



AllAboutTrees

Arboricultural & Ecological Consultancy
Chartered Arboriculturalists & Environmentalists

Phase 1 Habitat Survey
&
Potential For Protected Species Survey

At The
Former School Kitchens
North Road, Boldon Colliery

Revision A



For

Blake Hopkinson Architecture



Document Verification

Document Title	<ul style="list-style-type: none"> • Phase 1 Habitat Survey & Potential for Protected Species Survey
Prepared By	<ul style="list-style-type: none"> • Tricia Snaith BSc BA PGCE PGCert EST MifL ACIEEM
Authorised By	<ul style="list-style-type: none"> • Andrew Watson FLS CEnv MICFor CBiol MSB FArborA LCGI

Phase 1 Habitat Survey & Potential For Protected Species Survey	
Issued 30th March 2015	Authorised - A Watson
↓	
Phase 1 Habitat Survey & Potential For Protected Species Survey Revision A	
Issued 10th July 2015	Authorised - A Watson
↓	
Revision	
-	-

Table Of Contents

1. Executive Summary.....	2
2. Introduction.....	3
2.1 Background.....	3
2.2 Surveyors & Timing	3
2.3 Site Location	5
3. Legal Status of Protected Species	6
3.1 UK and Local Biodiversity Action Plan	6
4. Survey Methodology	7
4.1 Pre-survey Data Search (Desk Top surveys)	7
4.2 Field Surveys.....	8
4.2.1 Phase I Habitat Survey.....	8
4.2.2 Protected Species.....	8
4.3 Site Assessment	9
5. Survey Results.....	10
5.1 Pre-survey Data Search (Desk Top surveys) Results	10
5.1.1 Designated Sites.....	10
5.1.2 Protected Species.....	13
5.2 Field Surveys.....	15
5.2.1 Phase I Habitat Survey.....	15
5.2.2 Protected Species Scoping Survey	20
5.3 Site Assessment	21
6. Conclusion & Recommendations.....	22
7. Appendices	24
7.1 References.....	24
7.2 Legal Status Of Protected Species - Background	24
7.2.1 The Wildlife & Countryside Act 1981	24
7.2.2 The Conservation of Habitats and Species Regulations 2010.....	25
7.2.3 European Protected Species Of Animals	25
7.2.4 European Protected Species Of Plants	26
7.2.5 UK & Local Biodiversity Action Plan	26
7.2.6 Key Principles Of Planning	27
7.3 Site Assessment	28
7.4 Raw Data	29
7.4.1 MAGIC – Multi Agency Geographic Information For The Countryside	29
7.4.2 Local Wildlife Groups.....	32
7.4.3 Plant List Produced On Site	33

Table Of Figures

Figure 1 – Position of the survey area using QGIS and Google maps	5
Figure 2 – Designated Site around the survey site using magic maps.	11
Figure 3 – Habitat descriptions around the survey site using magic maps.....	12
Figure 4 – ERIC species records	13
Figure 5 – Identification of features within the survey area.....	15
Figure 6 – Former kitchens area – now scrub.....	16
Figure 7 – Scrub patch - target note BC1.	17
Figure 8 – Hardstanding areas – target note BC2	18
Figure 9 – Path to rear of the site - target note BC3.	18
Figure 10 – Eastern boundary.....	19
Figure 11 – View from the site to the River Don	20
Figure 12 – Advised positions of wildlife enhancements.....	3

1. Executive Summary

We are instructed by Blake Hopkinson Architecture to provide a Phase 1 Habitat Survey and Potential For Protected Species Survey for a development on land at the former school kitchens, North Road, Boldon Colliery. This report is revision 'A'.

- 1.1 The survey area consists of an enclosed patch of scrub surrounded by overgrazed, poor semi-improved grassland. Boundaries include a defunct species poor hawthorn hedge to the west and a privet hedge to the east, both could provide bird nesting habitat.
- 1.2 We were provided with the redline boundary and proposed development layout plans, ten new dwellings are planned for the site.
- 1.3 Areas of existing important habitat do exist within 2km of the survey area; these are predominantly areas of reclaimed and recreated habitats, there are few priority habitats and limited woodland areas.
- 1.4 The River Don lies to the south and the hedges and scrub on and around the site could provide foraging habitat for bats. There is some connectivity with suitable habitat within 1km of the site.
- 1.5 Whilst on site no evidence of protected species was noted, there is little potential for use by any relevant species and no further faunal surveys are considered necessary.
- 1.6 No further survey work is considered necessary.
- 1.7 Any trees or shrubs removed, should ideally be carried out outside of the bird breeding season (1st March to 1st August). If any removals must be undertaken during this time the project ecologist will need to check the area for any active nests prior to any works being undertaken.
- 1.8 Inbuilt bat roosting and bird nesting features should be incorporated into the new buildings as per the attached advised enhancements.
- 1.9 Floral planting should consider natural species present within hay meadows and nectar rich plants should be incorporated into the landscape plan, including a hedge along the southern boundary to compensate for the loss of scrub on site.
- 1.10 If construction has not commenced within two years of the date of this survey a repeat survey is advised.
- 1.11 If any BAP species are found during construction the ecologist is to be informed and work to cease.

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

2. Introduction

2.1 Background

It is proposed to construct some dwellings on the former school kitchens at North Road, Boldon Colliery. We were instructed by Blake Hopkinson Architecture to provide a Phase 1 Habitat Survey and Potential for Protected Species Survey.

The surveys will:

- Identify existing sites designated for their nature conservation interest in the survey area
- Identify any existing records of important species recorded in the survey area
- Identify and map broad habitat types in the survey area
- Evaluate the nature conservation importance of recorded habitats and of the site as a whole
- Identify possible ecological constraints on development and management of the survey area
- Record incidental records of animals
- A written report will be provided presenting the above information. If any protected species are found during the inspection the incorporation of outline mitigation and compensation measures will be incorporated into the final report.

2.1.2 We were provided with the following documents:

- Red line boundary sketch
- Proposed development plan

2.2 Surveyors & Timing

A visit was undertaken on Friday 20th March 2015 by Ms Tricia Snaith.

The survey was undertaken during the early flowering season, vegetative characteristics of some grasses and floral species are recognisable.

The area enclosed by the metal fencing contained dense scrub and all areas were non accessible, but visual assessment was possible.

The weather was sunny and visibility was good.

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

Surveyor experience

Tricia Snaith the surveyor has had many years of experience surveying both mammals and plants.

Her qualifications include a BA (1991) and a BSc(2006) from the Open University, these degrees both contain biological sciences including Animal Behaviour, Animal Physiology, Ecology, Biology Brain and Behaviour, Organic Chemistry, Evolution to name but a few. In 2013 as part of the first cohort of students, the elements surveying vegetation and surveying mammals were completed as part of the Post Graduate Diploma in Ecological Survey Techniques at The University of Oxford with a dissertation on the distribution of Water Shrews within a specified area.

Tricia Snaith was an active member of Durham Wildlife in the early 1980's completing training during this time on both Otters and water voles. Since that time she has completed many surveys.

During 2004 to 2008 completing surveys on water voles as part of the North Pennines water vole surveys alongside personal surveys. She is conducting water vole surveys as part of the PTES programme.

Tricia was part of an otter survey of the River Tees in and around Barnard Castle in the early 1990's and since then has completed numerous surveys more recently participating in the Durham Wildlife otter surveys.

She has been an active member of the Upper Teesdale Botany Group for the past five years surveying for the Teesdale Assemblage of plants and has been involved in surveying of Upland Hay Meadows'.

Tricia has Natural England species licenses for both bats and great crested newts and has partially completed the licence to survey the hazel dormouse

Tricia regularly attends CPD on both mammals and plants to increase her understanding of the subjects, completing the CIEEM modules including, bats in building, surveying otters, surveying badgers, surveying white clawed crayfish alongside mosses and lichens, sedges and beetles and bumble bees.

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

2.3 Site Location

North Road, Boldon Colliery,
NE35 9NH
Grid Ref: NZ 34703 61365
Lat & Long: 54.945737 -1.4597735



*Figure 1 – Position of the survey area using QGIS and Google maps
Red shape indicates the survey area, the yellow circle indicates an approximate 2km area*

The survey area is a parcel of land to the southern edge of Boldon Colliery, a large village to the south of Jarrow and east of West Boldon.

The land is the northern section of a larger paddock, and the area that was previously kitchens associated with North Road Primary School, the main school land has already been developed around 2002.

The surrounding landscape is one predominantly urban, to the south is a green space area separating the Boldon's from Sunderland. To the west of the site are allotments, and industrial parks with tree lined areas.

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

3. Legal Status Of Protected Species

It is an offence for anyone to deliberately capture, injure or kill any such animal or to deliberately take or destroy their eggs. It is an offence to damage or destroy a breeding or resting place of such an animal. It is also an offence to have in one's possession or control, any live or dead European protected species.

A person will commit an offence if they deliberately disturb such animals in a way as to be likely significantly to affect

- (a) the ability of any significant groups of animals of that species to survive, breed, or rear or nurture their young, or
- (b) the local distribution of abundance of that species.

It is an offence to deliberately pick, collect, cut, uproot or destroy a wild plant of a European protected species. It is also an offence for any purpose to possess, sell or exchange such a plant.

3.1 UK & Local Biodiversity Action Plan

The UK Biodiversity Action Plan (BAP) was published in 1994 in response to Article 6 of the Biodiversity Convention, to develop national strategies for the conservation of biological diversity and the sustainable use of biological resources. The current list of UKBAP priority species and habitats was published in August 2007 and now contains 1150 species and 65 habitats.

This has led to Local Biodiversity Action Plans (LBAPs) which identify local priorities for biodiversity conservation.

The potential impact of planning decisions on biodiversity and geological conservation need to be fully considered.

Note: This information is a guide only. Please refer to the full relevant texts for more information (see References section 7.1).

4. Survey Methodology

4.1 Pre-survey Data Search (Desk Top surveys)

Consultation of pre-existing information on Local Wildlife sites, biodiversity of the area and protected species at and around the survey site was obtained through the following:

- Bing and Google maps to study aerial photography and satellite imagery - to understand the surrounding habitat.
- Multi Agency Geographic Information Centre (MAGIC) searches are performed, to deduce the general character of the area, the presence of any relevant wildlife areas, and any sites of wildlife interest within a 2km zone of the survey site. In particular:
 - Environmentally Sensitive Areas (England)
 - Important Bird Areas (England)
 - Local Geological Sites (England)
 - Local Nature Reserves (England)
 - Natural Areas (England)
 - Ramsar Sites (England)
 - Scheduled Monuments (England)
 - Sites of Special Scientific Interest (England)
 - Sites of Special Scientific Interest Units (England)
 - Special Areas of Conservation (England)
 - Special Protection Areas (England)
- Environmental Records Information Centre North East – ERIC NE were contacted for records within the 2km radius of the site.
- Any previous surveys conducted on the site were also considered.

4.2 Field Surveys

4.2.1 Phase I Habitat Survey

The field survey of the site was carried out in accordance with the methodology outlined in the JNCC handbook for Phase 1 habitat survey. Each parcel of land was assessed and classified. A walkover survey was conducted; habitat and features were target noted where appropriate.

Plant species were identified and compared to county axiophytes lists. Habitats which were identified as being of particular interest would be studied in more detail. Plant species lists with abundance were recorded for such areas, if necessary.

Until April 2010, there were only two non-native invasive plant species that developers really had to worry about finding - Japanese knotweed and giant hogweed. A further 38 species have been added to schedule 9 of the Wildlife and Countryside Act 1981, for which it is a criminal offence to cause to grow in the wild. There are now over 20 non-aquatic species several of which lie dormant in the winter months. Identification of any of these plants will be noted during the survey.

The quality of field data will be affected by the season of the survey, with some plant species only being evident or identifiable in certain seasons.

4.2.2 Protected Species

Additional to the Phase 1 habitat survey, a scoping survey for the potential for the presence of European protected species and local Biodiversity Action Plan (BAP) terrestrial mammals, (more details can be found on the UK Biodiversity Action Plan website) was undertaken within the survey area.

The potential of these BAP species being present was assessed from the desktop surveys, consultation responses, field signs and local knowledge. In particular:

- Trees and buildings were viewed for their potential for bat usage.
- If present any track ways, regularly used by badger, deer or relevant species, were mapped.
- Any badger sett evidence was recorded and assessed as to usage.
- Wetlands and waterways were reviewed for their potential use by great crested newt, otter, water voles and white clawed crayfish.

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

4.3 Site Assessment

On the basis of the survey information the site was categorised. This was done primarily using a three point scale as follows:-

- 1= site of high conservation priority
- 2= site of lower priority for conservation
- 3 =site of limited wildlife interest.

Any sites rated 1 or 2 were also categorised using the Institute of Ecological and Environmental Management - Guidelines for Ecological Impact Assessment (as detailed in appendix 7.3).

Habitats present were assessed as to their likely value to the following species, in particular BAP species:-

- Plants
- Invertebrates
- Amphibians'
- Reptiles
- Birds
- Bats
- Badgers
- Other mammals

5. Survey Results

The raw data where appropriate can be found in appendix 7.4

5.1 Pre-survey Data Search (Desk Top surveys) Results

5.1.1 Designated Sites

A search was made using MAGIC (Multi Agency Geographic Information for the Countryside) to look for sites of wildlife interest with a 2km zone of the survey site.

Designations

Land-Based designations

Statutory

- Areas of Outstanding Natural Beauty (England)
- Environmentally Sensitive Areas (England)
- Local Nature Reserves (England)
- Moorland line (England)
- National Nature Reserves (England)
- National Parks (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)
- Biosphere Reserves (England)

Non-Statutory

- Community Forests (England)
- Green Belt (England)
- Heritage Coasts (England)
- National Forest (England)
- RSPB reserves (GB)

Habitat and Species

All habitats chosen

Land based schemes – none

Landscape

Landscape Classifications

- National Character Areas (England)
- Natural Areas (England)

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

From the above MAGIC identified the area as having the following habitats or interest:-

- Sites of Special Scientific Interest (England) – 1 area identified the 3.08 hectares West Farm Meadow.
- Local Nature Reserve – Station Burn
- Community Forest – The Great North Forest

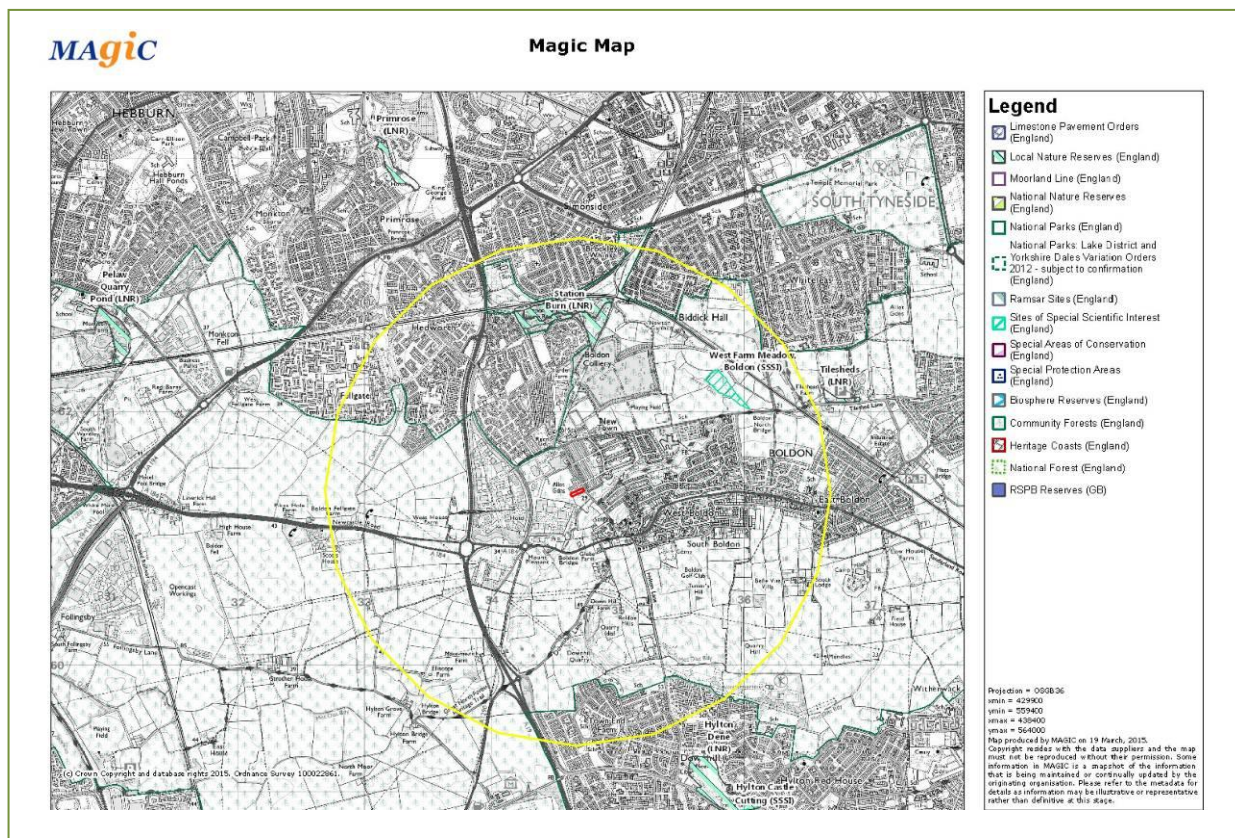


Figure 2 – Designated Site around the survey site using magic maps. Including – Counties, Metropolitan Districts and Unitarian Authorities (GB) and Parishes (GB)

Station Burn and Colliery Wood (planted in 1997) will become the largest woodland in South Tyneside (www.southtyneside.info/CHttpHandler.ashx?id=6957&p=0). It is planted on reclaimed colliery land including a stretch of the River Don. This document also identifies the presence of Water vole within this area.

West Farm meadow is one of the few surviving semi-natural hay meadows within the River Tyne and Tees coastal plain.

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
 For Blake Hopkinson Architecture

9th July 2015

The following priority habitats were identified

- Lowland meadows – 9x areas
- Lowland fens – 4x areas
- No main habitat – 4x areas with deciduous woodland

The following woodland habitats were identified

- Traditional orchard – 1x area
- Deciduous woodland - 49x areas identified totalling 40.3 ha ranging from 0.005279ha to 3.119322ha
- National Inventory of Woodland and Trees (England) - 3x areas identified – 1x broadleaf, 0x coniferous, 0x mixed, 2x young trees and 0x felled

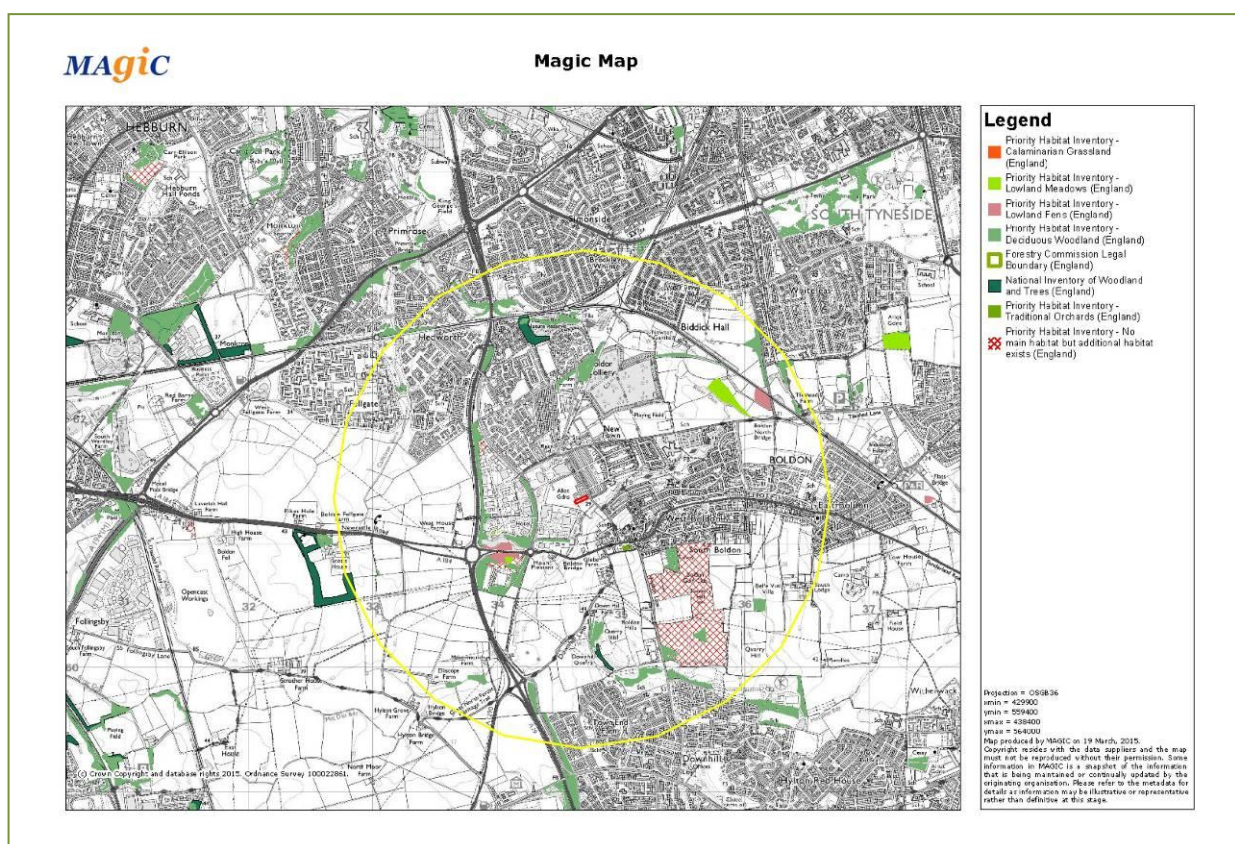


Figure 3 – Habitat descriptions around the survey site using magic maps.

Priority habitats are generally small patches of land that are scarce within the area, there are few woodlands present.

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

5.1.2 Environmental Records Information Centre North East

Environmental Records Information Centre – North East provided a data search for Protected and Notable Species within 2km of the central grid reference.

Amphibians – 6x species recorded

Birds – 55x species recorded

Flowering plants – 8x species are recorded – 3 are negative indicators, 2 are positive indicators and a Local Nature Reserve SNCI

Insects - Beetle (*Coleoptera*) - 4 species, Butterfly - 3 species, Moth - 2 species

Terrestrial mammals - 12 species recorded

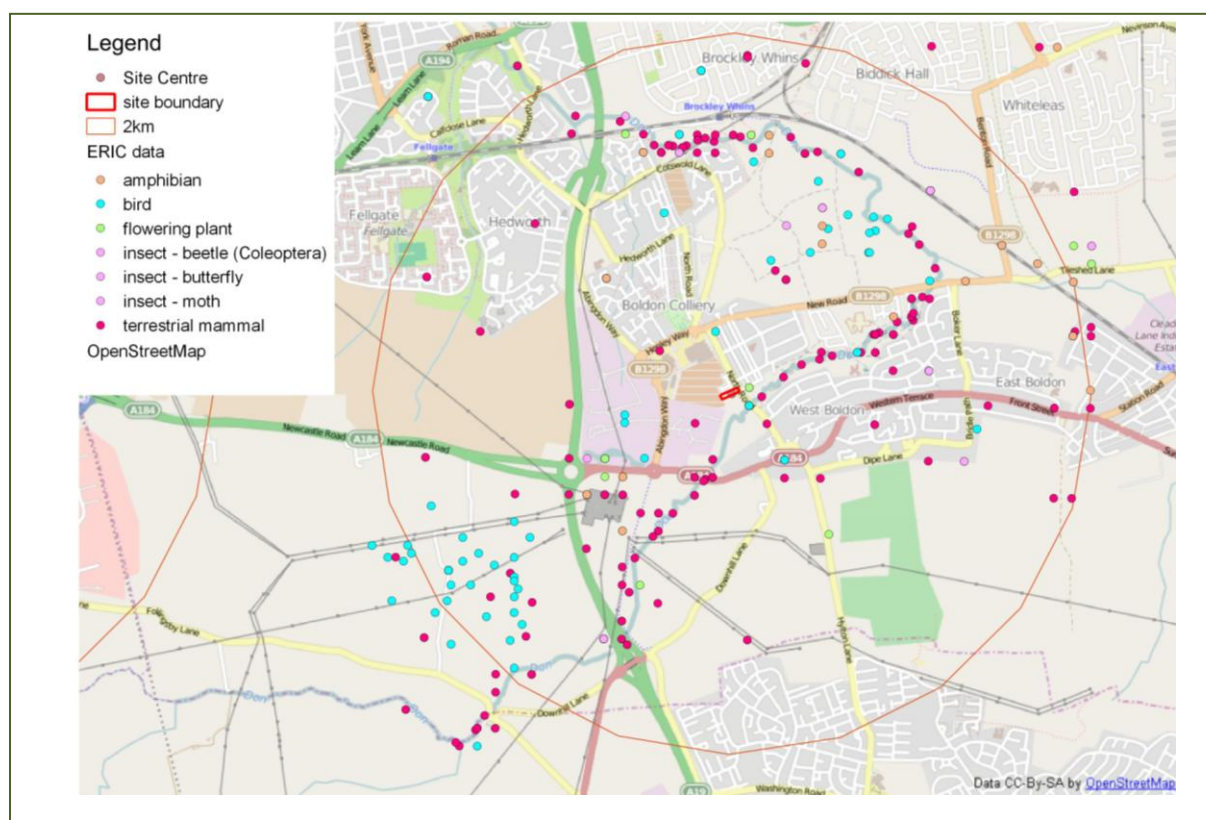


Figure 4 – ERIC species records

As shown by figure 4, water vole records are present along the River Don, there are bird record hot spots to the south west and north east of the site predominantly on arable land

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

5.1.3 Previous surveys conducted on the site

No records of any previous surveys conducted on the site were used

5.1.4 Protected Species

Searches on the area identify that the River Don which traverses Boldon is the last stronghold of Water voles in South Tyneside.

West Boldon Lodge, constructed by the National Grid, is a purpose built environmental centre with a range of habitats including a locally rare orchid and wet land areas with 'lots of frogs'.

South Tyneside Council received money from the SITA trust to make the area to the north of the proposed development 'more otter friendly', Otter have since been recorded as present on the River Don.

5.2 Field Surveys

5.2.1 Phase I Habitat Survey

The survey area a plot of land approximately 100m by 30m, adjacent to North Road with allotments to the west and Lawson Close to the north.

The area comprises of two parcels of land; an area of scrub which is enclosed by 1m tall metal railings, formerly the school kitchens (eastern side), and the northern portion of an overgrazed paddock (western side).

The River Don flows 125m to the south of the site, through the adjacent farmland pasture.

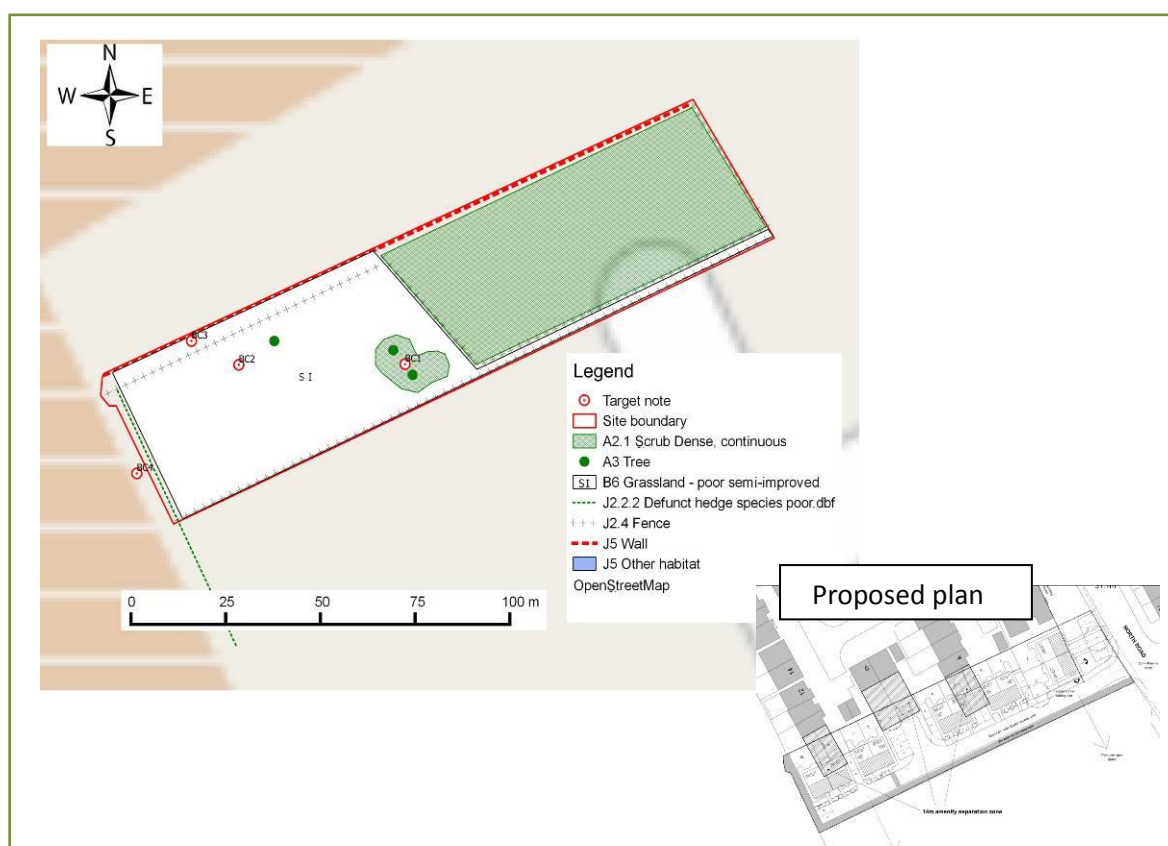


Figure 5 – Identification of features within the survey area.

There are several trees associated with the site a tree survey has been conducted separately.

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

The plot which previously housed the school kitchens to the east of the study area, is bounded by 1m tall metal railings which have prevented grazing thereby allowing it to develop into barely penetrable scrub – species present are elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*) blackthorn (*Prunus spinosa*) hazel (*Corylus avellana*) English oak (*Quercus robur*) wild cherry (*Prunus avium*). This area is unmaintained and contains litter throughout.

To the east along North Road is a 2m tall regularly trimmed privet hedge.



Figure 6 – Former kitchens area – now scrub

The western section of the study area addresses the northern segment of the adjacent paddock which is divided from the main paddock by a three strand wire fence.

Consisting of poor semi-improved grassland; the narrow 2m strip to the south of the former kitchens and the area to the east. The parcel to the east contains self set trees, a short privet hedge and concrete footings from a previous building.

Flora present grasses associated with disturbed land, annual meadowgrass (*Poa annua*), common bent (*Agrostis capillaries*) and creeping bent (*Agrostis stolonifera*), alongside perennial ryegrass (*Lolium perenne*).

Other plants evident creeping buttercup (*Ranunculus repens*), broad-leaved dock (*Rumex obtusifolius*), nettle (*Urtica dioica*), daisy (*Bellis perennis*) Cranesbill sp

Target Note BC1 – A Small Area Of Scrub

A patch of scrub within the western parcel of poor semi-improved grassland including Elder (*Sambucus nigra*), hawthorn (*Crataegus monogyna*), wild rose (*Rosa canina*), bramble (*Rubus fruticosus*), and the remnants of a privet hedge.

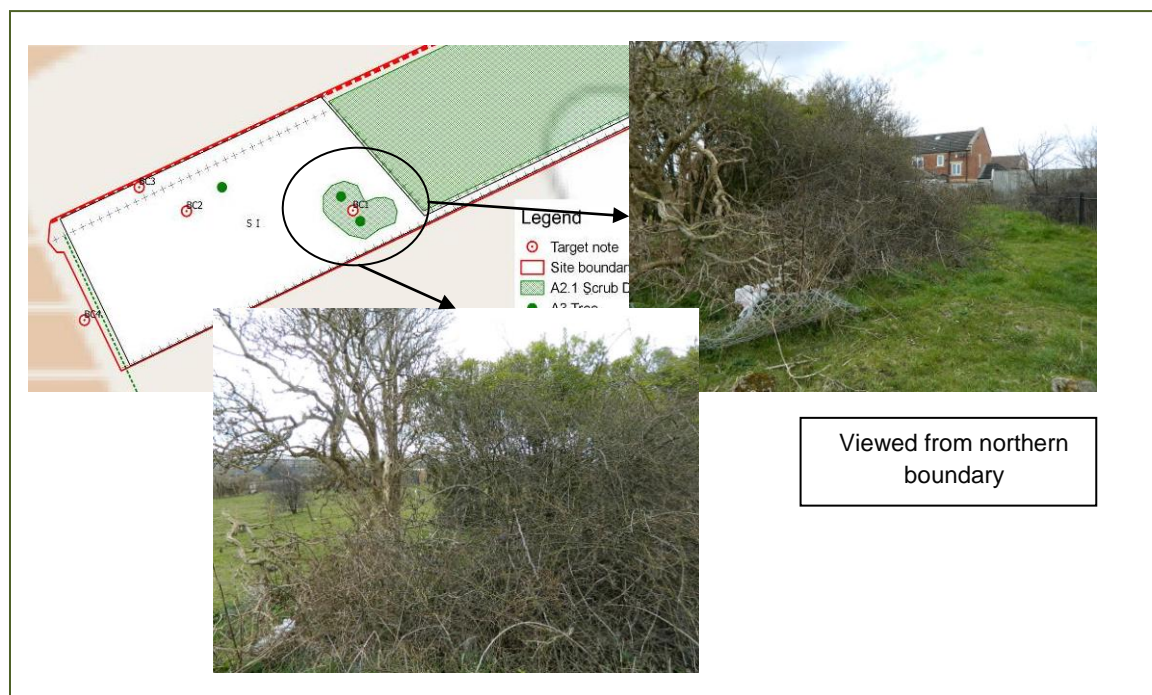


Figure 7 – Scrub patch - target note BC1.

Target Note BC2 – Hardstanding & Evidence Of Previous Buildings

The areas of concrete and macadam present have fine grasses and first colonisers – ragwort (*Jacobaea vulgaris*), dandelion (*Taraxacum*) and common dock (*Rumex obtusifolius*).



Figure 8 – Hardstanding areas – target note BC2

Target Note BC3 – Path To The Rear of The Site

To the rear of the site is an unused pathway between the walls of the adjacent housing and the rear of the site, bramble (*Rubus fruticosus*), is encroaching on this area



Figure 9 – Path to rear of the site - target note BC3.

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

Target Note BC4 – Eastern Boundary

The eastern corner of the site is bounded by allotments. Unmanaged elder is extending into the paddock and there is a quantity of rubbish emanating from the allotments. A redundant hawthorn hedge including some mature bushes are present.



Figure 10 – Eastern boundary.

5.2.2 Protected Species Scoping Survey

There are no buildings present on site.

There are no ponds or standing water on site.

The trees on site have not reached a stage where they contain potential bat roosting features. The hedges and scrub present will provide suitable habitat for nesting birds.

The River Don is situated to the south of the site but is separated by both open land and two pig netted fences, thereby discouraging the movement of any mammals from the waterway to the site. An increase in streamside vegetation would be necessary to encourage use of this stretch of river except for 'passing through'

There were no trackways or spraints present on site



Figure 11 – View from the site to the River Don

5.3 Site Assessment

Our general assessment is that the site falls within category 3, that of a site of limited wildlife interest (refer to section 4.3 for details).

The hedgerows have the potential to provide bat foraging habitat and flight paths, they will also support nesting birds.

Plants – The predominant plants are elder and hawthorn bushes with neutral grassland grasses. Also present are ragwort, nettles, docks and thistles. There is limited species diversity.

Invertebrates – The ruderal vegetation present will be food sources for a range of invertebrates

Amphibians – No ponds suitable for breeding are present on site or within the vicinity.

Reptiles – The area is unlikely to support reptiles.

Birds – The trees and hedges provide both habitat for breeding birds and foraging. Robins, thrush and blackbird were seen and heard on site.

Bats – There is limited potential for roosting bats on site, there is potential for foraging bats within the area.

Badgers – No tracks or trails were present to indicate badger activity

Otters – Are known to be present on the River Don, otter spraints have been found previously under the bridge. The stretch of river in the vicinity of the survey area does not provide a suitable habitat for otters to regularly frequent as it is very open and the water is shallow.

Otters are considered to require 20ha of water for breeding. Male and female territories will also overlap, these range between 1 and 40km with 18km being the normal length. River range is dependent upon prey availability with shallow streams having a tendency for longer distances.

Water vole - Are known to be present on the River Don, the stretch of river within the survey area does not provide a suitable habitat for water voles to regularly frequent. The area is very open with little feeding habitat

Other BAP species - The land has limited habitat for other BAP species.

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

6. Conclusion & Recommendations

Conclusion

- 6.1 There are two statutory sites to the north of the study area. Barriers exist in the form of both distance and habitat characteristics.
- 6.2 Wildlife records are limited records within the area bird records are predominately recorded from open fields to the south west and north east of the site. There are however extensive records for Water vole presence and otter activity along the River Don.
- 6.3 The study area does not possess any notable flora or fauna.
- 6.4 Hedgerows and scrub present will provide habitat for bird nesting and food sources.
- 6.5 An existing regularly used public bridleway exists along the northern bank of the River Don, this is bounded on the northern side by pig-netting fencing.

Recommendations

- 6.6 The nearby river would need habitat improvement to encourage otter and water vole to use this area. The site is at its closest 120m north of the river and is separated from the survey site by pig-netting fencing.
- 6.7 Both otter and water vole utilise the water way and immediate bank-side. Water vole are considered to concentrate their activity to within 5m of the stream bank. Otter could potentially use this as a commuting route, primarily using the waterway. Neither species would be considered to use a site over 100m from the banks.
- 6.8 All features, hedges and shrubs are to be surveyed for the presence of nesting birds before being cut back or removed from site.
- 6.9 Inbuilt bat boxes and bird nesting facilities should be considered for the new housing. There is suitable foraging habitat for bats along both the River Don to the south west of the site and around Mount Pleasant.

For and on behalf of
AllAboutTrees Ltd

Tricia Snaith BSc BA PGCE MIFL ACIEEM

Andrew Watson FLS MICFor CBiol MSB FArborA CEnv LCGI

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

7. Appendices

7.1 References

The Wildlife and Countryside Act 1981

The Conservation of Habitats and Species Regulations 2010

National Planning Policy Framework (NPPF) – March 28th 2012.

Handbook for Phase 1 habitat survey, A Technique For Environmental Audit, English Field Unit, Nature Conservancy Council, 1990

Institute for Ecology and Environmental Management (2006) Guidelines for Ecological Impact Assessment in the United Kingdom (Version 7 July 2006). <http://www.ieem.org.uk/ecia/index.html>.

Great Crested Newt Suitability Index – Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). Evaluating the suitability of habitat for the Great Crested Newt (*Triturus cristatus*). *Herpetological Journal* 10 (4), 143-155.

Bat Surveys – Good Practice Guidelines 2nd Edition 2012 – BCT

7.2 Legal Status Of Protected Species - Background

7.2.1 The Wildlife & Countryside Act 1981

The Wildlife and Countryside Act 1981 is the primary legislation which protects animals, plants, and certain habitats in the UK. This act was amended by the Countryside and Rights of Way Act 2000, which covers England and Wales but not Scotland. Wild birds and certain other wild animals are legally protected.

- Schedule 5 in the Wildlife and Countryside Act lists the animals other than birds that qualify for protection.

With certain exceptions and exemptions, it is an offence (without a licence):

- intentionally to take animals listed on Schedule 5 from the wild
- intentionally to kill or injure these wild animals
- to possess any of these wild animals (live or dead) or any part or derivative of them
- intentionally or (in England and Wales) recklessly to damage, destroy or obstruct the places these animals use for shelter and protection
- intentionally or (in England and Wales) recklessly to disturb these animals when they are using such places
- to trade in any of these wild animals (live or dead) or any part of them.

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

7.2.2 The Conservation of Habitats and Species Regulations 2010

Paragraph 41.—(1) A person commits an offence if they deliberately capture, injure or kill any wild animal of a European protected species; or deliberately disturbs wild animals of any such species impairing the ability of any significant group of animals of that species to survive, breed, or rear or nurture their young; or in the case of animals of a hibernating or migratory species, to hibernate or migrate; or to affect significantly the local distribution or abundance of the species to which they belong.

Paragraph 40. - The species of animals listed in Annex IV(a) to the Habitats Directive whose natural range includes any area in Great Britain are listed in Schedule 2.

7.2.3 European Protected Species Of Animals

Conservation (Natural Habitats) Regulations 1994 (as amended)

Common name	Scientific name
Bats, Horseshoe (all species)	<i>Rhinolophidae</i>
Bats, Typical (all species)	<i>Vespertilionidae</i>
Butterfly, Large Blue	<i>Maculinea arion</i>
Cat, Wild	<i>Felis silvestris</i>
Dolphins, porpoises and whales (all species)	<i>Cetacea</i>
Dormouse	<i>Muscardinus avellanarius</i>
Frog, Pool*	<i>Rana lessonae</i>
Lizard, Sand	<i>Lacerta agilis</i>
Moth, Fisher's Estuarine*	<i>Gortyna borelii lunata</i>
Newt, Great Crested (or Warty)	<i>Triturus cristatus</i>
Otter, Common	<i>Lutra lutra</i>
Snail, Lesser Whirlpool Ram's-horn*	<i>Anisus vorticulus</i>
Snake, Smooth	<i>Coronella austriaca</i>
Sturgeon	<i>Acipenser sturio</i>
Toad, Natterjack	<i>Bufo calamita</i>
Turtles, Marine	<i>Caretta caretta, Chelonia mydas, Lepidochelys kempii, Eretmochelys imbricate, Dermochelys coriacea</i>

*These species were added to Schedule 2 (European protected species of animals) of the Conservation (Natural Habitats &c.) Regulations 1994 on 1st October 2008 via Statutory Instrument 2008 No.2172 The Conservation (Natural Habitats, &c.) (Amendment) (England and Wales) Regulations 2008

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

7.2.4 European Protected Species Of Plants

Schedule 5 Regulation 44(1)

Common name	Scientific name
Dock, Shore	Rumex rupestris
Fern, Killarney	Trichomanes speciosum
Gentian, Early	Gentianella anglica
Lady's-slipper	Cypripedium calceolus
Marshwort, Creeping	Apium repens
Naiad, slender	Najas flexilis
Orchid, Fen	Liparis loeselii
Plantain, Floating-leaved water	Luronium natans
Saxifrage, Yellow Marsh	Saxifraga hirculus

NOTE. The common name or names given in the first column of this Schedule are included by way of guidance only; in the event of any dispute or proceedings, the common name or names shall not be taken into account.

7.2.5 UK & Local Biodiversity Action Plan

At the first 'Earth Summit' held in Rio de Janeiro in 1992, governments acknowledged that the planet's biodiversity was being severely depleted. Over 150 world leaders signed the Convention on Biological Diversity. In doing so, they agreed to play a part in restoring the richness of the Earth's biodiversity.

The UK Biodiversity Action Plan (BAP) was published in 1994 in response to Article 6 of the Biodiversity Convention, to develop national strategies for the conservation of biological diversity and the sustainable use of biological resources. The current list of UKBAP priority species (and habitats) was published in August 2007 and now contains 1150 species: Birds, Fish, Fungi (including lichens), Herptiles, Marine-only species, Non-vascular plants, Terrestrial Invertebrates, Terrestrial Mammals and Vascular plants and 65 habitats.

Now the four Country Groups (England, Northern Ireland, Scotland and Wales) take responsibility for overseeing implementation of the individual action plans, raising public awareness, encouraging implementation at the local level and promoting environmental education.

The England Biodiversity Group, which involves stakeholders from public, private and the voluntary sector, advises the Government on the implementation of the UKBAP in England.

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

In particular, it oversees development and delivery of the Biodiversity Strategy for England as set out in 'Working with the grain of nature'.

The Group is chaired by Defra who provide its secretariat through the Biodiversity Policy Unit.

The North East Biodiversity Forum was founded in 2000 and is a partnership of over 25 different organisations covering Northumberland, County Durham, Tees Valley and Tyne and Wear. The Forum members share a common interest in conserving and improving the biodiversity of the region.

Local Biodiversity Action Plans (LBAPs) identify local priorities for biodiversity conservation and work to deliver agreed actions and targets for specific habitats and species. LBAPs are delivered through wide local partnerships that involve wildlife organisations, local authorities, businesses and other interested parties.

7.2.6 Key Principles Of Planning

On 28th March 2012 the UK government published the final version of the National Planning Policy Framework (NPPF), this sets out the Government's planning policies for England and how they should be applied. (NPPF is available to download on line)

Planning should enhance the natural environment and where possible providing net gains for biodiversity, Local Plans should "*plan positively for development*" (Para 157), with a "*presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking*" (Para 14). "*decision-takers at every level should seek to approve applications for sustainable development where possible*" (Para 187) and "*in assessing and determining development proposals, local planning authorities should apply the presumption in favour of sustainable development*" (Para 197).

"encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value" (Para 17).

"development proposals where the primary objective is to conserve or enhance biodiversity should be permitted" and "opportunities to incorporate biodiversity in and around developments should be encouraged" (Para 118).

Also, the "presumption in favour of sustainable development (paragraph 14) does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined" (Para 119).

Economic, social and environmental roles of sustainable development being mutually dependent on each other and therefore should not be viewed in isolation (Para 8).

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

7.3 Site Assessment

See the Guidelines for Ecological Impact Assessment produced by the Institute of Ecology and Environmental Management (IEEM) used in sites assessed as 1or2 in 4.3.

Level of Value	Examples
International	<ul style="list-style-type: none"> • An internationally designated site or candidate site. • A viable area of a habitat type listed in Annex I of the Habitats Directive, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. • Any regularly occurring population of an internationally important species, which is threatened or rare in the UK. • Any regularly occurring, nationally significant population/number of any internationally important species.
National	<ul style="list-style-type: none"> • A nationally designated site. • A viable area of a priority habitat identified in the UK BAP, or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. • Any regularly occurring population of a nationally important species, which is threatened or rare in the region or county. • A regularly occurring regionally or county significant population/number of any nationally important species. • A feature identified as of critical importance in the UK BAP.
Regional	<ul style="list-style-type: none"> • Viable areas of key habitat identified in the Regional BAP or smaller areas of such habitat, which are essential to maintain the viability of a larger whole. • A regularly occurring, locally significant number of a regionally important species.
County/ Metropolitan	<ul style="list-style-type: none"> • County/Metropolitan designated sites. • A viable area of a habitat type identified in the County BAP. • Any regularly occurring, locally significant population of a species which is listed in • A County/Metropolitan “red data book” or BAP on account of its regional rarity or localisation. • A regularly occurring, locally significant number of a species important in a County/Metropolitan context.
District/ Borough	<ul style="list-style-type: none"> • Areas of habitat identified in a District/Borough level BAP. • Sites designated at a District/Borough level. • Sites/features that are scarce within the District/Borough or which appreciably enrich the District/Borough habitat resource. • A population of a species that is listed in a District/Borough BAP because of its rarity in the locality.
Parish/ Neighbourhood	<ul style="list-style-type: none"> • Area of habitat considered to appreciably enrich the habitat resource within the context of the Parish or neighbourhood. • Local Nature Reserves.
Low	<ul style="list-style-type: none"> • Habitats of poor to moderate diversity such as established conifer plantations, species poor hedgerows and un-intensively managed grassland that may support a range of Local BAP species but which are unexceptional, common to the local area and whose loss can generally be readily mitigated.

Phase 1 Habitat Survey & Potential For Protected
Species Survey At The Former School Kitchens, North
Road, Boldon Colliery Revision ‘A’
For Blake Hopkinson Architecture

9th July 2015

7.4 Raw Data

Only raw data not already used within the report will be presented here.

7.4.1 MAGIC – Multi Agency Geographic Information For The Countryside (including the Ancient Woodland Inventory)

Site Check Report generated on Thu Mar 19 2015

Centroid Grid Ref: NZ347613

The following features have been found in the search area:

Counties, Metropolitan Districts and Unitary Authorities (GB)	South Tyneside District (B)
Parliamentary Constituencies (England)	Jarrow Boro Const
Parishes (GB)	Non-Civil Parish or Community
Local Enterprise Partnership Boundaries (England)	North Eastern

Designations

Land-Based Designations Statutory

Areas of Outstanding Natural Beauty (England)	No Features found
Environmentally Sensitive Areas (England)	No Features found
Local Nature Reserves (England)	1 site identified - Station Burn
Moorland Line (England)	No Features found
National Nature Reserves (England)	No Features found
National Parks (England)	No Features found
National Parks: Lake District and Yorkshire Dales Variation Orders 2012 - subject to confirmation (England)	No Features found
Ramsar Sites (England)	No Features found
Sites of Special Scientific Interest (England)	1 site identified – West farm Meadow, Boldon 3.08ha
Special Areas of Conservation (England)	No Features found
Special Protection Areas (England)	No Features found
Biosphere Reserves (England)	No Features found

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

Historic Statutory

Scheduled Monuments (England)	Not searched for
World Heritage Sites (England)	Not searched for
Listed Buildings (England)	Not searched for
Registered Battlefields	Not searched for
Registered Parks and Gardens (England)	Not searched for

Non-statutory

Catchment Sensitive Farming Capital Grant Scheme Target Areas (England)	Not searched for
Catchment Sensitive Farming Delivery Initiative 2011-2014 (England)	Not searched for
Community Forests (England)	The Great North Forest
Green Belt (England)	5 areas named
Heritage Coasts (England)	No Features found
National Forest (England)	No Features found
RSPB Reserves (GB)	No Features found

Habitats

MAGIC was used to identify the presence of the following BAP (Biodiversity Action Plan) habitats within 2km of the survey site

Habitat type	
Coastal Saltmarsh	No Features found
Coastal Sand Dune	No Features found
Coastal Vegetated Shingle	No Features found
Maritime Cliffs and Slopes	No Features found
Mudflat	No Features found
Saline Lagoons	No Features found
Calaminarian Grassland	No Features found
Coastal and Floodplain Grazing Marsh	No Features found
Lowland Calcareous Grassland	No Features found
Lowland Dry Acid Grassland	No Features found
Lowland Meadows	9 parcels identified 0.001179 to 3.009ha
Lowland Fens	4 parcels identified 0.4 to 1.182ha
Purple Moor Grass and Rush Pasture	No Features found
Upland Calcareous Grassland	No Features found
Upland Hay Meadow	No Features found
Lowland Heathland	No Features found
Mountain heaths and Willow Scrub	No Features found
Upland Heathland	No Features found
Limestone Pavements	No Features found

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

Habitat type	
Intertidal Substrate Foreshore (England and Scotland)	No Features found
Blanket Bog	No Features found
Fens	
Lowland Raised Bog	No Features found
Reedbeds	No Features found
Upland Flushes, Fens and Swamps	No Features found

Non priority habitat	
Good Quality semi-improved grassland (Non Priority)	No Features found
Fragmented heath (Non priority)	No Features found
Grass Moorland (Non priority)	No Features found
No main habitat but additional habitat exists	3 parcels identified – Other habitat – Deciduous woodlands

Woodland habitats	
Ancient Woodland (England)	No Features found
Traditional Orchard	1 parcel 0.235848ha
Forestry Commission Legal Boundary (England)	No Features found
Deciduous Woodland	49 parcels ranging from 0.005279ha to 3.119322ha totalling 40.3039ha
National Inventory of Woodland and Trees (England)	3 parcels identifies:- 1 broadleaved 0 coniferous 0 mixed 2 young trees 0 felled
Woodpasture and Parkland	No Features found

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

7.4.2 Local Wildlife Groups

ERIC NE was contacted in June 2015 to update the biodiversity search

6x species (4 - Great Crested Newt *Triturus cristatus*, 5 - Common Toad *Bufo bufo*, 1 - Alpine Newt *Mesotriton alpestris*, 13 - Common Frog *Rana temporaria*, 8 - Smooth Newt *Lissotriton vulgaris*, 2 - Palmate Newt *Lissotriton helveticus*)

Birds

55x species recorded (Arctic Redpoll *Acanthis hornemanni*, Bittern *Botaurus stellaris*, Blackbird *Turdus merula*, Carrion Crow *Corvus corone*, Common (Mealy) Redpoll *Acanthis flammea*, Goosander *Mergus merganser*, Greenshank *Tringa nebularia*, Greylag Goose *Anser anser*, House Martin *Delichon urbicum*, House Sparrow *Passer domesticus*, Jackdaw *Corvus monedula*, Jay *Garrulus glandarius*, Lesser Redpoll *Acanthis cabaret*, Little Bittern *Ixobrychus minutus*, Little Ringed Plover *Charadrius dubius*, Peregrine *Falco peregrines*, Pied Wagtail *Motacilla alba*, Pink-footed Goose *Anser brachyrhynchus*, Ringed Plover *Charadrius hiaticula*, Shelduck *Tadorna tadorna*, Skylark *Alauda arvensis*, Twite *Linaria flavirostris*, Water Rail *Rallus aquaticus*, Wheatear *Oenanthe oenanthe*, Willow Tit *Poecile Montana*, 2 - Buzzard *Buteo buteo*, 2 - Greenfinch *Carduelis chloris*, 2 - Grey Wagtail *Motacilla cinerea*, 2 - Linnet *Linaria cannabina*, 2 - Little Owl *Athene noctua*, 2 - Long-eared Owl *Asio otus*, 2 - Mallard *Anas platyrhynchos*, 2 - Robin *Erithacus rubecula*, 2 - Short-eared Owl *Asio flammeus*, 2 - Snipe *Gallinago gallinago*, 2 - Starling *Sturnus vulgaris*, 2 - Swallow *Hirundo rustica*, 2 - Whitethroat *Sylvia communis*, 2 - Willow Warbler *Phylloscopus trochilus*, 2 - Woodcock *Scolopax rusticola*, 2 - Yellowhammer *Emberiza citronella*, 3 - Grasshopper Warbler *Locustella naevia*, 3 - Magpie *Pica pica*, 3 - Meadow Pipit *Anthus pratensis*, 3 - Moorhen *Gallinula chloropus*, 3 - Reed Bunting *Emberiza schoeniclus*, 3 - Sparrowhawk *Accipiter nisus*, 3 - Swift *Apus apus*, 3 - Woodpigeon *Columba palumbus*, 4 - Barn Owl *Tyto alba*, 4 - Goldfinch *Carduelis carduelis*, 5 - Curlew *Numenius arquata*, 5 - Kestrel *Falco tinnunculus*, 5 - Lapwing *Vanellus vanellus*, 5 - Pheasant *Phasianus colchicus*, 6 - Grey Heron *Ardea cinerea*, 6 - Kingfisher *Alcedo atthis*, 7 - Grey Partridge *Perdix perdix*)

Flowering plants

8x species are recorded – 3 negative indicators (New Zealand Pigmyweed *Crassula helmsii*, Indian Balsam *Impatiens glandulifera*, Curly Waterweed *Lagarosiphon major*) 2 positive indicators (Tubular Water-dropwort *Oenanthe fistulosa*, Marsh-Orchid *Dactylorhiza*, Northern Marsh-Orchid *Dactylorhiza purpurella*) and a LNR SNCI - Common Spotted-Orchid *Dactylorhiza fuchsia* and Mudwort *Limosella aquatica*

Phase 1 Habitat Survey & Potential For Protected Species Survey At The Former School Kitchens, North Road, Boldon Colliery Revision 'A'
For Blake Hopkinson Architecture

9th July 2015

Insects

Beetle (Coleoptera)

4x species - *Stenus pallitarsis* *Stenus (Metatesnus) butrintensi*, *Mantura rustica*
Mantura rustica

Tropiphorus terricola *Tropiphorus terricola*, *Agabus (Agabus) uliginosus* *Agabus (Agabus) uliginosus*

Butterfly

3x species – (4 - Dingy Skipper *Erynnis tages*, 3 - Small Heath *Coenonympha pamphilus*, 33 - Wall *Lasiommata megera*)

Moth

2x species – (Mouse Moth *Amphipyra tragopogini*, Shaded Broad-bar *Scotopteryx chenopodiata*)

Terrestrial mammal

12x species – (3 - American Mink *Mustela vison*, 2 - Eastern Grey Squirrel *Sciurus carolinensis*, 66 - European Otter *Lutra lutra*, 21 - West European Hedgehog *Erinaceus europaeus*, Brown Hare *Lepus europaeu*, 11 - Brown Hare *Lepus europaeus*, 108 - European Water Vole *Arvicola amphibious*, 12 - Pipistrelle *Pipistrellus pipistrelles*, 8 - Weasel *Mustela nivalis*, 5 - Eurasian Common Shrew *Sorex araneus*, 11 - Eurasian Water Shrew *Neomys fodiens*, a Eurasian Badger *Meles meles*, 3 - Roe Deer *Capreolus capreolus*)

7.4.3 Plant List Produced On Site

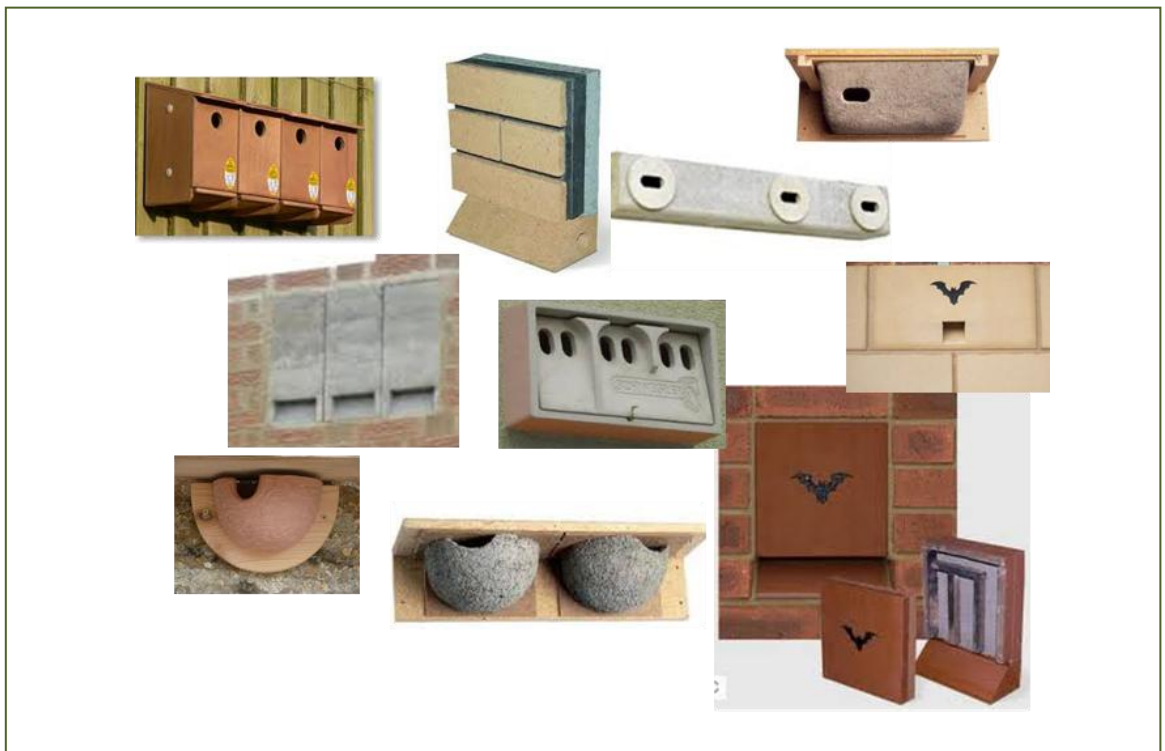
Detailed in the report



AllAboutTrees

Arboricultural & Ecological Consultancy
Chartered Arboriculturalists & Environmentalists

Proposed Wildlife Enhancements For The Proposed Development At The Former School Kitchens, North Road, Boldon Colliery



For

Blake Hopkinson Architecture



The proposed development at the former school kitchens, North Road, Boldon Colliery must include wildlife enhancements for both bats and birds.

Wherever possible it is advised to use inbuilt structures situated in the gable ends and soffit areas of the new buildings. All boxes should ideally be placed a minimum of 5m from ground level in areas avoiding direct sunlight, where overheating could occur.

Bats

We would advise that bat bricks are incorporated into the eaves of the some of the buildings:-

- On western elevations for crevice dwelling bats as potential maternity colonies using either the Habibat bat box, Ibstock enclosed bat box, Forticrete bat box or one of the Schwegler bat roost range.

Birds

A range of boxes should be considered, the RSPB has a range of boxes available for a variety of species. The main species to be considered are swifts, House martins, swallows and House sparrows. The new hedge planting along the southern boundary is likely to be used by nesting birds.

Swift boxes should be situated in shade, away from direct sunlight and avoiding windows.

House martin boxes need to be north or east facing, avoiding positions where droppings would be an issue

Swallow boxes need to be placed on a ledge within buildings

Positioning Of The Bricks & Boxes

Bats

To be positioned on the northern elevation – the bat box provides winter hibernation on plots 12 and 15

To be positioned on the western elevation – the bat boxes are suitable for maternity colonies on the western elevation of plots 03 & 10 and the south-east of 01,

Birds

Swift boxes - use two boxes per plot using the eastern elevations on plots 06 and 05.

House martin cups use north facing wall - use several cups placed as a group on plots 09 and 02

House sparrows ideally create a structure at the eaves or within soffit boards on the eastern or western elevations or alternatively use an external box on some of the garages

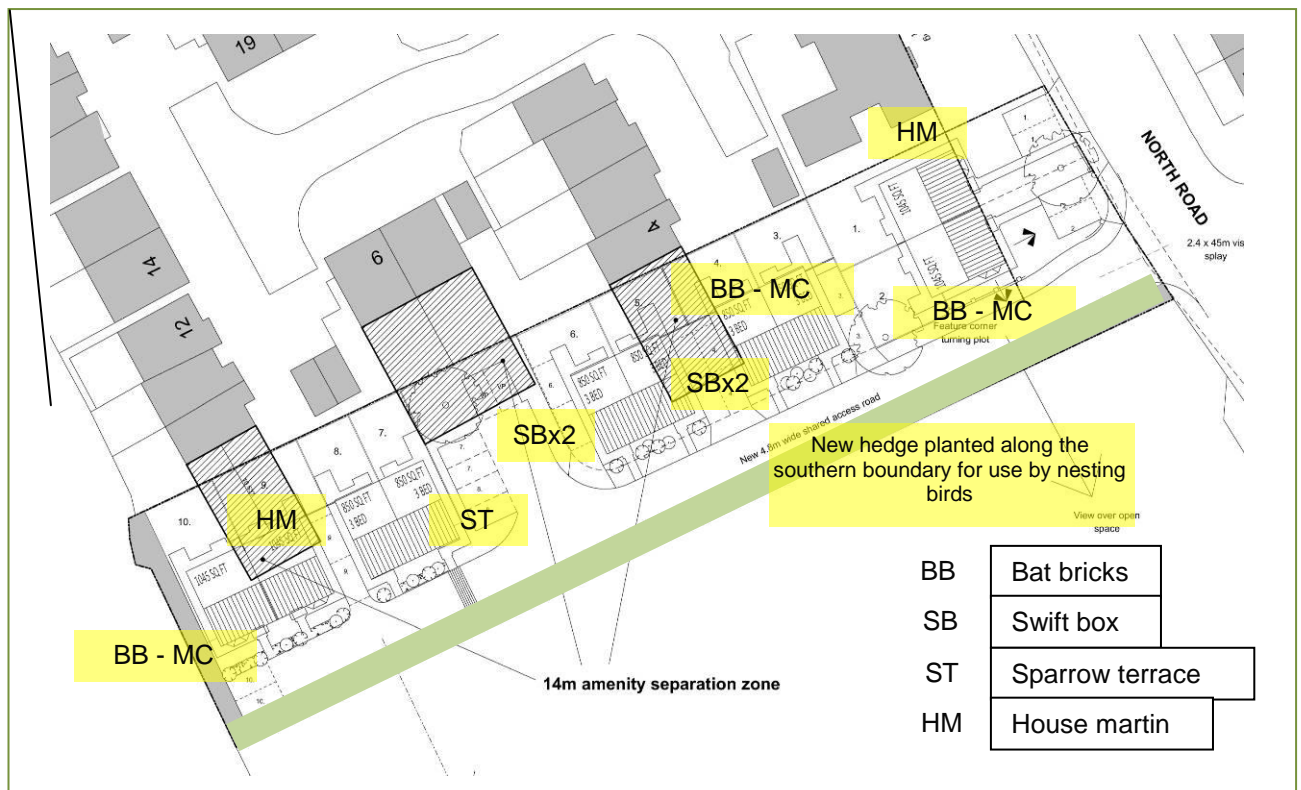


Figure 12 – Advised positions of wildlife enhancements

Suppliers

This is by no means an exhaustive list

RSPB – has a range of bird boxes

nhbs – <http://www.nhbs.com/browse/subject/420/nest-boxes-habitats>

Wildcare - <http://www.wildcareshop.com/product/nest-boxes-artificial-habitats.html>

Other suppliers are available.

Please feel free to contact the ecologist for any additional information.

For and on behalf of
AllAboutTrees Ltd

Tricia Snaith BSc BA PGCE MIFL GIEEM

Andrew Watson FLS MICFor CBiol MSB FARborA CEnv LCGI



AllAboutTrees

Arboricultural & Ecological Consultancy
Chartered Arboriculturalists & Environmentalists

The Old School
Quarry Lane
Butterknowle
Co Durham
DL13 5LN

Telephone 0191 3739494 / 01388 529200

Email – info@allabouttrees.co.uk
www.allabouttrees.co.uk

Registered in England & Wales No. 5301671
Registered Office: The Old School, Quarry Lane, Butterknowle,
Co Durham. DL13 5LN