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EXTENDED PHASE 1 HABITAT SURVEY & PROTECTED SPECIES SURVEY / ASSESSMENT

- Land off Lincoln Way, Clitheroe, Lancashire -

EXTENDED PHASE 1 HABITAT SURVEY
& PROTECTED SPECIES SURVEY / ASSESSMENT

- Land off Lincoln Way, Clitheroe, Lancashire -

A report for

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March 2018

EXTENDED PHASE 1 HABITAT SURVEY
& PROTECTED SPECIES SURVEY / ASSESSMENT

- Land off Lincoln Way, Clitheroe, Lancashire -

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PART 1 INTRODUCTION:

1.1 REASONS FOR SURVEY:

PENNINE *Ecological* have been commissioned by Avalon Chartered Town Planning, to undertake an Extended Phase 1 Habitat Survey and protected species survey / assessment of land off Lincoln Way, Clitheroe, Lancashire.

The study includes a vegetation, water vole and badger survey, together with assessment for other potential protected species issues. The study also includes a desk top ecological data search with Lancashire County Council.

The report includes a full evaluation of the ecological significance of the survey findings. The surveys are required due to proposals for site development.

This report is required due to a revised site layout which requires a new planning application. The site was granted planning permission in January 2016. The revised application does not affect any additional land than that covered by the 2016 planning permission. The changes simply relate to a revised internal layout of the site.

1.2 SITE LOCATION:

The site is located approximately 1.2km north east of Clitheroe town centre. The sites central National Grid Reference is SD 754 423.

The locations of the habitats surveyed are shown on Map 1 Appendix 1.

1.3 SITE STATUS:

A desk top study was commissioned as part of the original survey in August 2014 and is included in this study. This included searches for both statutory protected sites and non-statutory sites within 500m radii of the site survey boundary. The data request also includes records of protected species within 500m radii of the site. Lancashire Environment Record Network (LERN), were consulted to provide details of non-statutory sites and protected species records.

1.3.1 Statutory Sites:

Details of statutory sites were sought from the Natural England web site search, this has been re-checked as part of this study:

http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx

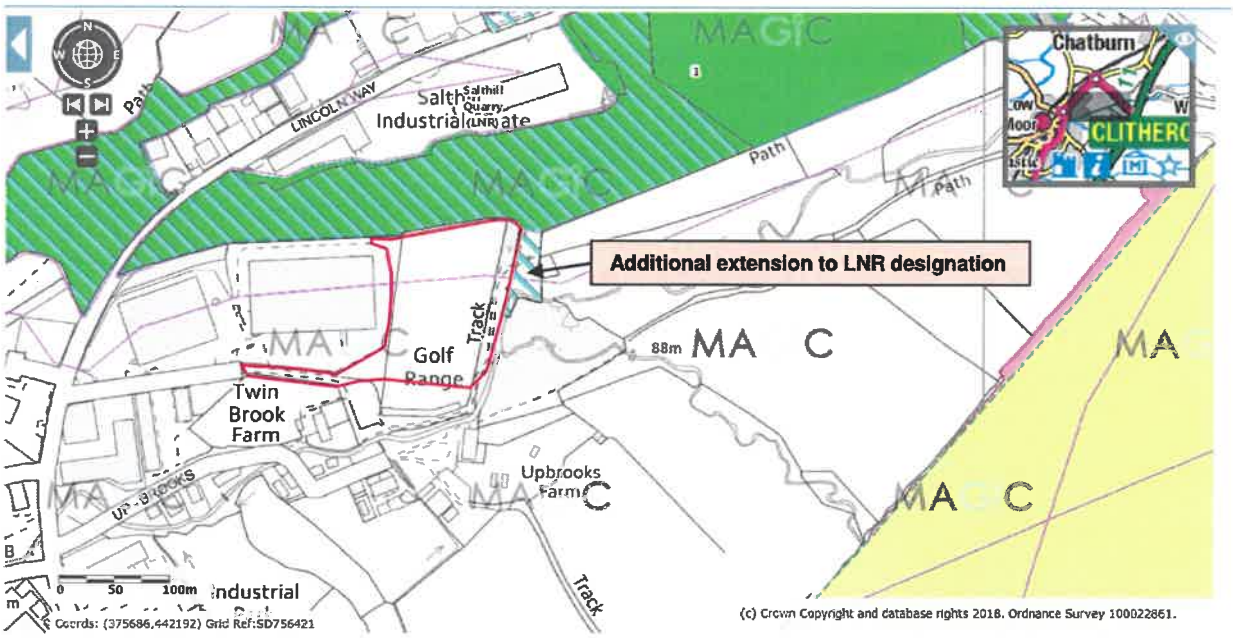
There is one statutory wildlife site within the search area; Salthill And Bellmanpark Quarries which is a Site of Special Scientific Interest *(SSSI)*. This is a geological SSSI and runs across the sites northernmost boundary. The site also forms part of Salthill Quarry Local Nature Reserve *(LNR)*.

Part of the citation states:

'The famous Carboniferous Limestone site is the type locality for the fossiliferous Salthill Bank Beds (Chadian) and the Salthill Cap Beds (Arundian) of the Clitheroe Limestone Complex. It provides the best sections through the Chadian and the Knoll Reefs of the Craven Basin, and some of the finest such sections in the English Lower Carboniferous'.
Further information can be found on natural England's website;

http://www.sssi.naturalengland.org.uk/special/sssi/sssi_details.cfm?sssi_id=1002604

Since the original 2014 survey, the LNR has been extended to include part of the woodland off the eastern site boundary. This is shown below;



1.3.2 Non-Statutory Sites:

There is one County Biological Heritage Sites *(BHS)* within the search area. This is Salthill Quarry, site code 72SE01. The site shares a similar boundary as the SSSI just beyond the northern site boundary.

1.3.3 Protected Species / Habitat Data:

N.b. Refer to Appendix 2 for full details of protected species records and other species.

The data search reveals no records that can be related directly to the site. Although one record for small scabious *(a Lancashire Key Species)* potentially relates to the site, the grid reference is only to 6 figures and almost certainly relates to the adjacent SSSI to the north. There are numerous Lancashire Key species records, mainly relating to uncommon Lancashire plant species; small scabious and northern yellow cress associated with the adjacent SSSI / BHS

site. Two records of pipistrelle bat are recorded at around 450m from the site. Bullhead is recorded from the stream immediately off the sites eastern boundary *(off site).*

A full list of species within the search area is shown in the interactive .pdf file in Appendix 2.

1.4 SURVEY CONSTRAINTS:

The survey was conducted on 9th March 2018 which is a sub-optimal time for Extended Phase 1 Habitat Survey. However given the nature of the habitats affected by development these constraints are not considered significant. In addition the whole site is now excavated and part of a construction site, comprising excavations and bare earth.

All habitats on site were accurately identified. Although some species will have been missed due to dormancy an accurate and representative species composition and evaluation was possible. There were no constraints to other protected species surveys / assessments and all parts of the site were accessible.

PART 2 SURVEY RESULTS:

2.1 EXTENDED PHASE 1 HABITAT SURVEY:

2.1.1 Extended Phase 1 Habitat Survey Methodology:

An Extended Phase 1 Habitat Survey *(Nature Conservancy Council 1990)* of the study area was undertaken 9th March 2018. The site's habitats were mapped and higher vascular plant species were recorded and given abundance values according to the standard DAFOR scale, where:

D = Dominant
A = Abundant
F = Frequent
O = Occasional
R = Rare

Where appropriate these values can be prefixed by the letter L (locally) or V (very), to provide more subtle biogeographical data.

2.1.2 Habitats Present:

A1.1.2 Broad-leaved plantation woodland
A2.1 Dense scrub
A2.2 Scattered scrub
A3.2 Scattered coniferous trees
G2 Running water *(off site)*
J2.4 Fence
J4 Bare ground/earth

2.1.3 General Description:

This site is approximately 150m by 90m in maximum dimensions with a linear access road approximately 100m in length serving the site from the west.

The whole site apart from the eastern/northern boundary woodland is now a constructions site with deep excavations and bare earth.

The eastern, western and northern boundaries are either fenced or open. The boundary to the south is formed by a newly constructed road, which extends to the west forming the site access. A row of Leyland cypress trees run along the northern edge of the site access road.

A stream *(off site)* runs close to the eastern site boundary. Dense mature plantation woodland and scrub is present alongside the stream and partially within the site.

The northern boundary is fenced with woodland / scrub within the SSSI to the north of the site.

2.1.4 Target Notes:

Target Note 1: Bare earth:

Bare earth and excavations dominate the site. The site has been excavated to create a more level area for construction.

Target Note 2: Mature plantation woodland / scrub:

Areas of mature plantation woodland associated with a stream corridor *(Mearley Brook)* are present alongside a footpath which follows the eastern site boundary.

The woodland / scrub is well structured and diverse with extensive secondary regeneration, many areas are impenetrable or not accessible.

The following species were recorded from the general area;

Species:	Abundance:
Woodland / scrub:	
Ash	F
Alder	F
Hawthorn	F
Wych elm	LF
Italian alder	VLF
Hornbeam	VLF
Poplar species	VLF
Hazel	VLF
Sycamore	O
Dog rose	O
Silver birch	O
Rowan	O
Guelder rose	O/R
Horse chestnut	O/R
Leyland cypress	R
Ground flora / path margins:	
Ivy	LA
Lesser celandine	VLA
Herb Robert	F
Cock's-foot	LF
Common nettle	LF
Bramble	LF
Great willowherb	LF
Rosebay willowherb	LF
Yorkshire-fog	LF
Dogs mercury	VLF
Lady's mantle species	VLF

Silverweed	VLF
Butterbur	VLF
Dotted loosestrife	VLF
False oat-grass	VLF
Meadow grass species	O
Cyperus sedge	R

Target Note 3: Young plantation woodland:

A small area of recently planted woodland is present in the north east corner of the site. A mix of the following native and non-native species are present; sycamore, sycamore species, hazel, pine species, rowan and ash.

The plantation is unfenced and was previously grazed out by sheep with a ground flora similar to the adjacent improved grassland. the ground flora now includes lesser celandine and bramble.

The woodland extends around the northern margins of the site and is a mix of species including; sycamore, ash, hazel, hawthorn and elder. This area is fenced off from the site and is dense and inaccessible.

2.2 PROTECTED SPECIES SURVEYS:

During the Phase 1 Habitat Survey additional surveys were undertaken where appropriate for the presence of other potential protected species. The following surveys were undertaken.

2.2.1 Badger Survey:

Method:

A badger survey was undertaken of the site. The badger survey used standard techniques for establishing the use of the site by badger, and includes searches for evidence of badgers including:

- Setts
- Pathways
- Footprints
- Latrines
- Foraging areas
- Scratching posts
- Boundary searches for runs, pathways and latrines.

The survey results are outlined below.

Results:

Sett Search:

The survey found no setts on site.

Search for Foraging Signs and Pathways:

The site was thoroughly searched for badger pathways and signs of foraging. No sign of badger activity was found therefore it can be concluded that the species is not using this area for foraging or commuting.

Boundary Search:

All of the boundaries of the site were walked and examined for potential runs, pathways and latrines. The search found no evidence to suggest badger activity along any of the site boundaries.

The absence of any activity signs indicates that badgers are not entering the site. The absence of latrines indicates a lack of territorial activity in the near vicinity of the site.

2.2.2 Bats:

During the survey an assessment of bat roost potential and foraging habitats was undertaken. It is understood that the peripheral areas of woodland on the sites eastern boundary will be retained and unaffected by development.

There were no buildings/structures on site capable of supporting bat roosts.

The site is considered to have value as bat foraging habitat, particularly along the eastern/northern site boundaries adjacent to the wooded stream corridor and SSSI to the north.

2.2.3 Water Vole:

Survey Methodology:

As part of the previous survey a water vole survey was undertaken on August 15th 2014 and followed the standard methodology as outlined in the *Water Vole Conservation Handbook,* (2nd Edition), Strachan, R. & Moorhouse, T. (2006).

The survey was based upon the examination where possible / visible of the stream off the eastern site boundary.

Searches were made for the following signs;

- Sightings of individual animals
- Latrines
- Feeding stations
- Burrows
- Runs

Survey Constraints:

It should be noted that the stream is outside the site along its entire length. The survey was undertaken from within the channel with no significant constraints apart from very localised restricted access.

Survey Results:

No evidence in terms of; burrows, feeding stations/remains, latrines, runs etc. was found in any of the survey areas where visible. The species is considered likely to be absent from the survey area.

The survey was repeated as part of this study, however this is outside the recognised season for water vole survey. Although surveys undertaken in March are good for the identification of burrows, due to the reduced amount of foliage compared to summer months. No burrows were identified during the current survey.

2.2.4 Other Protected Species:

Issues in relation to other potential protected species where no specific survey was undertaken are assessed in the following section.

PART 3 ECOLOGICAL EVALUATION & RECOMMENDATIONS:

3.1 EVALUATION OF SURVEY & RECOMMENDATIONS:

The following section evaluates the site in relation to statutory/non-statutory sites, protected species and species/habitats listed on the former UK Biodiversity Action Plan Priority List, Section 41 Species/Habitats of Principal Importance in England (NERC) Act 2006, and the Lancashire Biodiversity Action Plan.

3.1.1 Statutory Sites:

There are no statutory wildlife sites associated directly with the site.

There is one statutory wildlife site within the search area; Salthill And Bellmanpark Quarries which is a Site of Special Scientific Interest *(SSSI)*. This is a geological SSSI and runs across the sites northernmost boundary. The site also forms part of Salthill Quarry Local Nature Reserve *(LNR)*.

3.1.2 Biological Heritage Sites/non statutory designations:

There are no County Biological Heritage Sites *(BHS)* associated directly with the site. There is one County Biological Heritage Sites *(BHS)* within the search area. This is Salthill Quarry, site code 72SE01. The site shares a similar boundary as the SSSI just beyond the northern site boundary.

The area affected by the proposed works fails to meet any of the guidelines for selection associated with the Lancashire Biological Heritage Site scheme.

3.1.3 Sites Habitats & Higher Plant Species:

The habitats lost to development do not meet any guidelines for Lancashire BAP habitat status. The habitat *(bare earth)* and plant species recorded on the site margins are common and widespread and are considered to be of local *(Parish)* value.

The woodland areas on the sites eastern/northern boundary are Section 41 Habitats of Principal Importance in England (NERC) Act 2006. It is understood that these habitats are unaffected by proposed development.

The data search reveals no records that can definitely be related directly to the site.

<u>Recommendations: Habitats & Higher Plant Species:</u>

There are no requirements for further surveys.

The development must ensure that there is no disturbance to the boundary woodland / path side habitats along eastern site boundary and the northern boundary.

A suitable buffer zone must be maintained alongside the boundary woodland habitats on the sites southern and northern boundaries.

3.1.4 Protected Species:

Badgers:

Badgers are protected under Schedule 6 of the Wildlife and Countryside Act 1981, and under the Protection of Badgers Act 1992, which prohibits deliberate interference with the animal or its sett.

The survey found no evidence of historic, recent or current use of the site by badgers for foraging, commuting or occupation and the species is considered to be absent.

Recommendations: Badgers:

There are no issues in relation to badgers arising from the development. No further surveys are required.

Bats:

Bats are comprehensively protected by European legislation.

There were no buildings/structures on site capable of supporting bat roosts.

The site is considered to have value as bat foraging habitat.

Recommendations: Bats:

Boundary buffer zones particularly along the woodland stream corridor off the eastern site boundary and the northern boundary should be maximised/enhanced to ensure potential foraging routes are maintained. In all cases illumination of boundary features particularly the wooded stream corridor off the eastern site boundary and the northern boundary must be avoided. Where lighting is required this must be low level, directed downwards away from boundary features and of low intensity.

Water Vole:

Water voles *(Arvicola terrestris)* are protected by the Wildlife & Countryside Act (1981) as amended. In 1998 particular emphasis of protection was given to the water voles burrow in respect of Section 9(4) of the above act.

Water vole is protected under Section 41 of the NERC Act and is a species listed as of principle importance for the conservation of biological diversity in England.

The surveys found no evidence of the species. The stream and areas within at least 8m of the stream banks are understood to be unaffected by the proposed development.

Recommendations:

There are no issues in relation to water voles arising from the development. No further surveys are required.

Great Crested Newt:

Great crested newt is comprehensively protected under European legislation.

There are no waterbodies on the site or within the terrestrial range of the species.

Recommendations: Great Crested Newt:

There are no issues in respect of this species at this site.

Birds:

All breeding birds *(with only minor exceptions)* are protected under the Wildlife and Countryside Act (1981) as amended.

There are no habitats to be affected that have potential to support breeding birds. All habitat clearance is now understood to be complete.

Recommendations: Birds:

No further work is required.

PART 4 REFERENCES:

4.1 REFERENCES:

Lancashire County Planning Department, (1998) *Biological Heritage Sites. Guidelines for Selection.* Lancashire County Council

Nature Conservancy Council (1990) *Handbook for Phase 1 Habitat Survey – A Technique for Environmental Audit.* Nature Conservancy Council.

Rose, F. (1981) *The Wildflower Key.* Warne.

Stace, C., (1997) *New Flora of the British Isles (Second edition).* Cambridge University Press.

Web Sites:

Google Earth.

MARIO.

Natural England – Nature on the Map.

APPENDIX 1:

Map 1: Extended Phase 1 Habitat Survey

Site Photographs

Site Photographs: March 9th 2018

New access road into the site from the west.

Looking north across the site from the south west.

New access road into the site from the west.

Looking east along the sites southern boundary.

Looking north along the sites western boundary from the south.

Looking north east from the sites south eastern boundary.

Footpath and woodland edge *(Target Note 2)* off the sites eastern boundary.

Target Note 3 along the sites north eastern boundary.

Stream off the sites eastern boundary.

Footpath and woodland edge/stream corridor *(Target Note 2)* off the sites eastern boundary.

Footpath and woodland edge *(Target Note 2)* off the sites eastern boundary.

Footpath and woodland edge/stream corridor *(Target Note 2)* off the sites eastern boundary.

Stream corridor off the sites eastern boundary.

Stream corridor off the sites eastern boundary.

Stream corridor off the sites eastern boundary.

Target Note 3 along the sites north eastern boundary.

Stream corridor off the sites eastern boundary.

Target Note 3 along the sites north eastern boundary.

Looking south west across the site from the north east corner.

Looking west across the sites northern boundary.

Looking west across the sites northern boundary.

Looking south across the site from the northern boundary.

Looking south west across the site from the north east corner.

Looking south along the sites western boundary from the north west corner of the site.

Looking east across the sites northern boundary from the north west site corner.

Looking north along the sites western boundary from the southern part of the site.

Looking east across the site from the north west corner of the site.

Appendix 1

Job title:

Extended Phase 1 Habitat Survey & Protected Species Survey / Assessment
- Land off Lincoln Way, Clitheroe, Lancashire -

Map 1: Extended Phase 1 Habitat Survey

Drawn: Robert Leatham	Scale: NTS	Survey Date: 09/03/18

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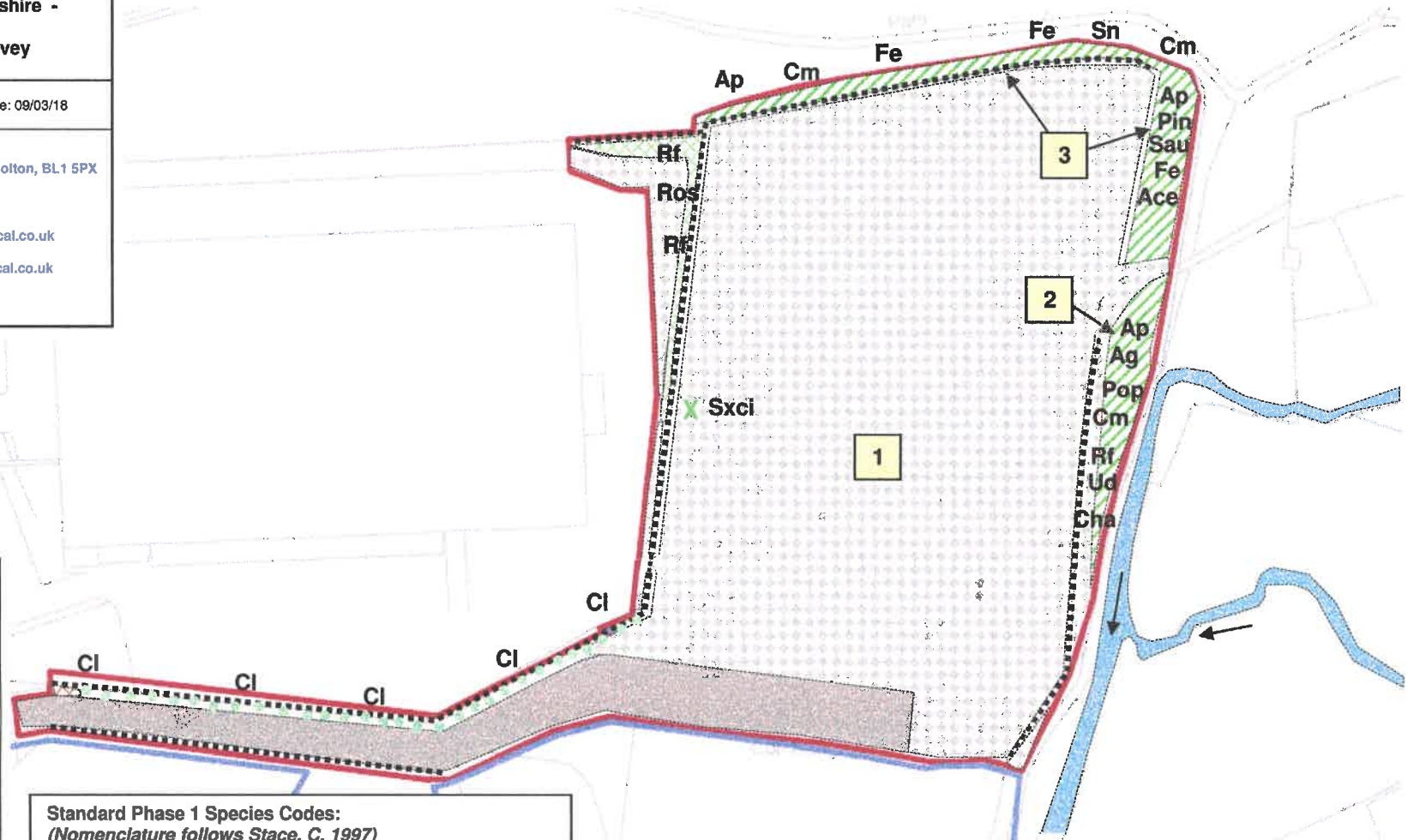

Extended Phase 1 Habitat Survey:

Map Colour Codes:

- Broad-leaved plantation woodland
- Dense scrub
- Scattered scrub
- Scattered coniferous
- Running water (stream/off site)
- Fence
- Bare ground/earth
- Tarmac road
- x Target Notes 1 - 3
- Site Survey boundary

Standard Phase 1 Species Codes:
(Nomenclature follows Stace, C. 1997)

Ace	*Acer species*	Sycamore species
Ag	*Alnus glutinosa*	Alder
Ap	*Acer pseudoplatanus*	Sycamore
Cha	*Chamerion angustifolium*	Rosebay willowherb
Cl	*Cupressus × leylandii*	Leyland cypress
Cm	*Crataegus monogyna*	Hawthorn
Fe	*Fraxinus excelsior*	Ash
Pop	*Populus species*	Poplar species
Rf	*Rubus fruticosus agg.*	Bramble species
Ros	*Rosa species*	Rose species
Sxci	*Salix cinerea*	Grey Willow

APPENDIX 2:

Desk Top Study

(Note data in separate file)

Appendix 2

Lancashire County Heritage Sites

Biological Heritage Site

Salthill Quarry

Site Boundary

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. Lancashire County Council 100023320 2012.

This map shows only the boundary of the Biological Heritage Site named above. It does not show any other designated sites which may occur within the area covered by the map.

Ref No. 74SE01

Biological Heritage Sites Partnership

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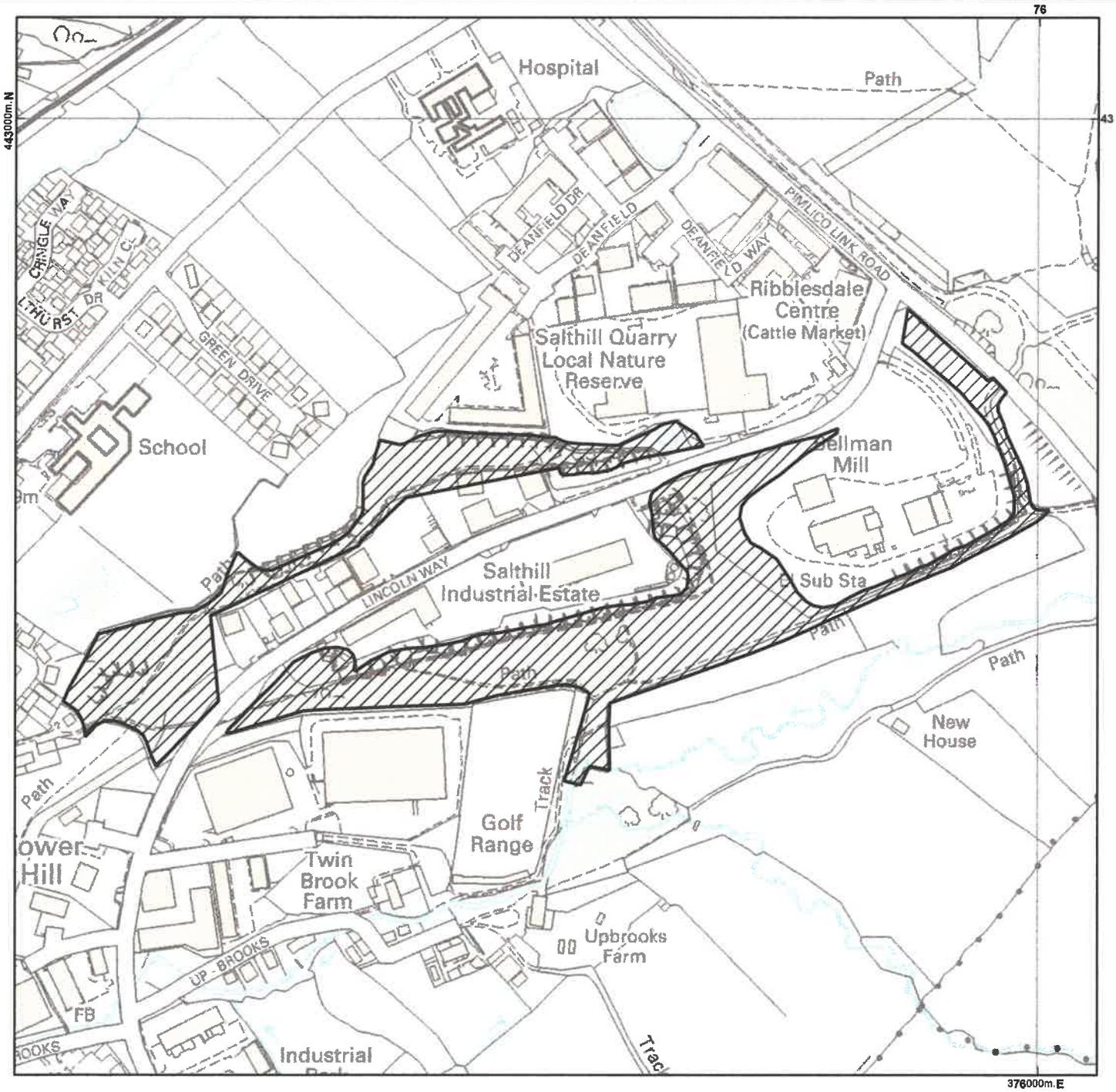
Natural England



Grid ref. SD757426	**Scale** 1:5,500	THE wildlife TRUST LANCASHIRE MANCHESTER N. MERSEYSIDE	Lancashire County Council
Site approved 01/09/1993	**Map** 1 of 1		
Boundary revised 01/09/1993	**Date of Map** 13/08/14		

Appendix 2a

Lancashire County Heritage Sites

Biological Heritage Site

Biological Heritage Sites Partnership:

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Natural England

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Site Name: **Salthill Quarry**

Site Ref: **74SE01** **Approved:** 01 September 1993

Area (ha): 8.31 **Date written/last updated:** 26 September 2013

Grid Ref: SD757426 **Owner/Occupier:**

Districts: Ribble Valley

Parishes: Clitheroe

Description:

The site comprises of a mosaic of habitats including limestone grassland, scrub and developing woodland surrounding a former limestone quarry which has been developed as an industrial estate. The main areas of interest are the exposed outcrops and stony ground which have been colonised by a diverse flora.

The outcrops support Small Scabious, Wild Thyme, Salad Burnet, Hairy St. John's-Wort, Wild Marjoram, Thyme-Leaved Sandwort, False-Brome, Eyebright, Harebell, Carline Thistle, Fairy Flax, Spring Sedge, Quaking-grass, Blue Fleabane, Wild Strawberry, Oxeye Daisy, Common Bird's-foot-trefoil, Pignut and Mouse-Ear-Hawkweed whilst on the shallow soils of crushed limestone Autumn Gentian, Hairy Rock-Cress, Hoary Plantain, Hairy Violet, Carline Thistle, Bee Orchid, Milkwort, Heath Speedwell and Glaucous Sedge occur. Buttercup, Great Burnet, Spiked Sedge, Lady's-Mantle, Meadow Crane's-bill, Rough Hawkbit, Yellow Oat-Grass, Betony, Lady's Bedstraw, Upright Hedge-parsley, Yellow-Rattle, Bloody Crane's-Bill, Downy Oat-Grass, Cowslip, Agrimony, Cowslips, Betony, Bloody Crane's-Bill, Bugle, Bulbous Buttercup and Common Knapweed. Common Rock-Rose was last recorded in 1988.

The scrub includes Sweet Briar and Spindle whilst beneath the wooded outcrops to the north of the site both Hard and Soft Shield-Fern occur. Established exotic shrubs include Wayfaring-Tree, Wrinkled Viburnum,*Sorbus mougeotii*, Butterfly-bush and Cotoneasters.

The site is also noteworthy for the presence of the Lancashire BAP bryophytes *Radula complanata, Cololejeunea minutissima, Aloina aloides, Campyliadelphus chrysophyllus, Didymodon* acutus, *Ditrichum flexicaule, Schistidium robustum, Syntrichia laevipila and Zygodon* conoideus.

A number of Lancashire BAP birds use the site such as Bullfinch, Lesser Redpoll, Lesser Whitethroat, Linnet, Spotted Flycatcher, Tree Sparrow and Willow Warbler. The Labyrinth Spider occurs here.

Guideline(s) for Site Selection:

Grassland	(Gr1)
Artificial Habitats	(Ar1)

Other Information/Comments:

The site is within the Salthill & Bellmanpark Quarries Geological SSSI and includes much of the Salthill Quarry Local Nature Reserve.

Appendix 2b

Interpretation, caveats and additional sources of data

Please note that the records contained in this data search refer only to data held within the LERN database that we are at liberty to distribute. The absence of biological records for an area in no way implies that taxa are not present. Whilst LERN has taken reasonable steps to ensure the validity of the records that it holds, we accept no responsibility for any errors subsequently discovered.

Records held by a number of organizations are not included in the data we release as these organizations have established mechanisms for providing access to their records:

Badgers: enquiries@lancashirebadgergroup.org.uk

Bats

South Lancashire: enquiries@slbg.org.uk.

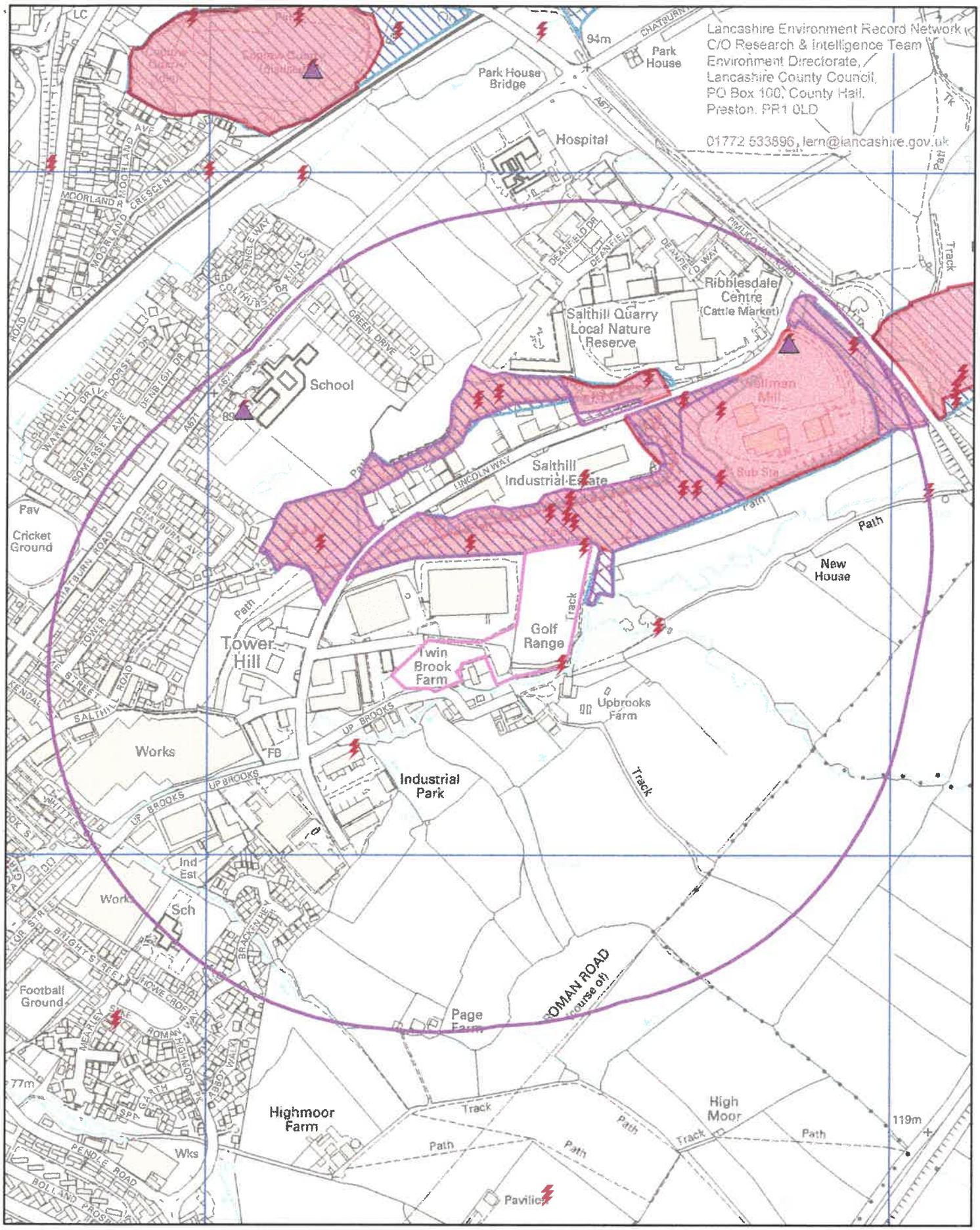
East Lancashire: dave@batworker.co.uk

North Lancashire: gail.armstrong@talk21.com

Birds: stevewhite102@btinternet.com

Amphibians & Reptiles: argsl@btinternet.com
ARGSL may hold the results of recent surveys which have yet to be processed by LERN

Appendix 2c



Legend

- Clitheroe 500m Buffer
- Chiroptera
- Lancashire_Key_Species
- Clitheroe
- LNR
- SSSI
- SSSI Site Unit
- BHS_2012

N

1:7,250

Date: 13/08/2014