

Summary Sheet

Date	15/10/15
Grid Reference	SE 3040 1033
Site Area	3.48ha
Surveyor	Fiona Denham

Site Name	Birthwaite Business Park
Site Ref Number	UB1

1 ASSESSMENT

Biodiversity interest (record presence by a cross as appropriate)

Habitat	Present	Notes & Photo Refs
Woodland	x	Plantation woodland along the southern edge Photo UB1.03
Scrub	x	Photo UB1.02
Scattered trees	x	
Species poor or defunct hedgerows		
Species rich hedgerows		
Amenity or improved grassland		
Semi-improved grassland		
Unimproved grassland	x	Photo UB1.05
Marshy grassland	x	Photos UB1.01 & 04
Tall ruderals	x	Photo UB1.02
Dwarf shrub heath		
Lichen/bryophyte heath		
Reedbed		
Swamp		
Standing water (ponds)	x	Small area of standing water and damp ditch
Flowing watercourses		
Arable / cultivated farmland		
Other:		

Species	Present (seen)	Quality of habitat		
		Low	Mod	High
Plants	x			x
Invertebrates	x			x
Amphibians	x		x	
Reptiles			x	
Birds				x
Mammals		x		
Other				

Influences on external features

On watercourse	No
On wildlife corridor	The woodland along the southern edge of the site forms part of a short corridor around the industrial estate.
Would lead to habitat isolation	No
Proximity/linkage to SSSI/LNR	None
Other	The River Dearne is 350m east. Aerial photos show a pond 200m north-east.

2 RECOMMENDATION

	Mitigation measures / design considerations	Score
a) Development of the site would have minimal detrimental local ecological impact.		
b) Development of the site would result in some adverse local ecological impact but there is scope for mitigation.	<p>The strip of woodland along the southern boundary of the site creates a buffer and link to woodland in the wider area. Therefore it would be beneficial if this habitat could be retained. The western section of the site comprises a mosaic of habitats, together assessed as having high ecological value because of the diversity of habitats and species present. Additionally this section of the site is moderately important for invertebrates and birds. Further botanical survey during the optimal season will be necessary to assess this habitat fully.</p> <p>The eastern section of the site is less diverse and more disturbed and is assessed as having low to medium value.</p>	3
c) Development of the site would result in detrimental ecological impacts.		

3 PHOTOGRAPHIC DETAILS

Photograph locations are recorded on the site map.

Photo Ref	Caption
UB1.01	Marshy grassland
UB1.02	Tall ruderals and scrub
UB1.03	Woodland strip
UB1.04	Marshy grassland
UB1.05	Unimproved neutral grassland

4 FURTHER INFORMATION

Brief Site Description
<p>The site is located within a small industrial estate on the edge of Darton. The site comprises two sections which are bisected by a private road. The majority of the western section of the site is a mosaic of marshy grassland, tall ruderal, scrub, a wet ditch, developing wet woodland, unimproved neutral grassland and an area of broadleaved woodland. The eastern section of the site comprises dense scrub, tall ruderal, marshy grassland, broadleaved woodland and bare ground.</p>

Additional comments / information
<p>Figure 1 shows the Phase 1 Habitat map for the site. Figure 2 shows the areas with significant ecological value.</p> <p>With reference to the data search, no significant issues for protected or priority species have arisen for this site.</p>

Further botanical survey within the marshy grassland habitat in the western section of the site would be required at an appropriate time of year if the site were to be developed.

Aerial images show a pond within 200m of the site to the north-west, with no major barriers between. The site comprises optimal terrestrial habitat for great crested newt and grass snake. Therefore if the site is to be developed, detailed newt and reptile survey will be necessary.

Site Ref: UB1

Site Area: 3.48ha

OS Grid Ref: SE 3040 1033

Date Surveyed: 15/10/15

Surveyor: Fiona Denham

Site Description

The site is located within a small industrial estate on the edge of Darton. The A637 Huddersfield Road bounds the site to the south and the M1 motorway is to the east. There is open countryside to the north and west.

The site comprises two sections which are bisected by a private road leading to the business park. The majority of the western section of the site is a mosaic of marshy grassland, tall ruderal, scattered and dense scrub, a wet ditch, developing wet woodland, unimproved neutral grassland and an area of broadleaved woodland. The eastern section of the site comprises dense scrub, tall ruderal, marshy grassland, developing woodland, broadleaved woodland and bare ground.

The marshy grassland within both sections of the site is diverse and species rich with good structural diversity. No species are dominant although locally dominant species include glaucous sedge *Carex flacca*, hairy sedge *Carex hirta*, reed canary grass *Phalaris arundinacea*, great willowherb *Epilobium hirsutum*, common knapweed *Centaurea nigra* and compact rush *Juncus conglomeratus*. Frequent and occasional species include tufted hair grass *Deschampsia cespitosa*, Yorkshire fog *Holcus lanatus*, meadow fox-tail *Alopecurus pratensis*, crested dog's-tail *Cynosurus cristatus*, creeping bent *Agrostis stolonifera*, a species of orchid *Dactylorhiza* sp., common bird's-foot trefoil *Lotus corniculatus*, greater bird's-foot trefoil *Lotus pedunculatus*, jointed rush *Juncus articulatus*, hard rush *Juncus inflexus*, autumn hawkbit *Scorzoneroides autumnalis*, marsh thistle *Cirsium palustre*, lady's bedstraw *Galium verum*, pendulous sedge *Carex pendula*, ox-eye daisy *Leucanthemum vulgare*, wild angelica *Angelica sylvestris*, common sorrel *Rumex acetosa*, purple loosestrife *Lythrum salicaria*, yarrow *Achillea millefolium* and meadow vetchling *Lathyrus pratensis*. The bryophytes *Calliergonella cuspidata* and *Brachythecium rutabulum* are locally abundant within the grassland.

There are pockets of tall ruderal habitat scattered throughout the site, which comprise dense impenetrable vegetation. Dominant species include great willowherb *Epilobium hirsutum*, common knapweed and creeping thistle *Cirsium arvense*, with scattered bramble *Rubus fruticosus* and raspberry *Rubus idaeus*. Scrub is scattered throughout the marshy grassland and tall ruderal habitats with species including hawthorn *Crataegus monogyna* and grey willow *Salix cinerea*.

A shallow ditch varying in width from approximately 1 metre to 5 metres wide has been created within the marshy grassland, possibly to improve drainage. It is mostly wet or retaining a couple of inches of water, with a small section of standing water approximately 4.5 inches deep on the day of the survey. A number of common frogs were observed here. The ditch is vegetated with species including purple loosestrife, common sedge *Carex nigra*, creeping bent, greater bird's-foot trefoil, compact rush, creeping thistle, wild angelica and iris *Iris* sp. Dense and scattered scrub dominated by grey willow is abundant in this area. A small area of developing wet woodland lies to the west of the ditch which is dominated by alder *Alnus glutinosa* with nettle and bramble within the understory. This woodland joins a woodland strip which runs adjacent to the western edge of the site.

A small strip of dry grass dominated unimproved neutral grassland with scattered scrub lies along the southern edge of the marshy grassland area. Tufted hair grass is dominant with Yorkshire fog, common bent and red fescue abundant. Other grass species are occasional and include sweet vernal grass *Anthoxanthum odoratum*, timothy *Phleum pratense* and false oat grass *Arrhenatherum elatius*. Compact rush and hairy sedge are occasional. The bryophytes *Rhytidiadelphus squarrosus* and *Pseudoscleropodium purum* are locally abundant. Herbs are scattered and include locally abundant bird's-foot trefoil. Other species are occasional and include ribwort plantain *Plantago lanceolata*, common knapweed, common centaury *Centaureum erythraea*, sheep's

sorrel *Rumex acetosella*, meadow vetchling, common vetch *Vicia sativa*, red clover *Trifolium pratense*, white clover *Trifolium repens*, meadow buttercup *Ranunculus acris* and yarrow. Scattered scrub includes locally abundant bramble with dog rose *Rosa canina*, silver birch *Betula pendula* and grey willow rare.

The eastern section of the site comprises a small area of marshy grassland, and tall ruderal habitats with the same species composition as in the western section. A small cutting lies along the south western edge of this section partly dominated by dense bramble scrub, with an area of developing woodland dominated by silver birch. A further strip of dense scrub separates the broadleaved woodland and the grassland within the site. The scrub is dominated by bramble with occasional hawthorn, willow, dog rose, blackthorn and alder.

A fence separates the grassland from the scrub, with a small strip of vegetation behind it. This whole area was surveyed from behind the fence as it could not be accessed. It comprises fine grass species, predominantly common bent *Agrostis capillaris* and a mix of herbs, including locally abundant mouse-ear hawkweed *Hieracium pilosella* and frequent common centaury, common cat's-ear *Hypochaeris radicata*, bird's-foot trefoil, selfheal *Prunella vulgaris* and perforate St John's-wort *Hypericum perforatum*. Common sedge is occasional.

The northern half of this section has recently been stripped of topsoil and is lower than the rest of the site. It comprises a stony, rubble substrate with only patchy vegetation and small areas of grassland beginning to develop.

Broadleaved woodland/plantation lies along the southern edge within both sections. This area could not be accessed and creates a buffer between the site and the busy Huddersfield Road.



UB1.01 Marshy grassland



UB1.02 Tall ruderals and scrub



UB1.03 Woodland strip



UB1.04 Marshy grassland



UB1.05 Unimproved neutral grassland

Species List for UB1

DAFOR Scale

D=dominant, A=abundant, F=frequent, O=occasional, R=rare, L=locally, P=present

Marshy Grassland (West)

Trees and Shrubs

Bramble	<i>Rubus fruticosus</i> agg.	LA
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Herbs

Yarrow	<i>Achillea millefolium</i>	O
Wild Angelica	<i>Angelica sylvestris</i>	O
Michaelmas-daisy	<i>Aster</i> sp.	R
Common Knapweed	<i>Centaurea nigra</i>	LA
Common Centaury	<i>Centaureum erythraea</i>	O
Rosebay Willowherb	<i>Chamerion angustifolium</i>	P
Creeping Thistle	<i>Cirsium arvense</i>	P
Marsh Thistle	<i>Cirsium palustre</i>	P
Orchid sp.	<i>Dactylorhiza</i> sp.	LA
Great Willowherb	<i>Epilobium hirsutum</i>	LA
Willowherb	<i>Epilobium</i> sp.	O
Lady's bedstraw	<i>Galium verum</i>	P
Hogweed	<i>Heracleum sphondylium</i>	O
Meadow Vetchling	<i>Lathyrus pratensis</i>	O
Autumn hawkbit	<i>Leontodon autumnalis</i>	O
Oxeye Daisy	<i>Leucanthemum vulgare</i>	O
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	P
Purple loosestrife	<i>Lythrum salicaria</i>	O
Ribwort Plantain	<i>Plantago lanceolata</i>	F
Creeping Cinquefoil	<i>Potentilla reptans</i>	O
Selfheal	<i>Prunella vulgaris</i>	O
Creeping Buttercup	<i>Ranunculus repens</i>	O
Common Sorrel	<i>Rumex acetosa</i>	O
Sheep's Sorrel	<i>Rumex acetosella</i>	R
Curled Dock	<i>Rumex crispus</i>	O

Grasses, Rushes and Sedges

Creeping Bent	<i>Agrostis stolonifera</i>	LA
Meadow Foxtail	<i>Alopecurus pratensis</i>	F
Glaucous Sedge	<i>Carex flacca</i>	LD
Hairy sedge	<i>Carex hirta</i>	LA
Pendulous sedge	<i>Carex pendula</i>	R
Crested Dog's-tail	<i>Cynosaurus cristatus</i>	F
Cock's-foot	<i>Dactylis glomerata</i>	O
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	LD
Yorkshire Fog	<i>Holcus lanatus</i>	A
Jointed Rush	<i>Juncus articulatus</i>	P
Compact Rush	<i>Juncus conglomeratus</i>	LD
Hard Rush	<i>Juncus inflexus</i>	P
Reed Canary-grass	<i>Phalaris arundinacea</i>	O (LD)

Mosses

Rough-stalked Feather Moss	<i>Brachythecium rutabulum</i>	O
Pointed Spear-moss	<i>Calliergonella cuspidata</i>	LD

Unimproved Neutral Grassland (West)

Trees and Shrubs

Silver Birch	<i>Betula pendula</i>	R
Oak sp.	<i>Quercus sp.</i>	R
Dog Rose	<i>Rosa canina</i>	R
Bramble	<i>Rubus fruticosus</i> agg.	LA
Grey Willow	<i>Salix cinerea</i>	R

Herbs

Yarrow	<i>Achillea millefolium</i>	O
Common Knapweed	<i>Centaurea nigra</i>	O
Common Centaury	<i>Centaureum erythraea</i>	O
Common Mouse-ear	<i>Cerastium fontanum</i>	O
Rosebay Willowherb	<i>Chamerion angustifolium</i>	LD
Marsh Thistle	<i>Cirsium palustre</i>	O
Smooth Hawk's-beard	<i>Crepis capillaris</i>	R
Hogweed	<i>Heracleum sphondylium</i>	O
Meadow Vetchling	<i>Lathyrus pratensis</i>	O
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	LA
Ribwort Plantain	<i>Plantago lanceolata</i>	O
Creeping Cinquefoil	<i>Potentilla reptans</i>	O
Selfheal	<i>Prunella vulgaris</i>	O
Meadow Buttercup	<i>Ranunculus acris</i>	O
Common Sorrel	<i>Rumex acetosa</i>	O
Sheep's Sorrel	<i>Rumex acetosella</i>	O
Common Ragwort	<i>Senecio jacobaea</i>	O
Red Clover	<i>Trifolium pratense</i>	O
White Clover	<i>Trifolium repens</i>	O
Common Vetch	<i>Vicia sativa</i>	O

Grasses, Rushes and Sedges

Common Bent	<i>Agrostis capillaris</i>	A
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	O
False Oat-grass	<i>Arrhenatherum elatius</i>	O
Hairy sedge	<i>Carex hirta</i>	R
Tufted Hair-grass	<i>Deschampsia cespitosa</i>	O
Red Fescue	<i>Festuca rubra</i>	A (LD)
Yorkshire Fog	<i>Holcus lanatus</i>	F
Compact Rush	<i>Juncus conglomeratus</i>	R
Timothy	<i>Phleum pratense</i>	O
Neat Feather-moss	<i>Pseudoscleropodium purum</i>	LA
Springy Turf-moss	<i>Rhytidiadelphus squarrosus</i>	LA

Scrub (West)

Trees and Shrubs

Alder	<i>Alnus glutinosa</i>	LD
Bramble	<i>Rubus fruticosus</i> agg.	A (LD)
Grey Willow	<i>Salix cinerea</i>	LA
Rose	<i>Rosa sp.</i>	O
Silver Birch	<i>Betula pendula</i>	O

Southern Strip of Grassland (East)

Herbs

Common Centaury	<i>Centaureum erythraea</i>	F
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Perforate St John's-wort	<i>Hypericum perforatum</i>	R
Cat's-ear	<i>Hypochaeris radicata</i>	F
Common Bird's-foot Trefoil	<i>Lotus corniculatus</i>	O
Selfheal	<i>Prunella vulgaris</i>	O

Grasses, Rushes and Sedges

Common Bent	<i>Agrostis capillaris</i>	F
Common Sedge	<i>Carex nigra</i>	O
Yorkshire Fog	<i>Holcus lanatus</i>	O

Figure 1. Phase 1 Habitat Map: October 2015
Site UB1

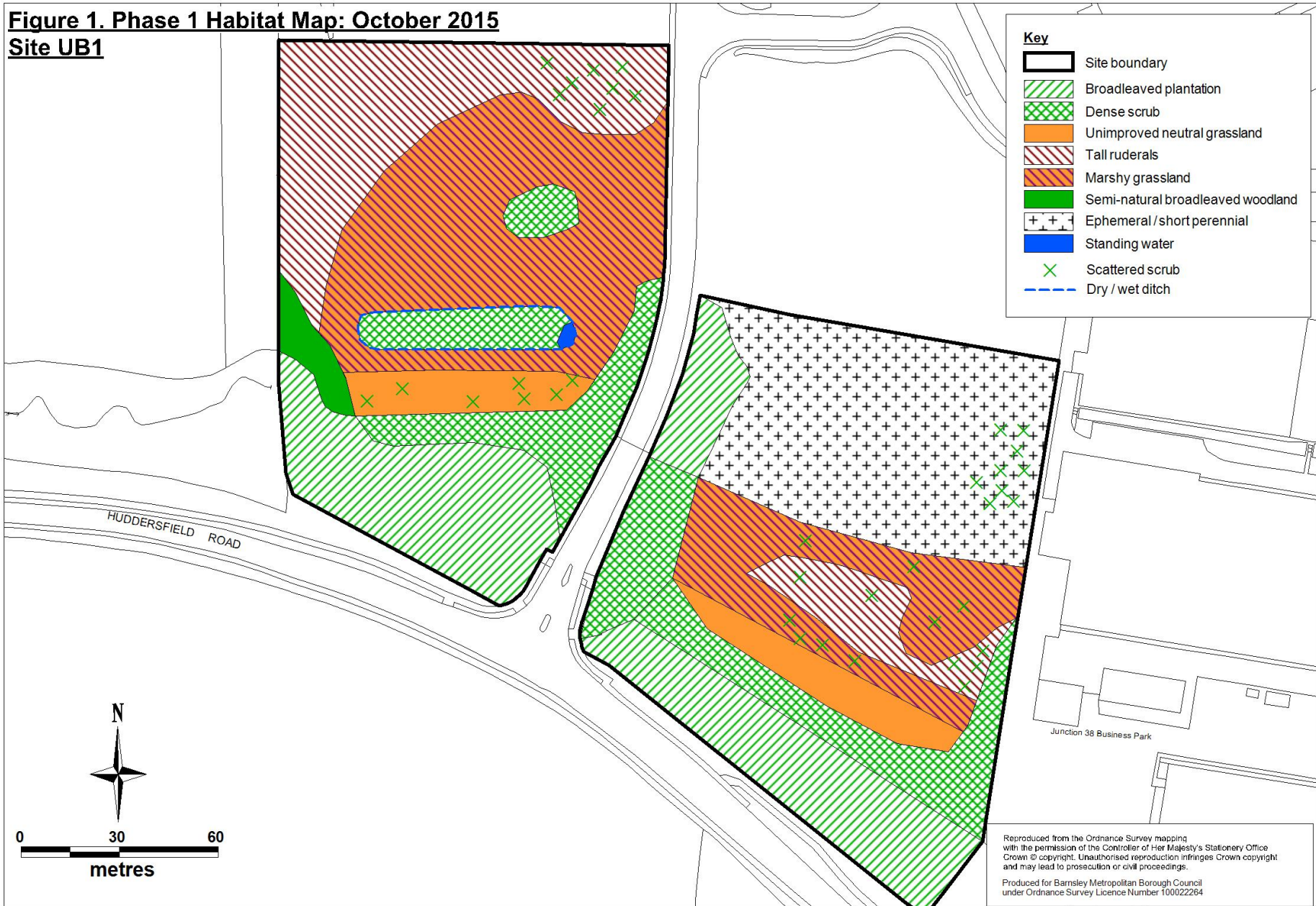
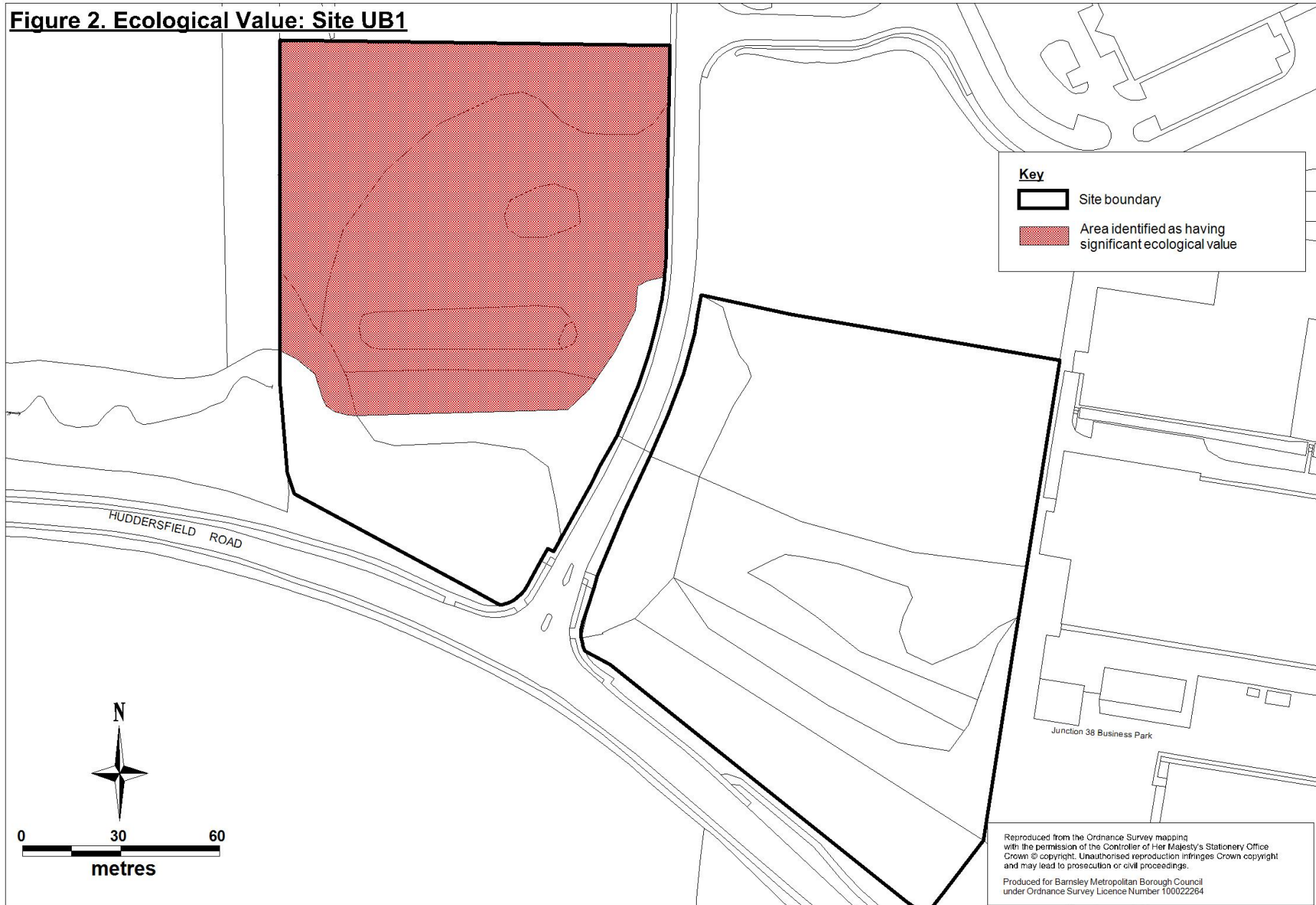


Figure 2. Ecological Value: Site UB1



Data Search – Local Records Centre

Notable species recorded within 1km of the site in the last 10 years (2005 – 2015)

A search for badger records has been carried out separately.

Group	Scientific Name	Common Name	Year	Location
Bird	<i>Chroicocephalus ridibundus</i>	Black-headed Gull	2013	Darton Park
Bird	<i>Falco tinnunculus</i>	Common Kestrel	2011	Haigh
Bird	<i>Milvus milvus</i>	Red Kite	2011	Kexborough
Bird	<i>Passer domesticus</i>	House Sparrow	2008	'BARNSELY MBC'
Bird	<i>Passer domesticus</i>	House Sparrow	2009	'BARNSELY MBC'
Bird	<i>Passer domesticus</i>	House Sparrow	2013	Land off Bloomhouse Lane
Bird	<i>Prunella modularis</i>	Hedge Accentor	2009	'BARNSELY MBC'
Bird	<i>Prunella modularis</i>	Hedge Accentor	2009	Deep Haigh,Rushworth,High, Scrat Haigh Wood
Bird	<i>Prunella modularis</i>	Hedge Accentor	2013	Land off Bloomhouse Lane
Bird	<i>Prunella modularis</i>	Hedge Accentor	2013	Longfields
Bird	<i>Prunella modularis</i>	Hedge Accentor	2013	Railway station
Bird	<i>Pyrrhula pyrrhula</i>	Common Bullfinch	2009	Deep Haigh,Rushworth,High, Scrat Haigh Wood
Bird	<i>Pyrrhula pyrrhula</i>	Common Bullfinch	2013	Land off Woolley Colliery Road
Bird	<i>Pyrrhula pyrrhula</i>	Common Bullfinch	2013	Land off Bloomhouse Lane
Bird	<i>Sturnus vulgaris</i>	Common Starling	2008	'BARNSELY MBC'
Bird	<i>Sturnus vulgaris</i>	Common Starling	2009	'BARNSELY MBC'
Bird	<i>Turdus philomelos</i>	Song Thrush	2009	Deep Haigh,Rushworth,High, Scrat Haigh Wood
Bird	<i>Turdus philomelos</i>	Song Thrush	2013	Longfields
Invertebrate	<i>Erynnis tages</i>	Dingy Skipper	2006	'BARNSELY MBC'
Invertebrate	<i>Erynnis tages</i>	Dingy Skipper	2011	old shale tips Darton
Terrestrial mammal	<i>Erinaceus europaeus</i>	West European Hedgehog	2014	Kexbrough
Vascular plant	<i>Hyacinthoides non-scripta</i>	Bluebell	2006	Birthwaite (West of Darton)