

PRELIMINARY ECOLOGICAL APPRAISAL

- Lakeland Lodge, Rudyard



05/06/2026

Site: Land adjacent to B5331 Rudyard

Walkover Date: 19 November 2025

Prepared by: Tom Egerton, Ecologist

Document Control Sheet

Status	Issued
Date:	05/06/2026
Issue to:	Mr Farra / 25_439
Author:	Tom Egerton BSc(Hons)
Contact Details:	Hewitt&Carr Services DaisyBank House 17-19 Leek Road, Cheadle, Stoke-on-Trent, ST10 1JE 01538 711777 hello@hc-services.uk
Position:	Ecologist
Author's Signature:	

Revision Status

Issue No	Issued to	Changes Made	Date
1	Client	First Issue	27/11/2025
2	Client	Revised to address SWT objections	05/06/2026

EXECUTIVE SUMMARY

Hewitt & Carr Services (HCS) was commissioned to undertake a Preliminary Ecological Appraisal (PEA) for land adjacent to Lakeland Lodges, Rudyard Road, Rudyard, Staffordshire in support of a planning application for the erection of four dwellings and associated works.

The site comprises previously developed and disturbed land associated with former bowling green use which has undergone secondary ecological succession following cessation of management. At the time of survey, the site supported a mosaic of disturbed ground, ruderal vegetation, neutral grassland, scrub and secondary woodland edge habitat associated with recolonisation of previously modified land.

The wider Rudyard valley landscape is recognised as ecologically sensitive due to the presence of woodland, wetland habitats, watercourses, priority habitats and non-statutory designated sites including a nearby fen meadow Site of Biological Importance (SBI). Woodland and scrub habitats surrounding the site contribute to ecological connectivity within the wider valley system.

Despite the ecological sensitivity of the surrounding landscape, the development footprint itself is associated primarily with secondary successional habitat occurring on previously disturbed and modified land rather than extensive intact semi-natural habitat of particularly high intrinsic ecological value.

The principal ecological considerations associated with the proposed development relate to:

- Retention of woodland edge and habitat connectivity features.
- Protection of nearby wetland habitats from polluted runoff and hydrological impacts.
- Protection of nesting birds during vegetation clearance.
- Protection of common reptiles associated with scrub and disturbed habitat mosaics.
- Protection of bat commuting and foraging corridors through sensitive lighting design.
- Control of invasive non-native species.
- No evidence of protected species presence was identified during the walkover surveys undertaken.

The site is not considered likely to support significant great crested newt populations due to the absence of ponds within or immediately adjacent to the site, the heavily managed nature of the nearest identified pond approximately 300 m away and the substantial dispersal barrier created by the Rudyard Lake to Leekbrook canal feeder.

Similarly, while bats are likely to utilise the wider landscape for commuting and foraging, the principal ecological consideration relates to retention of habitat connectivity and implementation of a sensitive lighting strategy rather than impacts on confirmed roosting habitat.

A WW2 bunker referenced within arboricultural documentation lies outside the application boundary and outside the direct development footprint. Consequently, no direct impacts to the structure itself are proposed as part of the development.

The report concludes that the proposed development is capable of proceeding without significant adverse ecological effects subject to implementation of the mitigation and enhancement measures outlined within this report.

Recommended mitigation measures include:

- Retention of ecologically valuable peripheral habitats where practicable.
- Sensitive lighting design to protect retained habitat corridors.
- Protection of nesting birds during vegetation clearance.
- Precautionary reptile and amphibian working methods.
- Protection of nearby wetland habitats from polluted runoff.
- Implementation of invasive non-native species controls.
- Native planting and habitat enhancement.
- Implementation of a Construction Environmental Management Plan (CEMP).

The report further concludes that extensive additional protected species survey work is not considered proportionate or necessary at the time of assessment due to the disturbed and previously developed nature of the site, the scale of the proposed development and the ability to adequately address ecological risks through mitigation, habitat retention and precautionary working methods.

TABLE OF CONTENTS

Document Control Sheet	1
EXECUTIVE SUMMARY	2
1.0 INTRODUCTION.....	7
1.1 Background	7
1.2 Purpose of the assessment	7
1.3 Site location and surrounding landscape	8
1.4 Historical land use and baseline condition	8
1.5 Development proposals	9
1.6 Ecological approach.....	9
2.0 METHODOLOGY	10
2.1 Desk study	11
2.2 Field survey methodology	11
2.3 Habitat assessment methodology	11
2.4 Protected species assessment methodology	12
2.5 Survey limitations	12
2.6 Assessment approach	13
3.0 DESK STUDY	13
3.1 Designated sites	13
3.3 Woodland connectivity and landscape context	14
3.4 Hydrological context	15
3.5 Waterbodies and amphibian context.....	15
3.6 Invasive non-native species	16
3.7 Species records	16
4.0 HABITATS	17
4.1 Overview.....	17
4.2 Previously developed and disturbed ground	18
4.3 Neutral grassland	18
4.4 Scrub habitat	19
4.5 Woodland and woodland edge habitat.....	20
4.6 Trees and hedgerow features	20
4.7 Ruderal and pioneer vegetation.....	21
4.8 Invasive non-native species	21
4.9 Habitat Services.....	22

5.0 PROTECTED SPECIES ASSESSMENT	22
5.1 Overview.....	22
5.2 Bats	23
5.3 Breeding birds.....	24
5.4 Reptiles	25
5.5 Great crested newt and amphibians.....	26
5.7 Otter	27
5.8 Hedgehog and other small mammals	28
5.9 Invertebrates.....	28
5.10 Summary of protected species constraints.....	29
6.0 ECOLOGICAL IMPACT ASSESSMENT	29
6.1 Overview.....	29
6.2 Habitat loss and habitat modification.....	30
6.3 Habitat fragmentation and connectivity	30
6.4 Impacts on bats	31
6.5 Impacts on breeding birds	31
6.6 Impacts on reptiles.....	32
6.7 Impacts on great crested newt and amphibians	32
6.8 Hydrological and pollution impacts	33
6.9 Impacts associated with invasive non-native species	33
6.10 Cumulative ecological effects	34
6.11 Summary of ecological effects.....	34
7.0 AVOIDANCE, MITIGATION AND ENHANCEMENT MEASURES.....	35
7.1 Overview.....	35
7.2 Retention of habitats and connectivity features.....	35
7.3 Protection of nesting birds.....	36
7.4 Protection of bats.....	36
7.5 Protection of reptiles and amphibians	37
7.6 Pollution prevention and hydrological protection	38
7.7 Invasive non-native species management	38
7.8 Ecological enhancement measures	39
7.9 Construction Environmental Management	39
7.10 Summary of mitigation strategy	40
8.0 FURTHER SURVEY REQUIREMENTS.....	41
8.1 Overview.....	41

8.2 Bats	41
8.3 Breeding birds.....	42
8.4 Reptiles	43
8.5 Great crested newt.....	44
8.6 Grassland survey	44
8.7 Summary of further survey requirements	45
9.0 CONCLUSION	46
10.0 RECOMMENDATIONS	48
10.1 Overview	48
10.2 Recommended ecological safeguards.....	48
10.3 Vegetation clearance recommendations	48
10.4 Lighting recommendations	49
10.5 Drainage and pollution prevention recommendations	49
10.6 Invasive species recommendations	49
10.7 Biodiversity enhancement recommendations	50
10.8 Recommended planning conditions	50
10.9 Final recommendation	50
11.0 REFERENCES	51
12.0 APPENDICES	52

1.0 INTRODUCTION

1.1 Background

Hewitt & Carr Services (HCS) was commissioned to undertake a Preliminary Ecological Appraisal (PEA) for land adjacent to Lakeland Lodges, Rudyard Road, Rudyard, Staffordshire. The assessment supports a planning application for the erection of four dwellings and associated works.

This report has been prepared to provide an updated and consolidated ecological assessment of the site and supersedes previous ecological narrative where inconsistencies occurred between earlier submitted ecological documents.

The report draws upon the findings of the original ecological walkover survey undertaken on 12 February 2025, subsequent verification work undertaken on 19 November 2025, desk study information, habitat assessment, aerial imagery review and assessment of the wider Rudyard valley landscape context.

Particular consideration has been given to:

- The ecological sensitivity of the wider Rudyard valley landscape.
- Nearby priority habitats and non-statutory designated sites.
- Woodland edge and habitat connectivity.
- Hydrological connectivity with adjacent wetland habitats.
- Protected species potential.
- Invasive non-native species.
- The previously developed and disturbed nature of the development footprint.
- The proportionality of further survey requirements.

1.2 Purpose of the assessment

The purpose of this Preliminary Ecological Appraisal is to:

- Identify and describe habitats present within and adjacent to the site.
- Assess the ecological value of the site within the context of the wider landscape.
- Identify statutory and non-statutory designated sites within the zone of influence.
- Assess the potential for protected and notable species to occur within habitats affected by the proposed development.
- Identify ecological constraints associated with the proposed development.
- Assess likely ecological impacts arising from construction and operation of the development.
- Provide proportionate recommendations for avoidance, mitigation, compensation and enhancement.
- Identify any further ecological survey work considered necessary to determine the application.

This report has been prepared with reference to the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal and relevant standing advice issued by Natural England.

1.3 Site location and surrounding landscape

The site is located adjacent to Lakeland Lodges, Rudyard Road, Rudyard, Staffordshire at approximate central grid reference SJ 95353 57807.

The site lies within the wider Rudyard valley landscape south of Rudyard Lake. The surrounding area comprises a mosaic of woodland, wetland habitat, scrub, grassland, watercourses, residential development and previously disturbed land.

Woodland occurs to the east and west of the site and forms part of the wider wooded valley network associated with Rudyard Lake and the surrounding slopes.

An elevated canal feeder associated with Rudyard Lake and Leekbrook runs approximately 50 m east of and adjacent to the site. The feeder contains a considerable flow rate and vertical sides and forms a substantial hydrological and physical landscape feature within the local area.

The site slopes southwards toward a fen meadow Site of Biological Importance (SBI), which represents the principal hydrologically sensitive ecological receptor within the local landscape.

1.4 Historical land use and baseline condition

Historically, the site formed part of a bowling green and associated developed land including a pavilion structure which has since fallen into dereliction or been removed.

Following cessation of active management, the site underwent secondary ecological succession through colonisation by ruderal vegetation, scrub and young self-set trees.

At the time of survey, the site comprised a mosaic of disturbed ground, remnant hardstanding, compacted substrate, ruderal vegetation, neutral grassland, scrub and secondary woodland edge habitat associated with previously developed land.

The habitats recorded during survey reflected a transitional condition between previously managed developed land and naturally colonising vegetation communities.

The northern and central sections of the site were dominated by disturbed and previously modified habitats associated with former use and secondary colonisation, while the southern and peripheral sections supported structurally denser vegetation associated with woodland edge and habitat connectivity features.

The site therefore represents previously developed and disturbed land with secondary ecological functionality rather than an undisturbed semi-natural habitat parcel.

1.5 Development proposals

The proposed development comprises the erection of four dwellings and associated works including access, hardstanding, landscaping and drainage infrastructure.

The proposed development footprint is concentrated within the more disturbed sections of the site, while retained peripheral habitats and woodland edge features provide the principal ecological value within and adjacent to the site.

The ecological strategy for the development should therefore prioritise:

- Retention of ecologically valuable peripheral habitats where practicable.
- Protection of nearby wetland habitats from pollution and hydrological impacts.
- Retention of habitat connectivity features.
- Sensitive lighting design.
- Control of invasive non-native species.
- Habitat enhancement through native planting and long-term management.

1.6 Ecological approach

This assessment adopts a precautionary but proportionate ecological approach.

The wider Rudyard valley is recognised as an ecologically connected landscape supporting woodland, wetland and watercourse habitats. However, the ecological sensitivity of the surrounding landscape must be distinguished from the ecological value and function of the specific development footprint.

The presence of protected species records or priority habitats within the wider landscape does not automatically require all possible species-specific surveys to be undertaken. Further survey is considered necessary only where there is a realistic likelihood of protected species presence within habitats affected by the proposed development and where a credible impact pathway exists between the development and the ecological receptor.

This assessment, therefore, considers:

- The habitat quality and condition within the development footprint.
- The likelihood of protected species using affected habitats.
- The scale and nature of the proposed development.
- The availability of avoidance, mitigation and precautionary measures.
- Whether additional survey information is necessary to determine the application.

Where ecological risks can be adequately addressed through habitat retention, timing restrictions, ecological supervision, sensitive lighting, pollution prevention and precautionary working methods, extensive additional survey effort may not be proportionate or necessary.

The principal ecological sensitivities associated with the proposed development are considered to comprise:

- Potential indirect impacts on nearby wetland habitats and the adjacent fen meadow SBI.
- Potential reduction in woodland edge and habitat connectivity.
- Potential impacts on nesting birds associated with scrub and tree removal.
- Potential impacts on common reptiles associated with disturbed habitat mosaics and refugia features.
- Potential impacts on bat commuting and foraging activity through inappropriate lighting or excessive vegetation removal.
- Potential spread of invasive non-native species.

These constraints are considered capable of being addressed through proportionate mitigation, ecological safeguards and sensitive design measures.

2.0 METHODOLOGY

2.1 Desk study

- A desk study was undertaken to identify ecological constraints within the site and surrounding zone of influence. The desk study reviewed:
- Existing ecological survey information.
- Protected species records.
- Statutory and non-statutory designated sites.
- Priority habitat inventories.
- Ancient woodland inventory data.
- Aerial imagery and mapping.
- Hydrological features and nearby waterbodies.
- Arboricultural information.

The desk study considered ecological receptors within the site and the wider surrounding landscape, with particular focus on woodland connectivity, wetland habitats, protected species records and hydrological sensitivity associated with the Rudyard valley.

2.2 Field survey methodology

An initial ecological walkover survey was undertaken on 12 February 2025. A subsequent verification survey was undertaken on 19 November 2025 to review site conditions and identify any material habitat changes since the earlier survey.

The surveys comprised a walkover assessment of all accessible habitats within the application site and included:

- Habitat classification using UKHab principles.
- Assessment of habitat structure and vegetation composition.
- Recording of dominant and notable plant species.
- Identification of invasive non-native species.
- Assessment of protected species potential.
- Identification of ecological constraints and impact pathways.
- Target note recording and photographic documentation.

The surveys were undertaken by Tom Egerton BSc (Hons), Ecologist.

2.3 Habitat assessment methodology

Habitats were assessed using UKHab principles and broad habitat classification methods suitable for Preliminary Ecological Appraisal and Biodiversity Net Gain baseline assessment.

The habitat assessment considered:

- Habitat type and extent.
- Vegetation structure and composition.
- Habitat connectivity and ecological functionality.
- Disturbance history and land use context.
- Presence of invasive species.
- Potential suitability for protected species.
- Relationship with surrounding habitats and designated sites.

Particular consideration was given to distinguishing between habitats associated with long-established semi-natural vegetation and habitats associated with secondary colonisation of previously disturbed land.

2.4 Protected species assessment methodology

Protected species potential was assessed through evaluation of habitat suitability, local records, site observations and wider landscape context.

The assessment considered the potential for the site to support:

- Bats.
- Breeding birds.
- Reptiles.
- Great crested newt and common amphibians.
- [REDACTED]
- Otter.
- Hedgehog and other small mammals.
- Invertebrates.

The assessment distinguished between species likely to utilise the wider landscape and species likely to be materially affected by the proposed development footprint.

2.5 Survey limitations

The surveys were undertaken outside the optimal botanical survey season for detailed grassland assessment. Consequently, while the broad habitat types and vegetation structure could be identified confidently, the full grassland species assemblage and condition could not be comprehensively assessed during the surveys.

This limitation does not prevent identification of the principal ecological constraints associated with the proposed development. However, a growing-season grassland verification survey is recommended to support the final Biodiversity Net Gain condition assessment.

Dense scrub and woodland edge vegetation limited access in some areas but did not prevent identification of the principal habitat types or the main ecological constraints associated with the site.

No evidence of protected species presence was identified during the walkover surveys. However, absence of direct evidence during a Preliminary Ecological Appraisal does not confirm species absence, particularly for cryptic, seasonal or nocturnal species groups.

The assessment therefore adopts a precautionary approach where suitable habitat for protected species is present.

2.6 Assessment approach

This Preliminary Ecological Appraisal adopts a proportionate ecological assessment approach based upon the scale and nature of the proposed development, the habitats present within the development footprint and the likelihood of significant ecological effects occurring.

The wider Rudyard valley is recognised as an ecologically connected landscape supporting woodland, wetland and watercourse habitats. However, the site itself comprises previously developed and disturbed land subject to secondary colonisation and transitional habitat formation.

Consequently, ecological assessment has focused on:

- Realistic impact pathways associated with the development.
- The ecological functionality of habitats directly affected by the proposals.
- The distinction between wider landscape sensitivity and the intrinsic value of the development footprint itself.
- The extent to which ecological risks can be addressed through mitigation, habitat retention, precautionary working methods and planning conditions.

Further survey recommendations have therefore been based upon ecological proportionality and the likelihood of material effects occurring rather than solely upon the presence of species records within the wider landscape.

3.0 DESK STUDY

3.1 Designated sites

The desk study confirmed that the application site is not located within any statutory ecological designation such as a Site of Special Scientific Interest (SSSI), Special Area of Conservation (SAC), Special Protection Area (SPA), National Nature Reserve (NNR) or Ramsar Site.

However, the wider Rudyard valley contains several ecologically sensitive non-statutory sites and priority habitats which are relevant to the assessment of indirect ecological effects associated with the proposed development.

The principal ecological receptor within the local area is a fen meadow Site of Biological Importance (SBI) located immediately south of the site. This habitat represents a sensitive wetland receptor and is likely to be dependent upon local hydrological conditions and water quality.

Additional Sites of Biological Importance and Biodiversity Alert Sites occur within the wider Rudyard valley landscape and contribute to the ecological sensitivity of the surrounding area.

Ancient woodland parcels including Rudyard Wood, Fairview Wood, Longsdon Wood, Cowhay Wood and West Wood occur within the wider landscape and collectively form part of the wooded valley system associated with Rudyard Lake and the surrounding slopes.

The proposed development does not result in direct impacts on any statutory or non-statutory designated site. However, indirect effects associated with pollution, runoff, habitat fragmentation and lighting require consideration.

3.2 Priority habitats

Priority habitats recorded within the wider zone of influence include:

- Deciduous woodland.
- Wet woodland.
- Lowland meadow.
- Fen and wetland habitat mosaics.
- Floodplain grazing marsh.

These habitats occur outside the direct development footprint but remain ecologically relevant due to the potential for indirect impacts associated with hydrology, runoff, lighting and habitat connectivity.

The development footprint itself does not comprise mapped priority habitat. The habitats recorded within the site were associated primarily with previously developed and disturbed land undergoing secondary ecological succession.

3.3 Woodland connectivity and landscape context

The site lies within a wider wooded valley landscape associated with Rudyard Lake and the surrounding slopes. Woodland occurs to the east and west of the site and forms part of a broader ecological network linking habitats across the valley.

The woodland edge, scrub, line of trees and retained peripheral habitats provide local connectivity for birds, bats, invertebrates and other mobile fauna.

The ecological value of the site in this context is principally associated with its function as secondary habitat within a connected landscape rather than as a core ancient woodland parcel or high-value semi-natural habitat.

The proposed development therefore requires sensitive retention and management of peripheral habitats to avoid unnecessary fragmentation of the local habitat network.

The principal ecological connectivity measures required are considered to comprise:

- Retention of woodland edge habitat where practicable.
- Retention of tree lines and hedgerow features.
- Sensitive lighting design preventing illumination of retained habitats.
- Native planting and habitat enhancement.
- Long-term management of retained habitats.

Provided these measures are implemented, the development is not expected to result in significant fragmentation effects at the wider landscape scale.

3.4 Hydrological context

The site lies upslope of sensitive wetland habitats associated with the adjacent fen meadow SBI and wider valley system.

An elevated canal feeder associated with Rudyard Lake and Leekbrook runs approximately 50 m east of and adjacent to the site. The feeder contains a considerable flow rate and vertical sides and forms a significant hydrological and physical landscape feature.

The feeder is ecologically relevant for several reasons:

- It contributes to the hydrological character of the surrounding landscape.
- It represents a pathway through which pollutants could spread if drainage is poorly controlled.
- It forms a substantial dispersal barrier for some terrestrial species.
- It contributes to the separation of the site from habitats further east.

The nearby fen meadow SBI and associated wetland habitats are considered sensitive receptors in relation to sedimentation, polluted runoff and hydrological alteration.

The proposed development should therefore incorporate appropriate pollution prevention and drainage controls during both construction and operation.

3.5 Waterbodies and amphibian context

No pond occurs within or immediately adjacent to the application site.

The nearest identified pond lies approximately 300 m from the development footprint and is understood to comprise a heavily utilised fishing pond. The pond is separated from the site by the Rudyard Lake to Leekbrook canal feeder.

Due to the considerable flow rate and vertical-sided nature of the canal feeder, this feature is considered to represent a substantial dispersal barrier for great crested newt and other small terrestrial fauna moving between the pond and the site.

The development footprint itself comprises previously developed and disturbed land associated with compacted substrate, remnant hardstanding, rubble, ruderal vegetation and secondary colonisation habitat. Consequently, the site is not considered likely to represent high-quality terrestrial habitat for great crested newt.

While common amphibians may occasionally utilise damp refugia within the site, the combination of distance from the nearest pond, managed fishing use of the pond and the presence of the canal feeder substantially reduces the likelihood of a significant functional relationship existing between the development footprint and breeding great crested newt habitat.

3.6 Invasive non-native species

Invasive non-native plant species recorded or referenced within the site and surrounding habitats include:

- Himalayan balsam (*Impatiens glandulifera*).
- Rhododendron (*Rhododendron ponticum*).

Both species are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended). Appropriate management measures will therefore be required during construction to prevent accidental spread.

Himalayan balsam was associated primarily with disturbed and damp habitat margins, while rhododendron was associated with woodland edge habitat.

Provided appropriate biosecurity and vegetation management measures are implemented, the proposed development is not expected to result in significant spread of invasive species.

3.7 Species records

Protected and notable species records returned within the wider surrounding area include:

- Bat species associated with woodland and water features.
- Bird species including raptors and wetland-associated species.
- Slow worm and grass snake.
- Badger.
- Otter.
- Common amphibians.

These records confirm that the wider Rudyard valley supports a productive ecological landscape with strong habitat connectivity and varied habitat structure.

However, the presence of species records within the wider landscape does not automatically indicate that the development footprint itself supports significant populations or requires full survey effort for all species groups.

The requirement for further survey should instead be determined by:

- The quality and suitability of habitats within the development footprint.
- The likelihood of protected species presence within affected habitats.
- The existence of credible impact pathways between the development and the ecological receptor.
- The extent to which impacts can be avoided through mitigation, design and precautionary working methods.

These matters are considered further within the habitat and protected species assessment sections overleaf.

4.0 HABITATS

4.1 Overview

At the time of survey, the site comprised a mosaic of previously developed and disturbed land undergoing secondary ecological succession following cessation of historical management associated with former bowling green use.

The habitats present reflected a transitional condition between historically managed developed land and naturally colonising vegetation communities. The site

supported a combination of disturbed substrate, ruderal vegetation, neutral grassland, scrub and secondary woodland edge habitat associated with recolonisation of previously modified land.

The principal habitats recorded within the site included:

- Previously developed and disturbed ground.
- Artificial unvegetated and sparsely vegetated habitat.
- Neutral grassland.
- Mixed scrub.
- Line of trees.
- Native hedgerow
- Ruderal vegetation.
- Invasive non-native plant species.

While the site provided ecological functionality within the wider Rudyard valley landscape, the habitats present were principally associated with secondary colonisation of disturbed ground rather than long-established semi-natural habitat communities.

4.2 Previously developed and disturbed ground

Large sections of the site comprised previously disturbed land associated with historical development and recreational use. Areas of compacted substrate, rubble, remnant hardstanding and sparsely vegetated ground occurred throughout parts of the proposed development footprint.

These areas supported ruderal vegetation and pioneer species typical of disturbed substrates and nutrient-enriched ground conditions. Mosses, scattered grasses and opportunistic herbaceous species were locally frequent.

The disturbed habitat contributed to structural diversity within the site and provided opportunities for invertebrates, basking reptiles and foraging birds associated with transitional habitat mosaics. However, the habitat was not considered to be of significant intrinsic botanical value due to its disturbed origin and heavily modified condition.

4.3 Neutral grassland

Neutral grassland habitat occurred throughout more open areas of the site and along habitat transition zones between scrub and disturbed ground.

The grassland was dominated by widespread species associated with disturbed and nutrient-influenced substrate, including:

- Perennial ryegrass.
- Timothy grass.
- Cocksfoot.
- Plantain.
- Common nettle.
- Dandelion.

- Common daisy.
- Rosebay willowherb.

Localised ruderal species and scrub encroachment were evident across sections of the habitat, indicating transitional successional processes associated with reduced management.

The grassland habitat was structurally variable but generally species-poor and associated with previously disturbed land rather than semi-improved or unimproved species-rich grassland.

The surveys were undertaken outside the optimal season for detailed botanical assessment, and therefore, a growing-season grassland verification survey is recommended to support the final Biodiversity Net Gain condition assessment. However, based upon the habitat structure, disturbance history and species assemblage recorded, the grassland is not considered likely to represent priority lowland meadow habitat.

Ecologically, the grassland provided foraging opportunities for birds and invertebrates and formed part of the wider habitat mosaic utilised by common fauna.

4.4 Scrub habitat

Scrub habitat formed one of the principal ecological features within the site and occurred extensively throughout unmanaged areas.

The scrub was dominated by bramble with frequent goat willow, hawthorn, ivy and rosebay willowherb. Buddleia and broom were recorded locally, while Himalayan balsam occurred within more disturbed and damp areas.

The habitat structure varied from dense bramble thickets to more open scrub mosaics interspersed with ruderal vegetation and grassland.

The scrub habitat represented relatively recent secondary colonisation associated with cessation of management and disturbance history. The habitat was not considered particularly mature or species-rich but nevertheless provided ecological functionality within the wider landscape.

The scrub provided:

- Suitable nesting habitat for common breeding birds.
- Refuge habitat for reptiles and small mammals.
- Foraging habitat for invertebrates.
- Woodland edge transition zones utilised by bats and birds.
- Sheltered microhabitats within the wider site mosaic.

Although ecologically functional, the scrub was considered typical of secondary successional habitat associated with previously disturbed land and did not represent scrub habitat of particularly high intrinsic ecological value.

4.5 Woodland and woodland edge habitat

Woodland and woodland edge habitat occurred primarily along the eastern and western boundaries of the site and formed part of the wider wooded valley network associated with Rudyard Lake.

Species recorded included:

- Sycamore.
- Goat willow.
- Wild cherry.
- Norway maple.
- Oak.
- Beech.
- Silver birch.
- Spruce.
- Holly.

The understory was dominated by bramble and ivy with occasional invasive species including Himalayan balsam and rhododendron.

The woodland habitat was secondary in character and associated with relatively recent colonisation and edge habitat processes rather than ancient semi-natural woodland.

Ecologically, the woodland edge contributes to:

- Local habitat connectivity.
- Shelter and screening.
- Bird nesting opportunities.
- Bat foraging and commuting habitat.
- Invertebrate habitat diversity.
- Habitat transition structure within the wider landscape.

The woodland edge habitat represented one of the more ecologically valuable components of the site due to its role within the wider habitat network. Retention of woodland edge habitat wherever practicable should therefore form part of the ecological mitigation strategy for the development.

4.6 Trees and hedgerow features

Scattered trees, line of trees and hedgerow fragments occurred within and adjacent to the site.

The line of trees comprised species including sycamore and cedar and contributed to habitat connectivity and visual screening. Native hedgerow sections also occurred along parts of the site boundary.

These features provided:

- Potential nesting habitat for birds.

- Commuting structure for bats.
- Shelter and refuge opportunities for fauna.
- Connectivity between retained habitats and surrounding woodland.

The ecological value of these features was primarily associated with connectivity and structural function within the landscape rather than their intrinsic botanical importance.

Retention of these features should therefore be prioritised where practicable, particularly where they contribute to continuity between retained habitats.

4.7 Ruderal and pioneer vegetation

Ruderal vegetation was widespread throughout disturbed sections of the site and was associated primarily with nutrient-enriched substrate, rubble, hardstanding margins and transitional habitats.

Species recorded included rosebay willowherb, common nettle and other disturbance-associated species typical of unmanaged previously developed land.

The ruderal vegetation contributed to habitat heterogeneity and provided localised foraging opportunities for invertebrates and birds. However, the habitat was characteristic of secondary colonisation and disturbed substrate rather than species-rich semi-natural vegetation communities.

4.8 Invasive non-native species

Invasive non-native plant species recorded or referenced within the site included Himalayan balsam and rhododendron.

Himalayan balsam occurred primarily within disturbed and damp habitat margins, while rhododendron was associated with woodland edge habitat.

Both species are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) and therefore require appropriate management during construction to avoid accidental spread.

An invasive species management strategy should be implemented during construction and should include:

- Identification and demarcation of affected areas.
- Appropriate biosecurity procedures.
- Prevention of contaminated soil movement.

- Appropriate disposal or treatment of vegetation arisings.
- Follow-up monitoring where required.

Provided such measures are implemented, the development is not expected to result in a significant spread of invasive non-native species.

4.9 Habitat Services

The site comprised a structurally varied mosaic of disturbed land, scrub, grassland and secondary woodland edge habitat associated with recolonisation of previously developed land.

The habitats present provided ecological functionality within the wider Rudyard valley landscape, particularly in relation to:

- Bird nesting habitat.
- Bat foraging and commuting habitat.
- Reptile refuge opportunities.
- Invertebrate habitat diversity.
- Local habitat connectivity.

However, the habitats recorded were principally associated with secondary successional processes occurring on previously disturbed and modified land rather than intact semi-natural habitat communities of particularly high intrinsic ecological value.

The principal ecological sensitivities associated with the habitats present are considered to comprise:

- Retention of woodland edge and connectivity features.
- Protection of nearby wetland habitats from runoff and pollution.
- Protection of nesting birds during vegetation clearance.
- Protection of reptiles associated with scrub margins and refugia.
- Sensitive lighting design to protect bat activity corridors.
- Control of invasive non-native species.

These matters are considered further within the protected species and impact assessment sections below.

5.0 PROTECTED SPECIES ASSESSMENT

5.1 Overview

The site lies within a wider ecologically connected landscape associated with woodland, wetland and watercourse habitats surrounding Rudyard Lake and the wider valley system. Protected species records exist within the surrounding landscape and several habitats within the site provide ecological functionality for common fauna.

However, the development footprint itself is associated primarily with previously developed and disturbed land undergoing secondary ecological succession. Consequently, the assessment of protected species potential must consider both:

The wider ecological sensitivity of the surrounding landscape.

The actual habitat suitability and impact pathways associated with the development footprint itself.

The habitats within the site are considered capable of supporting common and widespread species associated with scrub, woodland edge and disturbed habitat mosaics. However, the site does not comprise extensive undisturbed semi-natural habitat likely to support particularly significant populations of protected species.

The principal ecological considerations associated with the proposed development relate to:

- Nesting birds.
- Common reptiles.
- Bat foraging and commuting activity.
- Habitat connectivity.
- Pollution and hydrological effects on nearby wetland habitats.
- Invasive species management.

5.2 Bats

The wider Rudyard valley provides suitable habitat for bats due to the presence of woodland, waterbodies, woodland edge habitat, scrub corridors and wetland habitats. Local bat records further support the likelihood of bat activity occurring within the surrounding landscape.

Within the site itself, woodland edge habitat, scrub margins and tree lines provide suitable opportunities for commuting and foraging bats moving through the wider valley corridor.

The principal bat-related ecological consideration associated with the proposed development is therefore the retention of habitat connectivity and avoidance of inappropriate illumination of retained habitats.

The site survey identified no confirmed evidence of bat roosting within the habitats assessed during the walkover surveys. The majority of the development footprint comprised disturbed land, scrub and secondary colonising vegetation associated with previously modified habitat.

A WW2 bunker referenced within arboricultural documentation lies outside the application boundary and outside the direct development footprint. Consequently, no direct impacts to the structure itself are proposed as part of the development.

The principal potential impact pathway in relation to bats is therefore indirect and relates to the potential for increased illumination or reduction in nearby commuting and foraging habitat connectivity.

Provided retained woodland edge habitat and peripheral vegetation are maintained and a sensitive lighting strategy is implemented to avoid excessive illumination of surrounding habitat corridors, significant adverse effects associated with bats are not anticipated.

At the time of assessment, extensive bat activity surveys are not considered proportionate or necessary because:

- The development footprint is associated primarily with disturbed and previously developed land.
- The principal ecological value relates to peripheral connectivity features rather than confirmed roost habitat.
- No confirmed roost evidence was identified during the surveys undertaken.
- Potential impacts can largely be addressed through habitat retention and sensitive lighting design.

Any trees proposed for removal which contain features potentially suitable for roosting bats should nevertheless be subject to ground-level inspection prior to works.

A sensitive lighting strategy should accompany the development proposals and should demonstrate that retained woodland edge habitat, scrub margins, tree lines and retained peripheral habitats remain unlit or subject only to minimal light spill.

5.3 Breeding birds

The site contained suitable nesting habitat for common breeding birds associated with scrub, woodland edge, trees and hedgerow features.

The scrub and woodland edge habitats provided suitable shelter and nesting structure for common passerines and other widespread bird species associated with secondary successional habitats.

Bird activity within the wider landscape is likely to be relatively high due to the surrounding mosaic of woodland, wetland and water-associated habitats.

No evidence was identified during the survey to indicate that the site supported a particularly significant breeding bird assemblage or habitat of exceptional ornithological importance. However, all nesting birds and active nests receive legal protection under the Wildlife and Countryside Act 1981 (as amended).

Vegetation clearance therefore represents the principal potential impact pathway for birds.

To avoid offences under wildlife legislation, vegetation clearance should be undertaken outside the main nesting bird season where practicable. If vegetation clearance is required during the nesting season, a nesting bird check should be

undertaken by a suitably qualified ecologist no more than 48 hours prior to clearance works commencing.

Where active nests are identified, an appropriate exclusion buffer should be established and retained until the nest is no longer in active use.

At the time of assessment, extensive breeding bird survey work is not considered proportionate or necessary because:

- The habitats present are typical of secondary successional habitat mosaics associated with disturbed land.
- No evidence was identified to indicate that the site supports a particularly significant breeding bird assemblage.
- Potential impacts can be adequately addressed through timing restrictions and pre-clearance checks.
- The proposed development is relatively small-scale and concentrated within previously disturbed habitat.

Subject to implementation of these measures, significant adverse impacts on breeding birds are not anticipated.

5.4 Reptiles

The site provided suitable habitat for common reptiles associated with scrub margins, disturbed habitat mosaics, ruderal vegetation, rubble and unmanaged areas.

The habitat structure present within the site was suitable for occasional refuge, basking and dispersal opportunities for common reptile species such as slow worm and grass snake, which are recorded within the wider landscape.

However, the development footprint itself comprised primarily disturbed and previously modified land associated with compacted substrate, remnant hardstanding and secondary colonising vegetation rather than extensive undisturbed semi-natural reptile habitat.

The site is therefore considered capable of supporting common reptiles at low to moderate population levels typical of secondary successional habitat mosaics.

The principal impact pathway for reptiles would arise through vegetation clearance, rubble removal and ground disturbance.

Given the habitat context and disturbance history of the site, impacts on reptiles can be appropriately addressed through a precautionary Reasonable Avoidance Measures approach rather than through extensive population-level survey work.

The ecological mitigation strategy should therefore include:

- Phased vegetation clearance.

- Directional strimming towards retained habitat.
- Careful removal of rubble, debris and refugia features.
- Avoidance of unnecessary clearance of retained peripheral habitats.
- Ecological supervision during initial site clearance where appropriate.
- Provision of habitat enhancement features such as log piles and retained refuge areas.

At the time of assessment, extensive reptile survey work is not considered proportionate or necessary because:

- The site is previously developed and disturbed.
- Suitable habitat is fragmented and transitional in character.
- The likely reptile assemblage is expected to comprise common species associated with secondary successional habitat.
- Potential impacts can be adequately addressed through precautionary working methods.

Subject to implementation of these measures, significant adverse impacts on reptiles are not anticipated.

5.5 Great crested newt and amphibians

No pond occurs within or immediately adjacent to the application site.

The nearest identified pond lies approximately 300 m from the development footprint and is understood to comprise a heavily utilised fishing pond.

The pond is separated from the site by the Rudyard Lake to Ladderedge canal feeder, which contains a considerable flow rate and vertical sides and is considered to represent a substantial dispersal barrier for great crested newt and other small terrestrial fauna moving between the pond and the site.

The development footprint itself comprised disturbed and previously developed land associated with compacted substrate, rubble, remnant hardstanding and secondary colonising vegetation. Consequently, the site is not considered likely to represent high-quality terrestrial habitat for great crested newt.

While common amphibians may occasionally utilise damp refugia within the site, the combination of:

- Distance from the nearest pond.
- Managed fishing use of the pond.
- The substantial dispersal barrier created by the canal feeder.
- The disturbed character of the development footprint.

substantially reduces the likelihood of a significant functional relationship existing between the site and breeding great crested newt habitat.

On this basis, the site is considered to have low potential to support great crested newt.

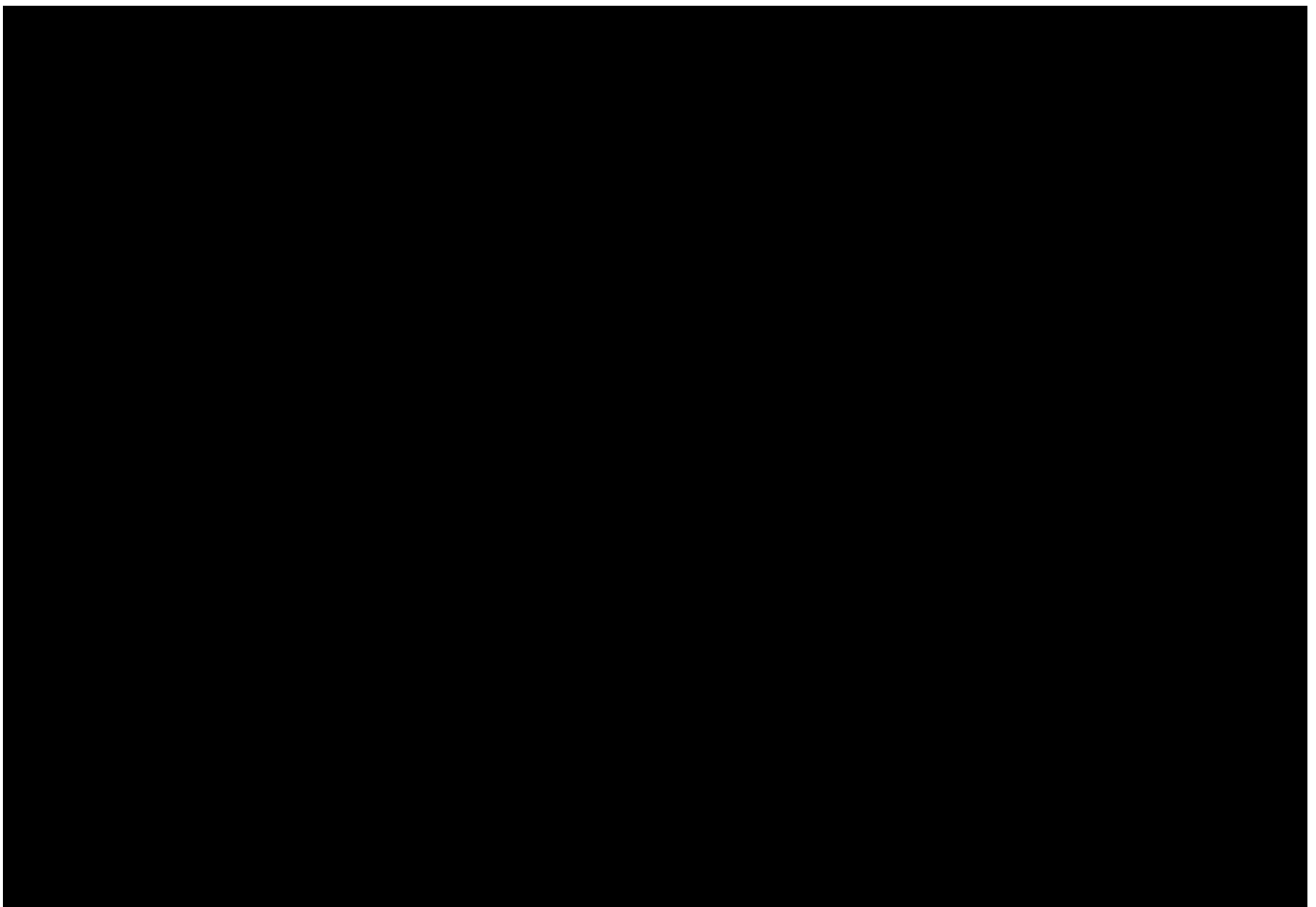
At the time of assessment, great crested newt surveys are not considered proportionate or necessary because:

- No pond occurs within or immediately adjacent to the site.
- The nearest pond lies approximately 300 m away.
- The nearest pond is understood to comprise a managed fishing pond.
- The canal feeder forms a substantial dispersal barrier between the pond and the site.

The development footprint itself provides limited suitability as terrestrial great crested newt habitat.

Nevertheless, a precautionary approach should be adopted during vegetation clearance and ground disturbance works. Any rubble, debris, dense vegetation or refugia features should be removed carefully under ecological supervision where appropriate.

Subject to implementation of precautionary measures, significant adverse impacts on amphibians are not anticipated.



5.7 Otter

Otter records exist within the wider landscape and are associated primarily with Rudyard Lake, connected watercourses and surrounding wetland habitats.

No suitable otter resting habitat was identified within the application site and the site is not considered suitable for permanent otter occupation.

The principal potential impact pathway in relation to otter is indirect and relates to the potential for polluted runoff to affect downstream waterbodies and wetland habitats during construction.

Appropriate pollution prevention measures and drainage controls should therefore be implemented during the construction and operation of the development.

Subject to the implementation of these measures, significant adverse impacts on otter are not anticipated.

5.8 Hedgehog and other small mammals

The scrub, ruderal vegetation and habitat transition zones within the site provided opportunities for common small mammals and hedgehog.

The site is unlikely to support particularly significant populations due to its disturbed character and fragmented habitat structure. However, localised refuge and foraging opportunities were present.

The ecological mitigation strategy should therefore include:

- Sensitive vegetation clearance.
- Checks of debris piles and refugia prior to removal.
- Avoidance of entrapment hazards.
- Retention of habitat connectivity where practicable.
- Provision of permeable boundary treatments where feasible.

Subject to implementation of these measures, significant adverse impacts on hedgehog and small mammals are not anticipated.

5.9 Invertebrates

The structurally varied habitat mosaic present within the site provided opportunities for common invertebrates associated with scrub, grassland, ruderal vegetation and disturbed ground.

The site was not considered likely to support particularly notable or specialist invertebrate assemblages due to its disturbance history and secondary successional character.

However, the habitat mosaic contributed to local invertebrate diversity within the wider landscape and supported ecological functionality for birds and bats through provision of prey resources.

Retention of habitat heterogeneity, native planting and long-term habitat management would provide opportunities for enhancement of local invertebrate habitat value.

5.10 Summary of protected species constraints

The principal protected species considerations associated with the proposed development are considered to comprise:

- Protection of nesting birds during vegetation clearance.
- Protection of common reptiles associated with scrub and disturbed habitat mosaics.
- Protection of bat commuting and foraging corridors through habitat retention and sensitive lighting design.
- Protection of nearby wetland habitats from pollution and runoff.
- Control of invasive non-native species.

The site is not considered likely to support significant great crested newt populations due to the absence of ponds within or adjacent to the site, the heavily managed nature of the nearest pond and the substantial dispersal barrier created by the canal feeder.

Similarly, while bats are likely to utilise the wider landscape, the principal ecological consideration relates to retention of peripheral habitat connectivity and implementation of a sensitive lighting strategy rather than impacts on confirmed roosting habitat.

Subject to implementation of proportionate mitigation and ecological safeguards, significant adverse impacts on protected species are not anticipated.

6.0 ECOLOGICAL IMPACT ASSESSMENT

6.1 Overview

The proposed development comprises the erection of four dwellings and associated works within a site comprising previously developed and disturbed land undergoing secondary ecological succession.

The wider Rudyard valley landscape is recognised as ecologically sensitive due to the presence of woodland, wetland habitats, watercourses, priority habitats and non-statutory designated sites. However, the development footprint itself is associated primarily with secondary colonising habitats occurring on previously modified land.

The assessment of ecological effects has therefore considered both:

- The ecological function of the development footprint itself.
- The relationship between the site and the wider surrounding habitat network.

The principal ecological impact pathways associated with the development are considered to comprise:

- Loss of secondary successional habitat.
- Potential disturbance to nesting birds and reptiles during vegetation clearance.
- Potential reduction in local habitat connectivity.
- Potential effects on bat foraging and commuting activity through inappropriate lighting or excessive vegetation removal.
- Potential pollution and hydrological impacts affecting nearby wetland habitats.
- Potential spread of invasive non-native species.

6.2 Habitat loss and habitat modification

The proposed development will result in the loss of areas of disturbed ground, ruderal vegetation, neutral grassland and scrub habitat within the development footprint.

The habitats affected are associated primarily with secondary colonisation of previously developed land and are not considered to represent extensive intact semi-natural habitat communities of particularly high intrinsic ecological value.

Nevertheless, the habitats provide ecological functionality within the wider landscape, particularly in relation to habitat connectivity, bird nesting habitat, reptile refuge opportunities and foraging habitat for common fauna.

The greatest ecological value within the site is associated with retained woodland edge habitat, peripheral vegetation and habitat connectivity features. Consequently, retention of these habitats wherever practicable is considered central to the ecological mitigation strategy for the development.

Subject to retention and enhancement of peripheral habitats, the habitat losses associated with the development are not considered likely to result in significant ecological effects at the local landscape scale.

6.3 Habitat fragmentation and connectivity

The site forms part of a wider woodland and scrub corridor associated with the Rudyard valley landscape.

Potential fragmentation effects may arise where excessive vegetation clearance or inappropriate lighting reduces connectivity between retained habitats and surrounding woodland.

However, the development footprint is concentrated within the more disturbed sections of the site rather than within the principal woodland edge habitats providing wider ecological connectivity.

The development can therefore avoid significant fragmentation effects through:

- Retention of peripheral woodland edge habitat.
- Retention of tree lines and hedgerow features where practicable.
- Native planting and habitat enhancement.
- Sensitive lighting design.
- Long-term management of retained habitat areas.

Provided these measures are implemented, the development is not expected to result in significant fragmentation of the wider habitat network.

6.4 Impacts on bats

The site provides suitable foraging and commuting habitat for bats associated with woodland edge habitat, scrub corridors and the wider Rudyard valley landscape.

The principal potential impacts on bats are considered to comprise:

- Reduction in local foraging habitat.
- Disruption of commuting routes.
- Increased artificial illumination affecting retained habitats.

The development footprint itself does not comprise confirmed roost habitat based upon the habitats assessed during the walkover surveys.

A WW2 bunker referenced within arboricultural documentation lies outside the application boundary and outside the direct development footprint. Consequently, no direct impacts to the structure itself are proposed as part of the development.

The principal potential impact pathway in relation to bats is therefore indirect and relates to the potential for increased illumination or reduction in nearby commuting and foraging habitat connectivity.

Provided retained woodland edge habitat and peripheral vegetation are maintained and a sensitive lighting strategy is implemented to avoid excessive illumination of surrounding habitat corridors, significant adverse impacts on bats are not anticipated.

6.5 Impacts on breeding birds

The proposed development has the potential to impact nesting birds through vegetation clearance and habitat loss associated with scrub, woodland edge and trees.

The habitats present provide suitable nesting opportunities for common and widespread bird species associated with secondary successional habitats.

The principal impact pathway relates to direct disturbance or destruction of active nests during vegetation clearance.

This risk can be adequately addressed through:

- Timing vegetation clearance outside the main nesting bird season where practicable.
- Undertaking nesting bird checks prior to clearance during the nesting season.
- Retention of peripheral habitat features.
- Native planting and habitat enhancement.
- Installation of bird nesting features where appropriate.

Subject to implementation of these measures, significant adverse impacts on breeding birds are not anticipated.

6.6 Impacts on reptiles

The site provides suitable habitat for common reptiles associated with scrub margins, ruderal vegetation, rubble and disturbed habitat mosaics.

Potential impacts relate primarily to vegetation clearance, rubble removal and ground disturbance resulting in injury or mortality of reptiles using refugia within the site.

The site is not considered likely to support a particularly significant reptile population due to its disturbance history and previously developed character. Nevertheless, common reptiles may utilise the site at low to moderate levels.

Impacts can be adequately addressed through a precautionary Reasonable Avoidance Measures approach comprising:

- Phased vegetation clearance.
- Directional strimming towards retained habitat.
- Careful removal of rubble and refugia features.
- Ecological supervision during initial clearance where appropriate.
- Retention of peripheral habitats.
- Provision of habitat enhancement features.

Subject to implementation of these measures, significant adverse impacts on reptiles are not anticipated.

6.7 Impacts on great crested newt and amphibians

No pond occurs within or immediately adjacent to the application site and the nearest identified pond lies approximately 300 m away.

The nearest pond is understood to comprise a heavily utilised fishing pond and is separated from the site by the Rudyard Lake to Leekbrook canal feeder.

Due to the considerable flow rate and vertical-sided nature of the canal feeder, this feature is considered to represent a substantial dispersal barrier between the pond and the development footprint.

The development footprint itself comprises disturbed and previously developed land and is not considered likely to represent high-quality terrestrial habitat for great crested newt.

Consequently, the likelihood of a significant functional relationship existing between the site and breeding great crested newt habitat is considered low.

Potential impacts on amphibians can be adequately addressed through precautionary site clearance measures and ecological supervision where appropriate.

Significant adverse impacts on great crested newt are therefore not anticipated.

6.8 Hydrological and pollution impacts

The principal ecological sensitivity associated with the wider landscape relates to the nearby fen meadow SBI and associated wetland habitats located downslope of the site.

Potential impact pathways include:

- Sedimentation.
- Polluted runoff.
- Hydrocarbon contamination.
- Cementitious pollution.
- Alteration of drainage pathways.

The proposed development should therefore incorporate robust pollution prevention and drainage measures during construction and operation.

Provided appropriate drainage design and construction controls are implemented, significant adverse effects on nearby wetland habitats are not anticipated.

6.9 Impacts associated with invasive non-native species

Construction works have the potential to spread invasive non-native plant species where contaminated soil, vegetation or machinery is moved without appropriate controls.

An invasive species management strategy should therefore be implemented during construction to prevent spread of Himalayan balsam and rhododendron.

Provided appropriate biosecurity procedures are implemented, significant spread of invasive species is not anticipated.

6.10 Cumulative ecological effects

The proposed development comprises a relatively small-scale residential scheme within a landscape already influenced by residential development, infrastructure and historical land modification.

The development is not considered likely to result in significant cumulative ecological effects provided appropriate mitigation, habitat retention and drainage controls are implemented.

6.11 Summary of ecological effects

The proposed development will result in localised loss of secondary successional habitat associated with previously developed land. However, the habitats affected are not considered to comprise extensive high-value semi-natural habitat communities.

The principal ecological sensitivities associated with the site relate to:

- Woodland edge and habitat connectivity.
- Nesting birds.
- Common reptiles.
- Bat commuting and foraging activity.
- Nearby wetland habitats and hydrology.
- Invasive non-native species.

These effects are considered capable of being addressed through proportionate mitigation, sensitive design, ecological supervision and habitat enhancement.

Subject to implementation of the mitigation measures outlined within this report, the proposed development is not expected to result in significant adverse ecological effects.

7.0 AVOIDANCE, MITIGATION AND ENHANCEMENT MEASURES

7.1 Overview

The proposed development should incorporate a combination of avoidance, mitigation and enhancement measures to ensure that ecological impacts are minimised and that the site continues to contribute to ecological functionality within the wider Rudyard valley landscape.

The ecological strategy for the development should focus on:

- Retention of ecologically valuable peripheral habitats.
- Protection of nearby wetland habitats and hydrological receptors.
- Protection of protected species during construction.
- Retention of habitat connectivity.
- Sensitive lighting design.
- Control of invasive non-native species.
- Long-term habitat enhancement and management.

7.2 Retention of habitats and connectivity features

The retained woodland edge habitat, peripheral scrub, tree lines and hedgerow features represent the principal ecological connectivity features associated with the site.

Where practicable, these habitats should be retained and protected throughout construction and operation of the development.

The ecological mitigation strategy should therefore include:

- Retention of peripheral woodland edge habitat.
- Retention of tree lines and hedgerow features where practicable.

- Avoidance of unnecessary vegetation clearance outside the development footprint.
- Protection fencing around retained habitats during construction.
- Native planting to strengthen retained habitat corridors.
- Long-term management of retained habitats.

Retained peripheral habitat areas should remain undeveloped and should be managed as ecological enhancement habitat wherever practicable.

7.3 Protection of nesting birds

All active bird nests are protected under the Wildlife and Countryside Act 1981 (as amended).

Vegetation clearance should therefore be undertaken outside the main bird nesting season where practicable. The main nesting bird season generally extends from March to August inclusive, although nesting may occur outside this period depending on weather conditions and species present.

Where vegetation clearance is required during the nesting season, a suitably qualified ecologist should undertake a nesting bird check no more than 48 hours prior to works commencing.

If active nests are identified, an appropriate exclusion buffer should be established and retained until the nest is no longer active.

Habitat enhancement measures for birds should include:

- Retention of scrub and woodland edge habitat where practicable.
- Native shrub and tree planting.
- Installation of integrated bird nesting features within suitable new buildings where feasible.

Subject to implementation of these measures, significant adverse impacts on breeding birds are not anticipated.

7.4 Protection of bats

The principal bat-related ecological consideration associated with the development is the retention of commuting and foraging habitat connectivity.

The ecological mitigation strategy should therefore include:

- Retention of woodland edge habitat and tree lines where practicable.
- Sensitive lighting design.
- Avoidance of unnecessary removal of peripheral vegetation.
- Native planting to strengthen habitat connectivity.

The WW2 bunker referenced within arboricultural documentation lies outside the application boundary and outside the direct development footprint. Consequently, no direct impacts to the structure itself are proposed as part of the development.

The principal potential impact pathway in relation to bats is therefore indirect and relates to the potential for increased illumination or reduction in nearby commuting and foraging habitat connectivity.

Provided retained woodland edge habitat and peripheral vegetation are maintained and a sensitive lighting strategy is implemented to avoid excessive illumination of surrounding habitat corridors, significant adverse effects associated with bats are not anticipated.

Any trees proposed for removal which contain features potentially suitable for roosting bats should nevertheless be subject to ground-level inspection prior to works.

A sensitive lighting strategy should accompany the development proposals and should demonstrate that retained woodland edge habitat, scrub margins, tree lines and retained peripheral habitats remain unlit or subject only to minimal light spill.

Lighting should therefore:

- Be directed away from retained habitats.
- Use low-level warm spectrum lighting where practicable.
- Avoid excessive upward spill.
- Avoid illumination of retained habitat corridors.
- Use timers, cowl or directional fittings where appropriate.

7.5 Protection of reptiles and amphibians

The site provides suitable habitat for common reptiles associated with scrub margins, rubble, ruderal vegetation and disturbed habitat mosaics.

Although the site is not considered likely to support particularly significant reptile populations, precautionary working methods should be implemented during site clearance.

The ecological mitigation strategy should therefore include:

- Phased vegetation clearance.
- Directional strimming towards retained habitats.
- Careful removal of rubble, debris and refugia features.
- Avoidance of unnecessary clearance of retained peripheral habitats.
- Ecological supervision during initial site clearance where appropriate.
- Provision of habitat enhancement features including log piles and retained habitat margins.

Precautionary measures should also be implemented for amphibians and other small fauna during vegetation clearance and ground disturbance works.

Any excavations left open overnight should include escape ramps where practicable to avoid accidental entrapment of animals.

Subject to implementation of these measures, significant adverse impacts on reptiles and amphibians are not anticipated.

7.6 Pollution prevention and hydrological protection

The nearby fen meadow SBI and associated wetland habitats represent sensitive ecological receptors in relation to polluted runoff and hydrological impacts.

Construction and operational drainage measures should therefore ensure that no contaminated runoff enters adjacent habitats or connected water features.

The ecological mitigation strategy should therefore include:

- Appropriate construction pollution prevention measures.
- Secure storage of fuels and chemicals.
- Appropriate silt and sediment controls.
- Emergency spill response procedures.
- Appropriate surface water drainage design.
- Avoidance of direct discharge into adjacent wetland habitats.
- Protection of retained vegetation and soils during construction.

Any drainage infrastructure should be designed to ensure that downstream wetland habitats and the fen meadow SBI are not adversely affected by runoff quantity or quality.

7.7 Invasive non-native species management

Himalayan balsam and rhododendron recorded within the site should be managed appropriately during construction to prevent accidental spread.

An invasive species management strategy should therefore be implemented and should include:

- Identification and demarcation of affected areas.
- Appropriate biosecurity procedures.
- Avoidance of unnecessary soil movement.
- Appropriate treatment or disposal of contaminated material.
- Prevention of spread by machinery or footwear.
- Follow-up monitoring where required.

Provided appropriate controls are implemented, significant spread of invasive species is not anticipated.

7.8 Ecological enhancement measures

The proposed development provides opportunities to deliver ecological enhancement through habitat management, native planting and incorporation of biodiversity features.

Enhancement measures should include:

- Retention and enhancement of woodland edge habitat.
- Native tree and shrub planting.
- Long-term management of retained habitats.
- Retention of habitat connectivity features.
- Provision of bird nesting features where appropriate.
- Provision of bat roosting features where appropriate.
- Creation of habitat piles and refuge features within retained habitat areas.
- Use of wildlife-friendly planting within landscaped areas.

Enhancement planting should prioritise native species characteristic of the local landscape.

7.9 Construction Environmental Management

A Construction Environmental Management Plan (CEMP) should be implemented throughout construction works and should include:

- Protection of retained habitats.
- Pollution prevention procedures.
- Vegetation clearance controls.
- Precautionary measures for protected species.
- Storage of materials and chemicals.
- Site waste management.
- Biosecurity procedures for invasive species.
- Ecological supervision requirements where applicable.

The CEMP should be implemented throughout all construction phases to ensure that ecological safeguards are maintained.

7.10 Summary of mitigation strategy

The principal ecological mitigation strategy for the proposed development comprises:

- Retention of ecologically valuable peripheral habitats.
- Sensitive lighting design.
- Protection of nesting birds during vegetation clearance.
- Precautionary reptile and amphibian working methods.
- Protection of nearby wetland habitats from polluted runoff.
- Control of invasive non-native species.
- Native habitat enhancement and long-term management.
- Implementation of a Construction Environmental Management Plan.

Subject to implementation of these measures, the proposed development is not expected to result in significant adverse ecological effects and can deliver ecological enhancement within the wider Rudyard valley landscape.

8.0 FURTHER SURVEY REQUIREMENTS

8.1 Overview

This Preliminary Ecological Appraisal has identified that the site supports ecological functionality associated with secondary successional habitat occurring within a wider ecologically connected valley landscape.

The site provides suitable habitat for nesting birds, common reptiles, foraging and commuting bats and other common fauna associated with scrub, woodland edge and disturbed habitat mosaics.

However, the development footprint itself comprises previously developed and disturbed land and does not represent extensive undisturbed semi-natural habitat likely to support particularly significant protected species populations.

Consequently, further survey requirements should be determined proportionately based upon:

- The habitats directly affected by the development.
- The likelihood of protected species presence.
- The existence of credible impact pathways.

The extent to which impacts can be addressed through mitigation, design and precautionary working methods.

8.2 Bats

The wider landscape provides suitable habitat for commuting and foraging bats due to the presence of woodland, waterbodies and habitat corridors.

Within the site, woodland edge habitat, scrub margins and tree lines provide suitable opportunities for bat movement and foraging activity.

The principal ecological consideration associated with bats is therefore retention of habitat connectivity and implementation of sensitive lighting design.

No confirmed evidence of bat roosting was identified during the walkover surveys of the habitats assessed.

A WW2 bunker referenced within arboricultural documentation lies outside the application boundary and outside the direct development footprint. Consequently, no direct impacts to the structure itself are proposed as part of the development.

The principal potential impact pathway in relation to bats is therefore indirect and relates to the potential for increased illumination or reduction in nearby commuting and foraging habitat connectivity.

Provided retained woodland edge habitat and peripheral vegetation are maintained and a sensitive lighting strategy is implemented to avoid excessive illumination of surrounding habitat corridors, significant adverse effects associated with bats are not anticipated.

At the time of assessment, extensive bat activity surveys are not considered proportionate or necessary because:

- The development footprint is associated primarily with disturbed and previously developed land.
- The principal ecological value relates to peripheral connectivity features rather than confirmed roost habitat.
- No confirmed roost evidence was identified during the surveys undertaken.
- Potential impacts can largely be addressed through habitat retention and sensitive lighting design.

Any trees proposed for removal which contain features potentially suitable for roosting bats should nevertheless be subject to ground-level inspection prior to works.

8.3 Breeding birds

The site provides suitable nesting habitat for common breeding birds associated with scrub, woodland edge and trees.

The principal impact pathway relates to vegetation clearance during the nesting season.

This risk can be adequately addressed through timing restrictions and pre-clearance nesting bird checks where necessary.

At the time of assessment, extensive breeding bird survey work is not considered proportionate or necessary because:

- The habitats present are typical of secondary successional habitat mosaics associated with disturbed land.
- No evidence was identified to indicate that the site supports a particularly significant breeding bird assemblage.
- Potential impacts can be adequately addressed through timing restrictions and pre-clearance checks.
- The proposed development is relatively small-scale and concentrated within previously disturbed habitat.

Subject to the implementation of nesting bird protection measures, significant adverse impacts on breeding birds are not anticipated.

8.4 Reptiles

The site provides suitable habitat for common reptiles associated with scrub margins, rubble, ruderal vegetation and unmanaged habitat mosaics.

The disturbed and previously developed nature of the site suggests that any reptile population present is likely to comprise low to moderate densities typical of secondary successional habitats.

The principal impact pathway relates to vegetation clearance and disturbance of refugia features.

At the time of assessment, extensive reptile survey work is not considered proportionate or necessary because:

- The site is previously developed and disturbed.
- Suitable habitat is fragmented and transitional in nature.
- The likely reptile assemblage is expected to comprise common species associated with secondary successional habitat.
- Potential impacts can be appropriately addressed through precautionary working methods.
- A precautionary Reasonable Avoidance Measures approach is therefore considered appropriate and should include phased vegetation clearance, directional strimming, careful removal of rubble and ecological supervision where appropriate.

Subject to implementation of these measures, significant adverse impacts on reptiles are not anticipated.

8.5 Great crested newt

No pond occurs within or immediately adjacent to the application site.

The nearest identified pond lies approximately 300 m from the site and is understood to comprise a heavily utilised fishing pond.

The pond is separated from the development footprint by the Rudyard Lake to Leekbrook canal feeder, which contains a considerable flow rate and vertical sides and is considered to represent a substantial dispersal barrier for great crested newt and other small terrestrial fauna.

The development footprint itself comprises disturbed and previously developed land associated with compacted substrate, rubble, remnant hardstanding and secondary colonising vegetation.

Consequently, the site is not considered likely to represent high-quality terrestrial habitat for great crested newt.

At the time of assessment, great crested newt surveys are not considered proportionate or necessary because:

- No pond occurs within or immediately adjacent to the site.
- The nearest pond lies approximately 300 m away.
- The nearest pond is understood to comprise a managed fishing pond.
- The canal feeder forms a substantial dispersal barrier between the pond and the site.
- The development footprint itself provides limited suitability as terrestrial great crested newt habitat.
- The likelihood of a significant functional relationship existing between the site and breeding great crested newt habitat is therefore considered low.

Nevertheless, precautionary site clearance measures should be implemented during vegetation clearance and ground disturbance works.

8.6 Grassland survey

The surveys were undertaken outside the optimal botanical survey season for detailed grassland assessment.

A growing-season grassland verification survey is therefore recommended to support the final Biodiversity Net Gain condition assessment and confirm the grassland classification.

However, based upon the habitat structure, disturbance history and species assemblage recorded during the surveys, the grassland is not considered likely to represent species-rich priority grassland habitat.

The requirement for a growing-season survey does not alter the principal ecological conclusions of this Preliminary Ecological Appraisal.

8.7 Summary of further survey requirements

The following targeted survey and assessment work is recommended:

- Growing-season grassland verification survey to support final Biodiversity Net Gain assessment.
- Ground-level assessment of any trees proposed for removal which contain potential bat roost features.
- Preparation of a sensitive lighting strategy.
- Preparation of a Construction Environmental Management Plan.
- Preparation of an invasive species management strategy.

The following survey work is not considered proportionate or necessary at the time of assessment:

- Extensive bat activity surveys.
- Extensive breeding bird survey work.
- Extensive reptile survey work.
- Great crested newt presence/absence surveys.

This position is based upon the disturbed and previously developed character of the site, the scale of the proposed development, the nature of the habitats affected and the extent to which ecological risks can be addressed through mitigation, habitat retention and precautionary working methods.

9.0 CONCLUSION

The application site comprises previously developed and disturbed land associated with former bowling green use which has undergone secondary ecological succession following cessation of management.

At the time of survey, the site supported a mosaic of disturbed ground, ruderal vegetation, neutral grassland, scrub and secondary woodland edge habitat associated with recolonisation of previously modified land.

The wider Rudyard valley landscape is recognised as ecologically sensitive due to the presence of woodland, wetland habitats, watercourses, priority habitats and non-statutory designated sites including the nearby fen meadow Site of Biological Importance.

Within this wider context, the site provides ecological functionality principally in relation to:

- Habitat connectivity.
- Nesting bird habitat.
- Bat foraging and commuting habitat.
- Common reptile refuge opportunities.
- Invertebrate habitat diversity.

However, the development footprint itself is associated primarily with secondary successional habitat occurring on previously developed and disturbed land rather than extensive intact semi-natural habitat communities of particularly high intrinsic ecological value.

The principal ecological sensitivities associated with the proposed development are considered to comprise:

- Retention of woodland edge and connectivity features.
- Protection of nearby wetland habitats from pollution and hydrological impacts.
- Protection of nesting birds during vegetation clearance.
- Protection of common reptiles associated with scrub and disturbed habitat mosaics.
- Protection of bat commuting and foraging activity through sensitive lighting design.
- Control of invasive non-native species.

The site is not considered likely to support significant great crested newt populations due to:

- The absence of ponds within or immediately adjacent to the site.
- The heavily managed nature of the nearest identified pond.
- The substantial dispersal barrier created by the Rudyard Lake to Leekbrook canal feeder.
- The disturbed and previously developed nature of the development footprint.

Similarly, while bats are likely to utilise the wider landscape, the principal ecological consideration relates to retention of habitat connectivity and implementation of a sensitive lighting strategy rather than impacts on confirmed roosting habitat.

A WW2 bunker referenced within arboricultural documentation lies outside the application boundary and outside the direct development footprint. Consequently, no direct impacts on the structure itself is proposed as part of the development.

The ecological impacts associated with the proposed development are considered capable of being adequately addressed through:

- Retention of peripheral habitats.
- Sensitive lighting design.
- Protection of nesting birds during vegetation clearance.
- Precautionary reptile and amphibian working methods.
- Protection of nearby wetland habitats from polluted runoff.
- Control of invasive non-native species.
- Native planting and habitat enhancement.
- Implementation of a Construction Environmental Management Plan.

Subject to implementation of the mitigation measures outlined within this report, the proposed development is not expected to result in significant adverse ecological effects and can deliver ecological enhancement within the wider Rudyard valley landscape.

10.0 RECOMMENDATIONS

10.1 Overview

The proposed development is considered capable of proceeding without significant adverse ecological effects provided that the mitigation and precautionary measures outlined within this report are implemented throughout construction and operation.

The ecological strategy for the site should focus on proportionate mitigation, retention of habitat connectivity and protection of nearby wetland habitats rather than extensive species-specific survey effort unsupported by the habitat context of the development footprint.

10.2 Recommended ecological safeguards

The following ecological safeguards should be implemented as part of the development:

- Retention of peripheral woodland edge habitat where practicable.
- Retention of tree lines and hedgerow features contributing to habitat connectivity.
- Implementation of a sensitive lighting strategy to avoid illumination of retained habitat corridors.
- Protection of nearby wetland habitats and the fen meadow SBI from polluted runoff and hydrological impacts.
- Implementation of precautionary reptile and amphibian working methods during vegetation clearance and ground disturbance works.
- Implementation of nesting bird protection measures during vegetation clearance.
- Implementation of invasive non-native species controls.
- Implementation of a Construction Environmental Management Plan.
- Native planting and habitat enhancement within retained peripheral habitat areas.

10.3 Vegetation clearance recommendations

Where vegetation clearance is required during the nesting season, a suitably qualified ecologist should undertake a nesting bird check no more than 48 hours prior to works commencing.

Vegetation clearance should proceed in a phased and directional manner toward retained habitats to allow dispersal opportunities for reptiles, amphibians and other fauna.

Rubble, debris piles and refugia features should be removed carefully and progressively to minimise the risk of harm to reptiles and small mammals.

10.4 Lighting recommendations

A sensitive lighting strategy should be prepared for the development and should demonstrate that retained woodland edge habitat, scrub margins, tree lines and retained peripheral habitats remain unlit or subject only to minimal light spill.

Lighting should:

- Be directed away from retained habitats.
- Use low-level warm spectrum fittings where practicable.
- Avoid excessive upward spill.
- Avoid illumination of habitat corridors.
- Use timers, shields or directional fittings where appropriate.

The lighting strategy should ensure that habitat connectivity for commuting and foraging bats is maintained.

10.5 Drainage and pollution prevention recommendations

Construction and operational drainage measures should ensure that no contaminated runoff enters adjacent wetland habitats or connected water features.

Appropriate pollution prevention measures should therefore include:

- Secure storage of fuels and chemicals.
- Appropriate silt and sediment controls.
- Emergency spill response procedures.
- Appropriate surface water drainage design.
- Protection of retained vegetation and soils during construction.
- Avoidance of direct discharge into adjacent habitats.

These measures are considered particularly important due to the proximity of the fen meadow SBI downslope of the site.

10.6 Invasive species recommendations

An invasive species management strategy should be implemented during construction to prevent spread of Himalayan balsam and rhododendron.

The strategy should include:

- Identification and demarcation of affected areas.
- Appropriate biosecurity procedures.
- Appropriate treatment or disposal of contaminated material.
- Prevention of spread through machinery or soil movement.
- Follow-up monitoring where required.

10.7 Biodiversity enhancement recommendations

The development provides opportunities to deliver biodiversity enhancement through habitat retention, native planting and incorporation of ecological features.

Enhancement measures should include:

- Retention and enhancement of woodland edge habitat.
- Native tree and shrub planting.
- Provision of bird nesting features where appropriate.
- Provision of bat roosting features where appropriate.
- Retention of habitat heterogeneity.
- Creation of habitat piles and refuge features.
- Long-term management of retained habitat areas.
- Native planting should prioritise species characteristic of the local landscape.

10.8 Recommended planning conditions

The following ecological planning conditions are recommended:

- Submission and approval of a Construction Environmental Management Plan.
- Submission and approval of a sensitive lighting strategy.
- Implementation of nesting bird protection measures.
- Implementation of precautionary reptile Reasonable Avoidance Measures.
- Implementation of invasive non-native species management measures.
- Implementation of biodiversity enhancement measures.
- Submission of a growing-season grassland verification survey to support the final Biodiversity Net Gain assessment.

10.9 Final recommendation

Based on the habitats present, the scale and nature of the proposed development and the mitigation measures outlined within this report, the site is considered suitable for the proposed development from an ecological perspective.

The development footprint is associated primarily with previously developed and disturbed land undergoing secondary ecological succession rather than extensive high-value semi-natural habitat.

While the wider Rudyard valley landscape is ecologically sensitive, the principal ecological constraints associated with the site are considered capable of being adequately addressed through proportionate mitigation, sensitive design, habitat retention and precautionary working methods.

Subject to implementation of the recommendations outlined within this report, significant adverse ecological effects are not anticipated.

11.0 REFERENCES

- Amphibian and Reptile Conservation (ARC) (2011). Common Reptile Survey Guidance.
- Bat Conservation Trust (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition).
- BS 42020:2023. Biodiversity – Code of Practice for Planning and Development.
- Chartered Institute of Ecology and Environmental Management (CIEEM) (2018). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine.
- Chartered Institute of Ecology and Environmental Management (CIEEM) (2017). Guidelines for Preliminary Ecological Appraisal.
- Collins, J. (Ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines. 4th Edition. Bat Conservation Trust, London.
- DEFRA (2024). The Biodiversity Gain Hierarchy.
- Department for Levelling Up, Housing and Communities (2023). National Planning Policy Framework.
- English Nature (2001). Great Crested Newt Mitigation Guidelines.
- Froglife (1999). Reptile Survey: An Introduction to Planning, Conducting and Interpreting Surveys for Snake and Lizard Conservation.
- JNCC (2022). UK Habitat Classification Version 2.0.
- Natural England (2024). Standing Advice for Protected Species.
- Natural England (2024). Standing Advice for Ancient Woodland and Veteran Trees.
- ODPM Circular 06/2005. Biodiversity and Geological Conservation – Statutory Obligations and Their Impact Within the Planning System.
- RSPB (2024). Guidance on Birds and Development.
- The Conservation of Habitats and Species Regulations 2017 (as amended).
- The Environment Act 2021.
- The Hedgerows Regulations 1997.
- The Wildlife and Countryside Act 1981 (as amended).
- Staffordshire Ecological Record Data Search Results.
- Magic Map Application (2025). Multi-Agency Geographic Information for the Countryside.
- Multi-Agency Geographic Information for the Countryside (MAGIC) Website.
- Ordnance Survey Mapping Data.
- Aerial imagery reviewed through Google Earth Pro and online mapping sources.
- Arboricultural documentation associated with the planning application.
- Site survey undertaken by Hewitt & Carr Services on 12 February 2025.
- Verification survey undertaken by Hewitt & Carr Services on 19 November 2025.

12.0 APPENDICES

Appendix 1 – Site Location Plan



A: DaisyBank House | 17-19 Leek Road | Cheadle | ST10 1JE
T: 01538 711777
E: hello@hc-services.uk
W: www/hc-services.uk

Legend



Boundary

Google Satellite

Client : Mr Farrar

Project : Proposed Dwellings

Title : Site Context

Date : 27/11/2025

Project No. Drawing No.
25_439 02

Rev :



A: DaisyBank House | 17-19 Leek Road | Cheddle | ST10 1JE
T: 01538 711777
E: hello@hc-services.uk
W: www.hc-services.uk

Legend

 Boundary

Baseline Habitats

-  Artificial unvegetated, unsealed surface
-  Developed land; sealed surface
-  Mixed scrub
-  Other neutral grassland
-  Other woodland; mixed

Google Satellite

Client : Mr Farra
Project : Proposed Dwellings
Title : Baseline Habitats
Date : 27/11/2025
Project No. Drawing No.
25_439 02

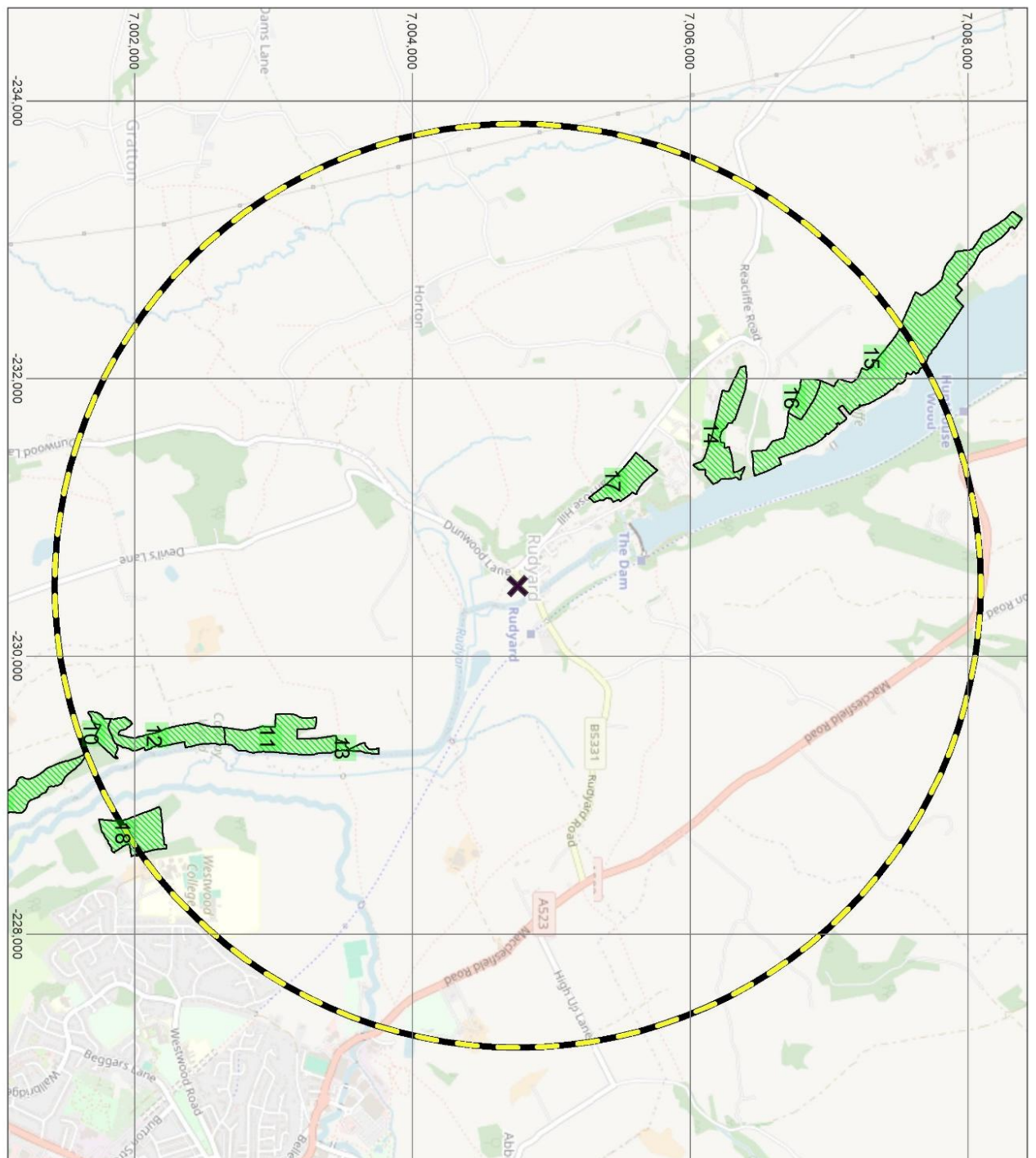
Rev :

Appendix 3 – Site Photographs

Grid Reference	Description	Image
SJ 95340 57813	Poorly draining, previously developed land colonised by goat willow, bramble and moss	
SJ 95360 57813	View from north to south of site showing band of new woodland growth dividing the site	
SJ 95367 57823	Containers situated on hardstanding	
SJ 95364 57797	Signs of previously developed land colonised by pioneer species.	
SJ 95380 57808	Scrubland backing onto mature woodland	

Grid Reference	Description	Image
SJ 95405 57794	Nutrient rich neutral grassland being overtaken by bramble scrub	
SJ 95376 57763	Bramble scrubland between line of cypress trees and pioneer woodland	
SJ 95365 57768	Line of trees	
SJ 95385 57846	Woodland to the east of the site	
SJ 95354 57759	Woodland to the west of site	

Appendix 4 – Desk Study Data



Land adjacent to B5331 Rudyard Ancient Woodland Inventory Sites

Note: For polygons that extent beyond the extent of this map, labels may not be present.

Key

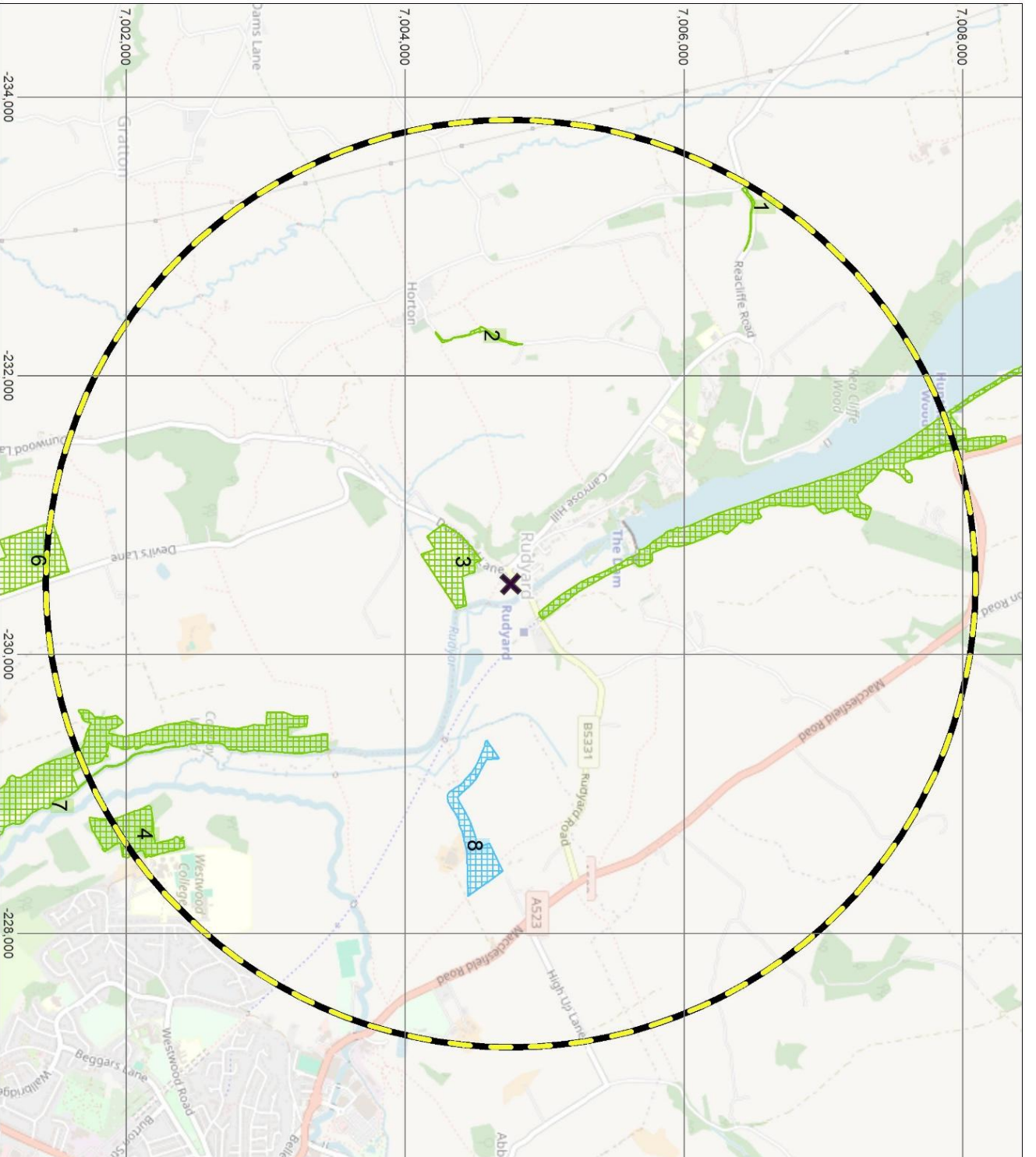
- ✕ Grid Reference (SJ 95365 57813)
- 2 km Search Area
- AWI 9 Longston Wood
- 10 - 13 Cowhay Wood
- 14 - 16 Fair View Wood
- 17 Rudyard Wood
- 18 West Wood



The Wolsley Centre, Wolsley Bridge, Stafford ST17 0WT
Tel: 01899 880101 Fax: 01899 880101
Email: info@staffs-ecology.org.uk **SER/25/068**
Reproduced from the Ordnance Survey mapping with permission
of the Controller of Her Majesty's Stationery Office, Crown
Copyright 2025. All other data Copyright Staffordshire
Wildlife Trust, not to be reproduced without permission.

Land adjacent to B5331 Rudyard
Non-Statutory Sites

Note: For polygons that extend beyond the extent of this map, labels may not be present.



- Key**
- ✕ Grid Reference (SJ 95365 57813)
 - 📏 2 km Search Area
 - SBI
 - 1 95-38-78
 - 2 95-47-26
 - 3 95-57-46
 - 4 95-66-42
 - 5 96-31-75
 - 6 96-55-27
 - 7 96-65-55
 - 8 96-67-17
 - BAS



The Wolsley Centre, Wolsley Bridge, Stafford ST17 0WT
Tel: 01889 880101 Fax: 01880 880101 **SER/25/068**
Email: info@staffs-ecology.org.uk

Reproduced from the Ordnance Survey mapping with permission
of the Controller of Her Majesty's Stationery Office, Crown
Copyright 2023, Staffordshire Wildlife Trust Licence No.
10001671/SW/25068. All other data copyright Staffordshire
Wildlife Trust, not to be reproduced without permission.

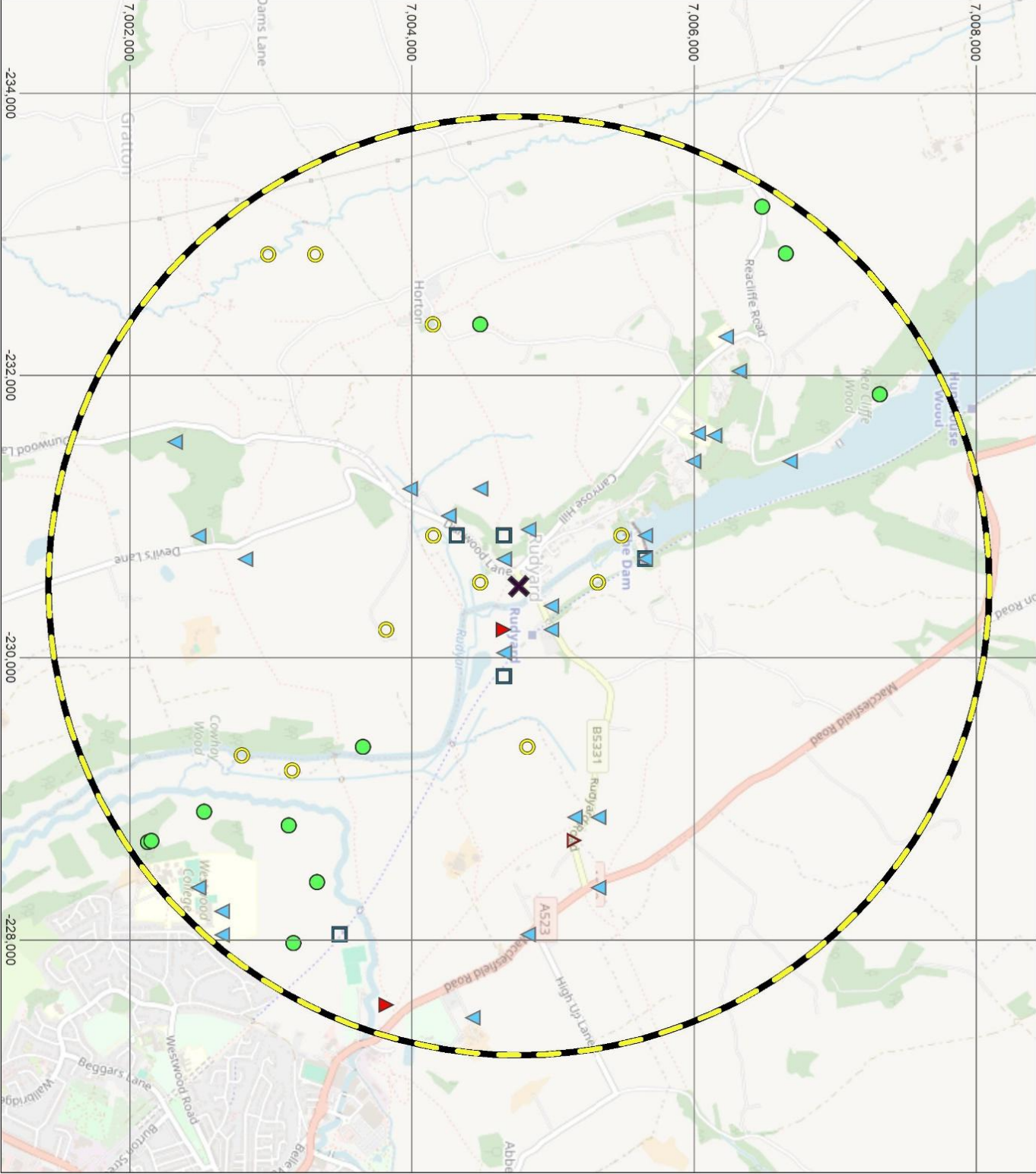
Land adjacent to B5331 Rudyard

Protected Species

Note: Where there are multiple species records for the same grid reference, the dot for one species may obscure the dots - all species records are displayed on the accompanying spreadsheet

Badger records are excluded and only 100 m precision records are plotted.

* Excludes otherwise named species.



Key

- ✕ Grid Reference (SJ 95365 57813)
- 2 km Search Area
- ▲ Mammals*
- ▲ Other (Lutra lutra)
- ▲ All Bat Species
- All Bird Species
- Amphibians & Reptiles*
- Bluebell (Hyacinthoides non-scripta)



The Wolesley Centre, Wolesley Bridge, Stafford ST17 0WT
Tel: 01869 860101 Fax: 01860 860101 **SER/25/068**
Email: info@staffs-ecology.org.uk

Reproduced from the Ordnance Survey mapping with permission of the Controller of Her Majesty's Stationery Office. Crown Copyright 2023, Staffordshire Wildlife Trust Licence No. 10001877/SW/728504. All other data Copyright Staffordshire Wildlife Trust, not to be reproduced without permission.



Appendix 5 – Site Species Mix

Species	DAFOR
Other woodland; mixed	
Sycamore	A
Goat willow	D
Wild Cherry	F
Norway Maple	A
Rhododendron	O
Atlantic ivy	A
Oak	O
Beech	O
Silver Birch	O
Leyland cypress	R
Spruce	O
Holly	F
Bramble	D
Himalayan balsam	F
Mixed Scrub	
Goat Willow	D
Bramble	A
Buddleia	O
Hawthorn	O
Broom	R
Atlantic ivy	F
Rosebay willowherb	A
Himalayan balsam	O
Other neutral grassland	
Rosebay willowherb	A
Timothy grass	F
Perennial rye grass	D
Pendulous sedge	R
Common nettle	D
Green field speedwell	R
Common dandelion	O
Common daisy	O
Plantain	F
Cocks foot	D
Wolfsbane	R
Bramble	A
Line of trees	
Sycamore	D
Cedar	D
Native Hedgerow	
Beech	D