



Indigo Ltd
S u r v e y s

2 Cliff Avenue, Summerseat

Preliminary Ecological Appraisal (PEA)

Sterling Properties

SD 79614 14970

20543

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Revision 1

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Disclaimer

This report has been prepared by Steven Whitcher for the sole use of the commissioning party. The report may not be relied upon by any other party without written agreement from Steven Whitcher.

In line with Chartered Institute of Environmental and Ecological Management (CIEEM) recommendations the findings of this survey are deemed valid for 18 months from the date of the survey.

1. Summary

Purpose	Planning permission is being sought for the demolition of the existing residential property at 2 Cliff Avenue in Summerseat and the residential development of the site. A Preliminary Ecological Appraisal (PEA) of the site was commissioned to accompany the application for planning permission.
Results	The habitats on the site are common habitats found in abundance throughout the surrounding area although Habitats of Principal Importance are present, in the form of hedgerows, and the site is functionally linked to areas of ancient woodland and additional Habitats of Principal Importance in the immediate surrounding area. The ecological receptors identified on the site included: - Existing records amphibian species in the area and ponds within 500m of the site, - Existing records of bats in close proximity to the site with roosting opportunities in the building, trees and exposed rock on site, - High value foraging and commuting habitat for bats on the site and in the surrounding area, - Existing records of birds with several species on site, including active nests, - Existing records of crayfish and otters along the River Irwell, in relatively close proximity to the site, - Existing records of hedgehogs in the surrounding area and suitable habitat for foraging and shelter on site, - Existing records of invertebrate species in the area around the site, - Terrestrial habitat suitable for reptile species on the site, - Two invasive non-native plant species present on the site.
Recommendations	- Retain existing habitats where possible and utilise appropriate native species in reinstated/created habitats, - Implement precautionary working methods for amphibians and reptiles, - Implement precautions for badgers and other mammals during the construction phase of the development, - Carry out additional bat surveys of the building and any trees to be removed from the site, - Retain the rock features on the site or carry out additional surveys prior to removal, - Implement a sensitive lighting scheme during the construction and occupation phases of the development, - Carry out additional bird surveys prior to any vegetation clearance or building demolition during the nesting season, - Implement precautionary working methods for hedgehogs, - Implement strict control conditions to prevent the spread of invasive non-native plant species during the development, - Consider including features for bats, birds and hedgehogs in the development.
Conclusions	If the development is carried out in a sensitive manner and retains existing habitats where possible and any reinstatement of habitats utilises locally appropriate native species the impact of the development on the biodiversity of the area will be negligible. If further surveys are carried out, where necessary, and suitable precautionary working methods are put in place during the development the impact on fauna species is likely to be minimal.

2. Introduction

2.1. Purpose

2.1.1. Planning permission is being sought for the demolition of the existing residential property at 2 Cliff Avenue in Summerseat and the residential development of the site.

2.1.2. A Preliminary Ecological Appraisal (PEA) of the site was commissioned to accompany the application for planning permission.

2.2. Site Description and Location

2.2.1. The site comprises 2 Cliff Avenue in Summerseat, an existing residential property, and the land associated with the property, which extends to 0.22 hectares (ha).



Figure 1: Showing the extent of the surveyed area.

2.2.2. The land surrounding the site comprises residential housing and roads to the east, west and south with the land to the north comprising a footpath and then a steep wooded slope down to the River Irwell.

2.2.3. The wider surrounding area comprises residential land within Summerseat to the west, with woodland and the River Irwell beyond, and further areas of residential land to the south, with open farmland beyond. To the north the land comprises the wooded corridor of the River Irwell with open countryside and the M66 motorway to the east.



Figure 2: Showing the site in context with the wider surrounding area.

2.3. Proposals

2.3.1. The proposals are to demolish the existing residential property and to residentially develop the site.

2.3.2. The plan in Appendix IV of this report shows the proposed site layout.

3. Methodology

3.1. Desk Study

3.1.1. A desk study was carried out in order to identify existing records of protected or notable species or habitats within 2km of the survey area.

3.1.2. Records of locally designated sites and existing records of protected species were requested from the Greater Manchester Ecology Unit (GMEU).

3.1.3. The MAGIC website was searched for records of statutory or non-statutory sites within 2km of the survey area and for records of existing European Protected Species (EPS) licence within the surrounding area.

3.1.4. The area within 500m of the site was searched for waterbodies using publicly accessible mapping including Ordnance Survey, Google Earth and the MAGIC website.

3.2. Field Study

3.2.1. A field survey of the site was undertaken on by Steven Whitcher (MCIEEM) on the 1st June 2023. The Preliminary Ecological Appraisal (PEA) was carried out in accordance with the industry standard and mapped using UKHab Classifications (2018).

3.2.2. The weather at the time of the survey was fine and clear with a light breeze (BWS-1) and a temperature of 14°C.

3.2.3. During the survey all habitats were noted, including dominant species, mapped and notable ecological features were target noted.

3.2.4. The survey also looked for evidence of protected or notable fauna species or invasive non-native plant species and followed specific survey guidelines, where applicable, including:

- Checking all buildings, trees and structures for bat roosting potential in line with the Bat Conservation Trust Good Practice Guidelines, 3rd edition (Collins 2016), BTHK Bat Roosts in Trees (BTHK 2018) and BRHK Bat Roosts in Rock (BRHK 2021).
- Assessing all accessible ponds within 500m of the surveyed area using the Habitat Suitability Index (HSI) assessment criteria (Oldham et al. 2000).
- Assessing the habitats on site for their suitability to support protected or notable species, including but not limited to, badgers (Harris et al 1989), water voles (Strachan et al 2011), otters (Channin, 2003), crayfish, nesting birds (BBS,BTO), reptiles (Froglife 1999), hedgehogs and hazel dormice.

3.3. Limitations/Constraints

3.3.1. This survey was carried out to CIEEM methodologies and therefore provides an overview of the habitats present on the site with dominant, notable or indicator species within those habitats noted. As such the species lists included are intended to be sufficient to confidently assess habitat condition but are not intended to provide an exhaustive list of all species present.

3.3.2. The ponds identified within 500m of the site on maps of the area are not shown to be adjacent to areas of public access. Therefore, a thorough assessment of the ponds, including a Habitat Suitability Index (HSI) assessment could not be carried out during the survey.

4. Results and Interpretation

4.1. Designated Sites

4.1.1. GMEU returned several records of non-statutory designated sites within the 2km search area, including a site located immediately adjacent to the survey site.

Table 1: Non-statutory sites within 2km

Site Name	Designation	Reason for Designation	Location
Gollinrod Wood	Site of Biological Interest (SBI)	Ancient woodland & other habitats, birds & invertebrates	Immediately to the north
Broadhey Wood & Woodhey	SBI	Unknown	650m west
Nuttall Farm Pasture	SBI	Unknown	900m north
Crow Lumb Wood	SBI	Unknown	1.1km north
Flushes at Springside	SBI	Unknown	1.4km south
Redisher Wood	Local Nature Reserve (LNR)	Unknown	1.6km northwest
Redisher Woods & Holcombe Brook	SBI	Unknown	1.6km northwest
Whitewall Wood	SBI	Unknown	1.65km southeast
Castlesteads Wood, Burrs	SBI	Unknown	1.7km south
Kirkless Brook	SBI	Unknown	1.7km southwest
Edgars Field	SBI	Unknown	1.7km north
Kirklees	LNR	Unknown	1.7km southwest

4.1.2. GMEU did not return any records of statutory designated sites within the 2km search area and there are no records within the search area on the MAGIC website. The closest site comprises the West Pennine Moors SSSI, which is located 2.1km to the northwest.

4.1.3. The proposed development will not have a direct impact on any designated sites. The development may have indirect impacts on the sites in close proximity, notably Gollinrod Wood, due to increases in foot traffic and domestic pets. The impacts are assessed as minimal due to the small size of the development and the presence of existing urban areas surrounding the site.

4.2. Habitats

4.2.1. The habitats present within the surveyed area are outlined below and shown on the plan in Appendix I of this report. Appendix III includes species lists for each habitat.

4.2.2. u1-11, 231 Built-up areas and gardens – scattered trees, vegetated garden (0.13ha)

4.2.2.1. The gardens associated with 2 Cliff Avenue comprise established gardens that display a mixture of regularly managed lawns, flower beds and established tree lined banks with occasional exposed areas of rock (T10).

4.2.2.2. The lawns of the property display common grass and forb species regularly found in managed lawns, including meadow grass (*Poa sp.*), cocks foot (*Dactylis glomerata*), white clover (*Trifolium repens*) and common ragwort (*Senecio jacobaea*).



Figure 3: Highly managed lawns within the garden.



Figure 4 : Tree line banks and exposed rock.

4.2.2.3. The flower beds within the gardens are predominantly shrubby in nature with some areas having a ground covering of bark chippings. The species present in the beds include common shrubby species such as laurel (*Laurus nobilis*) and berberis (*Berberis sp.*) with some scrub species present in less managed areas, including nettle (*Urtica dioica*), bramble (*Rubus fruticosus*) and herb Robert (*Geranium robertianum*). Two invasive non-native plant species were also identified in the beds, those being rhododendron (*Rhododendron sp.*)(T2) and montbretia (*Crocasmia x crocosmifolia*)(T7).

4.2.2.4. The scattered trees number approximately thirty in total and are predominantly located on the steep banks to the east of the site, although occasional ornamental species are located elsewhere. The trees include several mature and semi-mature sycamore (*Acer pseudoplatanus*) and ash (*Fraxinus excelsior*) with species including holly (*Ilex aquifolium*), laburnum (*Laburnum anagyroides*) and silver birch (*Betula pendula*) also present.



Figure 5: Trees and shrubs to the east of the garden.



Figure 6: Areas of woodchip.

4.2.2.5. The gardens provide opportunities for a range of species due to the established nature of the vegetation, particularly to the east of the site, and the structure the trees provide in the wider landscape.

4.2.2.6. The proposed development retains the trees and garden areas to the east and north of the site and therefore will potentially have limited impact on the ecological value of the site, if the level of management remains similar to existing.

4.2.3. u1b Developed land; sealed surface (0.05ha)



Figure 7: Paving to the southwest of the site.



Figure 8: The driveway to the northeast.

4.2.3.1. There are several areas of sealed surface throughout the gardens of 2 Cliff Avenue. The areas comprise concrete paving slab patios, concrete pathways and a tarmac drive.

4.2.3.2. The areas of sealed surface provide negligible ecological value and therefore changes to the sealed surface areas of the site during the development will not impact on ecological value of the site.

4.2.4. u1b5 Buildings (0.04ha)

4.2.4.1. The building on the site comprises a large residential property and attached garage. The buildings are covered in detail in section 4.3.3. of this report.



Figure 9: The property, viewed from the northwest.



Figure 10: The property, viewed from the northeast.

4.2.5. h2a Hedgerow (Priority Habitat) (71m)

4.2.5.1. To the east and south of the site a native hedgerow extends along the site boundary underneath the canopy of the trees. The hedgerow displays some management, predominantly to cut it back along the pavements around the site, but generally extends to approximately 2.5-3m in height.



Figure 11: The hedgerow to the east of the site.



Figure 12: The hedgerow to the south of the site.

4.2.5.2. The hedgerow displays several woody species, including privet (*Ligustrum sp.*), hawthorn (*Crataegus monogyna*) and sycamore with limited ground vegetation dominated by ivy (*Hedera helix*).

4.2.5.3. The hedgerows provide opportunities for a range of species and provide connectivity underneath the canopy of the trees. Native hedgerows are also a Habitat of Principal Importance under the NERC Act 2006.

4.2.5.4. The proposed development will retain the majority of the native hedgerows, with the minor loss on the southern boundary to facilitate additional site access. Therefore, the impact on the hedgerows will have minimal impact on the ecological value of the site.

4.2.6. h2b Other hedgerows (11m)

4.2.6.1. To the south of the site a short section of conifer (*Cupressus x leylandii*) hedge extends along the site boundary. The hedgerow displays no signs of recent management and has therefore become tall and overgrown.



Figure 13: The section of conifer hedgerow.

4.2.6.2. The hedgerow provides opportunities for some bird species but generally has minimal ecological value. Therefore, the removal of the hedgerow during the development will have minimal impact on the ecological value of the site.

4.2.7. u1e Built linear features (109m)

4.2.7.1. To the west and north the site boundaries comprise a mixture of brick and stone walls and wooden post and panel fencing. The fencing provides negligible ecological value.

4.3. Fauna

4.3.1. Amphibians

4.3.1.1. GMEU returned three records of great crested newt (*Triturus cristatus*) within the 2km search area although no records specific to the surveyed area or immediate surrounding area. The closest records are vague records of the species at Summerseat Nature Reserve, which is located approximately 300m to the west.

4.3.1.2. GMEU also returned three records of common toad (*Bufo bufo*), including a record in Gollinrod Wood, immediately to the north, and Summerseat Nature Reserve, 300m to the west.

4.3.1.3. No ponds were identified within the surveyed area although three ponds were identified within 500m of the site on maps of the area, as shown in Figure 14.

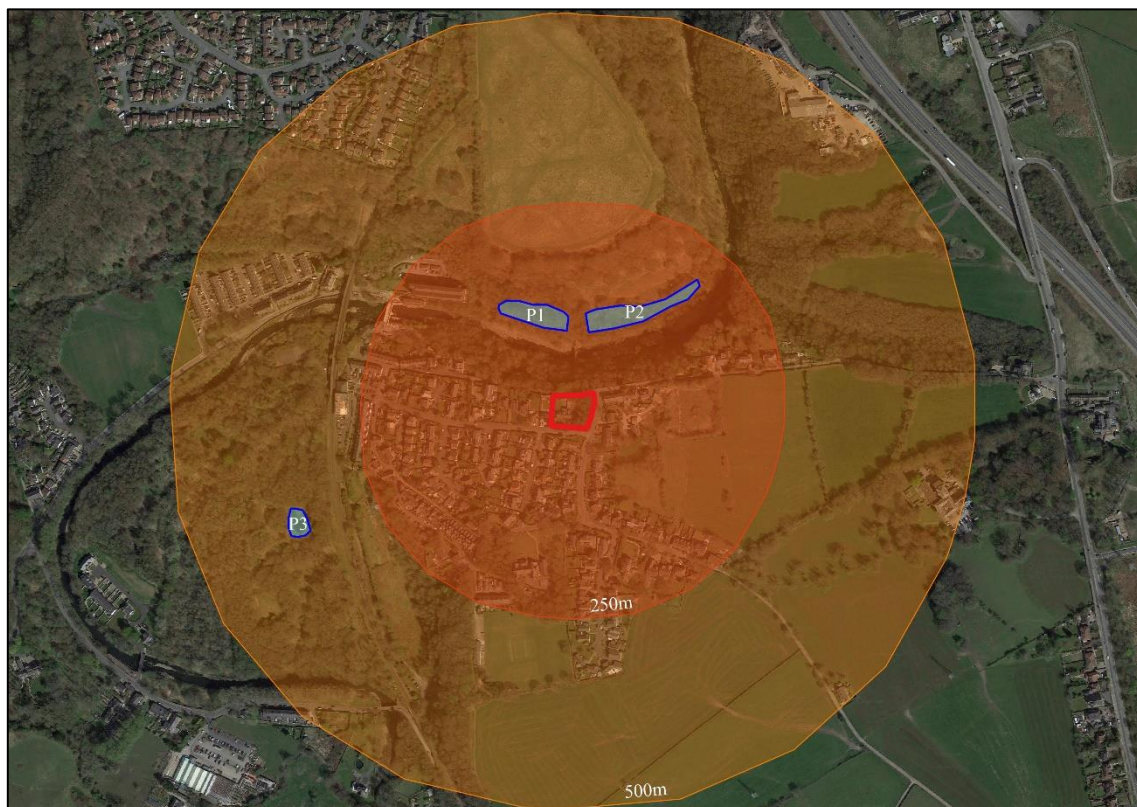


Figure 14: Showing the location of ponds, including 250m and 500m buffers around the site.

4.3.1.4. The ponds are not located adjacent to areas highlighted on maps as public access and therefore a thorough inspection of the ponds was not carried out during the survey.

4.3.1.5. Ponds P1 and P2 are located approximately 100m to the north of the site but are separated from the site by the River Irwell and the steep banks associated with the river, which are assessed as barriers to amphibian movement. The ponds appear to be the location of the existing records of common toads.

4.3.1.6. Pond P3 is located 390m to the west of the site and appears to be the location of the existing records of common toad and vague records of great crested newts.

4.3.1.7. The site provides areas of suitable terrestrial habitat for amphibians, including several compost heaps or piles of garden waste (T1), although no terrestrial amphibians were identified during the survey.

4.3.1.8. Due to the location of the existing ponds, which are separated from the site by barriers to amphibian movement and buffers of urban land with more suitable terrestrial habitats in close proximity to the ponds, it is assessed as unlikely that amphibians that utilise the ponds will be present on site. Therefore, if suitable precautionary working methods are implemented during the development the impact on amphibians will be negligible.

4.3.2. Badgers

4.3.2.1. GMEU returned occasional records of badgers (*Meles meles*) and badger setts within the 2km search area, although no records specific to the surveyed area or immediate surrounding area.

4.3.2.2. No badger setts or other badger field signs were identified within the surveyed area. Therefore, if precautionary working methods are implemented during the development the impact on badgers will be negligible.

4.3.3. Bats

4.3.3.1. GMEU returned abundant records of bats within the 2km search area although no records specific to the surveyed area. The records include records of a potential common pipistrelle (*Pipistrellus pipistrellus*) maternity roost on Crag Avenue, located immediately to the south of the site, plus field records and records of grounded bats on Cliff Avenue.

4.3.3.2. There are three records of granted Natural England licences within the 2km search area on the MAGIC website. The closest record refers to a 2020 licence covering common pipistrelle located 800m to the east of the site.

4.3.3.3. One building was identified within the surveyed area, the main residential property.

4.3.3.4. The Residential Property (T12)

4.3.3.4.1. The building comprises a residential property that partially extends over one floor and partially over two. The building is currently occupied.

4.3.3.4.2. The walls of the building comprise brick cavity walls with rendered areas along the southern elevation. The windows and doors around the building comprise a mixture of wooden and uPVC units with boxed wooden soffits to the two storey areas of the building and large uPVC soffits to the single storey areas.



Figure 15: The southern elevation of the building.



Figure 16: The northern elevation of the building.



Figure 17: The eastern elevation of the building.

4.3.3.4.3. The roof of the building comprises a tiled multi-pitch roof over the main house with flat felt and fibreglass roofs over the single storey areas of the building.

4.3.3.4.4. There are no loft spaces within the building with the living spaces extending into the roof voids.

4.3.3.4.5. The walls of the building were found to be generally good condition throughout the majority of the building although large cracks were identified in the southern elevation of the main building and around the single storey areas of the building to the north. No bat field signs were identified around the cracks during this survey.



Figure 18: The cracks in the single storey areas of the building.



Figure 19: Cracks in the southern elevation.

4.3.3.4.6. The windows and doors around the building displayed areas of deteriorating woodwork and flaking paint on the frames but were generally well sealed into the brickwork of the building.

4.3.3.4.7. The soffits around the building displayed abundant voids due to deteriorating or missing woodwork and uPVC panels. The voids extended into the soffits and provided potential access to the cavity walls of the building.



Figure 20: Missing woodwork on the soffits of the building.



Figure 21: Extensive voids around the garage.



Figure 22: Missing cement in the western elevation.



Figure 23: Missing cement in the northern elevation.

4.3.3.4.8. The verges of the building displayed abundant areas of missing cement providing potential access to the void underneath the roof tiles.

4.3.3.4.9. The roof of the building was generally found to be in a good condition with tight fitting tiles and the ridge tiles in place and mortared. Occasional areas of slipped tiles were identified although the areas did not provide suitable access points.



Figure 24: The roof of the building.



Figure 25: Areas of slipped roof tiles.

4.3.3.4.10. The flat roofs of the building were generally in a good condition although there were areas that displayed high levels of leaf litter and significant signs of movement.

4.3.3.4.11. Overall, the building was assessed to provide a moderate potential to support roosting bats due to the gaps in the walls, soffits and verges of the building. No bat field signs were identified during this survey of the building.

4.3.3.5. Several trees that were assessed as displaying Potential Roost Features (PRF) were identified within the surveyed area.

4.3.3.6. Tree 1 (T3)

4.3.3.6.1. Tree 1 comprises a semi-mature sycamore located on the bank at the eastern edge of the site.



Figure 26: The semi-mature sycamore (T3).

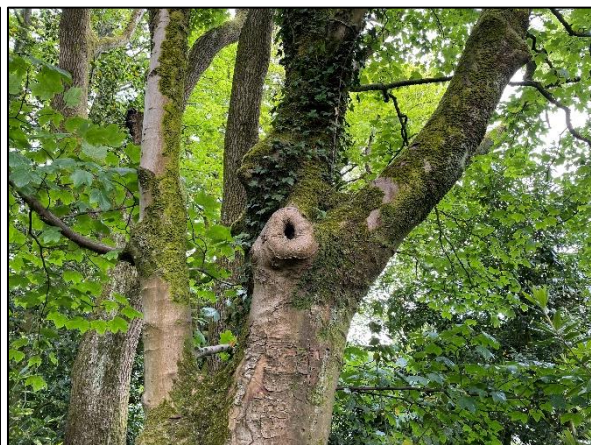


Figure 27: The east facing knot hole.

4.3.3.6.2. The tree displays an east facing knot hole at approximately 3m. Due to the presence of the knot hole the tree was assessed to provide a moderate potential to support roosting bats.

4.3.3.7. Tree 2 (T5)

4.3.3.7.1. Tree 2 comprises a semi-mature ash located on the bank at the eastern edge of the site.

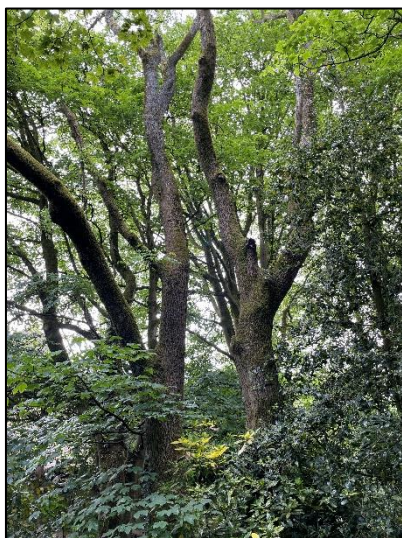


Figure 28: The ash tree (T5).

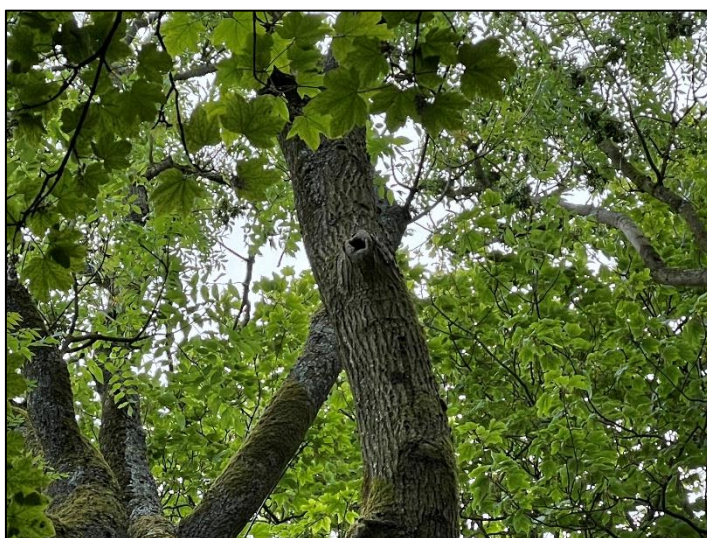


Figure 29: The west facing knot hole.

4.3.3.7.2. The tree displays a west facing knot hole at approximately 6m. Due to the presence of the knot hole the tree was assessed to provide a moderate potential to support roosting bats.

4.3.3.8. Tree 3 (T6)

4.3.3.8.1. Tree 3 comprises a goat willow located on the northern boundary of the site.

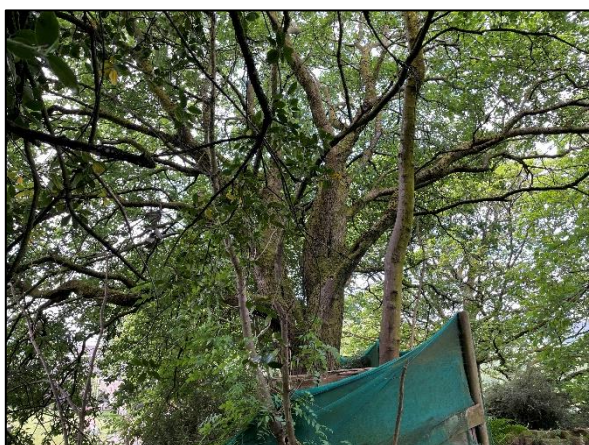


Figure 30: The goat willow (T6).

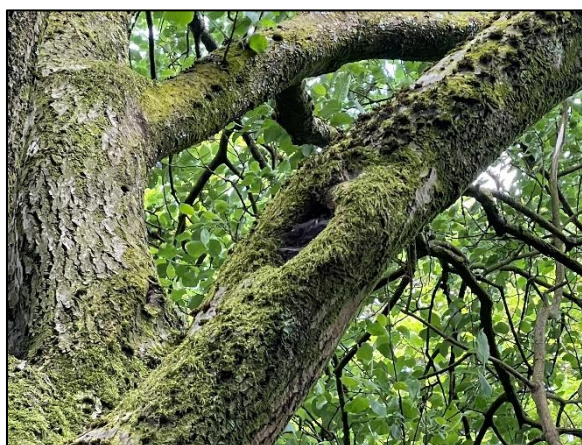


Figure 31: The southeast facing tear out.

4.3.3.8.2. The tree displays a southwest facing tear out at 4m. Due to the presence of the tear out the tree was assessed to provide a moderate potential to support roosting bats.

4.3.3.9. Tree 4 (T8)

4.3.3.9.1. Tree 4 comprises a semi-mature sycamore located at the bottom of the bank to the east of the site.

4.3.3.9.2. The tree displays a large tear out and associated damage west facing on the main stem from 0-3m. Due to the presence of the feature the tree was assessed to provide a moderate potential to support roosting bats.

4.3.3.10. Tree 5 (T9)

4.3.3.10.1. Tree 5 comprises a semi-mature sycamore located on the bank to the northeast of the site.



Figure 32: The semi-mature sycamore tree (T9).



Figure 33: The southeast facing knot hole.

4.3.3.10.2. The tree displays a southeast facing knot hole at 3m. Due to the presence of the knot hole the tree was assessed to provide a moderate potential to support roosting bats.

4.3.3.11. Tree 6 (T11)

4.3.3.11.1. Tree 6 comprises a semi-mature sycamore located at the eastern end of the site, immediately adjacent to the single storey garage.



Figure 34: The sycamore tree (T11).



Figure 35: The extensive damage to the stem of the tree.

4.3.3.11.2. The tree displays extensive damage to the stem and lower limbs from 0-4m. Due to the presence of the feature the tree was assessed to provide a moderate potential to support roosting bats.

4.3.3.12. Two areas of exposed rock were also identified on the bank to the east of the site (T10). The areas displayed deep cracks and other voids that may provide suitable roosting opportunities for bats, although no field signs were visible during this survey.



Figure 36: Exposed rock within the bank.



Figure 37: Further areas of rock to the southeast.

4.3.3.13. The proposed development will require the demolition of the existing building and the removal of some of the trees, where in close proximity to the building. Therefore, the development will potentially have a significant impact on roosting bats, if they are present in the building or the trees that will be affected by the works.

4.3.3.14. The site was assessed as providing a high value foraging and commuting habitat for bats due to the presence of established vegetation and trees lines and the connectivity the site has to the River Irwell, and the associated river corridor, to the north.

4.3.3.15. A thorough assessment of the foraging and commuting activity on and around the site was not carried out during the survey.

4.3.3.16. The development retains the majority of the trees on the site and therefore the impact on foraging and commuting bats is likely to be minimal, if a sensitive lighting scheme is implemented during the development.

4.3.4. Birds

4.3.4.1. GMEU returned records of several bird species within the 2km search area, although no records specific to the surveyed area or immediate surrounding area. The closest records refer to the presence of kingfisher (*Alcedo atthis*) along the River Irwell.

4.3.4.2. The site provides nesting and foraging opportunities for a range of bird species with several species of bird identified during the survey, including chaffinch (*Fringilla coelebs*), blackbirds (*Turdus merula*) and song thrush (*Turdus philomelos*), an International Union for the Conservation of Nature (IUCN) amber list species.

4.3.4.3. During the survey a tawny owl (*Strix aluco*), an IUCN amber list species, nest box was identified on a tree on the bank to the east of the site (T4). The occupiers of the property

anecdotally reported that the box was occasionally monitored and that owls had previously nested in the box, although the box wasn't disturbed to inspect for a nest during this survey.

4.3.4.4. A song thrush nest was identified in the soffit on the front of the garage during the survey. The bird was identified flying to and from the nest during the survey, indicating current use of the nest, although the stage of the nesting behaviour was not confirmed during the survey.



Figure 38: The tawny owl nest box (T4).



Figure 39: The song thrush nest in the garage.

4.3.4.5. Any site clearance or building demolition works carried out during the nesting season, which extends from March to September each year (weather dependent) will potentially have a significant impact on any nests present on the site at the time of the survey. Changes in activity during the nesting season may also impact on nesting birds, notably tawny owls, if they utilise the nest box on site.

4.3.5. Crayfish

4.3.5.1. GMEU returned a single record of white clawed crayfish (*Austropotamobius pallipes*) located on the River Irwell at Nuttall Park, located 1.5km to the north.

4.3.5.2. The River Irwell flows in close proximity to the site, located approximately 40m to the north, but will remain unaffected by the proposed development. Therefore, there will be no impact on white clawed crayfish during the proposed development.

4.3.6. Hedgehogs

4.3.6.1. GMEU returned occasional records of hedgehog (*Erinaceus europaeus*) within the 2km search area, although no records associated with the surveyed area. The closest records refer to the presence of the species along Crag Avenue, immediately to the south of the site.

4.3.6.2. The site provides opportunities for hedgehogs for shelter and foraging due to the established nature of the gardens and the presence of areas of dense vegetation and compost/garden waste piles (T1). No hedgehog field signs were identified during this survey.

4.3.6.3. The proposed development will potentially have a significant impact on the species if hedgehogs seek shelter on the site and may cause habitats to become fragmented, if suitable measures are not implemented during the construction and occupation phases of the development.

4.3.7. Invertebrates

4.3.7.1. GMEU returned occasional records of invertebrate species within the 2km search area, although no records specific to the surveyed area or immediate surrounding area. The closest records refer to the presence of white letter hairstreak butterflies (*Satyrrium w-album*) 350m to the west of the site.

4.3.7.2. The site provides opportunities for a range of invertebrate species although no high value invertebrate habitats were identified. A thorough invertebrate survey was not carried out during the survey.

4.3.7.3. Due to the lack of high value habitats and the managed nature of the gardens of 2 Cliff Avenue it is assessed that the proposed development will not have a significant impact on invertebrate communities.

4.3.8. Otters

4.3.8.1. GMEU returned occasional records of otters (*Lutra lutra*) within the 2km search area, although no records specific to the surveyed area or immediate surrounding area. The records refer to the presence of the species along the River Irwell.

4.3.8.2. The River Irwell flows in close proximity to the site, located approximately 40m to the north, but will remain unaffected by the proposed development. Therefore, there will be no impact on otters during the proposed development.

4.3.9. Reptiles

4.3.9.1. GMEU did not return any records of reptile species within the 2km search area.

4.3.9.2. The site provides terrestrial opportunities for reptiles due to the presence of dense vegetation and areas of compost and garden waste (T1) although no reptiles were identified during this survey.

4.3.9.3. Due to the managed nature of the site and the presence of densely urban land in close proximity to the site it is assessed as unlikely that significant reptile populations will be present on site or impacted upon by the development, with precautionary measures implemented during the construction phase of the development further reducing the likely impacts.

4.3.10. Water Voles

4.3.10.1. GMEU did not return any existing records of water vole (*Arvicola amphibius*) and the proposed development will not impact on habitats suitable for the species. Therefore, there will be no impact on water voles during the development.

4.4. Invasive Non-Native Plant Species

4.4.1. Two invasive non-native plant species listed on Schedule 9 of the Wildlife and Countryside Act 1981 were identified within the surveyed area, those being rhododendron (T2) and montbretia (T7).

4.4.2. Rhododendron was identified growing in several locations throughout the gardens of the property. The species spreads through runners in the soil underneath the plant. Therefore, any works that disturb the areas of rhododendron, or the land immediately surrounding the plant, have the potential to spread the plant to other areas.



Figure 40: Showing areas of rhododendron (yellow circle) and montbretia (red circle).

4.4.3. Montbretia was identified growing on the bank at the eastern side of the site. The plant spreads through corms present in the soil underneath the plant. Therefore, any works that disturb the area of montbretia, or the land immediately surrounding the plant, have the potential to spread the plant to other areas.

5. Recommendations

5.1. Designated Sites

5.1.1. The development will not have a direct impact on the designated sites in the surrounding area and therefore there are no recommendations specific to designated sites.

5.2. Habitats

5.2.1. The trees on the site are functionally linked to the woodland within Gollinrod Wood SBI, which is designated as ancient woodland and is a Habitat of Principal Importance under the NERC Act 2006. Therefore, it is recommended that as many trees as possible are retained on the site during the development. Any additional trees planted during the development should comprise native species in keeping with the adjacent woodland.

5.2.2. It is recommended that as much of the native hedgerows along the boundaries of the site are retained as possible during the development and that any additional hedgerows planted on the site utilise native tree species.

5.3. Fauna

5.3.1. Amphibians and Reptiles

5.3.1.1. It is recommended that precautionary working methods for amphibians and reptiles are implemented during the construction phase of the development. The measures should include the following as a minimum:

- All site personnel should be briefed on the potential presence of amphibians and reptiles on the site, how to identify the species and what to do if animals are encountered,
- Toolbox talks on amphibians should be kept on site at all times,
- Areas of suitable refugia, such as dense vegetation or piles of garden waste, should be moved with care and the area underneath inspected for amphibians and reptiles,
- Materials should be stored on pallets or batons to deter animals from seeking refuge underneath,
- Any materials placed on the ground should be carefully lifted and the area underneath inspected for amphibians and reptiles.

5.3.1.2. In the event that individual common amphibian or reptile species are encountered they should be carefully moved to areas of suitable refugia outside the development footprint. If large numbers of common amphibians or reptiles (5+) are encountered work in that area should cease and further advice should be sought.

5.3.1.3. In the event that any great crested newts are identified all works on site should cease immediately and further advice should be sought.

5.3.2. Badgers and Other Mammals

5.3.2.1. It is recommended that any excavations created on the site have a sloping side to allow any animals that may become trapped to escape. Pipe ends should be blocked between shifts to prevent inquisitive animals becoming trapped.

5.3.3. Bats

5.3.3.1. It is recommended that no work commences on the building prior to further bat surveys being carried out, in line with the Bat Conservation Trust (BCT) Good Practice Guidelines (2016). For a building with a moderate potential to support roosting bats the guidelines require two activity surveys carried out during the peak survey season, which is May to August, by sufficient surveyors or equipment to cover all areas of potential around the building.

5.3.3.2. It is recommended that the extent of the tree removal is clarified and that any trees being removed from the site are subjected to additional bat surveys, in line with the BCT Good Practice Guidelines. The surveys should commence with an aerial inspection to identify and assess any PRF present.

5.3.3.3. It is recommended that the exposed areas of rock are retained as features in the development. If there is a requirement to remove or cover the features these works should be preceded by further bat surveys, commencing with a thorough endoscope inspection of all cracks and voids present.

5.3.3.4. It is recommended that a sensitive lighting scheme is implemented during the construction and occupation phases of the development, in line with BCT and Institute of Lighting Professionals (ILP) Guidance (2018). The scheme should also take into account light spill from windows, particularly where the properties overlook Gollinrod Wood SBI.

5.3.3.5. It is recommended that consideration is given to including bat roosting features in the new buildings on the site in the form of bat bricks built into the fabric of the buildings.

5.3.4. Birds

5.3.4.1. It is recommended that any site clearance avoids the nesting season, which extends from March to September each year (weather dependent) where possible.

5.3.4.2. Any works that commence during the nesting season should be immediately preceded by a thorough nesting bird survey carried out by a suitably experienced surveyor, which should include an inspection of the tawny owl box. Any nests present must remain undisturbed until the young have fledged from the nest. This should also take into account changes in noise and vibration around the nest, particularly for species such as tawny owl, which may be easily disturbed.

5.3.4.3. It is recommended that consideration is given to including nesting features for a range of bird species on the site during the development. This should include nest boxes in the buildings, for threatened urban species, and nest boxes on the trees.

5.3.5. Hedgehogs

5.3.5.1. It is recommended that any site clearance avoid the peak hibernation period for hedgehogs, that being December to February, where possible.

5.3.5.2. It is recommended that the initial site clearance is carried out with care and that areas of dense vegetation and compost heaps or piles of garden waste are carefully cleared by hand to allow an inspection of the area underneath for hedgehogs.

5.3.5.3. It is recommended that any fence lines created on the site include hedgehog highways to ensure that hedgehogs retain access throughout the area following the development.

5.4. Invasive Non-Native Plant Species

5.4.1. It is recommended that the site clearance is carried out under strict control conditions to prevent the spread of invasive non-native plant species to elsewhere on site, or off site, during the development.

6. Conclusions

6.1. If the development is carried out in a sensitive manner and retains existing habitats where possible and any reinstatement of habitats utilises locally appropriate native species the impact of the development on the biodiversity of the area will be negligible.

6.2. If further surveys are carried out, where necessary, and suitable precautionary working methods are put in place during the development the impact on fauna species is likely to be minimal.

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Appendix I: Habitat Map

2 Cliff Avenue, Summerseat

Habitats

-  u1-11, 231 Built-up areas and gardens - scattered trees, vegetated garden
-  u1b Developed land; sealed surface
-  u1b5 Buildings

Linear Habitats

-  h2a Hedgerow (Priority Habitat)
-  h2b Other hedgerows
-  u1e Built linear features



Appendix II: Target Notes

2 Cliff Avenue, Summerseat

 Site boundary

Target Notes

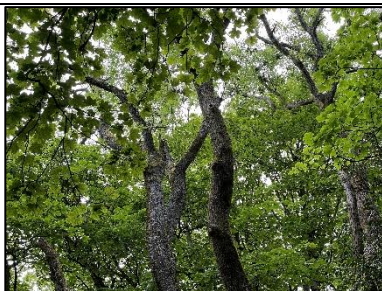
-  T1 Compost heap/garden waste
-  T2 Rhododendron plants
-  T3 Sycamore with bat roost potential
-  T4 Sycamore with owl nest box
-  T5 Ash with bat roost potential
-  T6 Willow with bat roost potential
-  T7 Montbretia plants
-  T8 Sycamore with bat roost potential
-  T9 Sycamore with bat roost potential
-  T10 Exposed rock face
-  T11 Sycamore with bat roost potential
-  T12 The residential property
-  T13 Thrush nest



0 8 16 m



Appendix II: Target Notes

T1	Compost heaps and piles of garden waste.	
T2	Areas of rhododendron.	
T3	A sycamore tree with a moderate potential to support roosting bats.	
T4	A tawny owl nest box located on a sycamore tree.	
T5	An ash tree with a moderate potential to support roosting bats.	

T6	A goat willow with a moderate potential to support roosting bats.	
T7	Areas of montbretia.	
T8	A sycamore tree with a moderate potential to support roosting bats.	
T9	A sycamore tree with a moderate potential to support roosting bats.	
T10	Areas of exposed rock that may support roosting bats or nesting birds.	
T11	A sycamore tree with a moderate potential to support roosting bats.	

T12	The residential property, with a moderate potential to support roosting bats and nesting bird potential.	
T13	A song thrush nest in the soffit of the building.	

Appendix III: Species Lists

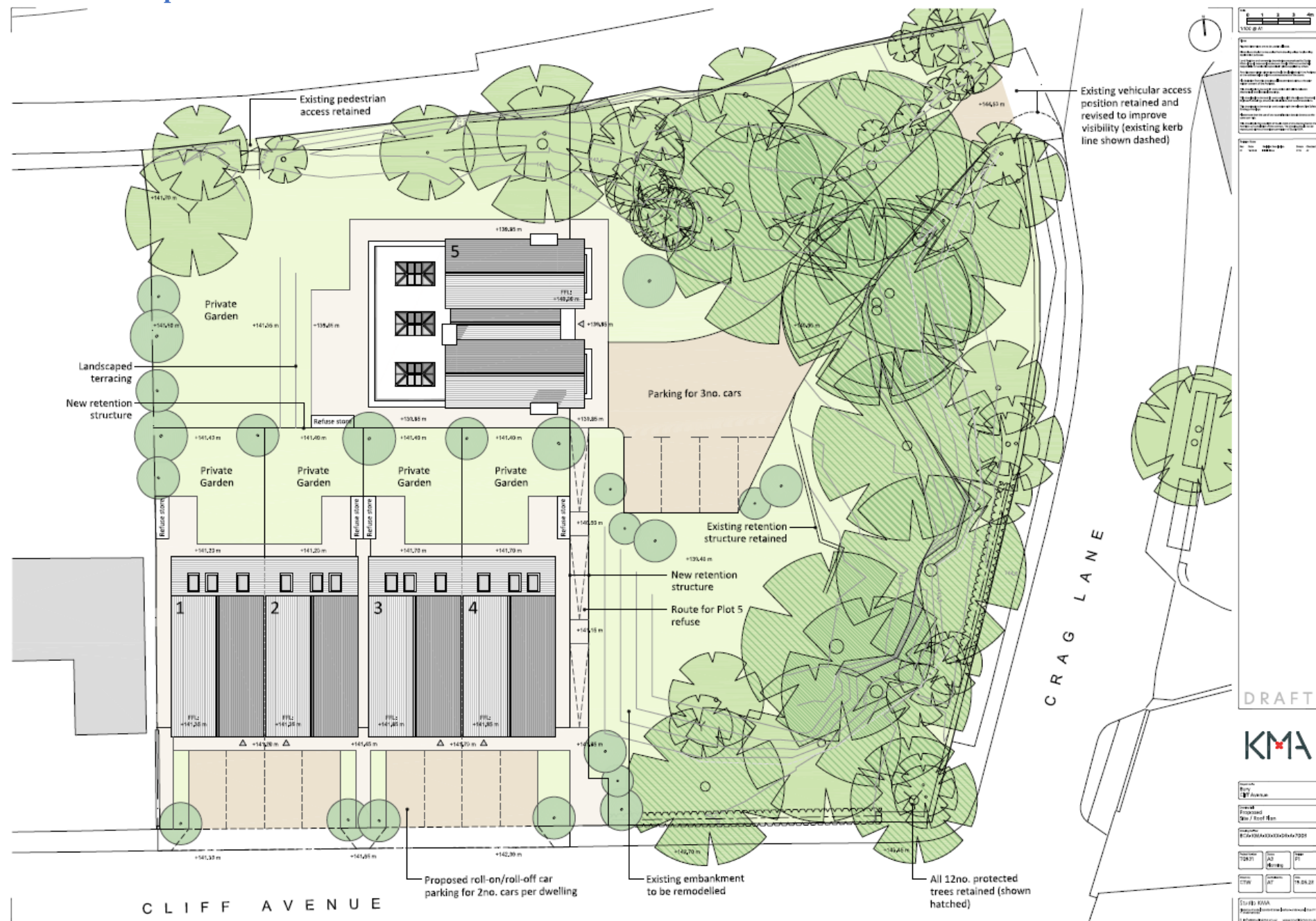
u1-11, 231 Built-up areas and gardens – scattered trees, vegetated garden	
Species Present	DAFOR Assessment
<i>Lawns</i>	
Meadow grass (<i>Poa sp.</i>)	A
Cocks foot (<i>Dactylis glomerata</i>)	O
Common ragwort (<i>Senecio jacobaea</i>)	F
Creeping buttercup (<i>Ranunculus repens</i>)	O
White clover (<i>Trifolium repens</i>)	O
<i>Flower beds</i>	
Pendulous sedge (<i>Carex pendula</i>)	F
Poppy (<i>Papaver rhoeas</i>)	F
Foxglove (<i>Digitalis purpurea</i>)	O
Shrubby honeysuckle (<i>Lonicera nitida</i>)	O
Rhododendron (<i>Rhododendron sp.</i>)	O
Wood avens (<i>Geum urbanum</i>)	F
Montbretia (<i>Crocasmia x crocosmifolia</i>)	R
Cow parsley (<i>Anthriscus sylvestris</i>)	O
Nettle (<i>Urtica dioica</i>)	O
Rowan (<i>Sorbus aucuparia</i>)	R
Wisteria (<i>Wisteria sp.</i>)	R
Acer (<i>Acer sp.</i>)	R
Laurel (<i>Laurus nobilis</i>)	O
Forget me not (<i>Myosotis sp.</i>)	R
Box (<i>Buxus sempervirens</i>)	O
Rose (<i>Rosa sp.</i>)	R
Berberis (<i>Berberis sp.</i>)	R
Bramble (<i>Rubus fruticosus</i>)	O
Bamboo (<i>Poaceae sp.</i>)	R
Ivy (<i>Hedera helix</i>)	F
Elder (<i>Sambucus nigra</i>)	O
Herb Robert (<i>Geranium robertianum</i>)	O
Cleavers (<i>Galium aparine</i>)	O
Bluebell (<i>Hyacinthoides non-scripta</i>)	O
<i>Trees</i>	
Sycamore (<i>Acer pseudoplatanus</i>)	F
Elm (<i>Ulmus sp.</i>)	R
Goat willow (<i>Salix caprea</i>)	R
Laurel (<i>Laurus nobilis</i>)	O
Holly (<i>Ilex aquifolium</i>)	O
Ash (<i>Fraxinus excelsior</i>)	O
Laburnum (<i>Laburnum anagyroides</i>)	O

Conifer (<i>Cupressus x leylandii</i>)	O
Cherry (<i>Prunus sp.</i>)	O

h2a Hedgerow (Priority Habitat)	
Species Present	DAFOR Assessment
Privet (<i>Ligustrum sp.</i>)	A
Hawthorn (<i>Crataegus monogyna</i>)	O
Sycamore (<i>Acer pseudoplatanus</i>)	R
Laurel (<i>Laurus nobilis</i>)	R
Ivy (<i>Hedera helix</i>)	O

h2b Other hedgerows	
Species Present	DAFOR Assessment
Conifer (<i>Cupressus x leylandii</i>)	D

Appendix IV: Development Plans



Appendix V: Planning Policy and Species Legislation Summary

1. Planning Policy

1.1. The National Planning Policy Framework (NPPF, 2019) sets out the governments planning policies and how they should be applied. Section 15 of the policies refers to ‘Conserving and enhancement the natural environment’. This outlines how local authorities should deal with biodiversity when considering planning applications.

1.2. NPPF paragraph 175 States:

When determining planning applications, local planning authorities should apply the following principles;

- a) If significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) Development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) Development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvement in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.*

2. Legislation Summary

Site	Legislation	
Locally Designated Sites	Locally designated sites are not covered by any statutory legislation but are protected by local development plans.	
Statutory Sites	Statutory sites are protected in different ways depending on the reason for the sites designated with sites being covered by legislation including the Wildlife and Countryside Act 1981 and the Habitats Directive.	
Species and Habitats of Principal Importance	Species and habitats of principal importance are covered by the Natural Environment & Rural Communities Act 2006.	
Species	Legislation	Offences include
Badgers	Protection of Badgers Act 1992	○ Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so; ○ To intentionally or recklessly interfere with a sett (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).
Bats	Conservation of Habitats and Species Regulations 2017 (as amended) Wildlife and Countryside Act 1981	○ Deliberately kill, injure or capture a bat; ○ Deliberately disturb bats; ○ Damage or destroy a breeding site or resting place of a bat. ○ Obstruct access to any structure or place which any bat uses for shelter or protection; or ○ Disturb any bat while occupying a structure or place which it uses for that purpose.

Birds	Wildlife and Countryside Act 1981	○ Intentionally kill, injure, or take any wild bird; ○ Intentionally take, damage or destroy a nest of any such bird whilst it is in use or being built; or ○ Intentionally take or destroy an egg of any such bird.
Crayfish	Wildlife and Countryside Act 1981	○ Obstruct access to any structure or place which a crayfish uses for shelter or protection; or ○ Disturb a crayfish while occupying a place which it uses for that purpose.
Great Crested Newts	Conservation of Habitats and Species Regulations 2017 (as amended) Wildlife and Countryside Act 1981	○ Intentionally or deliberately capture, injure, kill, or disturb the species; ○ Intentionally or recklessly damage, destroy or disturb a GCN in a place of shelter or protection, or obstruct access to such a place; or ○ Damage or destroy a breeding site or resting place.
Hazel Dormice	Conservation of Habitats and Species Regulations 2017 (as amended) Wildlife and Countryside Act 1981	○ Deliberately capture, injure or kill a dormouse; ○ Deliberately disturb dormice; ○ Damage or destroy a breeding site or resting place of a dormouse ○ Obstruct access to any structure or place which a dormouse uses for shelter or protection; or ○ Disturb a dormouse while occupying a structure or place which it uses for shelter or protection
Otters	Conservation of Habitats and Species Regulations 2017 (as amended) Wildlife and Countryside Act 1981	○ Deliberately capture, injure or kill any wild otter; ○ Deliberately disturb wild otters; ○ Damage or destroy a breeding site or resting place of an otters. ○ Disturb an otters while it is occupying a structure or place which it uses for shelter or protection; or ○ Obstruct access to such a place.
Red Squirrels	Wildlife and Countryside Act 1981	○ Kill, injure or take a red squirrel; ○ Damage, destroy or obstruct access to any structure or place which a red squirrel uses for shelter or protection; or ○ Disturb a red squirrel while it is occupying a structure or place which is used for that purpose.
Reptiles (non EPS)	Wildlife and Countryside Act 1981	○ Intentionally kill or injure a reptile.
Water Voles	Wildlife and Countryside Act 1981 Natural Environment & Rural Communities (NERC) Act 2006	○ Intentionally capture, kill or injure water voles; ○ Intentionally or recklessly damage, destroy or block access to their places of shelter or protection; or ○ Disturb water voles while occupying a place of shelter used for that purpose.

Local authorities therefore have a duty to consider protected species as a material consideration when assessing planning applications. The ODPM Government Circular 06/2005 states: *‘It is essential that the presence or otherwise of protected species, and the extent that they may be affected by the proposed development, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.’*