Preliminary Ecological Appraisal (PEA) Survey Report	
For:	Fairfax Investments
Site:	45a St Helen's Gate, Almondbury, Huddersfield, West Yorkshire, HD4 6SG
Report Date:	24th May 2024
Report Reference:	SQ-1987

Surveying Ecologist:

John Davies BSc (hons)

Fern Harrison MSc (hons)

Client:	Fairfax Investments
Site Name:	45a St Helen's Gate, Almondbury, Huddersfield, HD4 6SG
Grid Reference:	SE 17094 14964
Report:	Preliminary Ecological Appraisal
Date of Survey:	13th May 2024

Issue:	Revision:	Stage:	Date:	Prepared by:	Approved by:
1	-	Draft for review	24th May 2024	John Davies BSc (hons) - Estrada Ecology Ltd	Sam Toon BSc (hons) - Estrada Ecology Ltd
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The contents of this report have been produced with consideration of current best practice guidance, and in accordance with the Chartered Institute of Ecology and Environmental Management's (CIEEM) Code of Professional Conduct.

This report should not be submitted as part of a planning application without any accompanying species- specific reports which may have been recommended herein.

Data within this report is valid for a maximum of eighteen months from the date of the survey. After this period, an updated site visit will be required to determine a new ecological baseline.

Site Summary

The site is approximately 0.08 hectares in size and is comprised largely of vegetated garden habitat, artificial unsealed surface, and developed land surface surrounding a central residential building. A hedgerow is recorded along the northern, northwestern, and northeastern site boundaries and scattered trees are recorded at the north of the site.

The wider landscape is comprised largely of open gardens and green spaces featuring scattered trees. Low density residential developments are present around the site, particularly to the north.

Findings

Trees within the site as well as those which overhang into the site are recorded as being suitable habitat for use by nesting birds. No field sign evidence suggesting the use of the site by breeding birds was recorded during the site survey. Recommendations regarding potential impacts towards breeding birds are provided in the conclusion of this report.

The building within the site was assessed for the suitability to function as a roost or place of shelter for bats. The building was classified as offering low potential for use by roosting bats. As such, further survey effort has been recommended.

No major commuting / foraging habitats are present on site. Lines of trees outside of the site are deemed to constitute suitable commuting / foraging habitat. To mitigate any impacts from light splay, a lighting scheme has been recommended to be incorporated into the development scheme.

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The site was assessed as offering low suitability for European hedgehogs (*Erinaceus europaeus*) given the habitats on site. To mitigate any residual impacts towards the species during the clearance of any vegetation on the site, a precautionary method statement has been recommended to be implemented. No further survey effort has been recommended for this species.

The site has negligible suitability for Eurasian badger (*Meles meles*) given the size and use of the site as a residential garden; however, there is suitability for the species in the wider landscape. No evidence suggesting the use of the site by badger was recorded. To mitigate any residual impacts towards the species during the clearance of any vegetation on the site, a precautionary method statement has been recommended to be implemented. No further survey effort has been recommended for this species.

The site has negligible suitability for aquatic / riparian mammals given the lack of suitable habitats on and lack of suitable habitats within the wider area. No impacts are predicted, and no further survey effort has been recommended for aquatic / riparian mammals.

The site has very low suitability for use by reptiles and amphibians give the habitats on site. No impacts are predicted, and no further survey effort has been recommended for any herptile species.

No notable or protected species listed on Schedule 8 of the Countryside and Wildlife Act 1981 (as amended) were recorded during the site survey.

Non-native invasive species listed on Schedule 9 of the Countryside and Wildlife Act 1981 (as amended) were recorded during the site survey. Recommendations regarding its control and appropriate management are provided in the conclusion of this report.

The site was recorded to lack significant floral diversity and is unlikely to support important assemblages of invertebrates.

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Contents:

Whilst every effort has been taken to ensure the accuracy of this report and its contents in view of potential ecological constraints to development or the likely presence or absence of species it must only be viewed as a snapshot in time and not be viewed as definitive. Due to external factors, such as seasonality, weather etc having the potential to affect survey results, no liability can be assumed for omissions or changes that may or may not occur after the date this report was produced.

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1 Introduction and Background to the Site

1.1 Estrada Ecology Ltd was commissioned to conduct a Preliminary Ecological Appraisal (PEA) of 45a St Helen's Gate, Huddersfield, HD4 6SG.

1.2 The site consists of a residential property of one two storey house and surrounding vegetated garden, scattered trees, hedge, and developed / artificial surface driveway and decking.

1.3 It is understood that the current proposal is for redevelopment of the site, subject to the necessary consents.

1.4 Site Location and Wider Area

1.4.1 The site is located within the village of Almondbury which lies to the southeast of Huddersfield, approximately 3.2 km from the town centre.

1.4.2 The survey site's central OS grid reference is SE 17094 14964.

1.4.3 The wider landscape is comprised largely of open gardens and green spaces featuring scattered trees and belts of woodland. Low density residential developments are present around the site, particularly to the north.

Figure 1: The Survey Site Within the Wider Setting.

1.5 Report Objectives

- Present the findings of the ecological survey.
- Assess the potential of existing on-site habitats to support protected or notable species.
- Evaluate any likely ecological impacts on protected and notable species or habitats because of the proposed development.
- Provide recommendations for any further species-specific survey and mitigation measures that may be required; and
- Provide habitat enhancement recommendations in line with the National Planning Policy Framework (NPPF, 2023).

2 Protected Species Legislation

2.1 Relevant legislation includes the Conservation of Natural Habitats and Species Amendment (EU Exit) Regulations which came into force on 31st of December 2020.

2.2 The Natural Environment and Rural Communities (NERC) Act came into force on 1 Oct 2006. Section 41 (S41) 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 in England. The list has been drawn up in consultation with Natural England, as required by the Act. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 40 of the Natural Environment and Rural Communities Act 2006, to have regard to the conservation of biodiversity in England, when conducting their normal functions.

2.3 The UK Post-2010 Biodiversity Framework was developed in response to the Convention on Biological Diversity's Strategic Plan for Biodiversity 2011 - 2020. Its five strategic goals and twenty biodiversity targets supersede the UK Biodiversity Action Plan.

2.4 Environment and Biodiversity

2.4.1 Under the National Planning Policy Framework (NPPF, 2023), local planning authorities should aim to conserve and enhance the natural environment when determining planning applications. Local planning authorities also have an obligation to seek opportunities to further enhance the conservation status of Species and Principal Habitats.

2.4.2 Species and Habitats of Principal Importance for the conservation of biodiversity in England (JNCC, 2009) are covered under section 41 of the Natural Environmental and Rural Communities (NERC) Act (2006). Species and habitats listed within Section 41 need to be taken into consideration by a public body when performing any of its functions.

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2.4.3 Development proposals submitted after 12th February 2024, with some exceptions, will be expected to achieve a minimum of 10% net gain in site biodiversity value under The Environment Act 2021 (Commencement No. 8 and Transitional Provisions) Regulations 2024.

2.5 Wildlife

2.5.1 European Protected Species, such as bats (all species) and great crested newt (*Triturus cristatus*), are afforded protection under the Conservation of Habitats and Species Regulations 2017, as well as under the Wildlife and Countryside Act 1981 (as amended) and the Countryside Rights of Way Act 2000. It is an offence to:

- Deliberately or recklessly capture, injure, or kill any wild animal of a European protected species. Deliberately or recklessly disturb any such animal.
- Damage or destroy their breeding site or resting place.
- Keep, transport, or offer for sale / exchange any live or dead animal, or any part of, or anything from these species.

2.5.2 Disturbance of European Protected Species constitutes any activity which is likely to:

- To impair their ability to survive, to breed or reproduce, or to rear or nurture their young; or, in the case of animals of a hibernating or migratory species, to hibernate or migrate; and
- To significantly affect the local distribution or abundance of the species to which they belong.

2.6 UK Legislation

2.6.1 **Breeding birds** (all species) are protected under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally kill, injure or take any wild bird and to take, damage or destroy the nest (whilst being built or in use) or eggs. Schedule 1 species are afforded protection from disturbance at or near nest sites, including reckless disturbance under the Countryside Rights of Way (CRoW) Act 2000.

2.6.2 **Reptiles** (common species of adder, grass snake, common lizard, and slow worm) are protected under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally kill, injure and trade these animals.

2.6.3 **Amphibians** (smooth newt, palmate newt, common frog, and common toad) are protected by the Wildlife and Countryside Act 1981 (as amended). The sale, barter, exchange, transporting for sale and advertising to sell or to buy are an offence.

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2.6.4 **Badgers** are protected by the Protection of Badgers Act 1992 and under the Wildlife and Countryside Act 1981 (as amended). It is an offence: to wilfully, or attempt, to kill, capture, ill-treat or injure any badger; to obstruct, destroy or damage a badger sett or to disturb a badger whilst within its sett; to sell or offer for sale a live badger, or have possession or control of a live badger; and marking a badger or attaching any ring, tag, or other marking device to a badger.

2.6.5 **Otters** are a European Protected Species (EPS) and are also fully protected under Schedule 5 of the Wildlife and Countryside Act 1981. It is against the law to capture, kill, disturb or injure otters (on purpose or by not taking enough care); damage or destroy a breeding or resting place (deliberately or by not taking enough care); obstruct access to their resting or sheltering places (deliberately or by not taking enough care); and possess, sell, control or transport live or dead otters, or parts of otters.

2.6.6 **Water voles** are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 and is a priority conservation species. It is against the law to:

- Intentionally capture, kill, or injure water voles.
- Damage, destroy or block access to their places of shelter or protection (on purpose or by not taking enough care).
- Disturb them in a place of shelter or protection (on purpose or by not taking enough care); and
- Possess, sell, control or transport live or dead water voles or parts of them (not water voles bred in captivity).

3 Survey Methodology

3.1 Desktop Survey

3.1.1 A biological data records search was commissioned from West Yorkshire Ecology for a 2 km radius from the central grid reference.

3.1.2 Further inspection, using colour 1:25,000 OS base maps (www.ordnancesurvey.co.uk), MAGIC (www.magic.defra.gov.uk), aerial photographs from Google Earth (www.maps.google.co.uk), was also undertaken to provide additional context and identify any features of potential importance for nature conservation in the wider countryside.

3.1.3 Furthermore, consultation with MAGIC was undertaken to ascertain any European Protected Species Mitigation Licences granted within a 1 km radius from grid.

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3.1.4 Natural England's Geoportal: England-wide data for great crested newts (GCN) was analysed for any records within a km radius from grid. The dataset contains eDNA pond surveys for district level licensing (England). When available for the location, the Risk Zones for GCN are considered.

3.2 Field Survey

3.2.1 The survey area was investigated on foot to ascertain habitats on site and the potential of those habitats to support ecological diversity. The vegetation types present within the site were assessed by experienced ecologist; John Davies BSc (hons) using methodology based on that described in the UK Habitat Classification User Manual Version 2.0 (2023) and CIEEM's Guidelines for Ecological Impact Assessment (2018).

3.2.2 Habitats and features with potential to support protected and / or conservation priority faunal species, together with any field signs of such species were recorded on the field map using target notes. A search was undertaken for the following key habitats and field signs for protected or conservation priority species highlighted in Table 1.

Table 1: Key habitats and field signs of protected and priority species.

Taxon	Indicative Habitats	Field Signs
Bats	Roosts - Trees, buildings, bridges caves etc. Foraging areas - e.g., parkland, water bodies and streams, wetlands, woodland edge, hedgerow commuting routes linear features (e.g., hedgerows).	In or on potential roost sites: Droppings stuck to walls; urine spotting in roof spaces; oil from fur staining around roost entrances; feeding remains (e.g., moth wings).
Great Crested Newts	Ponds within 500m of suitable habitat within the site boundary. Suitable (terrestrial) habitat includes rough grassland, scrub and woodland, log and rubble piles and other debris, animal burrows.	Eggs, Individuals of all life stages. Egg rolled plants.
Reptiles	Rough grassland, log and rubble piles, compost heaps.	Sloughed skins; eggs, individuals.
Birds	Trees, scrub, hedgerow, field margins, grassland.	Nests; droppings below nest sites (especially in buildings of trees); tree holes.
Badgers	Found in most rural and many urban habitats.	Excavations and tracks: sett entrances, latrines, hairs, well-worn paths; prints; snuffle holes.
Water Vole	Water bodies / water courses.	Burrow entrances; prints; latrine areas; faeces; feeding stations.

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Otter	Water bodies / water courses.	Holt entrances; prints; latrine / spraint sites; anal jelly / smears. feeding remains.
BAP invertebrates	Each butterfly species has its own habitat requirements determined by the food plant of the caterpillar, the nectar source for the adult and the conditions needed for the caterpillar to survive and then pupate successfully.	Eggs, larva, Pupa, adult butterfly. Habitat type and presence of food plants.

3.3 Timing & Weather

3.3.1 The survey was conducted on the 13th of May 2024, which is a valid time to conduct ecological habitat condition assessments.

3.3.2 Weather conditions at the time of the site visit were sunny with a light breeze and temperatures of 20.5°C.

3.4 Personnel

3.4.1 The survey was undertaken by ecologists John Davies BSc (hons) and Fern Harrison MSc of Estrada Ecology Ltd, experienced with ecological surveying and Biodiversity Net Gain assessments.

3.4.2 All surveying ecologists worked under the supervision and guidance of experienced ecologist Natasha Estrada BSc (hons), MRes, MCIEEM, who is a licensed bat ecologist (2015-12213-CLS-CLS) and the named ecologist on several Natural England European Protected Species Mitigation Licenses.

3.5 Preliminary Roost Assessment

3.5.1 Where present and access could be gained, trees and buildings were subject to an external inspection to determine their suitability to support roosting bats. The external inspections were conducted in accordance with current best practice guidance (Collins, 2023).

3.5.2 Potential bat roost features and field sign evidence of use of the site by bats include the presence of droppings, stain, or grease marks, feeding remains, or the observations of the bats themselves.

3.5.3 Where present, trees, buildings and the quality of on-site habitats were then categorised based on the classification criteria in 'Bat Surveys for Professional Ecologists' (Collins, 2023). Classification criteria is presented below:

- **Negligible:** a structure or tree with features unlikely to be used by roosting bats. Habitats on site unlikely to be used by foraging or commuting bats.

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- **Low:** a structure or tree with one or more potential roost sites that may be utilised by opportunistic bats but are not suitable for use on a regular basis or by a large number of bats. Habitat could be used by a small number of foraging or commuting bats.

- **Moderate:** a structure or tree with one or more potential roost sites that may be utilised on a regular basis but unlikely to support a roost of high conservation status. Continuous habitat that provides good connectivity within the wider landscape and offers foraging opportunities.

- **High:** a structure or tree with one or more potential roost sites suitable for use by a larger number of bats on a regular basis and for longer periods of time. Continuous high-quality habitat that is well connected within the wider landscape and offers high-quality foraging habitat. The site is close to and connected to known roosts.

4 Ecological Constraints

4.1 It should be noted that this ecological appraisal provides baseline ecological data at the time of survey only and does not include flora or fauna which may be present at different times of the year.

4.2 An absence of species records from within a search radius does not provide confirmation that a species is absent from within the search area.

5 Survey Results

5.1 Field Survey Results

5.1.1 Habitat Overview

5.1.1.1 A summary of the habitats recorded during the site inspection are listed as follows:

Table 2: Recorded Habitats Within the Site Boundaries.

Habitat	UK HABS Codes	
	Primary	*Secondary*
Buildings	u1b5	-
Vegetated Garden	g4	828, 524
Artificial Unvegetated, Unsealed Surface	u1c	-
Developed Land, Sealed Surface	u1b	-
Scattered Trees	g4	32
Ornamental Hedgerow	h2b	201

5.1.1.2 A list of all species recorded on the site during the survey can be found in appendix two.

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5.1.2 **Building**

5.1.2.1 Centrally within the site is a two-storey residential building which is recorded to be generally in very good condition throughout, with very little weathering or wear observed.

5.1.2.2 The walls are comprised of stone bricks which are recorded to be intact and in very good condition on all elevations. Windows and doors are uPVC-framed and recorded to be intact and well-sealed to the surrounding brickwork. The roof is comprised of slate tiles which are also recorded to be in good condition and the mortar along the ridge tiles and all gable edges intact. The balcony on the southern elevations was recorded as offering no suitability for bats.

5.1.2.3 On the western elevation, a small fissure was recorded along the gutter line above the stonework. The depth of the feature could not be determined; however, the feature is deemed to have the potential to provide bat roosting provisions.

5.1.2.4 The building was deemed to constitute a low potential for use by roosting bats, as assessed by a licenced bat ecologist (2015-12213-CLS-CLS). Further survey effort regarding bats has been recommended.

Figure 2: Building (With Potential Bat Feature Highlighted)

5.1.3 **Vegetated Garden**

5.1.3.1 Comprising the majority of the site is vegetated garden habitat, consisting largely of managed lawns and a rockery in the west of the site featuring some introduced decorative flowers.

5.1.3.2 Species recorded include perennial ryegrass (*Lolium perenne*), white clover (*Trifolium repens*), daisy (*Bellis perennis*), common Vetch (*Vicia sativa*), common dandelion (*Taraxacum officinale*), forget-me-not (*Myosotis sylvatica*), and creeping buttercup (*Ranunculus reptans*), among others.

5.1.3.3 This habitat is recorded to offer very limited suitability for hedgehog, given the composition of the site and the use as a dwelling. The presence of badger or hedgehog on the site is considered to be an unlikely but residual possibility, given the wider landscape. To mitigate any residual impacts towards these species, a precautionary methods statement has been recommended.

Figure 3: Vegetated Garden

5.1.4 **Ornamental Hedge**

5.1.4.1 Along the northeastern, northern, and partly along the western site boundaries around the garden habitat is a hedgerow consisting of bushes and small trees.

5.1.4.2 Species recorded comprising this habitat include arborvitae (*Thuja occidentalis*), bramble (*Rubus fruticosus*), ash (Fraxinus excelsior), cherry laurel (*Prunus laurocerasus*), hawthorn (*Crataegus monogyna*), yew (*Taxus baccata*), western horse chestnut (*Aesculus hippocastanum*), sycamore (*Acer pseudoplatanus*), and common ivy (*Hedera helix*), among others.

5.1.4.3 In addition, examples of Himalayan cotoneaster (*Cotoneaster simonsii*) on the eastern section and rhododendron (*Rhododendron ponticum*) on the western section are recorded within this habitat. These are non-native invasive species listed on schedule 9 of the wildlife and countryside act 1981. Recommendations regarding the appropriate control and removal are provided in the conclusion of this report.

5.1.4.4 This habitat is deemed to be suitable for use by nesting birds and is deemed to have a residual potential for being used by hedgehog. No field sign evidence was recorded to suggest the use of this hedge by any protected species. Recommendations regarding mitigating impacts are provided in the conclusion of this report. This hedgerow is not deemed to constitute major foraging / commuting habitat for local bat populations given its size and lack of connectivity.

Figure 4: Hedgerow

5.1.5 **Scattered Trees**

5.1.5.1 Included within the hedgerow at the northern boundary to the site are two mature trees consisting of one ash and one sycamore. Further small potted trees are present along the southern site boundary, consisting of bird cherry (*Prunus padus*). In addition, trees outside the northwestern corner of the site

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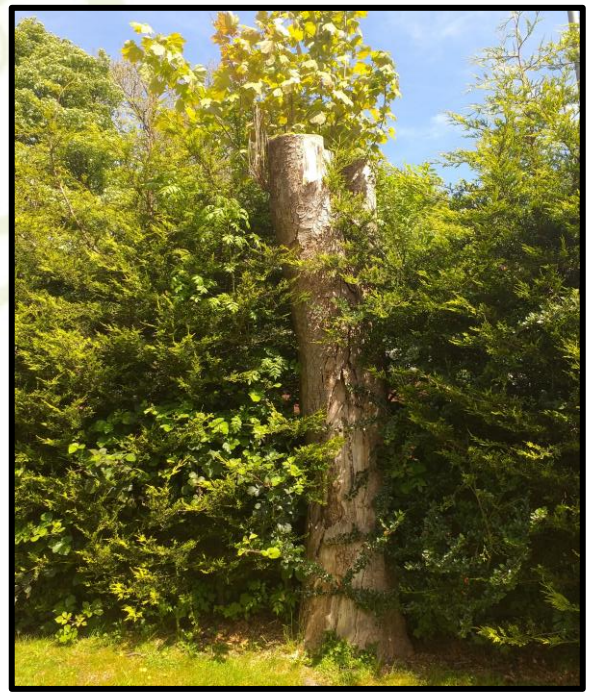
are recorded as overhanging into the site boundaries. On the eastern elevation of the site included within the length of hedgerow is a recently managed sycamore trees which has all branches removed and has been cut to about two meters high.

5.1.5.2 The two mature trees as well as the larger trees overhanging into the site were assessed as constituting suitable habitat for use by nesting birds. It is unknown whether these trees, including those overhanging into the site will be impacted by the developments on the site. Recommendations regarding potential impact towards breeding birds are provided in the conclusion of this report.

5.1.5.3 All trees were assessed for their suitability for use by bats for roosting or as a place of rest. The managed branchless tree in the east of the site was recorded as featuring separation of the bark creating an internal cavity. This cavity was deemed to not constitute a feature suitable for use by bats given the lack of protection from weather and the environment. All other trees were recorded as not offering features which could provide roosting potential.

Figure 5: Example Scattered Trees



5.1.6 Artificial Unvegetated Unsealed Surface and Developed Land Sealed Surface

5.1.6.1 Comprising the majority of the southern portion of the site is a driveway comprised of compressed aggregates. Examples of concrete paving and wooden decking as also present surrounding the exterior of the building on the north, east, and southern elevations. Habitats in this condition are assessed as offering negligible intrinsic ecological value.

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Figure 6: Artificial Surface and Developed Surface

5.2 Desktop Survey Results

5.2.1 Two-hundred and eighty-six records were returned from West Yorkshire Ecology for the 2 km radius from the central grid reference. The list of protected and notable species data records is available upon request. In summary, the following records were returned:

- Records for Eurasian badger, if returned, have been omitted from this report due to the sensitivity of the data. Full consideration has been given to any returned data within this report.
- Two records for western European hedgehog were returned by the records search, dated 2016 and 2019.
- Seventy-four records which pertain to bats were returned by the records search. These include, thirty-nine for common pipistrelle (*Pipistrellus pipistrellus*) dated 2003 to 2023, two for soprano pipistrelle (*Pipistrellus pygmaeus*) dated 2012 and 2015, one for Nathusius's bat (*Pipistrellus nathusii*) dated 2017, three for unspecified *Pipistrelle* species dated 2005 and 2007, one for Daubenton's bat (*Myotis daubentoni*) dated 2012, one for whiskered bat (*Myotis mystacinus*) dated 2018, three for unspecified

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Myotis species dated 2014 to 2020, five for common noctule (*Nyctalus noctula*) dated 2012 and 2023, one for lesser noctule (*Nyctalus leisleri*) dated 2020, six for brown long-eared bat (*Plecotus auritus*) dated 2015 to 2020, and twelve records for unspecified bats dated 2000 to 2012.

- One record for Eurasian otter (*Lutra lutra*) was returned, dated 2015.
- No records for European water vole (*Arvicola amphibius*) were returned.
- Two records for amphibian species were returned, both being for common frog (*Rana temporaria*) dated 2005 and 2017.
- Two records for reptilian species were returned, one for common lizard (*Zootoca vivipara*) and one for grass snake, both dated 1914.
- One record for white-clawed crayfish (*Austropotamobius pallipes*) was returned, dated 1997.
- No records pertain to the site or the central grid reference. The majority remaining records pertain to birds, teleost, insect, and flowering plants.

5.2.2 Consultation with MAGIC returned three European Protected Species Mitigation Licences granted within the 2 km radius from grid (Table 3).

Table 3: Granted EPSM Licences within the Search Radius

Licence	Dates	Species	Purpose	Distance from Site
2016-27076-EPS-MIT	2017 - 2017	Brown Long-eared Bat	Destruction of a resting place.	1348 meters southwest
2016-27076-EPS-MIT-1	2017 - 2022	Brown Long-eared Bat	Destruction of a resting place.	1348 meters southwest
EPSM2010-1750	2010 - 2012	Common Pipistrelle, Soprano Pipistrelle, Brown Long-eared Bat	Destruction of a resting place.	1969 meters northwest

5.2.3 Given the dates of the granted mitigation licences, no impacts from recently displaced bats are anticipated.

5.2.4 No records for great crested newt presence were recorded within a 1 km radius from grid via consultation with Natural England's eDNA pond surveys for District Level Licensing (England).

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5.3 Designated Sites

5.3.1 Consultation with MAGIC map returned one Statutory Designated Site within the search radius, it being the Castle Hill Local Nature Reserve located approximately 1812 meters southwest of the site.

5.3.2 The site does fall within the Impact Zone for the Dark Peak Site of Special Scientific Interest (SSSI) which is approximately 9.8 km southwest from site. Given the concerns listed for this Impact Zone, no impacts are considered regarding any developments at the site.

5.3.3 Consultation with MAGIC map returned eight Non-Statutory Designated Sites within the search radius (Table 4, Figure 7). The closest of these is the Almondbury Common Local Wildlife Site which is approximately 451 meters from the southeast from site boundaries.

Table 4: Non-designated Statutory Sites within the Search Radius

Site Name	Designation	Distance from Site Boundaries
Almondbury Common	Local Wildlife Site	451 meters southeast
Arkenley Lane	Local Wildlife Site	493 meters southwest
Carr Wood	Local Wildlife Site	806 meters southeast
Longley Hill Plantation	Local Wildlife Site	1403 meters west
Arther, Molly, Carr, and Roaf Woods	Local Wildlife Site	1466 meters southwest
Round Wood	Local Wildlife Site	1722 meters northeast
Castle Hill	Local Wildlife Site	1801 meters southwest
Castle Hill	Local Geological Site	1940 meters southwest

5.3.4 The site and the immediate surroundings are recorded as falling outside the Kirklees Wildlife Habitat Network.

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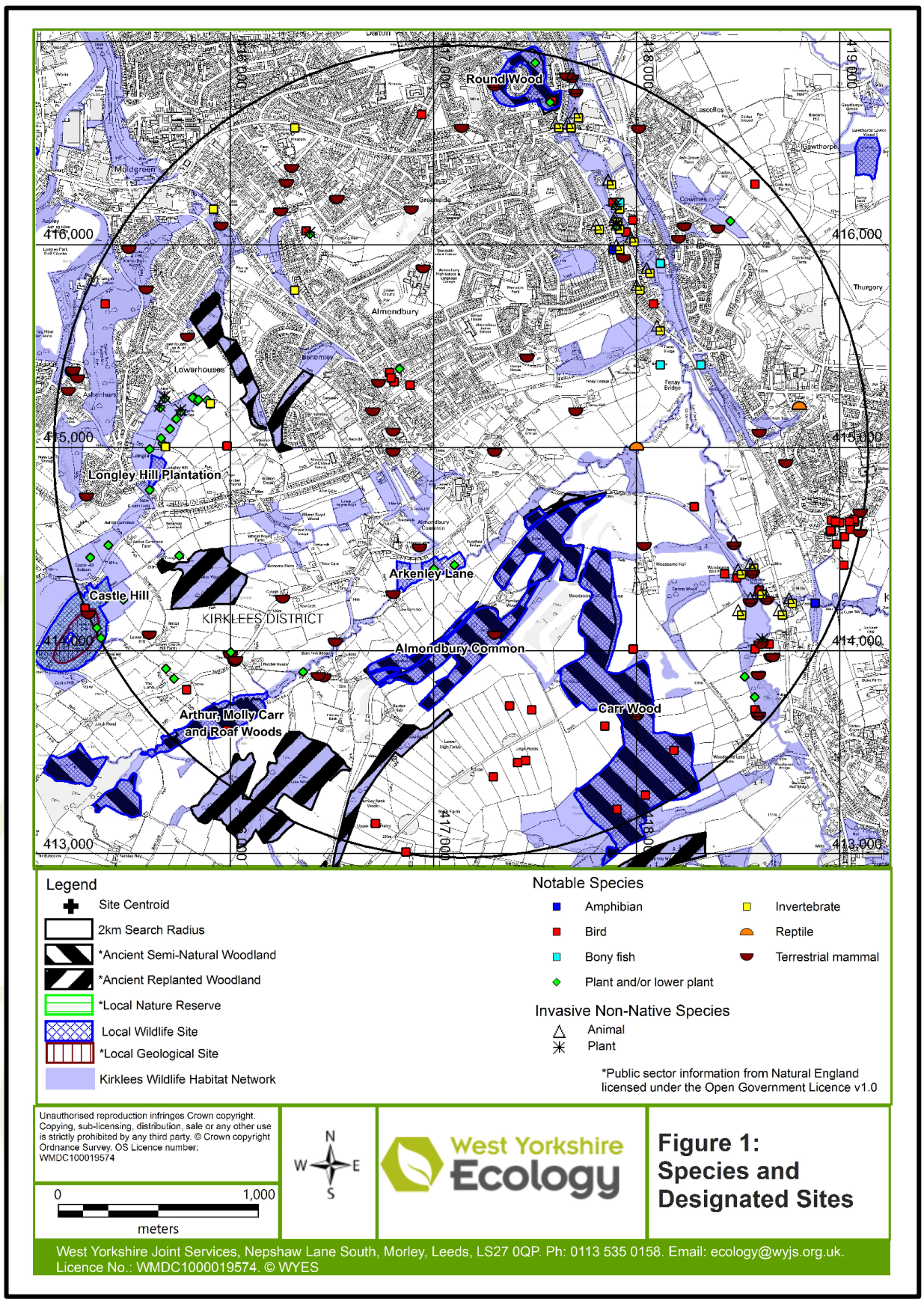
Figure 7: Non-statutory Designated Sites Within the Search Radius



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5.4 Priority Habitats and Priority Species

5.4.1 No priority habitats were recorded within the redline site boundary.

5.4.2 Priority habitats were recorded outside the redline site boundary within the search radius. These include:

- Deciduous Woodland – The closest compartment being approximately 59 meters south of site boundaries.
- Traditional Orchard – The closest compartment being approximately 488 meters south of site boundaries.

5.4.3 No protected species listed on Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) were recorded within the application boundary.

5.4.4 Two non-native invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded within the site. Recommendations regarding this species are included in the conclusion of this report.

5.5 Protected Species

5.5.1 Breeding Birds

5.5.1.1 Whilst no current evidence of breeding birds was recorded within the surveyed area, the large trees in the north of the site, the trees which overhang into the north of the site, and the hedgerow along the site boundary are all assessed as offering suitability for use by breeding birds.

5.5.1.2 Impacts towards breeding birds are considered a possibility without any mitigation. Recommendations regarding breeding birds are provide in the conclusion of this report.

5.5.2 Bats

5.5.2.1 The buildings within the site were deemed as offering **low** potential to be used by bats for roosting, as assessed by a licenced bat ecologist (2015-12213-CLS-CLS). As such, impacts towards bats are considered a possibility should bats be using the identified feature.

5.5.2.2 Further survey effort has been recommended to assess the presence of bats using the site.

5.5.2.2 The site does not constitute as likely major foraging or commuting ground, based on the size of the site and the habitat composition. However, the belt of trees outside the site outside the north and western site boundaries is deemed to have suitability for use as a commuting / foraging corridor. Consequently, a lighting scheme has been recommended.

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5.5.3 Badger

5.5.3.1 No presence of Eurasian badger was recorded within the site. No field-sign evidence suggesting the use of the site by badger was recorded.

5.5.3.2 The site is deemed to offer negligible suitability for badgers, however given the surrounding landscape, impacts towards badger are considered an unlikely but residual possibility.

5.5.3.3 Precautionary working methods have been recommended. No further survey effort has been recommended for this species.

5.5.4 European Hedgehog

5.5.4.1 No presence of European hedgehog was recorded within the site. No field-sign evidence suggesting the use of the site by hedgehog was recorded.

5.5.4.2 The site is deemed to offer low suitability for use by hedgehog, largely limited to the hedgerow around the northern site boundaries. Impacts towards hedgehog are considered an unlikely residual possibility without mitigation.

5.5.4.3 Precautionary working methods have been recommended. No further survey effort has been recommended for this species.

5.5.5 Riparian / Aquatic Mammals

5.5.5.1 The site is deemed to offer negligible suitability for use by any riparian or aquatic mammals give the habitats on site and in the wider landscape.

5.5.5.2 No impacts towards riparian or aquatic mammals are anticipated. No further survey effort has been recommended.

5.5.6 Amphibians and Reptiles

5.5.6.1 The site is deemed to offer negligible suitability for use by any amphibian or reptilian species give the habitats on site. The short-sward lawns of the property are likely to dissuade use by herptiles given the increased predation risk.

5.5.6.2 No impacts towards amphibians or reptiles are anticipated. No further survey effort is deemed necessary regarding any herptiles.

5.5.7 Other species

5.5.7.1 The site does not support suitable habitat for any other protected or significant fauna, such as: barn owl, dormouse, brown hare, or white-clawed crayfish. No impacts towards these species are anticipated.

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6 Conclusions

6.1 Designated Sites

6.1.1 One Statutory Designated Site was recorded within the search radius.

6.1.2 Eight Non-Statutory Designated Sites were recorded within the search radius. The site is recorded as falling outside the Kirklees Wildlife Habitat Network.

6.1.3 No direct or indirect impacts towards any designated site is anticipated, given the scale of the proposed development and the separating distances between the sites.

6.2 Habitats and Vegetation

6.2.1 No priority habitats were recorded within the redline boundary. No impacts towards any priority habitat are anticipated.

6.2.2 No trees which are on the Ancient Tree Inventory were recorded on site.

6.2.3 No protected or notable flora listed on Schedule 8 of the Wildlife and Countryside Act 1981 (as amended) was recorded during the survey.

6.2.4 Two non-native invasive species listed on Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) were recorded within the site during the survey. The appropriate and controlled removal and disposal of these species is recommended in conjunction with the redevelopment of this site.

6.3 Recommendations for Further Surveys / Mitigation

6.3.1 Birds

6.3.1.1 It is recommended that the removal or maintenance of the large trees and hedge in the north of the site is undertaken outside the breeding bird season which is typically recognised as March to September (inclusive).

6.3.1.2 Should these timings not be feasible, then a walkover survey / breeding bird check should be conducted in advance of the impactful works to ensure there is no breeding bird activity before the removal or disturbance.

6.3.1.3 Should birds of any species be recorded nesting, breeding, or attempting to breed, then a suitable buffer should be erected as advised by a suitably qualified ecologist. The buffer should be retained until breeding has ceased and the young have fledged.

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6.3.2 **Bats**

6.3.2.1 The building within the site was assessed as offering low roost suitability. It is unknown to what extent this building will be affected by the proposed works on the site.

6.3.2.2 Consequently, a phase-two bat survey has been recommended to assess the presence / likely absence of bats using the structures. Further survey effort will inform any mitigation which may be required to permit development.

6.3.2.3 A phase two bat survey will consist of one dusk bat emergence survey to assess the presence / likely absence of any bats using the feature identified on the building. Further survey effort will be required should presence of bat roosts or places of shelter be recorded.

6.3.2.4 Bat activity surveys are seasonally dependent and should only be conducted in the recognised survey season of between May to August (inclusive). The surveys must also take place during optimal weather conditions at a minimum three-week interval between surveys if multiple surveys are required.

6.3.2.5 The line of trees outside the northern and western site boundaries are considered to have the ability to function as a commuting / foraging habitat for local bat populations. It is recommended that a lighting scheme is incorporated into the development of the site to negate any impacts from light splay originating from the site directed towards this habitat.

6.3.3 **Flora**

6.3.3.1 Rhododendron and Himalayan cotoneaster were recorded within the site which are both Schedule 9 non-native invasive species. It is not an offence to have these species on site, however, it is the property owner's responsibility to ensure it does not spread beyond the current extent, as noted within the Environmental Protection Act (Duty of Care) Regulations.

6.3.3.2 The recorded stands of the species are small and manageable. It is recommended that the instances of these species are removed in conjunction with the proposed works to prevent the future spread of the species and risks to biosecurity. Consultation with an invasive species specialist will inform appropriate methods for removal.

6.3.3.3 Further guidance on invasive species management and control is provided in the Government Regulatory Position Statement 178 (Environment Agency, 2023).

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Figure 8: Non-native Invasive Species Recorded Onsite.

7 Biodiversity Enhancement (BNG)

7.1 In line with national policy, developments submitted for planning after 12th February 2024, with some exceptions, are expected to achieve a 10% net gain minimum increase in site biodiversity value from the existing baseline assessment.

7.2 A baseline assessment of the site and condition assessment of the habitats present was conducted during the survey which was conducted within the appropriate season. The results of the BNG are outlined below.

Table 5: Results of Baseline BNG Assessment

Area Habitats	Area (ha)	Condition Assessment	Baseline Units
Built Linear Feature (Building)	0.0148	N/A	0.00
Developed Land, Sealed Surface	0.0037	N/A	0.00
Artificial Unvegetated, Unsealed Surface	0.0214	N/A	0.00
Vegetated Garden	0.0396	N/A	0.08
Individual Trees	0.0326	Moderate: Passing criteria A, B, C, and F; failing criteria D and E	0.30
Linear Habitats	**Length (km)**	**Condition Assessment**	**Baseline Units**
Ornamental Hedge	0.0507	Poor (Default)	0.05

7.3 The total value of the site at baseline is calculated to be 0.38 area habitat units and 0.05 linear hedgerow units. No watercourse units are recorded on the baseline.

7.4 To achieve the target 10% net gain, the site post-development will need have a value of 0.42 area units and 0.06 linear units, minimum.

7.5 Once a development / landscaping scheme is compiled, a full BNG assessment can be completed.

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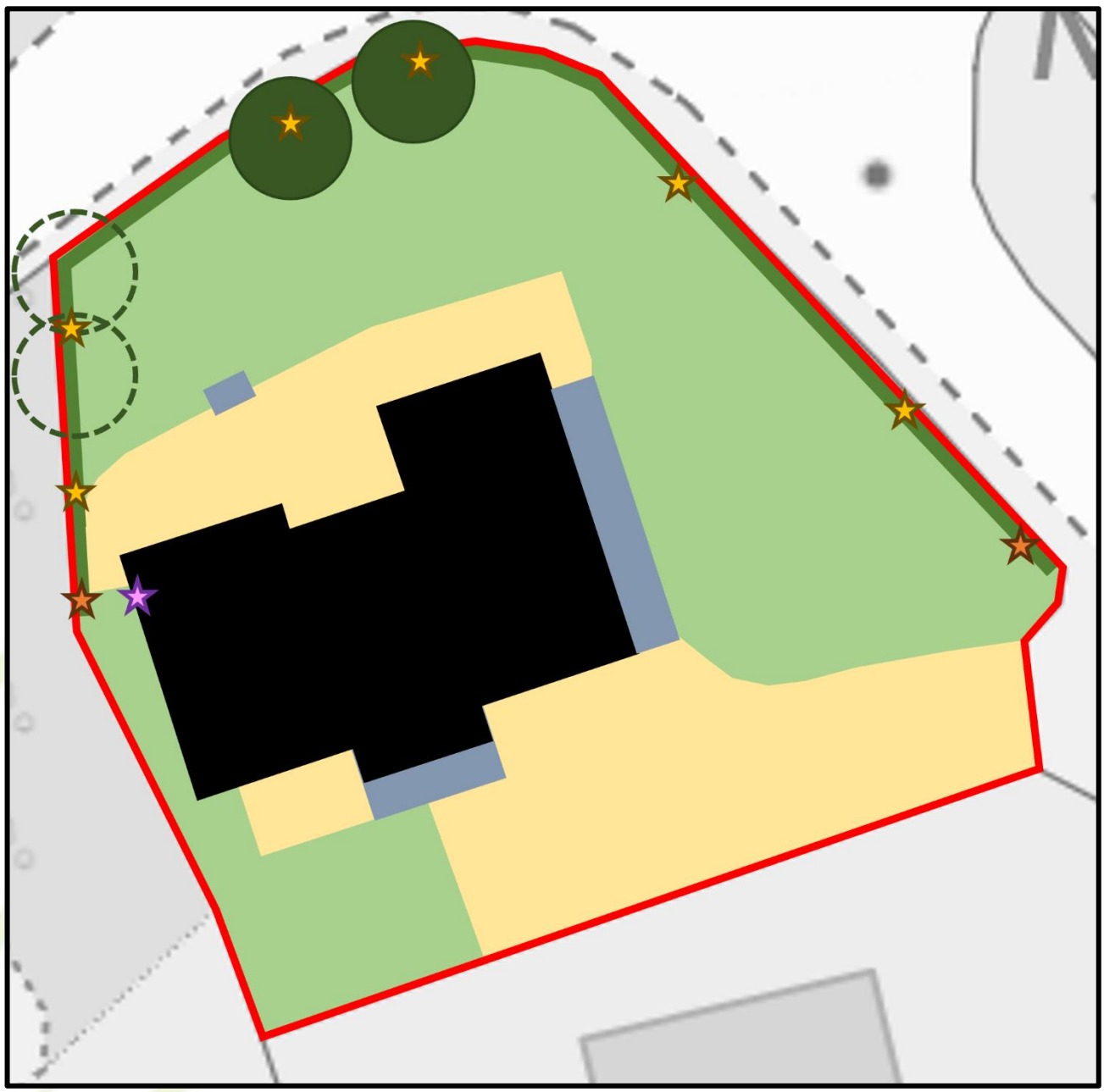
Appendix One: Phase one Map



Phase One Key			
	Redline Development Boundary		Trees Inside Site
	Artificial Unvegetated, Unsealed Surface		Trees Overhanging into Site
	Developed land, Sealed Surface		Target Note – Low Bat Roost Feature
	Buildings		Target Note – Non-native Invasive Schedule 9 Species
	Vegetated Garden		Target Note – Suitable Breeding Bird Habitat (*Representative*)

Appendix Two: Species List

Vernacular	Taxon
Flora	
Bent grass	*Agrostis sp.*
Bramble	*Rubus fruticosus*
Buddleia	*Buddleja sp.*
Cleavers	*Galium aparine*
Common ivy	*Helix hedera*
Common ragwort	*Senecio jacobaea*
Common vetch	*Vicia sativa*
Cow parsley	*Anthriscus sylvestris*
Creeping buttercup	*Ranunculus reptans*
Creeping thistle	*Cirsium arvense*
Hedge bindweed	*Calystegia sepium*
Herb-Robert	*Geranium robertianum*
Perennial ryegrass	*Lolium perenne*
Ribwort plantain	*Plantago lanceolata*
Rosebay willowherb	*Chamerion angustifolium*
Sycamore	*Acer pseudoplatanus*
Coliseum-Ivy	*Cymbalaria muralis*
Pale pink-sorrel	*Oxalis incarnata*
Borage	*Borago officinalis*
Stitchwort	*Stellaria holostea*
Himalayan cotoneaster	*Cotoneaster simonsii*
Arborvitae	*Thudja occidentalis*
Common lime	*Tilia × europaea*
Hawthorn	*Crataegus monogyna*
Cherry laurel	*Prunus laurocerasus*
Bramble	*Rubus fruticosus*
Bird cherry	*Prunus padus*
Clover	*Trifolium sp.*
Common daisy	*Belis perennis*
Common dandelion	*Taraxacum officinale*
Forget-me-not	*Myosotis sylvatica*
European ash	*Fraxinus excelsior*
English yew	*Taxus baccata*
Horse chestnut	*Aesculus hippocastanum*

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