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Phase 1 Habitat Survey

Summary of Recommendations

If all protected species or their habitats are absent from the site then no further survey effort needs to be performed. Otherwise, a Phase 1 Habitat Survey in which protected species or their habitats are present is not normally considered sufficient.

Taking into consideration the desk study and site survey findings, this report concludes that the proposed development of the site presents a low probability of harm to protected species or habitats.

The Company and Contact Information

Established in 2005, Arbtech Consulting Limited provides arboricultural and ecological consultancy services in respect to planning and development, throughout the UK.

Tel 01244 660558

@ email@arbtech.co.uk

Web www.arbtech.co.uk

The Surveyor

The surveyor and principal author of this report is Jo Gregory BA (Hons), MSc GradCIEEM.

Protected Species Licenses

Bats

England: CLS02941.

Scotland: 13660.

Wales: 39248.

Great Crested Newt

England: CLS002941.

The Client

The client is MJF Architects Ltd.

The Site of Proposed Development

The client is preparing a planning application to develop the land adjacent to Graphite Way, Woolley Bridge Road, Hadfield, Glossop SK13 1QG.

The Survey Brief

The client commissioned Arbtech to undertake a Phase 1 Habitat Survey; referring to a method of ecological assessment outlined in the Joint Nature Conservation Committee (“JNCC”) Handbook for Phase 1 Habitat Survey a technique for environmental audit (2010).

These guidelines state that the aim of the Phase 1 Survey is to observe, map and catalogue “*the potential value of the habitat.*” Since its publication the ecological consultancy industry has adapted the survey to make recommendations for further survey work as appropriate.

Limitations

This survey provides a ‘snap-shot’ of the potential habitat and wildlife value of the sites at the time of survey only and may require further survey effort to provide robust, scientifically valid evidence of species absence.

Data Searches

The author’s preparation of this report has been assisted by a search of the National Biodiversity Network Gateway.

Biological records data was requested from Derbyshire Wildlife Trust and the results are presented in later sections of this report.

Date of the Survey

21 February 2014.

Seasonality

This survey can be conducted at any time of year.

Informative

Table 1: Summary of Pertinent Legislation and Planning Policy Relevant to the Protection of Bats in the UK

Location of Site	Transposing EC Habitats Directive	Other Relevant Legislation	Planning Policy
England	Conservation of Habitats and Species Regulations 2010.	Wildlife and Countryside Act 1981 as amended. Countrywide and Rights of Way Act 2000. Natural Environment and Rural Communities Act 2006.	National Planning Policy Framework (“NPPF”).
Wales	Conservation of Habitats and Species Regulations 2010.	Wildlife and Countryside Act 1981 as amended. Countrywide and Rights of Way Act 2000. Natural Environment and Rural Communities Act 2006.	Technical Advice Note (“TAN”) 5.
Scotland	Conservation (Natural Habitat & c.) Regulations 1994 as amended.	Wildlife and Countryside Act 1981 as amended. The Nature conservation (Scotland) Act 2004.	National Planning Policy Guidance (“NPPG”) 14 and Planning Advice Note (“PAN”) 60.

A summary of legislation relevant to individual species can be found at Appendix IV.

The Survey Methodology

In order to fully assess the potential value of habitats at the site, the surveyor has observed widely accepted national standards set out in the JNCC (2010) publication Handbook for Phase 1 Habitat Survey: a technique for environmental audit.

The survey includes for a mapping exercise (found at Appendix I), in addition to a full species list and target notes (found at Appendix II.)

Inspections make use of binoculars and cameras where appropriate.

The survey is performed during daylight hours and provides an opportunity to exclude the need for further survey work, if the following species and features suitable for use by the following species can be confirmed absent from the site of proposed development:

1. Amphibians.
2. Bats.
3. Birds.
4. Reptiles.
5. Terrestrial mammals e.g. badger, dormouse and water vole.

If evidence of recent activity and or features suitable for the species cannot be confirmed absent from the site of proposed development, this report will make recommendations for further survey work and or mitigation where this is consistent with national guidelines and considered appropriate by the surveyor in the context of the proposed development.

Species Potential

Table 2: Species potential defined by integrating national guidelines e.g. Hundt 2012

Confirmed	Species are found to be present during the survey. Evidence of species' activity is found to be present during the survey.
High	Buildings, trees or other structures with features of particular significance for use by protected species e.g. nesting habitat, roosting opportunities, ponds. Habitat of high quality for foraging e.g. broadleaved woodland, tree-lined watercourses and grazed parkland. Site is connected with the wider landscape by strong linear features that would be used by commuting species e.g. river and or stream valleys and hedgerows. Site is close to known locations of records for protected species.
Medium	Several potential habitat opportunities in buildings, trees or other structures. Habitat could be used for foraging e.g. trees, shrub, grassland or water. Site is connected with the wider landscape by linear features that could be used by commuting species e.g. lines of trees and scrub or linked back gardens.
Low	A small number of less significant habitat opportunities. Isolated habitat for foraging e.g. a lone tree or patch of scrub. An isolated site not connected by prominent linear landscape features.
Negligible	No suitable habitats observed.

Table 2 (above) presents a scale continuum against which the significance of habitat value and opportunities for protected species at the site can be graded. By referring to this continuum and using their expert judgment, surveyors classify features such as habitats, buildings etc. as representing low, medium, high value or confirmed presence.

Survey Results

Table 3: Desk study results, habitats and species recorded on site

Desk Study Records	<p>The survey preparation has been informed by the use of a desk study utilising: - aerial images from Google Earth, MAGIC and other freely available information e.g. Natural England's nature on the map website, and OS Opendata 2010 using grid reference SK014963 and postcode SK13 1QG.</p> <p>Biological records data for a 1km radius of the above grid reference was received from the Derbyshire Wildlife Trust and has been checked. There are no protected species recorded on the site. Part of the Hollingworth Reservoir and Swallowswood Nature Reserve, which is designated as a Local Wildlife Site, lies within the 1km search radius. The proposed development will have no impact on this Local Wildlife Site.</p>
Local Environment	<p>The site is surrounded by housing and retail parks to the immediate north, east, and south with woodland and the River Etherow. There is also woodland located approx. 215m to the northwest, approx. 270m to the north, approx. 230m to the east and approx. 117m and 320m to the southeast. The River Etherow runs parallel to the site to the west with Hollingworth Brook joining the river approx. 160m to the north. Further open water is located approx. 840m to the north (Arnfield Reservoir) and approx. 1123m to the northeast (Bottoms Reservoir). No other habitat features are found within the surrounds. Hedgerows and tree lined roads can be found immediately adjacent to the site offering commuting routes to and from the woodland and other foraging areas.</p> <p>Weather: [at time of survey]</p> <p>Temperature: 6°C</p> <p>Cloud Cover: 90%</p> <p>Wind: 2/8</p> <p>Precipitation: Light.</p>
Habitats	Description of Features
Hard surface treatments	A tarmac road leads into the northern side of the site from Graphite Way.
Semi-improved neutral grassland	<p>The site comprises of a mosaic of semi-improved neutral grassland and marshy grassland.</p> <p>Semi-improved neutral grassland is located on the northern and eastern sides of the site with a species composition dominated by false oat grass (<i>Arrhenatherum elatius</i>), with localised stands of Yorkshire fog (<i>Holcus lanatus</i>), and meadow foxtail (<i>Alopecurus pratensis</i>). White clover (<i>Hedera helix</i>), dandelion (<i>Taraxacum officinale agg</i>), cock's foot (<i>Dactylis glomerata</i>), cow parley (<i>Anthriscus sylvestris</i>), ribwort plantain (<i>Plantago lanceolata</i>) and creeping thistle (<i>Cirsium arvense</i>) were also present on either side of the bare ground that intersects the site from the eastern site boundary. Buddleia (<i>Buddleia davidii</i>) is also located along the eastern site boundary.</p>
Marshy grassland	Marshy grassland is located on the southern and western sides of the site with a species composition dominated by tufted hair grass (<i>Deschampsia cespitosa</i>), compact rush (<i>Juncus conglomeratus</i>), hard rush (<i>Juncus inflexus</i>), crested dog's tail

	(Cynosurus cristatus) with localised growth forms of common reed (Phragmites australis) on the southern side of the site and a large sward located to the west of the site in close proximity to the River Etherow.	
Bare ground	Areas of bare ground are located on the northern side of the site near to the site entrance, rubble piles are also located on the north and northeastern sides of the site. Bare ground paths cross the site from Graphite Way towards the footpath along the river.	
Scrub	Willow species (Salix spp.) and brambles are scattered across the site, occurring more frequently on the northern side of the site.	
Tall ruderal	Located on the eastern site boundary with a species composition dominated by rosebay willowherb (Chamerion angustifolium).	
Species	Species potential defined in Table 2.	Description of features suitable to support a population OR external habitat connectivity to the site
Amphibian	Negligible.	No suitable habitat - no ponds located on the site.
Badger	Negligible.	No suitable habitat.
Bat	Negligible.	No suitable habitat.
Bird	Low.	Scrub (willow species scattered across the site) provides some potential for foraging and nesting however no bird nests could be located. A single song bird was heard during the survey.
Other terrestrial mammals e.g. otter, water vole	Moderate.	The River Etherow located adjacent to the site provides suitable habitat for water voles and otters.
Reptile	Moderate.	Tussocky grassland located across the site. Rubble piles located on the site could be used for basking.

A Phase 1 map can be found at Appendix I illustrating the habitats.

Conclusions and Recommendations

The NPPF and ODPM Circular 06/05 require that planning decisions are based on complete and timely ecological information. Further, it is required by Natural England's 'Standing Advice' that protected species information must be available before a decision can be made.

Following this guidance, it is highly unlikely that the local planning authority will defer the provision of further protected species survey work as a condition of any planning consent.

At this time we have no reason to believe the local planning authority will consider that this level of survey will provide them with inadequate information or lacks scientific rigour. On occasion though, it can become necessary to perform further surveys even after planning consent is given, where there are extenuating circumstances e.g. if protected species or habitats are found at a later date.

However, separately to mitigating and compensating for unavoidable ecological impacts, government has made it clear through the NPPF and circular 06/05 that development requires the enhancement of the quantity and quality of biodiversity and habitat.

Where the local planning authority is minded to grant consent for the proposed development, some basic and cost effective forms of ecological enhancement could be adequately secured through the use of an appropriately worded condition. Suggestions for such measures are referred to below, in Table 4.

Table 4: Conclusions and Recommendations

Species/Habitats	Species potential defined in Table 2.	Conclusions	Recommendations	Enhancements under NPPF and Circular 06/05
Habitats	Negligible.	All species and habitats found are common and widespread, no	No further surveys	

		rare or unusual plants or habitats were found.		
Amphibian	Negligible.	No suitable habitat found on site.	No further surveys.	
Badger	Negligible.	No suitable habitat found on site.	No further surveys.	
Bats	Negligible.	No suitable habitat found on site.	No further surveys.	
Bird	Low.	No old bird nests were found on site. The site offers limited nesting and foraging opportunities in the form of scrub (willow species).	Vegetation clearance must take place outside of March to August inclusive. If this is not possible a check of vegetation should be made before works start. Any nests found will require a 5m buffer place around the nest until the young have fledged.	
Other mammals	Moderate.	The River Etherow is located adjacent to the site and provides suitable habitat for water voles and otters. A detailed search of an approximate 100m section of the riverbank adjacent to the proposed development area was completed. Some holes/burrows were located along the river bank however these could be attributed to rats as no evidence of water voles could be located e.g. feeding stations, latrines, or footprints. No evidence of the presence of otters e.g. spraints, footprints, feeding remains, etc. The western boundary of the proposed development area is located approx. 40m east of the riverbank therefore the development is unlikely to have an impact on any water voles or otters should they be present on the River Etherow.	No further surveys.	
Reptiles	Low.	Although suitable habitat was located in the form of tussocky grassland and rubble piles it is highly unlikely that common reptiles will be utilising the site. The site is isolated from further suitable habitat in the wider landscape by the River Etherow.	No further surveys.	

Bibliography

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Natural England (2007). Badgers and Development a Guide to Best Practice and Licensing. Natural England. Bristol.

National Planning Policy Framework, 2012

<http://www.communities.gov.uk/publications/planningandbuilding/nppf>

Paul Edgar, Jim Foster and John Baker (2010). Reptile Habitat Management Handbook. Amphibian and Reptile Conservation, Bournemouth

Tom Langton, Catherine Beckett and Jim Foster (2001). Great Crested Newt Conservation Handbook. Froglife. Suffolk.

Biological Records Data provided by Derbyshire Wildlife Trust, East Mill, Bridge Foot, Belper, Derbyshire DE56 1XH. www.derbyshirewt.co.uk

Document Production and Approval Record

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Appendix I Phase 1 Habitat Map



Appendix II Species List and Target Notes

Bramble (*Rubus fruticosus* agg.)

Broad leaf dock (*Rumex obtusifolius*)

Buddleia (*Buddleia davidii*)

Cock's foot (*Dactylis glomerata*)

Common reed (*Phragmites australis*)

Compact rush (*Juncus conglomeratus*)

Cows parsley (*Anthriscus sylvestris*)

Creeping thistle (*Cirsium arvense*)

Crested dog's tail (*Cynosurus cristatus*)

Dandelion (*Taraxacum officinale* agg.)

False oat grass (*Arrhenatherum elatius*)

Hard rush (*Juncus inflexus*)

Hawthorn (*Crataegus monogyna*)

Meadow foxtail (*Alopecurus pratensis*)

Ribwort plantain (*Plantago lanceolata*)

Rosebay willowherb (*Chamerion angustifolium*)

Tufted hair grass (*Deschampsia cespitosa*)

White clover (*Hedera helix*)

Willow species (*Salix* spp.)

Yorkshire fog (*Holcus lanatus*)

Appendix III Site Photos



Figure 1: Semi-improved neutral grassland, bare ground and rubble piles.



Figure 2: Marshy grassland.



Figure 3: Example of bare ground.



Figure 4: Common reed sward to the west of the site in close proximity to the River Etherow.

Appendix IV Summary of Legislation for Various Species

Bats

All 18 species of bat common in the U.K (17 known to be breeding) are fully protected under the Wildlife and Countryside Act 1981 as amended through inclusion in Schedule V. All bat species in the UK. are also included in Schedule II of the Habitats Regulations 2010 which transpose Annex II of the Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (“EC Habitats Directive”) which defines European protected species of animals.

Bats species are afforded further protection by the Countryside and Rights of Way Act 2000; and the Natural Environment and Rural Communities Act 2006.

This combined legislation makes it an offence to:

1. Intentionally or deliberately kill, injure or capture bats.
2. Deliberately disturb bats, whether at roost or not.
3. Damage, destroy or obstruct access to bat roosts.
4. Possess or transport bats, unless acquired legally.
5. Sell, barter or exchange bats.

A bat roost is defined by the Bat Conservation Trust publication Bat Surveys—Good Practice Guidelines 2nd Edition as “the resting place of a bat” (BCT 2012). Generally however, the word roost is interpreted as “any structure or place, which any wild bat uses for shelter or protection.”

Bats tend to re-use the same roosts; therefore legal opinion is guided by recent case law precedents¹, that a roost is protected whether or not the bats are present at the time. This can include for summer roosts, used for breeding; or winter roosts, used for hibernating.

Common Birds

All common wild birds are protected under The Wildlife and Countryside Act 1981.

This legislation makes it an offence to:

¹ Internet search for e.g. the Woolley case (R. Simon Woolley v. Cheshire East Borough Council) and see here: http://www.naturalengland.org.uk/Images/WoolleyVsCheshireEastBC_tcm6-12832.pdf

1. Kill, injure or take wild birds.
2. Take, damage or destroy the nest of wild birds while it is in use or being built.
3. Take or destroy the eggs of wild birds.

Certain rare breeding birds are listed on Schedule I of The Wildlife and Countryside Act 1981. Under this legislation they are afforded the same protection as common wild birds and are also protected against disturbance whilst building a nest or on or near a nest containing eggs and or unfledged young e.g. Barn Owl *Tyto alba*.

Reptiles

There are six species of reptiles in Great Britain (Edgar et al. 2010) and four of these are commonly found; the grass snake *Natrix natrix*, adder *Viper aberus*, common lizard *Zootoca vivipara* and slow worm *Anguis fragilis* (“common reptiles.”)

All native British species of reptiles are legally protected through their inclusion in Schedule V of the Wildlife and Countryside Act 1981. As such, all species are protected from deliberate killing or injury. Therefore, where development is permitted, and there will be a significant change in land use, a reasonable effort must be undertaken to avoid committing an offence. The same act makes the trading of native reptile species a criminal offence without appropriate licensing.

Two species of reptile; the smooth snake *Coronella austriaca* and sand lizard *Lacerta agilis*, are further protected through their inclusion in Schedule II of the Habitats Regulations 2010 which transposes Annex II of the Council Directive 92/43/EEC 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (“EC Habitats Directive”), which defines European protected species of animals (“rare reptiles.”)

This legislation makes it an offence to:

1. Intentionally or deliberately kill, injure common and rare reptiles.
2. Deliberately disturb or capture rare reptiles.
3. Damage, destroy or obstruct access to rare reptile habitat.
4. Possess or transport a rare reptile or any part of a rare reptile, unless acquired legally.
5. Sell, barter or exchange common and rare reptiles.

Rare reptile species occupy only highly restricted ranges in the extreme south east of coastal England, with isolated populations of sand lizard in e.g. coastal Wales and Cornwall. Smooth snake populations are isolated to lowland heaths in e.g. Surrey, Hampshire, Dorset and West Sussex.

Badgers

Badgers *Meles meles* are vulnerable to baiting, hunting and the detrimental impacts of development on their habitat. Both the badger and its habitat are protected under

The Protection of Badgers Act 1992, Schedule V of the Wildlife and Countryside Act 1981, and Appendix III of the Bern Convention 1979.

This legislation makes it an offence to:

1. Kill, injure, take or possess a badger.
2. Interfere with, damage or destroy a badger sett including e.g. obstruct access to a badger sett.
3. Cruelly treat or harm a badger.
4. Disturb a badger in a sett.

Penalties for offences are documented (NE 2010) as fines of up to £5,000 and imprisonment for each illegal sett interference or damage or death to a badger.

Great Crested Newts

Populations of great crested newts *Triturus cristatus* declined considerably in the late twentieth century (Langton et al. 2001) due to the intensification of agriculture. They require ponds with good water quality and as they spend most of their life on land these ponds must be surrounded by high quality terrestrial habitat.

Great crested newts are listed in both Annex IV of the EC Habitats Directive and in Schedule V of the Wildlife and Countryside Act 1981.

GCN are afforded further protection by the Countryside and Rights of Way Act 2000; and the Natural Environment and Rural Communities Act 2006.

This combined legislation makes it an offence to:

1. Deliberately kill, injure or capture a great crested newt.
2. Deliberately disturb a great crested newt.
3. Damage, destroy or obstruct access to a structure used for shelter or protection by a great crested newt.
4. Possess or transport a great crested newt.