EXTENDED PHASE 1 HABITAT SURVEY REPORT
at
George Street/Scraper Lane
Barnsley
South Yorkshire
S73

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1. Introduction

1.1 Purpose of the Report

1.1.1 A report is required for **George Street/Scraper Lane, Barnsley,** in order to assess the sites ecological value through documenting the habitat types present and the site's potential for supporting protected or notable species.

1.1.2 The site will also be assessed for the presence of invasive plant species. If present, advice and recommendations will be given for the best practice treatment or removal of each invasive plant species found.

1.2 Terms of Reference

1.2.1 I am instructed by **Brewster Bye Architects** to visit the site and prepare my findings in a report.

1.2.2 For this purpose I have been supplied with a site map (drawing: **9980-01** & **15-124(02)002 Site Location Plan**), and brief details of the development proposal.

1.3 Scope of the Report

1.3.1 This report is compiled in accordance with the Joint Nature Conservation Committee's (JNCC's) *Handbook for Phase 1 habitat survey - A technique for environmental audit* (Revised reprint 2010).

1.4 Details of Proposed Development

1.4.1 The development proposed on this site is for the construction of residential properties.

1.5 Site Description

1.5.1 **George Street/Scraper Lane** is situated approximately 6.6km southeast of Barnsley town centre, at grid reference SE 407 040. The site is surrounded by a mosaic of residential land, woodland, agricultural land and standing water (please see **Appendix 3**). The site is immediately surrounded by residential land to the north, south and west, with Darfield Valley Primary School to the east. The surrounding residential land is characterised by semi-detached and terrace housing with small garden plots, containing the occasional mature broad-leaved tree. Roughly 40m northwest of the site is an area of allotments and several areas of rough grassland are located approximately 0.25km north, 0.08km south and 0.23km west. A large area of broad-leaved woodland and rough grassland is also present roughly 0.25km west of the site, separated from the site by residential land. Roughly 1.1km south of the site is Waterside Park: an area of rough grassland, scrub, scattered trees and standing water. A large number of ponds and lakes are situated to the southeast, the closest of which is around 0.3km southeast.

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2. Desktop Study

2.1 Methodology

2.1.1 A desktop study has been undertaken in order to obtain any relevant ecological records that may be present within a 1.5km radius of the site. This includes any records of protected and/or notable species and nature conservation designations. For this, the Sheffield Biological Records Centre (SBRC) was contacted.

2.2 Results

2.2.1 SBRC Records Centre: A summary of the SBRC data search can be seen in Table 1 below. A full copy of the data search report will accompany this report.

Table 1: Data search results from the SBRC for rare /protected species.

Group	Species Name	Common Name
Amphibian	Rana temporaria	Common Frog
Bird	Sterna paradisaea	Arctic Tern
	Tyto alba	Barn Owl
	Turdus merula	Blackbird
	Larus canus	Common Gull
	Larus ridibundus	Black-Headed Gull
	Branta leucopsis	Barnacle Goose
	Anser fabalis	Bean Goose
	Cygnus columbianus	Bewick's Swan
	Botaurus stellaris	Bittern
	Chlidonias niger	Black Tern
	Limosa limosa	Black-Tailed Godwit
	Carduelis cannabina	Common Linnet
	Tringa totanus	Common Redshank
	Tadorna tadorna	Common Shelduck
	Gallinago gallinago	Common Snipe
	Anas crecca	Common Teal
	Phalacrocorax carbo	Cormorant
	Miliaria calandra	Corn Bunting
	Cuculus canorus	Cuckoo
	Numenius arquata	Curlew
	Charadrius morinellus	Dotterel
	Calidris alpina	Dunlin
	Prunella modularis	Dunnock
	Charadrius morinellus	Eurasian Dotterel
	Turdus pilaris	Fieldfare
	Anas strepera	Gadwall
	Anas querquedula	Garganey
	Regulus regulus	Goldcrest
	Pluvialis apricaria	Golden Plover
	Bucephala clangula	Goldeneye
	Carduelis carduelis	Goldfinch
	Locustella naevia	Grasshopper Warbler
	Botaurus stellaris	Great Bittern
	Stercorarius skua	Great Skua

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	Tringa ochropus	Green Sandpiper
	Tringa ochropus	Green Sandpiper
	Picus viridis	Green Woodpecker
	Tringa nebularia	Greenshank
	Perdix perdix	Grey Partridge
	Pluvialis squatarola	Grey Plover
	Motacilla cinerea	Grey Wagtail
	Anser anser	Greylag Goose
	Larus argentatus	Herring Gull
	Delichon urbica	House Martin
	Passer domesticus	House Sparrow
	Lymnocryptes minimus	Jack Snipe
	Falco tinnunculus	Kestrel
	Alcedo atthis	Kingfisher
	Rissa tridactyla	Kittiwake
	Calidris canutus	Knot
	Vanellus vanellus	Lapwing
	Vanellus vanellus	Lapwing
	Larus fuscus	Lesser Black-Backed Gull
	Carduelis cabaret	Lesser Redpoll
	Carduelis cannabina	Linnet
	Egretta garzetta	Little Egret
	Larus minutus	Little Gull
	Clangula hyemalis	Long-Tailed Duck
	Anthus pratensis	Meadow Pipit
	Larus melanocephalus	Mediterranean Gull
	Falco columbarius	Merlin
	Turdus viscivorus	Mistle Thrush
	Cygnus olor	Mute Swan
	Vanellus vanellus	Northern Lapwing
	Anas clypeata	Northern Shoveler
	Pandion haliaetus	Osprey
	Haematopus ostralegus	Oystercatcher
	Falco peregrinus	Peregrine
	Anser brachyrhyncus	Pink-Footed Goose
	Anas acuta	Pintail
	Aythya ferina	Pochard
	Tringa totanus	Redshank
	Phoenicurus phoenicurus	Redstart
	Emberiza schoeniclus	Reed Bunting
	Charadrius hiaticula	Ringed Plover
	Philomachus pugnax	Ruff
	Riparia riparia	Sand Martin
	Aythya marila	Scaup
	Tadorna tadorna	Shelduck
	Asio flammeus	Short-Eared Owl
	Anas clypeata	Shoveler
	Alauda arvensis	Sky Lark
	Gallinago gallinago	Snipe
	Turdus philomelos	Song Thrush
	Tringa erythropus	Spotted Redshank

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	Sturnus vulgaris	Starling
	Columba oenas	Stock Dove
	Saxicola torquata	Stonechat
	Hirundo rustica	Swallow
	Anas crecca	Teal
	Passer montanus	Tree Sparrow
	Streptopelia turtur	Turtle Dove
	Rallus aquaticus	Water Rail
	Numenius phaeopus	Whimbrel
	Cygnus cygnus	Whooper Swan
	Anas penelope	Wigeon
	Parus montanus	Willow Tit
	Phylloscopus trochilus	Willow Warbler
	Tringa glareola	Wood Sandpiper
	Motacilla flava subsp. flavissima	Yellow Wagtail
	Emberiza citrinella	Yellowhammer
Terrestrial mammal	Myotis daubentoni	Daubenton's Bat
	Erinaceus europaeus	Hedgehog
	Nyctalus noctula	Noctule
	Lutra lutra	Otter
	Pipistrellus pipistrellus	Common Pipistrelle
	Pipistrellus	Pipistrellus
	Arvicola terrestris	Water Vole

A total of 1 amphibian, 101 birds (BAP, Red or Amber list and Wildlife & Countryside Act) and 7 mammals have been recorded within a radius of 1.5km of the site.

2.2.2 Designated sites:

A number of designated sites were highlighted within 1.5km of the site. These included:

Broomhill Flash and Wombwell Igns: Roughly 0.5km southeast of the site.

Parkhill Nature Reserve: Roughly 0.6km south of the site.

Neither of these two sites is likely to be negatively impacted upon by the proposed development.

2.3 Local BAP

2.3.1 The Local Biodiversity Action Plan (BAP) relevant to George Street/ Scraper Lane is the Barnsley BAP.

2.3.2

Barnsley BAP Habitat	Barnsley BAP Species
Upland Oakwood	Hedgehog
Lowland Mixed Deciduous Woodland	Bats
Wet Woodland	Water Vole

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Wood Pasture and Parkland	Otter
Hedgerows	Grey Partridge
Arable Field Margins	Bittern
Floodplain Grazing Marsh	Kestrel
Lowland Meadows	Little Ringed Plover
Lowland Dry Acidic Grassland	Lapwing
Lowland Heathland	Barn Owl
Upland Heathland	Skylark
Blanket Bog	Tree Sparrow
Purple Moor Grass and Rush Pasture	Twite
Reedbeds	Great Crested Newt
Ponds	Salmon
Rivers	Bullhead
Open Mosaic Habitats on	White-clawed Crayfish
Previously Developed Land	Glow Worm
	Dingy Skipper
	Bluebell

2.3.3 JCA Ltd will always recommend that any local BAP habitats present on site are retained and protected from development. Any BAP species and associated habitat should also always be retained and protected within any development.

2.3.4 JCA Ltd also recommend that following the proposed development the site is enhanced for wildlife, with any planting schemes or habitat creation being aimed at increasing or creating new areas of BAP habitats and encouraging BAP species.

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3. Site Visit

3.1 Survey Conditions

3.1.1 The site was surveyed on 31st July 2012 by Christopher Shaw, BSc Biol (Hons), GradIEEM.

3.1.2 The weather conditions during this survey were as follows: Temperature: 15°C, Wind: 5mph, Cloud cover: 100%, Precipitation: none.

3.1.3 Limitations: There were no perceived limitations to this survey.

3.2 Methodology

3.2.1 A thorough site assessment was undertaken; following the guidelines set out in the JNCC's *Handbook for Phase 1 habitat surveys*.

3.2.2 The entire site was walked over by a trained consultant who mapped and described each habitat type that was present. The dominant floral species present within each habitat type was noted and a complete floral list can be seen in **Appendix 4**.

3.2.3 All surveys are conducted by experienced consultants using the following equipment to ensure an accurate assessment of each survey site; a printed site map, coloured pencil crayons, camera, 1 million candlelight torch, bat detector, binoculars, ladders, compass and floral and faunal identification guides.

3.3 Habitat Types Present

3.3.1 A Phase 1 Habitat map showing all habitat types present can be found in **Appendix 1**.

3.3.2 The following habitat types are present at **George Street/ Scraper Lane** (in alphabetical order):

- Bare ground
- Broad-leaved woodland (plantation)
- Buildings
- Dense/continuous scrub
- Improved grassland
- Scattered broad-leaved trees
- Scattered scrub
- Tall ruderal

3.3.3 Bare ground: A small area of bare soil is present towards the south-eastern corner of

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the site. This is likely to have arisen due to human activity and ground compaction (as evidence from the large volume of litter within this southern end of the site).

3.3.4 Broad-leaved woodland (plantation): Two small woodland bunds have recently been planted (within the last 20 years) along the northern and part of the western boundaries. It is likely that these were originally planted as a visual screen to the road and comprises of young to semi-mature specimens. These have been densely planted with a range of native species including Field Maple, Ash, Rowan, Hazel, Guelder Rose, Elder, Dogwood, Blackthorn, Whitebeam, Oak, Apple, Silver Birch and Goat Willow. These native species will support a wide range of invertebrate life, as well as animals such as birds and foraging bats.

3.3.5 Buildings: There are no buildings within the site, however, a two storey red-brick building, with a pitched slate tile roof is present along the northwest boundary. This is in a relatively good state of repair, with only a small number of gaps being noted along the south facing gable end wall. A small electrical sub-station is also present on adjacent land to the southwest. This is a single storey brick building, with a flat felt roof. The building is surrounded by metal fencing and is in a good state of repair.

3.3.6 Dense/continuous scrub: A relatively large area of young, self-sown Blackthorn and Dogwood is present along the western site boundary. This will provide shelter and a food resource for local wildlife such as birds.

3.3.7 Improved grassland: The site consists primarily of rough improved grassland, dominated by a relatively wide number of floral species, all of which are typical of brown field sites. The site appears to have been left unmanaged for a number of years, and as a result is beginning to succeed into a mix of tall ruderal and dense scrub vegetation. The site has recently been used as a paddock for horses, as evidence by hoove prints and manure present throughout the site.

Floral species noted within the grassland include Meadow Foxtail, Yorkshire Fog, False Oat-grass, Sweet Vernal-grass, False Brome, Cock's-foot, Ragwort, Spear Thistle, Nettle, Herb-Roberts, Burdock, Creeping Thistly, Mugwort, Cleavers, Broad-leaved Dock, Creeping Buttercup, Cow Parsley, Great Willowherb, Red Clover, Ribwort Plantain, White Clover, Hop Trefoil, Yarrow, Oxeye Daisy, Tufted Vetch, Hedge Mustard, Hogweed, Broad-leaved Willowherb, Common Mallow, Poppy, Great Plantain, Hedge Woundwort, Field Vetch, Self Heal, Perennial Daisy, Rosebay Willowherb, Dandelion, Field Bindweed, Hedge Bindweed, White Bryony and Meadow Vetch. This habitat will support a wide range of invertebrate life, and provides foraging habitat for species such as birds, small mammals and amphibians.

3.3.8 Scattered broad-leaved trees: A mix of predominantly native broad-leaved trees are present around the site, primarily towards the south of the site along the boundaries. These trees are mostly young to semi-mature specimens. Several small copses of trees are present along the western and southern boundaries, and are likely to have been planted as a visual screen to the site. Species noted include Field Maple, Oak, Lime, Cherry, Rowan, Goat Willow and Alder. A band of semi-mature Willow, Hawthorn,

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Rose, Sycamore and Birch is present on adjacent land to the east, planted as a visual screen for the school. For a more comprehensive description of the trees present on site, please see the accompanying tree report (**JCA Ref: 10775/AJB**).

3.3.9 Scattered scrub: Due to a lack of management, scrub vegetation, such as Bramble, Elder, Rose and Buddleia is present throughout the grassland.

3.3.10 Tall ruderal: Similarly, tall ruderal vegetation was growing throughout the site, however, only the most significant areas of tall ruderal vegetation have been mapped on **Appendix 1**. These areas were dominated by Common Nettle, Hogweed, Sow Thistle, Greater Willowherb, Teasel, Broad-leaved Dock and Cleavers.

3.4 Target notes

3.4.1 Whilst conducting the site walkover, certain features with ecological value or habitat types, have been noted with a numerical label. Each target note has been described below. Target notes are used for the following reasons; for supplementary information on sites of interest; for information on sites too small to map and on sites where habitat mapping is found to be difficult or doubtful; or for information on sites previously surveyed and sites requiring further survey.

Target Note 1: Human pathways are present along the southern boundary. The dense vegetation along this southern boundary also contains a large amount of rubbish.

Target Note 2: Signs of a recently lit bonfire. The grassland to the southern half of the site is significantly shorter than the rest of the site, possibly due to being grazed by horses.

Target Note 3: A large amount of human litter was noted within the woodland bund to the north.

Target Note 4: Several old birds nest were noted within the canopies of the woodland bund to the north.

Target Note 5: Gaps were noted within the southern gable end wall of the building situated on adjacent land. These gaps were present between the roof tiles and wall where mortar has fallen away. No signs of bat activity were noted, however, this feature has been deemed to have a low bat roost potential.

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4. Invasive Plant Species

4.1 Invasive plant species are those plants listed under Schedule 9, Part II of the Wildlife and Countryside Act 1981 (as amended) or described on the Non-Native Species Secretariat (NNSS) website. Invasive species include; Giant Hogweed, Giant Kelp, Japanese Knotweed, Japanese Seaweed, Himalayan Balsam, Horsetail and Floating Pennywort.

4.2 No invasive plant species were encountered anywhere within, or immediately surrounding the site boundary.

5. Potential for Protected Species

5.1 Whist conducting the site walk over, any features that may be of value to or have the potential to support protected species were noted, and photographic evidence taken (please refer to **Appendix 2**). Such protected species include, but are not limited to; Badgers, Bats, Dormouse, Great Crested Newts, Nesting birds, Otter, Reptiles, Water Vole, White-Clawed Crayfish (please refer to **Appendix 4**).

5.2 Amphibians: The site contains no standing or running water, and therefore does not have the potential to support breeding amphibians. The mix of habitats present on site does however provide good terrestrial habitat for foraging amphibians. The SBRC data search uncovered records for only 1 amphibian species in the surrounding area: Common Frog. There is therefore the potential for this species to forage within the site.

5.3 Badger: No records of Badger activity have been recorded within the surrounding area (SBRC data search) and no signs of badger activity were noted within the site. The presence of this species on site is therefore deemed to be very low.

5.4 Bats: The site contains no buildings and none of the trees within the site contained features which have been deemed suitable for roosting bats, i.e. cavities, split limbs, woodpecker holes or lifted bark. This is due primarily to the age class of the trees on site. A two storey brick building is present on adjacent land to the northwest. This building forms part of the site boundary and contained a small number of features deemed suitable for roosting bats. However, the proposed development on this site is not anticipated to have any long term negative impacts on this building. The tree lines to the north, east south and west have the potential to support low numbers of foraging bats. These linear features may also support commuting bats.

5.5 Nesting Birds: The dense scrub, scattered trees and woodland bunds all have the potential to support nesting birds.

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5.6 Reptiles: No reptile species have been recorded within a 1.5km radius of the site (SBRC data search). The habitats on site provide good reptile habitat, however, due to the sites relatively small size and its location within an urban landscape, it has been deemed to have a low potential for supporting reptiles.

5.7 Otter, Water Vole & White Clawed Crayfish: No running or standing water is present within or immediately surrounding the site. The site is therefore deemed unlikely to support these species.

5.8 The absence of any signs of, or features considered valuable for, supporting protected species, can **not** be considered evidence that these species are absent from a site, or that these species will not occupy the site in the future. It must therefore always be recommended that work be conducted with care and vigilance. Should any protected species be encountered during work, work must stop immediately and JCA or Natural England contacted.

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6. Conclusions

6.1 The following habitat types were present at **George Street/ Scraper Lane**; bare ground, broad-leaved woodland (plantation), buildings, dense/continuous scrub, improved grassland, scattered broad-leaved trees and tall ruderal (please see **Section 3.3**).

6.2 The site is currently an area of un-managed land, consisting primarily of rough, improved grassland, scattered with scrub and tall ruderal vegetation. Several significant areas of dense/continuous scrub and tall ruderal vegetation are present within the southern half of the site. Two dense woodland bunds have been planted within the recent past, along the northern and western boundaries as visual screens to the road, and a number of scattered broad-leaved trees are present towards the south. The trees on site were predominantly young to semi-mature specimens of native species.

6.3 The site contained a relatively wide number of floral species, all of which are typical of brown-field sites. The habitats on site have generally been deemed to have a low to moderate ecological value.

6.4 The woodland bunds and (native) scattered broad-leaved trees along the north, west and south boundaries, provide a good visual screen and have a moderate ecological value. The wide range of native species will provide shelter, nectar and a food resource for local wildlife throughout the year, and support a wide range of insect life. This in turn has the potential to support foraging bats and birds.

6.5 The dense scrub, scattered trees, and woodland bunds all have the potential to support nesting birds. A number of old birds nests were noted within the tree canopies to the north.

6.6 No standing water is present on site, however the habitats on site have the potential to support foraging amphibians such as Common Frog. No Great Crested Newt have been recorded within a 1.5km radius of the site, and so are unlikely to be present on site.

6.7 No buildings are present on site, and none of the trees have the potential to support roosting bats. The tree lines along the boundaries have the potential to support low numbers of foraging and commuting bats. The SBRC data search revealed records of Common Pipistrelle, Noctule and Daubenton's within the surrounding area.

6.8 The local biodiversity action plan (BAP) relevant to this site is the Barnsley BAP (please see **Section 2.3**). None of the habitats present on site are listed within this BAP.

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6.9 A data search of the Sheffield Biological Records Centre (SBRC) was conducted for a 1.5km radius around the site (please see **Section 2.2**). A number of nature conservation designations are present within a 1.5km radius around the site. None of these sites will be impacted upon by proposed development.

7. Recommendations and Enhancements

7.1 Further Surveys:

Nesting Birds: The dense scrub, scattered trees and woodland bunds all have the potential to support nesting birds. It is therefore recommended that any vegetation clearance work that affects these habitats should be completed outside of the breeding bird period. If work within the breeding bird period (March to August) is unavoidable then a nesting bird survey should be commissioned prior to work starting. All breeding birds are protected under the Wildlife & Countryside Act 1981, meaning it is an offence to kill, injure or destroy any nesting bird, its young & eggs or the nest whilst the nest is in use or being constructed. If nesting birds are found, vegetation works scheduled around these nests can not begin until it can be confirmed that the young have fledged and the nest is therefore no longer in use.

7.2 Recommendations: It is recommended that the woodland bunds and (native) scattered broad-leaved trees along the north, west and south boundaries are retained and protected from the proposed development. If this is not possible, then an appropriate planting scheme (using only native tree species) should be implemented in order to compensate for the loss of those trees.

The site has the potential to support foraging amphibians. It is therefore recommended that any vegetation clearance be completed whilst amphibians are inactive, i.e. between November to March. If this is not possible, then work should proceed with care and vigilance. Should any amphibians be found, then these should be moved to a suitable part of the site, which will not be impacted upon by the proposed development. However, if Great Crested Newts are found (very unlikely), then work must stop immediately and Natural England contacted for advice on how to proceed.

7.3 National Planning Policy Framework (NPPF): The government objects for planning are to; promote sustainable development; conserve, enhance and restore the diversity of England's wildlife and geology.

The following recommendations are therefore given in order to enhance the sites value for wildlife following development, and so work in line with the goals set out by NPPF's.

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- Planting scheme: A detailed planting scheme could be designed and incorporated into the development, to compensate for the loss of any trees or significant vegetation required in order to facilitate the proposed development. This scheme should incorporate native species, or non-natives with known benefits for wildlife (i.e. those recommended by a wildlife charity or organisation). Hedgerows are listed as within the LBAP and species rich hedgerows could easily be planted around the site. Suitable native hedgerow species include; Hawthorn, Holly, Field Maple, Hazel, Blackthorn, Dog Rose, Guelder Rose, Elm, Hornbeam, Beech, Honeysuckle and Dogwood. These will offer shelter and a food resource for numerous species throughout the year. New hedgerows could be further enhanced for wildlife by creating a specie-rich ground flora. This could be done after the hedgerow whips are planted by sowing a suitable wildflower seed mix, planting spring bulbs or plug plants. Suitable species include; native Bluebell (LBAP species), Primrose, Violet, Garlic Mustard, Wood anemone, Cow parsley, Lords-and ladies, Cranes-bill sp. and Dog's Mercury. Due to the presence of Dutch Elms disease in the UK, Elm should only be planted within maintained hedgerows.

- Hedgehogs: Hedgehogs are listed as a LBAP species. The species could be encouraged onto the site following development by linking all of the newly created gardens. This can be achieved by creating holes in the bottom of fences, roughly 15cm in diameter, with at least one hole in each fence line. These holes will then allow wildlife, such as Hedgehogs and amphibians, to move freely between the gardens. A leaflet should be left within each newly built house explaining the purpose of the fence holes, in order to prevent the holes being blocked or sealed up by new residents.

- Faunal boxes: Bat, bird and insect boxes could be incorporated into each new build. These could also be attached to some of the mature street trees, buildings, walls and fences located around the site. This should include a range of faunal box designs and situated in appropriate locations in order to increase the chance of the boxes being used. Please contact JCA Ltd. for further advice on selecting and positioning faunal boxes.

- Wildlife pond: No areas of standing or running water were noted on or around the site. Therefore the creation of a pond aimed at attracting wildlife has the potential to greatly increase diversity on site. Ponds are listed within the LBAP and would have varying water depths and be planted with native aquatic plant species, such as Water Mint, Yellow Flag and White Water Lily. Hibernacula could also be created around the pond in order to support amphibians all year long.

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Appendices

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Appendix 1: Phase 1 Habitat Map

TITLE: Land off George Street/ Scraper Lane, Darfield, Barnsley, South Yorkshire. JCA Ref: 10775/A/CS

SCALE : 1:500 | **PAPER SIZE : A3**

KEY

- Bare ground
- Broad-leaved woodland (Plantation)
- Buildings
- Dense/continuous scrub
- Fence
- I — Improved grassland
- Scattered broad-leaved trees
- Scattered scrub
- Target note
- Tall ruderal
- Wall

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Appendix 2: Photographs



Photo 1: A view of the site from the southern end of the site.



Photo 2: A view of the tall ruderal, scattered trees and scattered scrub to the south.

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Photo 3: A view of the rough grassland and woodland bund to the north of the site.



Photo 4: A view of the southern end of the site from the centre.

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Appendix 3: Site Map



Figure 1: Google Maps image showing the George Street/Scraper Lane site in relation to the surrounding landscape and habitats.

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Appendix 4: Protected Species Information

The following species are protected under EU law, such as the Conservation (Natural Habitats, &c.) Regulations (2010):

- All UK bat species
- Dormouse
- Great Crested Newt
- Large Blue Butterfly
- Natterjack Toad
- Otter
- Scottish Wild Cat
- Smooth Snake and Sand Lizard
- Various aquatic and plant species

These species are afforded the highest protection in the UK. Under this protection it is an offence to; deliberately capture, injure or kill any wild animal of a European protected species; deliberately disturb wild animal of any such species; deliberately take or destroy the eggs of such an animal, or damage or destroy a breeding site or resting place of such an animal.
In addition to this it is an offence to be in possession of, or to control, transport, sell or exchange, or to offer for sale or exchange, and European Protected species.

The following species are protected under UK law, such as the Wildlife and Countryside Act 1981:

- Badger
- Nesting birds
- Red Squirrel
- Reptiles (Adder, Common lizard, Grass snake, Slow worm)
- Water Vole
- Pine Martin
- White Clawed Crayfish
- Various bird species i.e. Barn Owl
- Various plant species

Therefore under this protection it is an offence to; kill, injure or take any of the above species.

Nesting birds are only protected during the breeding season whilst on their nest. In addition the adults being protected, the eggs, young and nest itself is protected whilst in use.

Badgers are protected under The protection of Badger Act 1992. Under this legislation it is an offence to; take, injure, kill, or cruelly ill-treat a badger, sell and possess of a live badger, or interfere with a badger sett.

The following habitat types are protected under UK Law

- Habitats that are used by protected species
- Habitats that fall within designated sites
- Hedgerows
- Individual Trees/woods can be protected under Tree Preservation Orders

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Appendix 5: References

Bat Mitigation guidelines (Jan. 2004). A. J. Mittchell-Jones. English Nature.

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I hope that this report provides all the necessary information, but should any further advice be needed please do not hesitate to contact the author.

Signed

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