.	To be confirmed upon completion of the surveys of B1.
Roosting bats (T1 and scattered trees)	In line with Good Practice Guidelines (Collins, J. (Ed) 2016), all trees on site are assessed to have negligible value for roosting bats.	The proposed development will result in the felling of all trees. This could result in destruction of any bat roosts present and could cause disturbance, death or injury to 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.	To be confirmed upon completion of the surveys of B1.

Foraging and commuting bats	The woodland and scattered trees 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 adjacent Cherry Tree Wood will also provide similar benefits for foraging and commuting bats.	Foraging and Commuting Habitat The proposed development will result in the loss of ~195m² woodland and several scattered trees, but given the presence of more extensive areas of foraging and commuting habitat in the locality, such as within Cherry Tree Wood, this is likely to be inconsequential for bats. Artificial Lighting The proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat, in particular around Cherry Tree Wood (adjacent to the site). This could deter bats from using these areas.	Foraging and Commuting Habitat None Artificial Lighting A low impact lighting strategy will be adopted for the site during and post-development, which will include the following measures: • Light spill onto Cherry Tree Wood will be avoided. • Use narrow spectrum light sources to lower the range of species affected by lighting. • Use light sources that emit minimal ultra-violet light. • Avoid white and blue wavelengths of the light spectrum to reduce insect attraction and where white light sources are required in order to manage the blue shortwave length content they should be of a warm / neutral colour temperature <4,200 kelvin. • Not use bare bulbs and any light pointing upwards. The spread of light will be kept in line with or below the horizontal. • Light spill will be reduced via the use of low-level lighting used in conjunction with hoods, cowls, louvers and shields. Lights will also be directional to ensure that light is directed to the intended areas only.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats: • Planting of native tree, shrub and hedgerows to increase foraging opportunities.
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			- External lighting will be on PIR sensors that are sensitive to large objects only (so that they are not triggered by passing bats) and will be set to the shortest time duration to reduce the amount of time the lights are on. - Wall lights and security lights will be 'dimmable' and set to the lowest light intensity settings. There are several products on the market that allow the control of the light intensity and the duration that the lights are on. All lighting on the developed site will make use of the most up to date technology available.	
Badger	A badger sett consisting of ~4 entrance holes, mamma trails and badger hairs were identified at the southern end of the site.	The 5 new dwellings proposed for the site are located approximately 11m from the entrance holes of the badger sett, therefore development works could result in the damage, destruction and/or disturbance of the badger sett on the site and could kill or injure any badgers present.	Badger surveys will be required to characterise the sett types present and the usage of the site by badgers. This will comprise the deployment of wildlife cameras over a period of 3-4 weeks and such surveys can be undertaken throughout the year, in accordance with current survey guidelines (Harris et al, 1989). The surveys are likely to be required before planning permission can be granted. Disturbance, damage or destruction of active badger setts will require a badger development licence.	To be confirmed upon completion of the surveys.
Hazel dormouse	The site is not suitable for hazel dormice.	No impacts are anticipated on hazel dormice as a result of the proposed development.	None.	None.

Hedgehog	The woodland and planted shrubs around site provide foraging, sheltering and commuting opportunities for hedgehogs. The site is also well connected to Cherry Tree Wood beyond the site's southern boundary.	Woodland, scattered trees and planted shrubs 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. However, construction activities could result in the death or injury of hedgehogs, if present.	A precautionary working method will be implemented during construction, including the following measures: • Site clearance will be undertaken outside of the hedgehog hibernation season (November to March) insofar as is possible. • A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 15cm and left overnight to allow any hedgehogs to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter hedgehogs from the working area. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If a hedgehog is found then this should be moved by gloved hand to an undisturbed and sheltered area of the site or adjacent land.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses towards the southern end of the site. • Maintenance of gaps under boundary fencing to enable hedgehogs to move freely through the site.
Otter	The site is not suitable for otters.	No impacts are anticipated on otters as a result of the proposed development.	None.	None.

Water vole	The site is not suitable for water voles.	No impacts are anticipated on water vole as a result of the proposed development.	None.	None.
Birds	Birds' nests were identified within the soffit box of B1 and in T1. Scattered trees on site and within the woodland area to the south of the site provide foraging and nest-building resources for bird.	~195m² woodland and scattered trees will be removed during construction. The loss of such habitats is likely to be inconsequential to local bird populations owing to their low value and the presence of more extensive habitat locally, such as within Cherry Tree Wood. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.	Works should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the B1 and any trees planned for felling should be undertaken immediately, by qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged.	The installation of a minimum of two bird boxes on retained mature trees around the site boundaries will provide additional nesting habitat for birds e.g. Woodstone Nest Box (buildings or trees) or a similar alternative brand. Tree 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. Bird boxes can also be installed under the eaves of new buildings e.g. Woodstone Nest Box, Vivara Pro WoodStone Swift Nest Box, Woodstone sparrow nest box or a similar alternative brand. Swifts and sparrows prefer to nest gregariously, so at least 3 boxes should be installed together. Boxes should be positioned at the eaves of a building and can be incorporated into the fabric of the building during construction e.g. WoodStone Build-in Invisible Swift Box or similar alternative brand. The boxes should face a northerly directly out of direct sunlight.

Invertebrates	The site likely promotes populations of common invertebrates. However, Cherry Tree Wood adjacent is likely to be of greater significance for invertebrates due to the presence of deadwood and mature trees.	No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.	None.	The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: • Native tree, hedgerow and shrub planting. • Creation of wildflower grassland. • Retention of deadwood on the site, particularly towards the southern end of the site adjacent to Cherry Tree Wood.
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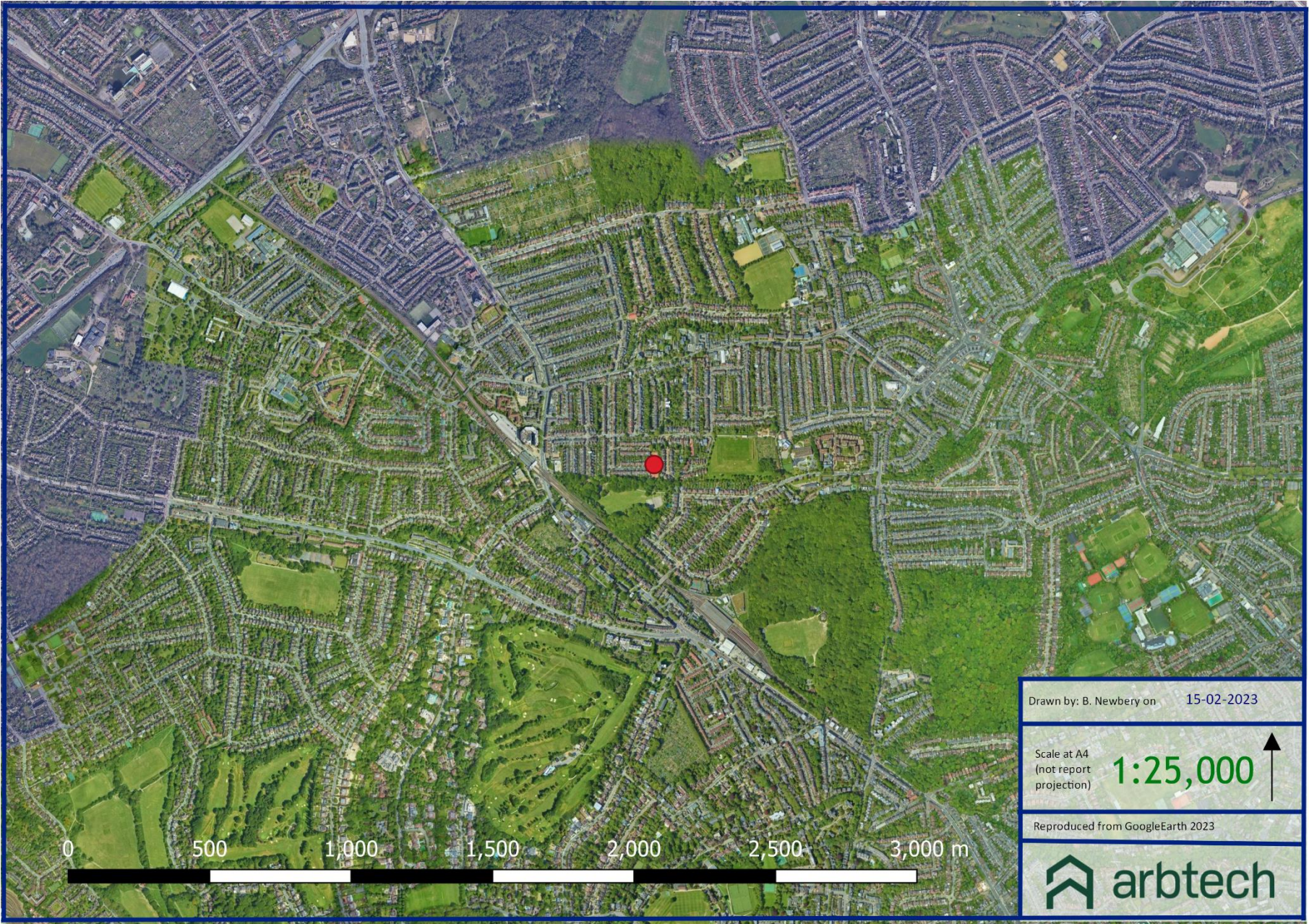
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Appendix 1b: Proposed Development Plan (Lower Ground Level)



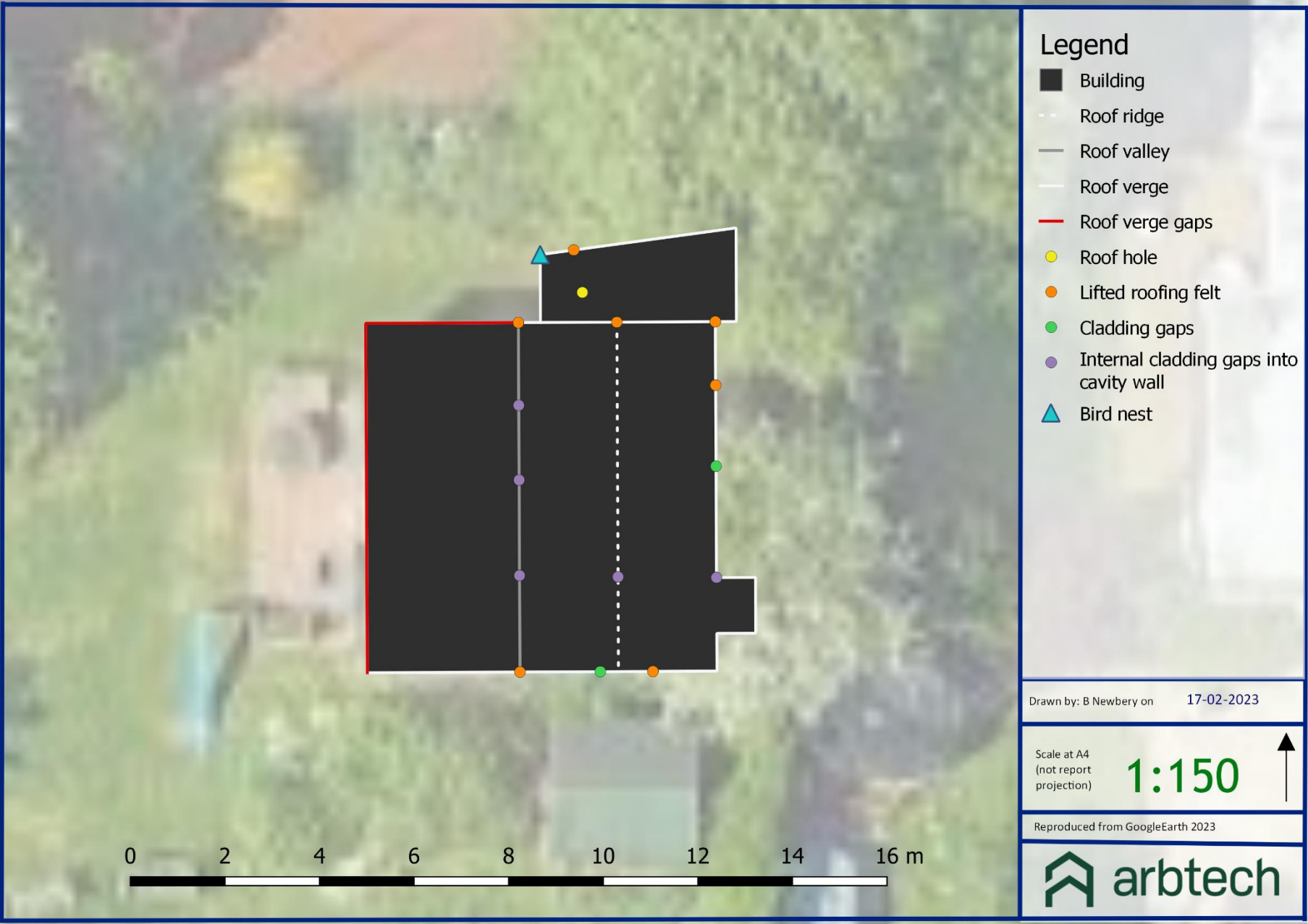
Appendix 2: Site Location Plan



Appendix 3a: Habitat Survey Plan



Appendix 3b: PRA Survey Plan



Appendix 4: Legislation and Planning Policy

LEGAL PROTECTION

National and European Legislation Afforded to Habitats

International Statutory Designations

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

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

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

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

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

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

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

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

National Statutory Designations

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

Local Statutory Designations

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

Non- Statutory Designations

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

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

The Hedgerow Regulations 1997

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

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

National and European Legislation Afforded to Species

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

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

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

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

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

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

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

Badgers

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

- Wilfully kill, injure, take, or attempt to kill, injure or take a badger
- Cruelly ill-treat a badger, including use of tongs and digging
- Possess or control a dead badger or any part thereof
- Intentionally or recklessly damage, destroy or obstruct access to a badger sett or any part thereof
- Intentionally or recklessly disturb a badger when it is occupying a badger sett
- Intentionally or recklessly cause a dog to enter a badger sett
- Sell or offers for sale, possesses or has under his control, a live badger

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 not possible to obtain a licence to translocate badgers.

Birds

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

- Intentionally (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 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 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 (ENGLAND)

Environment Act 2021

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

National Planning Policy Framework 2021

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

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

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

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

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

LOCAL PLANNING POLICY***Haringey's Local Plan (March 2013)***

The Haringey Local Plan can be viewed here: https://www.haringey.gov.uk/sites/haringeygovuk/files/final_haringey_local_plan_2017_online.pdf

The following planning policies have implications in relation to biodiversity and the proposed development:

- SP13: Open Space and Biodiversity:
 - New development shall protect and improve Haringey's parks and open spaces. All new development shall manage the impact of such new developments in areas adjacent to designated open space.
 - All development shall protect and improve sites of biodiversity and nature conservation, including private gardens through its: contribution to wildlife and ecological habitats and, where possible, include green and brown roofs, rainwater harvesting, green walls, bird and bat nesting/roosting opportunities; protection, management and maintenance of existing trees and the planting of new trees where appropriate; and protection, enhancement and creation of Sites of Importance for Nature Conservation (SINCs) and Local Nature Reserves (LNRs).

Haringey Biodiversity Action Plan (October 2009)

The Haringey Biodiversity Action Plan can be viewed here: https://www.haringey.gov.uk/sites/haringeygovuk/files/biodiversity_action_plan_2009-2.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:

- Parks and Open Space
- Woodland

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:

- Bats (all species)

EUROPEAN PROTECTED SPECIES POLICIES

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

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

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