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Biodiversity Evidence Document – Aireborough NDP

**Aireborough Neighbourhood Development Forum**

November 2016

# Notice

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# 1 Purpose of Document

The Aireborough Neighbourhood Development Plan (NDP) purpose is to support national planning policy (National Planning Policy Framework (NPPF)) and Leeds' Core Strategy. In doing so, it is intended that it will enable and drive improvements to the district's biodiversity, ecosystem services and ecological landscape. It will achieve this by ensuring best practice is achieved as standard and firm adherence to National Planning Policy and Leeds' Core Strategy.

## 1.1 National Planning Policy

The NPPF sets out the Government's policy on planning and development. Section 11 (Paragraphs 109 to 125 inclusive) of the NPPF is the primary policy area covering the natural environment, including biodiversity. Of specific relevance are Paragraphs 109, 114, 117, 118 (see Boxed Text 1).

**Text 1:** Primary NPPF Policies relating to biodiversity

Paragraph 109: The planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, geological conservation interests and soils;
- recognising the wider benefits of ecosystem services;
- minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and
- remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

Paragraph 114: Local planning authorities should:

- set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure; and
- maintain the character of the undeveloped coast, protecting and enhancing its distinctive landscapes, particularly in areas defined as Heritage Coast, and improve public access to and enjoyment of the coast.

Paragraph 117: To minimise impacts on biodiversity and geodiversity, planning policies should:

- plan for biodiversity at a landscape-scale across local authority boundaries;
- identify and map components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation;
- promote the preservation, restoration and re-creation of priority habitats, ecological networks and the protection and recovery of priority species populations, linked to national and local targets, and identify suitable indicators for monitoring biodiversity in the plan;
- aim to prevent harm to geological conservation interests; and
- where Nature Improvement Areas are identified in Local Plans, consider specifying the types of development that may be appropriate in these Areas.

Paragraph 118: When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
- proposed development on land within or outside a Site of Special Scientific Interest likely to have an adverse effect on a Site of Special Scientific Interest (either individually or in combination with other developments) should not normally be permitted. Where an adverse effect on the site's notified special interest features is likely, an exception should only be made where the benefits of the development, at this site, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest;
- development proposals where the primary objective is to conserve or enhance biodiversity should be permitted;
- opportunities to incorporate biodiversity in and around developments should be encouraged;
- planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss; and
- the following wildlife sites should be given the same protection as European sites:
  - potential Special Protection Areas and possible Special Areas of Conservation
  - listed or proposed Ramsar sites; and
  - sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

**Text 2:** Additional NPPF Policy relating to biodiversity

Paragraph 81:

- Once Green Belts have been defined, local planning authorities should plan positively to enhance the beneficial use of the Green Belt, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

Leeds' Core Strategy and the Neighbourhood Development Plans, including Aireborough, are a mechanism by which Paragraphs 109 and 114 are delivered. Paragraphs 117 and 118 are the means by which biodiversity should be considered for protection when applying the NPPF in decision making. Therefore, this document provides the evidence on a local scale, i.e. within Aireborough that will underpin the deliverables required by Paragraphs 117 and 118 of the NPPF.

Elsewhere in the NPPF, there is also mention of the need to protect biodiversity. Paragraph 81 (see Text 2) relates to a planning authority's requirement to plan positively to retain and enhance biodiversity within the wider landscape that is designated as green belt. It is understood that local authorities can achieve this through their existing responsibilities such as minimising roadside verge maintenance during the spring and summer, outwith areas identified as meeting necessary Highway safety standards (e.g. visual splays). The evidence collected during summer 2016 has identified that such management approaches can protect Aireborough's biodiversity.

## 1.2 Leeds Core Strategy

The principle document that sets out local policy for biodiversity protection is Leeds City Council's *Core Strategy* ([1]Leeds City Council, 2014).

**Text 3:** Objective 17

> Protect natural habitats and take opportunities to enhance biodiversity through the creation of new habitats and by improving and extending wildlife corridors.

Objective 17 (see Text 3) sets out the Council's broad intentions for biodiversity protection within its jurisdiction and this is underpinned by three key policy areas (see Text 4).

**Text 4:** Leeds Core Strategy key policies on landscape biodiversity protection

**Policy G1: Enhancing and Extending Green Infrastructure**

Where a development is considered to be acceptable within or adjoining areas defined as Green Infrastructure or on any future LDF Allocation Documents, development proposals should ensure that:

- Green Infrastructure/corridor function of the land is retained and improved, particularly in
  - areas of growth,
- Where appropriate, the opportunity is taken to extend Green Infrastructure by linking green spaces or by filling in gaps in Green Infrastructure corridors, including (where relevant) extending these into Leeds City Centre. Street trees and green roofs are particularly encouraged,
- A landscaping scheme is provided which deals positively with the transition between development and any adjoining open land,
- The opportunity is taken to increase appropriate species of woodland cover in the District,
- Provision for and retention of biodiversity and wildlife,
- Opportunities are taken to protect and enhance the Public Rights of Way (PROW) network through avoiding unnecessary diversions and by adding new links.

**Policy G2: Creation of New Tree Cover**

Development which would result in harm to, or the loss of, Ancient Woodland and Veteran Trees will be resisted. In supporting the need and desire to increase native and appropriate tree cover, the Council will, on its own initiative and through the development process, including developer contributions, work towards increasing appropriate species of woodland cover in the District. Delivery will involve planting in both urban and rural areas, and partnership with the Forestry Commission, Natural England and landowners. Development in the urban area of the City, including the City Centre will include the planting of street trees in appropriately designed pits to increase the area of tree canopy cover.

**Policy G9: Biodiversity Improvements**

Development will be required to demonstrate:

- That there will be an overall net gain for biodiversity commensurate with the scale of the development, including a positive contribution to the habitat network through habitat protection, creation and enhancement, and
- The design of new development, including landscape, enhances existing wildlife habitats and provides new areas and opportunities for wildlife, and
- That there is no significant adverse impact on the integrity and connectivity of the Leeds Habitat Network.

In addition to the designated sites (see Table 1), Leeds City Council has identified and defined the Leeds Habitat Networks (LHN). These are designated to identify those areas outside the designated site

[1] Leeds City Council. (2014) *Core strategy. Leeds Local Development Framework*. Adopted: 12th November 2014. Leeds City Council, Leeds. Available on-line: http://www.leeds.gov.uk/SiteAllocationMaps/Core%20Strategy/Adopted%20Core%20Strategy%20Nov%202014%20Final.pdf.

network (Table 1) which are considered to provide an ecological role in conserving biodiversity and avoiding isolating sites through strategic land planning. The LHN's integrity is protected through Policy G9. The LHN has been updated in 2014 ([2]Leeds City Council, 2015a) which adds that in addition to protecting its integrity, it identifies opportunities for enhancement and habitat creation.

Within Aireborough, the LHN is largely confined to the outer margins of the region; for example on Haworth Moor and the agricultural land (field network) between Guiseley, Otley and the Chevin.

This document describes the ecological features, habitats and networks and attributes of interest that will underpin Aireborough's NDP within the context of the policies set out in the boxed texts above. It aspires to identify the nature conservation value attributable to Aireborough's Greenspace, including its intrinsic value afforded by those who live and work within its boundaries to create a document that informs decision makers of the minimum standards expected to deliver its objectives. It is the result of expert led community research in 2016.

[2] Leeds City Council. (2015a) *Site Allocations Plan and Aire Valley Leeds Area Action Plan. Nature Conservation Background Paper*. Publication Draft informing the Leeds Local Development Framework Development Plan Document. Version: September 2015. Available on-line: http://www.leeds.gov.uk/SiteAllocationMaps/SAP%20and%20AVL%20Documents/09%20Nature%20Conservation%20Background%20Paper%20Publication%20Draft%20Final%20pt1lr.pdf; last accessed on 26th October 2016

[3] Available on-line: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/409431/pb14221-national-pollinators-strategy.pdf; last accessed on 4th November 2016

[4] Available on-line: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/370121/pb-14222-pollinator-strategy-supporting-doc.pdf; last accessed on 4th November 2016

[5] Available on-line: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf; last accessed on 4th November 2016

# 2 Research and Analysis

The Aireborough NDF aims to identify and conserve ecological habitats for the purpose as previous stated in Section 1. The research strategy chosen was inductive building up a picture of the local ecology and opportunities using expert led mixed methods as detailed below. The work was undertaken in conjunction with a Landscape Character and Value Research Project.

## 2.1 Research Phase 1

Exploring current designations and West Yorkshire Ecology (biological records centre) datasets; and additional historical survey information from selected professional surveys informing planning applications over a number of years has been reviewed and summarised in the context of the seven sites surveyed in detail (see Section 2.2).

## 2.2 Research Phase 2 – Initial Habitat Surveys on Allocated Development Sites

In early spring 2016, seven allocated development sites (ADS) identified on Leeds City Council's Site Allocation Plan ([6]Leeds City Council, 2015b) were surveyed following the standard Phase 1 habitat survey methodology ([7]Joint Nature Conservation Committee (JNCC), 2010). Detailed citations of most sites are provided in Appendix A of this document.

## 2.3 Research Phase 3 – Expert Led Community Ecology Survey

Following on from the baseline surveys, a workshop was held in Guiseley to engage local residents in surveying fauna and flora within Aireborough, using the seven ADSs as a starting point but increasing the survey area via additional sites and land parcels on the Forum's own initiative providing an enhanced baseline of additional ecological data throughout the spring and summer of 2016 based on their own knowledge and experience. The sites chosen for this extra work came from the detailed Landscape Character Research. This supplementary information demonstrates that local residents value these open spaces, which for some sites, bring the countryside in to the more urban footprint of Guiseley and Yeadon. Retaining this contextual relationship will be relevant and important on a human level; but also necessary in ecological terms too. This study, in context with the surrounding landscape will inform relevant opportunities for enhancing habitat connectivity and therefore biodiversity within the District. These areas identified for biodiversity enhancement may be considered for designation as Local Green Space. This survey data collected by volunteers has been assimilated, with details showing Key characteristics of findings for each site drawing on the most relevant aspects which in combination With the spring 2016 surveys and professional judgment, has informed Section 6.

[6] Leeds City Council. (2015b) *Site Allocations Plan. Section 3: Area Proposals: 1. Aireborough*. Publication Draft informing the Leeds Local Development Framework Development Plan Document. Version: September 2015. Available on-line: http://www.leeds.gov.uk/SiteAllocationMaps/SAP%20and%20AVL%20Documents/01%20Aireborough.pdf; last accessed on 27th October 2016

[7] JNCC. (2010) *Handbook for Phase 1 habitat survey. A technique for environmental audit*. Revised Reprint. JNCC, Peterborough. Available on-line: http://jncc.defra.gov.uk/PDF/pub10_handbookforphase1habitatsurvey.pdf

# 3 Aireborough's Ecological Landscape

## 3.1 Setting

Aireborough occupies an area of approximately 25 km$^2$, in an approximate south-east – north-west axis on the edge of the conurbation of Leeds and Bradford. The north-western sector (including Menston and north Guiseley) is located within the South Pennine National Character Area (NCA) ([8]Natural England, 2014a); whilst the south-eastern sector (including south Guiseley and Yeadon) falls within the Nottinghamshire, Derbyshire and Yorkshire Coalfield NCA ([9]Natural England, 2014b).

Topographically, Aireborough rises from the lowlands on the outskirts of Leeds to the higher ground of Hawksworth Moor in the north-west with the settlements of Guiseley and Yeadon centrally located. The glacial hanging valley of the Guiseley Gap, between Airedale and Wharfedale is an important feature which affords a corridor for nature, ecology, habitat and movement and informs the boundary of thetwo NCAs.

Approximately two-thirds of the land within Aireborough is designated greenbelt; a land use comprising largely arable, pasture and meadow, with woodland, smallholdings, quarrying, recreation, water management and the intensively managed grouse moors on Hawksworth Moor .

The dominant geology is the Millstone Grit series, which include the East Carlton Grit and Guiseley Grit of the Upper Carboniferous (deposited between 317 million and 315 million years ago) overlain by glacial till (unsorted heterogeneous material deposited by a glacier). The Millstone Grit series reflect the fluctuations in sea level experienced during the Carboniferous period when ice-caps waxed and waned at the South Pole. The Millstone Grit has been of economic importance for building stone, paving slabs and roofing material.

A number of smaller watercourses flow north-south and go by a number of local names. The Yeadon Gill issues from central Yeadon and flows south joining the Guiseley Beck just before the confluence with the River Aire; Calfhole Beck flows from the north of Aireborough, and meanders its way south between Yeadon (Shaw Lane) and Guiseley, becoming Nun Royd Beck and then Guiseley Beck; and Mire Beck flows north at the western end of Aireborough and flows through Menston, becoming the Gill Beck and then the Mickle Ing Beck, before meeting the River Wharfe.

Thus, whilst the Rivers Aire and Wharfe flow to the south and north respectively and neither form, nor penetrate Aireborough itself; the region straddles both their catchments and thus has influence on the hydrology of both systems.

[8] Natural England. (2014a) *Natural Area Character Profile. 36: Southern Pennines*. Natural England, Sheffield. Available on-line: http://publications.naturalengland.org.uk/file/5685649550082048

[9] Natural England. (2014b) *Natural Area Character Profile. 38: Nottinghamshire, Derbyshire and Yorkshire Coalfield*. Natural England, Sheffield. Available on-line: http://publications.naturalengland.org.uk/file/6203763674054656

# 4 Designated Landscape (Biodiversity)

## 4.1 Designated Sites

In total, just under 230 ha (just over 9 % of Aireborough) is statutorily designated for nature. All of this land is within the high ground associated with Haworth Moor. An approximate further 42 ha, or just under 2 % of Aireborough, is protected through local designations but these are more evenly distributed (see Table 1 for details).

**Table 1: Protected sites located within Aireborough**

| Tier | Designation | Name | Description |
|---|---|---|---|
| International | Special Protection Area (SPA) | South Pennine Moors | The South Pennine Moors SPA covers extensive tracts of semi-natural moorland including upland heath and blanket mire. They have been designated for important breeding populations of European golden plover (*Pluvialis apricaria*), merlin (*Falco columbarius*), peregrine (*Falco peregrinus*), short-eared owk (*Asio flammeus*) and dunlin (*Calidris alpina* ssp. *schinzii*).<br>Just over 1 % of the SPA is located within Aireborough. |
| | Special Area of Conservation (SAC) | South Pennine Moors | The South Pennine Moors SAC is designated for its heathland, blanket bogs and old sessile oak woodlands, in addition to important wet heaths, transitional mires and quaking bog communities.<br>Approximately 0.35 % of the SAC is located within Aireborough. |
| National | Site of Special Scientific Interest (SSSI) | South Pennine Moors | The Moors have been designated for their upland vegetation communities and breeding bird assemblages, which in addition to those cited in the SPA, include ring ouzel (*Turdus torquatus*) and whinchat (*Saxicola rubetra*).<br>The Unit within Aireborough (Haworth Moor) is identified as being in Unfavourable Recovering, as are all adjacent units. The reason cited for this is excessive burning, with little diversity and a poor bryophyte layer; characteristic of intensive grouse moor management.<br>Just over 1 % of the SSSI is located within Aireborough. |
| | | Yeadon Brickworks and Railway Cutting | The rock exposures within this site provide a most important cross-section through shales and sandstones of the Namurian Series, originally formed about 350 million years ago during the Carboniferous Period of geological history. The shales include important layers rich in the fossil remains of marine animals known as goniatites (related to ammonites). |
| | | [10]Great Dib Wood, The Chevin | This site provides exposures of rocks of the Namurian Series, formed during the |

[10] Great Dib Wood, is, by a matter of a few metres, just outside the northern boundary of Aireborough and is included in this table for completeness.

| Tier | Designation | Name | Description |
|---|---|---|---|
| | | | Carboniferous Period of geological history about 320 million years ago. Two sandstone layers are exposed, separated by a layer of mudstone and limestone known as the Otley Shell Bed which is rich in the fossilised remains of the animals that inhabited the Carboniferous sea. This fossil-rich bed is of great geological interest principally because of the variety of fossils it contains, but also because it is one of the youngest rock-layers known to contain the remains of a now-extinct group of animals known as tribolites |
| County | Site of Ecological of Geological Importance (SEGI) | Hawksworth Spring Wood | A proportion of this broadleaved woodland straddles the Aireborough boundary. It can be divided in to three distinct communities: an oak-dominated canopy with a variable understorey and ground flora, which includes a number of ancient woodland indicators. The steeper slopes support a community with an increase in holly (*Ilex aquifolium*), and the wet woodland community associated with Gill Beck has a canopy predominantly of alder (*Alnus glutinosa*) and a ground flora that includes the rare, in Yorkshire, alternate-leaved golden-saxifrage (*Chrysosplenium alternifolium*). |
| | | Rawdon Ponds | A grazed field with a waterbody supporting a population of great crested newt (*Triturus cristatus*) and four other species of amphibian. The waterbody's vegetation is relatively diverse and includes the regionally rare tubular water-dropwort (*Oenanthe fistulosa*) and water soldier (*Stratiotes aloides*). Surrounding the waterbody is a marshy grassland/ rush pasture community. |
| | | The Chevin | Designated as a regionally important geological site and a Local Nature Reserve. The latter supports scrub, heathland and grassland communities. Most of the site is outside Aireborough but runs along the northern boundary following the escarpement. |
| | Local Wildlife Site (LWS) | Great Wood/ West Wood | Woodlands. |
| District | Leeds Nature Area (LNA) | Nunroyd Park | LNAs are normally designated as a consequence of supporting some semi-natural vegetation communities or local significance. |
| | | Yeadon Tarn | |
| | | Engine Fields | |
| | | New Dam | |
| | | Airport Reservoirs | |
| | | Deipkier Wood | |
| | Bradford Nature Area (BNA) | Hawkstone Wood BNA | BNAs are normally designated as a consequence of supporting some semi-natural vegetation communities or local significance. |
| | | Spring & Jerrison Woods BNA | |

## 4.2 Designated Landscapes

As stated in Section 1.2, the LHNs are areas of land that are designated to identify those areas outside the designated site network (see above Table 1) which are considered to provide an ecological role in conserving biodiversity and avoiding isolating sites through strategic land planning.

Within Aireborough, the LHN is largely confined to the outer margins of the region; for example on Haworth Moor and the agricultural land (field network) between Guiseley, Otley and the Chevin. Taking in to account the Aireborough Landscape Report ([11]Placecraft Landscape Consultants, 2016) and the biodiversity surveys completed during spring and summer 2016, priority areas where ecological corridors need protecting ('pinch points') can be identified and thus link up the wider LNH network. This will maximise the benefits of the surveys undertaken during 2016 and provide a distinct and bespoke policy for protecting and enhancing Aireborough's biodiversity.

## 4.3 Influences on Biodiversity

Aireborough's natural setting, including its geology and geomorphology, in combination with its historic and current land use to influence the District's biodiversity; and therefore the opportunities that can be realised.

### 4.3.1 Natural Influences

Topographically, Aireborough rises from south-east to north-west, with the glacial hanging valley of the Guiseley Gap severing this topography but providing an important feature connecting Airedale with Wharfedale, and providing a potential corridor linking the two.

This generalisation is reflected in the NCAs. The north-western sector is located within the South Pennine NCA and is characterised by the large-scale open landscape such as Hawksworth Moor which supports open moorland and mosaics of upland vegetation including heathland, mires and bogs. These areas should, in the absence of ongoing and damaging management practices (see Section 4.3.2) support mosaics of species-diverse mires and bogs; with, for example, a characteristic avifauna that ought to include hen harrier (*Circus cyanaeus*), merlin (*Falco columbianus*), golden plover (*Pluvialis apricaria*) and twite (*Carduelis flavirostris*). On lower ground, hay meadows, in the absence of over-grazing, should predominate the landscape, and on the edge of watercourses such as Mire Beck, periodically inundated grasslands should support a lowland wet grassland, as suggested by place names such as 'Ings'.

The south-eastern sector falls within the Nottinghamshire, Derbyshire and Yorkshire Coalfield NCA, which is a fragmented landscape of pre-industrial remnant woodlands, and more semi-natural habitats that reflect the environment's industrial and agricultural heritage. The dominant landuse here is a mix of mostly pasture with hedgerows as field boundaries and scattered woodlands, though much biodiversity has been lost (see Section 4.3.2). What remains is marginalised or isolated in small pockets; or along narrow corridors following the watercourses that penetrate the landscape.

This is reflected in the designated landscape; with SSSIs located on the outer perimeter of Aireborough, confined to the South Pennine Uplands. The more important non-statutory sites such as the SEGI and LWS are semi-natural woodlands, located within the Aire Valley; whilst the smaller, isolated land parcels supporting remnant semi-natural vegetation of varying types but typically grass-dominated are scattered within settlements. Thus the more urban biodiversity is generally isolated and more likely supports generalist species which can readily adapt to a wide range of environments and habitats; specialising in none.

The other major influence on biodiversity is the underlying geology, which in the instance of Aireborough is predominantly the Millstone Grit overlain by glacial till. Where the Millstone Grit outcrops, or significantly influences the soil chemistry, the vegetation communities reflect this; with heath/ moorland in the uplands; and where glacial till has a greater influence, a more neutral (mesotrophic) vegetation community may prevail; characterised by neutral grasslands and woodlands.

[11] Placecraft Landscape Consultants. (2016) *Draft Aireborough Landscape Study Report*. Unpublished report for Aireborough Neighbourhood Development Forum. Placecraft Landscape Consultant, Huddersfield.

### 4.3.2 Anthropogenic (Human-induced) Influences

Outside the settlements of Menston, Guiseley and Yeadon, the dominant landuse in the lowlands is agricultural (pasture); and in the uplands; managed as intensive grouse moors. Both have and continue to constrain biodiversity. Intensively managed grouse moors seek to maximise red grouse (*Lagopus lagopus* ssp. *scoticus*) for the purposes of shooting the surplus. This is largely achieved by extensive strip-burning, damaging the underlying peat, including the bog-forming *Sphagnum* mosses; and all ecological competition is eradicated, including potential grouse predators (some legal, some illegal). Within the lowlands, intensive agriculture has resulted in an over-grazed landscape or species-poor pasture, maximising grass yields for the livestock. In both these environments, semi-natural vegetation is marginalised to field edges or embankments of watercourses, with the possible exception of some of the non-statutory sites which are regularly managed for nature conservation.

# 5 Biodiversity Baseline

The sites surveyed during spring and summer 2016 are described in Table 3 below. They are clustered according to their position within the Aireborough Landscape Character Area (LCA) as defined by the *Draft Aireborough Landscape Study Report* (Placecraft Landscape Consultants, 2016) and considered in relation to the development tension points (DTP) identified in the landscape study.

**Table 2:** DTPs identified in Aireborough

| DTP | Description (from *Draft Aireborough Landscape Study Report*) |
|---|---|
| B | The Hillside Avenue development to the east of Chevin End Road climbs aggressively up the hillside (as the name suggests), again with extensive use of white in the decor. There is no sense of this development respecting or responding to the landscape setting and it sets an unwelcome precedent on the north side of the Guiseley Gap valley for building to creep up the Chevin Slopes. |
| C | The Wills Gill landscape's contact with Queensway and the reciprocal sense of connection with countryside is fundamental to the character of Guiseley and Yeadon. This point of connection is already squeezed to its limit and could easily be lost. |
| D | Development on the flanks of Yeadon Haw already sets up an abrupt and unsympathetic edge but just stops short of obscuring the relationship between the Haw itself and the open land of Wills Gill and Guiseley Moor. The slopes known as Yeadon Banks are conspicuous from many viewpoints and form a crucial part of the sweep referred to earlier under Chevin Slopes (LCA 7), so any further creep here would be highly damaging. |
| G | The sloping fields of Westfield are outside the Plan area and under Bradford's jurisdiction but further development here would change the nature of the relationship with the valley, which is already compromised by the existing development on Woodlea and Greenlea to the east. |
| H | The built development on the crest of Hollins Hill is a profoundly insensitive imposition on the legibility of the Hawkstone ridge and destroys any chance of connecting LCA 16 and LCA 17, which more sensitively would restrict settlement to north of the ridge |

For the avoidance of doubt, DTPs are defined by Placecraft Landscape Consultants (2016) as recent development that has strayed away from the more organic settlement growth form, including the use of building materials, which would typically follow natural contours and features. This has resulted in tensions, or stark contrasts, between this developed environment and the rural, more open landscape. Thus, more recent development may ignore natural contours and sight lines, use building materials that fail to blend in through natural weathering or design; or encroach on the landscape as blocks of bespoke development. The relevance to biodiversity is that this may result in habitats becoming fragmented and isolated, preventing less mobile species such as amphibians from dispersing through the landscape. By defining the baseline, identifying the nearest DTP, particularly in relation to the LHN, this can lead to local opportunities within the context of Leeds' Core Strategy that can prioritise mitigation and enhancement opportunities identified in Table 4 (Section 6).

In referring to Table 3, the site citations for a number of sites are included in Appendix A. These sites are marked with a '†'. The site citations describe the sites in more detail and include reference to historical data held by West Yorkshire Ecology and forwarded on by the Forum as necessary.

**Table 3:** Summary descriptions of allocated sites within Aireborough

| Aireborough LCA | Sites Surveyed | General Description | Nearest relevant DTP | Relationship with LHN | Core Strategy Policies |
|---|---|---|---|---|---|
| LCA 7 | †Ings Lane | Three improved fields supporting a grassland community that is the classic lowland permanent pasture in England. Each field is divided by species-poor hedgerows with mature trees. The Mire Beck, forms the western boundary of the site.<br>The pasture is believed to support curlew (*Numenius arquatus*) and lapwing (*Vanellus vanellus*) as breeding species. Water voles (*Arvicola amphibious*) are believed to be present within Mire Beck. There is said to be white-clawed crayfish (*Austropotamobius pallipes*) within the Beck too; though this is now considered to be highly improbable.<br>Surveys during summer 2016 confirmed the presence of curlew and lapwing, which were again observed and are considered to breed within the site. Lapwings were observed defending eggs/ young in early May 2016 with nests and breeding behaviour. Curlew also observed on site in mid-June 2016.<br>Ground conditions are wet and there is consistent evidence including photographs in winter illustrating flooding, as well as the site's name ('Ing' refers to flooded meadows) that the pasture is regularly periodically inundated.<br>Plant species observed during the summer season include cow parsley (*Anthriscus sylvestris*), meadow buttercup (*Ranunculus acris*), lesser celandine (*Ficaria verna*). Common butterfly species observed included red admiral (*Vanessa atlanta*) and small white (*Pieris rapae*). | None | Western boundary of site is functionally connected to LHN via the Mire Beck. | Policy G1<br>Policy G9 |
| LCA 7 | High Royds | Roadside verges associated with the High Royds estate were | None | Southern boundary of the High | Policy G1 |

| Aireborough LCA | Sites Surveyed | General Description | Nearest relevant DTP | Relationship with LHN | Core Strategy Policies |
|---|---|---|---|---|---|
| | | walked over in autumn 2016 by a local resident (professional ecologist) and a brief species list compiled. The plants identified were widespread species common to verges throughout England, including Aireborough and would be reasonably expected in any similar situation. This included ribwort plantain (*Plantago lanceolata*), creeping buttercup (*Ranunculus repens*), common nettle (*Urtica dioica*) and thistles (*Cirsium* sp.). Hedgerow species included hazel (*Corylus avellana*) and sycamore (*Acer pseudoplatanus*). The non-native and invasive Indian balsam (*Impatiens glandulifera*) was observed here.<br>Three species of common and widespread bats were recorded associated with the balancing pond. | | Royds estate is functionally connected to the LHN via the Mire Beck. | Policy G2<br>Policy G9 |
| LCA 8 | Bracken End & Kelcliffe | Various fields, mostly horse grazed paddocks with generally species-poor grassland typical of this environment. Southern area, close to housing off Kelcliffe Lane and Oxford Avenue, managed as a community park. Mosaics of tussocky grassland and scrub with some mature trees.<br>Footpath to the rear of Hillside Avenue, with a mix of tall hedgerows supporting holly (*Ilex aquifolium*), silver birch (*Betula pendula*), bramble (*Rubus fruticosus* agg.) and hawthorn (*Crataegus monogyna*). Range of common bird species associated with woodland and scrub edge, including blackbird (*Turdus merula*), robin (*Erithacus rubecula*) and house sparrow (*Passer domesticus*). Tawny owl (*Strix aluco*) believed to be roosting/ nesting in some of the more mature trees. | DTP B | Isolated from the LHN by field pasture; the closest straight-line distance being *c*. 500 m to the north; and *c*. 400 m to the east. | Policy G1<br>Policy G2<br>Policy G9 |
| LCA 10 | †Wills Gill | Improved grassland pasture with a number of isolated mature trees. An unnamed watercourse on modern OS Maps, but possibly historically referred to as the Wills Gill Beck, flows from the north to south and forms the site's western boundary.<br>Surveys in summer 2016 identified a range of plant species | DTP C | The site is located close to the LHN that includes Deipkeir wood and the watercourses that meander through this area. | Policy G1<br>Policy G2<br>Policy G9 |

| Aireborough LCA | Sites Surveyed | General Description | Nearest relevant DTP | Relationship with LHN | Core Strategy Policies |
|---|---|---|---|---|---|
| | | associated with woodland edge and grasslands including meadow buttercup, creeping buttercup, cuckoo-flower (*Cardamine pratensis*), foxglove (*Digitalis purpurea*) and dog's mercury (*Mercurialis perennis*). A wide range of common bird species including sparrowhawk (*Accipiter nisus*), wood pigeon (*Columba palumbus*) and goldfinch (*Carduelis carduelis*) have also been recorded.<br>Deipkeir LNA is located approximately 450 m east of the site. The unnamed watercourse links the site to the extensive LHN to the north. | | | |
| LCA 11 | †Shaw Lane | A continuation of Wills Gill (see above). | DTP D | The site is located close to the LHN that includes Deipkeir wood and the watercourses that meander through this area. | Policy G1<br>Policy G2<br>Policy G9 |
| LCA 11 | Yeadon Banks | Area of sloping ground to the north of Haw Lane and south of Deipkeir Wood, managed as grazing pasture with scattered scrub and trees, including elder (*Sambucus nigra*) and alder (*Alnus glutinosa*) along the unnamed watercourse flowing east-west and its confluence with Calfhole Beck. The area surveyed can be viewed as a continuation of the open habitats on the northern fringe of Yeadon that have been described in more detail under Wills Gill and Shaw Lane.<br>The flora and fauna recorded within Yeadon Banks is typical of a grazed pasture field-system bounded by hedgerows. Some species such as cuckooflower (*Cardamine pratensis*) are indicative of damper soil conditions.<br>Plant species, presumably associated with the field margins and the watercourse include common mouse-ear (*Cerastium fontanum*), common dog-violet (*Viola riviniana*) and opposite-leaved golden saxifrage (*Chrysosplenium oppositifolium*). | DTP D | The site is within the LHN. | Policy G1<br>Policy G9 |

| Aireborough LCA | Sites Surveyed | General Description | Nearest relevant DTP | Relationship with LHN | Core Strategy Policies |
|---|---|---|---|---|---|
| | | Widespread and common lowland farmland bird species observed including great tit, chaffinch, goldfinch, skylark and jackdaw. Common butterflies including small tortoiseshell, green-veined white, meadow brown and large white.<br>Likewise, its proximity to Deipkeir LNA and the wider LHN also affords comparable ecological connectivity. | | | |
| LCA 12 | †Victoria Avenue | A single field sandwiched between Yeadon Tarn and the A658 (Victoria Avenue), just south of Leeds Bradford International Airport. The majority of the field consists of semi-improved grassland with a small area of marshy grassland at the western end.<br>Yeadon Tarn LNA abuts the site's western boundary and Rawdon Ponds SEGI is *c*. 450 m south-east but ecologically isolated by the industrial estate associated with LBIA. | None | The site falls within the LHN. It is functionally connected to Yeadon Tarn LNA but also abuts the operational area of Leeds-Bradford International Airport. Separated from LHN that extends south-east towards Rawdon by A658. | Policy G1<br>Policy G9 |
| LCA 16 | †Gill Lane | Improved grassland with small unnamed watercourse flowing through, resulting in small areas of impeded drainage (marshy grassland). Some unmanaged overgrown hedgerows and mature trees.<br>A report has identified and described the 21 individual mature trees on site based on a general layperson's consideration of their condition. Pedunculate oak (*Quercus robur*) and ash (*Fraxinus excelsior*) are the dominant tree species though specimen red oak (*Quercus rubra*), a non-native species and horse chestnut (*Aesculus hippocastanum*) are also present. | DTP G | A small area of LHN extends south-west from the site. However, by its nature, surrounded by residential development, including main roads, this is quite an isolated site. | Policy G1<br>Policy G9 |
| LCA 17 | †Coach Road | Three fields divided by dry-stone walls. Two fields of pasture and one of taller, tussocky grassland. A small plantation woodland is present abutting the boundary with Coach Road.<br>Summer surveys identified a woodland flora including wood mellick (*Melica uniflora*), common cow-wheat (*Melampyrum* | DTP H | Not located close to LHN. However, the adjacent railway line, although not formally defined as a LHN will provide a similar function. | Policy G1<br>Policy G2<br>Policy G9 |

| Aireborough LCA | Sites Surveyed | General Description | Nearest relevant DTP | Relationship with LHN | Core Strategy Policies |
|---|---|---|---|---|---|
| | | *pratense*) and bluebells (*Hyacinthoides non-scriptus*). Other woodland species such as speckled wood butterflies (*Pararge aegeria*) and various common bird species were also observed during the summer surveys.<br>A number of non-statutory sites are located close to the site's boundaries; of which Hawkstone Wood BNA and Spring & Jerrison Woods BNA are located approximately 820 m west and 525 m south of the site respectively. They have both been designated for their woodland communities and in particular the presence of bluebells (*Hyacinthoides non-scripta*). | | | |
| LCA 18 | †Hollins Lane | A single field comprising species-poor improved grassland pasture. | DTP H | Isolated from the LHN by field pasture; the closest straight-line distance being *c.* 250 m to the east but separated from it by the A6038. | Policy G2<br>Policy G9 |

## 5.1 Intrinsic Biodiversity Value

A significant volume of data describing the observations and recording of species within the sites described in Table 3 has been collated by community surveyors. The majority of these records represent the typical flora and fauna of urban and peri-urban environments influenced by human activity; which in this instance is mostly related to agricultural land management, principally grazing.

The value of these records extends beyond the pure nature conservation element of the process. It demonstrates the high intrinsic value that local residents have for their greenspace. This is reflected in their interactions with it and their perceived impressions which came across at the workshop. The opportunities presented in Section 6 emphasise the high value the community in Aireborough has towards its natural environment.

# 6 Opportunities

The opportunities identified in Table 4 are particularly relevant when considering possible mitigating actions addressing the five DTPs (see Table 2 that are closest to the land parcels surveyed during 2016. DTPs are defined as locations where recent or potentially new development have strayed from the natural setting and are at 'tension' with the visual landscape. In alternative parlance, the built or managed landscape appears to be antagonistic or 'out of place' within the context of Aireborough.

The opportunities presented in Table 4 below will contribute to intelligently mitigating the DTPs at these locations in addition to providing the desired ecological benefits. Possible options for achieving this could be through strategic planting and integrating internal greenspace reflecting the landform within which any new development resides.

**Table 4:** Opportunities for Aireborough

| Aireborough LCA | DTP & Designated Landscape | Opportunities | Cumulative Opportunities |
|---|---|---|---|
| LCA 7 | **DTP:** None<br>**Designated Landscape:** LHN | Within the LCA, there are opportunities to enhance the Mire Beck corridor, which currently connects LHNs to land parcels associated with Ings Lane and High Royds. Opportunities should therefore include:<br>• retaining a sufficient land buffer between any future development and the Mire Beck to accommodate sensitive landscaping and public access. This would enhance the corridor and strengthen the integrity of the LHN in this sector of Aireborough; and<br>• enhancing the floristic diversity to benefit [12] pollinators such as bees, sawflies, flies and beetles. Maximising pollinator diversity requires a wide range of flower species; and of equal importance, structural forms (e.g. open flowerheads such as member of the carrot family (Apiaceae) to closed types such as members of the pea family (Fabaceae)).<br>Given the potential for breeding waders within the fields adjacent to Mire Beck at Ings Lane, any development proposals will require an up to date baseline [13] breeding bird survey to identify territory distribution, particularly for curlew and lapwing; and thus inform layout and design. This area may be able to be concurrently managed as a Sustainable Urban Drainage Scheme (SUDS) with an appropriate floristically diverse flood meadow incorporated in | None within Aireborough but opportunities may exist with adjacent NDPs in Bradford. |

[12] Whilst bees are the classic pollinators, this guild of invertebrates extends to other groups of which the flies (Diptera) are particularly important, disproportionately so the further north in Britain one is.

[13] The O'Brien and Smith methodology [O'Brien, M. and Smith, K.W. (1992) Changes in the status of waders breeding on wet lowland grasslands in England and Wales between 1982 and 1989. *Bird Study*, **39(3):** 165 – 176] is the most relevant methodology in this instance given the target species are curlew and lapwing; but the standard Common Bird Census 'territory mapping' methodology, given the relative compact nature of the site would very likely be acceptable.

| Aireborough LCA | DTP & Designated Landscape | Opportunities | Cumulative Opportunities |
|---|---|---|---|
| | | to any future design. The design of SUDS here (and elsewhere within Aireborough) should follow the principles set out in [14]Graham *et al.* (2013). | |
| LCA 8 | **DTP:** B<br>**Designated Landscape:** None | Strengthen land parcel boundaries around Kelcliffe to reduce distance between locale and nearest LHN. Within community park, create swathes of pollinator-friendly wildflower meadows with a species-mix replicating lowland hay meadows. Install bat and bird boxes on existing mature trees. | Significant opportunities to link up enhancement across LCA 8, LCA 10 and LCA 11, further reducing DTP pressures and creating landscape scale biodiversity benefits to the north of Guiseley and Yeadon; linking these two settlements via a hedgerow and wildflower network. |
| LCA 10 | **DTP:** C<br>**Designated Landscape:** Deipkeir LNA; LHN | There are opportunities to connect the site and strengthen the corridor provided by the unnamed watercourse ("Wills Gill Beck"), Shaw Beck and existing field boundaries with Deipkeir LNA and the LHN that extends from Carlton Manor to the north.<br>This can be achieved through appropriate planting of native tree and shrub species, which should include pedunculate oak, field maple (*Acer campestre*), hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), holly and occasionally gorse. Ordinarily, ash would be recommended too; but with the prevalence of ash die-back, this will need to be reviewed at the time.<br>Pollinator-friendly enhanced greenspace should also be incorporated in to landscape designs, which can link up with proposed corridor enhancements referred to above. | |
| LCA 11 | **DTP:** D<br>**Designated Landscape:** Yeadon Tarn LNA; LHN | Land parcels described in this report within LCA 11 are a continuation those to the east in LCA 10 (see above). Opportunities to extend the mitigation and enhancements of pollinator-friendly enhanced greenspace are available along similar networks and corridors, following existing watercourses and field boundaries. | |
| LCA 12 | **DTP:** None<br>**Designated Landscape:** Yeadon Tarn LNA; LHN | Strengthen field boundaries abutting Airport. Provision of SUDS following principles conveyed in Graham *et al.* (2013) in association with pollinator-friendly enhanced greenspace should also be incorporated. | Land parcel surveyed falls within an existing LHN which is close to LCA 8, LCA 10 and LCA 11 (see above). Opportunities therefore exist to compliment cumulative effects described for these LCAs. |
| LCA 16 | **DTP:** G | Retain existing corridor, including mature trees along existing watercourse. Strengthen field boundaries that abut | No material |

[14] Graham, A., Day, J., Bray, R., and Mackenzie, S. (2013) *Sustainable Urban Drainage Systems: Maximising the potential for people and wildlife. A guide for local authorities and developers*. RSPB/ Wildfowl and Wetland Trust. Available on-line: https://www.rspb.org.uk/Images/SuDS_report_final_tcm9-338064.pdf

| Aireborough LCA | DTP & Designated Landscape | Opportunities | Cumulative Opportunities |
|---|---|---|---|
| | **Designated Landscape:** LHN | the LHN at the south-western quadrant of the land parcel surveyed in 2016 | opportunities available. |
| LCA 17 | **DTP:** H<br>**Designated Landscape:** Hawkstone Wood BNA; Spring & Jerrison Woods BNA; LHN | Opportunities to strengthen existing field boundaries, particularly those that can extend towards the BNAs in the adjacent District. Provision of pollinator-friendly enhanced greenspace in combination with hedgerows providing a network of corridors that penetrate the land parcel and enhancing informal habitat network provided by adjacent railway line. | Some marginal cumulative opportunities available by designing hedgerow network within each LCA that could soften the effects of the DTP. |
| LCA 18 | **DTP:** H<br>**Designated Landscape:** None | Land parcel relatively isolated from existing LHN. Provision of pollinator-friendly enhanced greenspace in combination with hedgerow, particularly on southern boundary of land parcel would improve DTP identified. | |

# A. Appendix A: Site Citations

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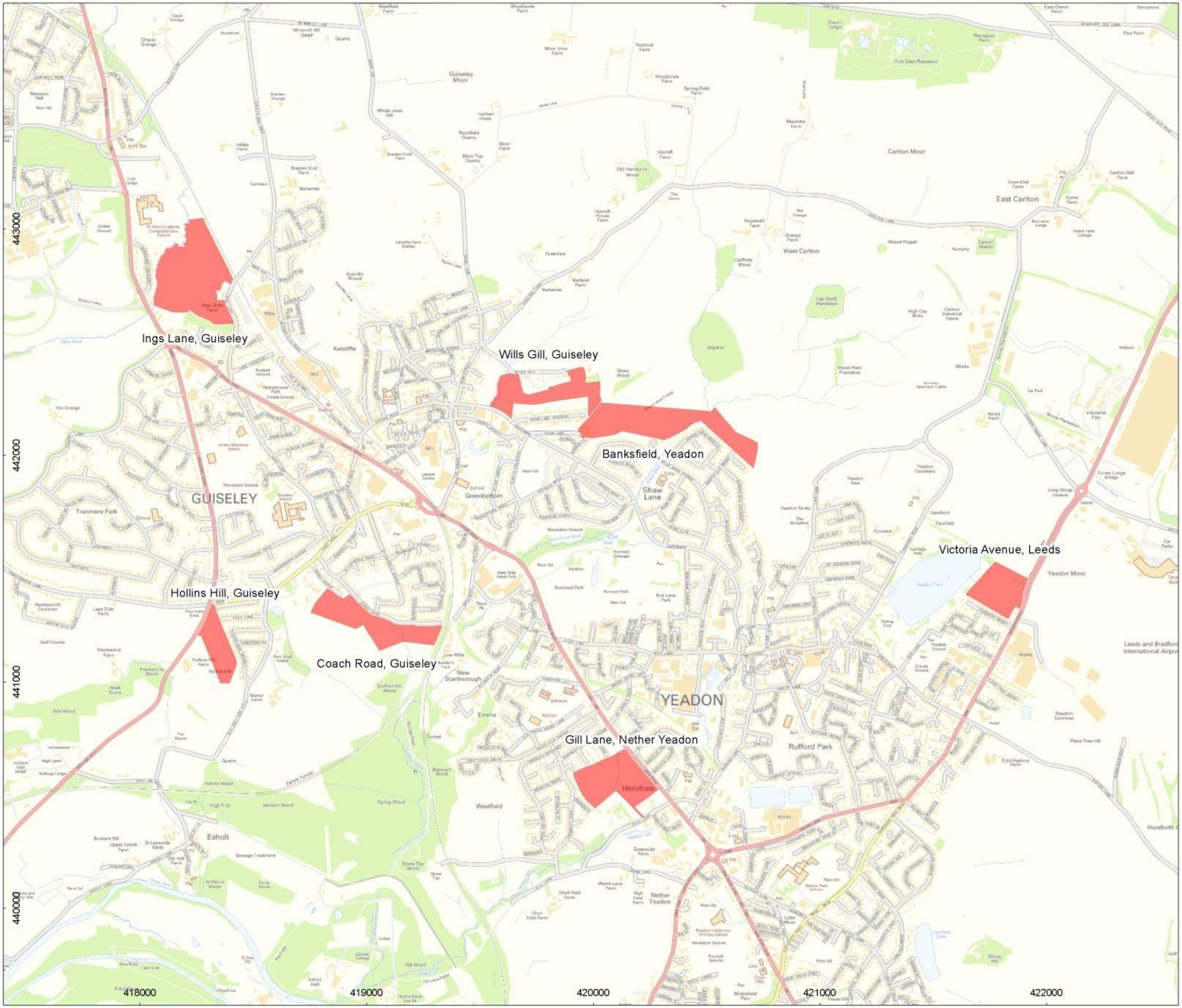
# Aireborough Neighbourhood Development Plan
# Site Summary

The following table summarises the citations of each of the seven sites surveyed in mid-March 2016 and the proposed focus of further ecology surveys to be completed to inform the Aireborough Neighbourhood Development Plan.

These surveys are recommended as a focus. However, **any additional surveys or records** not referred to in the table below would certainly add relevant data for each of the sites.

An overview map is appended on page 2 of this site summary.

| Site Name | Summary | Proposed Surveys |
|---|---|---|
| HG2-1 Ings Lane | Improved grasslands divided by species-poor hedgerows with mature trees. A watercourse (Mire Beck) forms the western boundary and has associated mature trees. | Breeding bird survey to establish presence and numbers of curlew, lapwing and skylark within fields.<br>General bird interest of site.<br>Water vole survey along Mire Beck.<br>Butterfly surveys (optional). |
| HG2-2 Wills Gill | Improved grasslands with some mature trees. | Bird survey to establish if hole-nesting species are present.<br>Survey of grasslands for increased grassland botanical diversity. |
| HG2-3 Shaw Lane | Improved grasslands. | Bird survey to establish ground-nesting species and possible relevance to curlew. |
| HG2-4 Hollins Lane | Improved grassland. | None recommended |
| HG2-5 Coach Road | Improved and semi-improved grassland. Mature trees. | Map invasive variegated yellow archangel on track.<br>Breeding bird survey within fields and hole-nesting species associated with mature trees.<br>Butterfly survey. |
| HG2-9 Victoria Avenue | Species-poor semi-improved grassland and marshy grassland. | None recommended. |
| HG2-10 Gill Lane | Improved grassland, small watercourse and mature trees. | Breeding bird survey, including any hole-nesting species.<br>Butterfly survey. |




## Map Legend

Study site



0 200 400 800 m

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| | |
|---|---|
| **Project** | Aireborough |
| **Title** | Site Location Plan |
| **Client** | Leeds City Council |

| Date | Reviewer | Version | Size |
|---|---|---|---|
| 08/04/16 | MP | 1.0 | A3 |

# Aireborough Neighbourhood Development Plan

# Site Citation Sheet

| | | | |
|---|---|---|---|
| **Site Name** | HG2-1 (Ings Lane) | **Location** | Guiseley |
| **Grid Reference** | SE 182 428 | **Surveyor** | Richard Wilson Ecology |
| **Date of Survey** | 14th March 2016 | **Area (hectares)** | 10.7 ha |
| **Geology (Bedrock)** | East Carlton Grit Sandstone (Millstone Grit Group) | **Geology (Superficial)** | Glacial Till |
| **Dominant Habitats** | Improved grasslands (pasture), species-poor hedgerows with mature trees and watercourse (Mire Beck). | | |

## Summary

The site consists of three unequal cattle-grazed fields on the north-western urban fringe of Guiseley.

## Setting

The site is located within a valley sandwiched between Guiseley Moor and The Chevin to the east, and Rombalds Moor to the west. The site is part of a network of open agricultural land that currently separates Menston to the north, from Guiseley.

There are no statutory or non-statutory sites closer than within an approximate 1.5 km search radius of the centre of the study site. The Chevin Forest Park Local Nature Reserve lies approximately 1.6 km north-east of the site (straight-line distance between nearest boundaries). The Mire Beck and a sliver of land to the immediate north (centred on SE 182 431) fall within the Leeds Wildlife Habitat Network designation.

Its western boundary is defined by the meandering Mire Beck which discharges in to the River Wharfe to the north, just west of Otley. To the east is the Guiseley – Ilkley railway and south and Ings Lane with the associated farm buildings of New Birks Farm. Its immediate southern boundary abuts a small woodland plantation and the other side of this are dwellings forming the existing north-western edge of Guiseley.

## Site Description

The site consists of three unequal-sized fields divided by stone walls, or species-poor hedgerows with mature trees in combination with stock-proof fencing. The grassland community is more-or-less uniform throughout the site, consisting of improved pasture with limited floristic diversity. Perennial rye-grass (*Lolium perenne*) with frequent creeping buttercup (*Ranunculus repens*) are the two most frequent species within the sward with occasional Yorkshire fog (*Holcus lanatus*) and red fescue (*Festuca rubra* agg.). Surveys at a more optimal time of year are likely to reveal a greater but limited diversity of grasses and small forbs tolerant of grazing. Towards the margins of some fields, broad-leaved dock (*Rumex obtusifolius*) and common nettle (*Urtica dioica*) occur.

The fields are the classic permanent pasture of lowland Britain and can be assigned to the MG6 *Lolium perenne* – *Cynosurus cristatus* [perennial rye-grass – crested dog's-tail] community in the National Vegetation Classification ([i]Rodwell, 1998). Towards the site's southern boundary, and along a linear strip identified by Target Note 5, ground conditions suggest that there is impeded drainage, which has resulted in areas becoming poached due to the grazing cattle. This may represent a minor change in grassland community but the date of the site visit was too early to establish accurately if this is the case. If indeed there is a minor change, it is most likely to represent the MG10 *Holcus lanatus* – *Juncus effusus* [Yorkshire fog – soft rush] rush-pasture community which very commonly occurs in such situations.

The field boundaries, excluding walls, are a species-poor hedgerow with blackthorn (*Prunus spinosa*) as the dominant shrub. Occasional mature trees comprising pedunculate oak (*Quercus robur*), ash (*Fraxinus excelsior*) and sycamore (*Acer pseudoplatanus*) are present as standards within these boundaries.

The western boundary is defined by the meandering Mire Beck which cuts a narrow channel separating the rear gardens of the adjacent dwellings and the grazed fields. Associated with this Beck are a number of mature ash and alder (*Alnus glutinosa*) trees (e.g. Target Note 6), and where cattle have not managed to graze, small patches of Ramsons [wild garlic] (*Allium ursinum*) are evident. Throughout the course of the Beck, there is no evidence of aquatic or emergent flora.

The site's southern boundary abuts a small plantation woodland with a species mix that includes pedunculate oak, ash, sycamore and willows (*Salix* sp.). A line of alder trees and a single collapsed crack willow (*Salix fragilis*) are present on the field side of the boundary wall/ fence.

Within this plantation is a small waterbody (SE 1833 4257) which is becoming rapidly encroached by the underscrub of willows and choked with leaf-litter. Nevertheless, there is evidence of iris (*Iris* sp.) on the margins which may suggest a semi-permanence to this feature.

## Historical Observations of Fauna/ Flora

Based on the West Yorkshire Ecology (WYE) database, a number of bird species have been observed within the site, of which curlew (*Numenius arquata*), hobby (*Falco subbuteo*), lapwing (*Vanellus vanellus*) are of greatest significance. The [ii]sustainability assessment makes reference to these plus other bird species that could be expected to be present. Additional records cited include hedgehog (*Erinaceus europaeus*); and presumably associated with Mire Beck, water vole (*Arvicola amphibius*) and white-clawed crayfish (*Austropotamobius pallipes*). Neither of these two species are noted in WYE's database. Mire Beck potentially provides suitable habitat though no evidence of water vole burrows were observed. The presence of the non-native signal crayfish (*Pacifastacus leniusculus*) would need to be determined.

## Incidental Observations of Fauna

During the survey, four lapwings (*Vanellus vanellus*) and six curlews (*Numenius arquata*) were observed within the fields in addition to a variety of common bird species such as mistle thrush (*Turdus viscivorus*), jackdaw (*Corvus monedula*) and dunnock (*Prunella modularis*). Mole (*Talpa europaeus*) hills were noted in various places within the fields.

## Evaluation and Further Survey

The habitats identified within the site are common and widespread throughout lowland Britain and at the county level (i.e. West Yorkshire). Based on the evidence observed to date, none of the habitats are likely to meet the minimum thresholds for Local Wildlife Sites when compared against the criteria set out in the appropriate [iii]guidelines for grassland communities if surveys at a more optimal time of year (i.e. May to July) are completed.

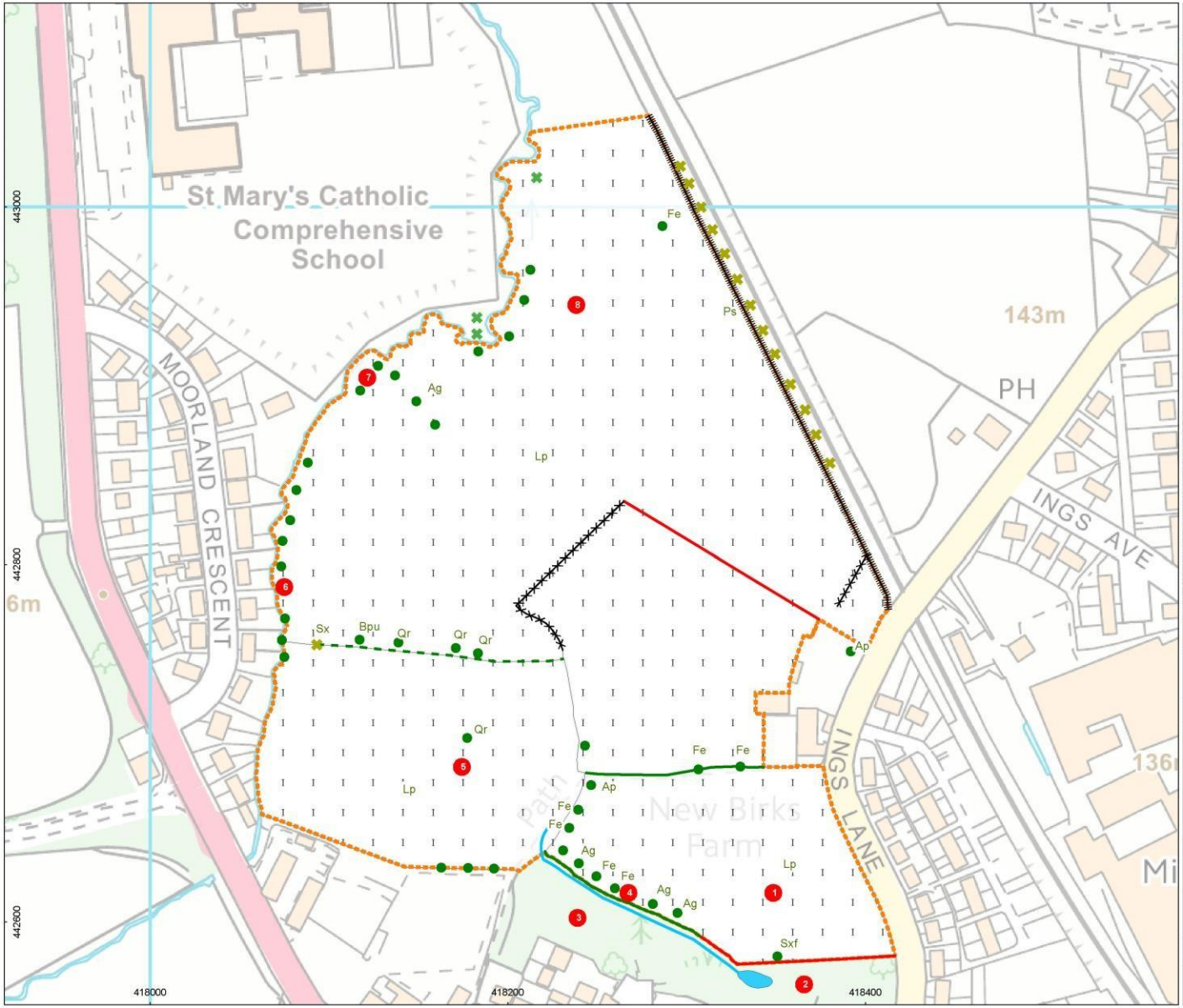
The presence of lapwing and curlew, including the former displaying, would be worthy of further investigation. Whilst the curlews are likely to be migrants passing through to their breeding grounds on the moors to the east of west, the habitat is potentially suitable for lapwing.

The mature trees within the site have the potential to support breeding birds (e.g. barn owl (*Tyto alba*), or starling (*Sturnus vulgaris*)), or roosting bats. They will also provide a local resource for wood decay (saproxylic) invertebrates, though given the isolated nature of the site with other significant wooded habitats, the likelihood of any notable species of nature conservation concern is reduced.

Any further ecological surveys that would materially benefit the Aireborough NDP should focus on the site's breeding bird assemblage, particularly the status of lapwing and curlew; presence of water vole within the Mire Beck and potentially crayfish. The former could be surveyed by methodically walking the banks of the Beck and observing for small burrows, feeding remains and latrines. Care would be required to separate potential brown rat (*Rattus norvegicus*) evidence. Surveying for crayfish would require a special licence and would therefore require professional surveys.

Should the site be brought forward for development, the waterbody within the adjacent plantation woodland would require amphibian surveys in accordance with standard survey methods ([iv]English Nature, 2001); and bat roost potential or activity surveys in accordance with [v]Collins (2016) would be appropriate on any trees or

hedgerow identified for felling, loss or likely to be subjected to indirect effects such as noise or artificial light disturbance.




## Map Legend

| | |
|---|---|
| | Survey extent |
| | Semi-natural broadleaved woodland |
| | Plantation broadleaved woodland |
| | Tall ruderal |
| | Semi-improved grassland |
| | Marshy grassland |
| | Improved grassland |
| | Waterbody |
| | Building |
| | Track / hardstanding |
| | Species poor intact hedgerow |
| | Species poor defunct hedgerow |
| | Wet ditch |
| | Wall |
| | Fence |
| | Boundary removed |

| | | | |
|---|---|---|---|
| | Tree | | Shrub |
| | Scrub | X | Target note |

**Species Codes:**

Ag - *Alnus glutinosa* (alder)
Ah - *Aesculus hippocastanum* (horse chestnut)
Ap - *Acer pseudoplatanus* (sycamore)
Bpu - *Betula pubescens* (downy birch)
Cm - *Crataegus monogyna* (hawthorn)
Fe - *Fraxinus excelsior* (ash)
Ia - *Ilex aquifolium* (holly)
Je - *Juncus effusus* (soft rush)
Lp - *Lolium perenne* (perennial rye-grass)
Pop - *Populus sp.* (hybrid poplar)
Ps - *Prunus spinosa* (blackthorn)
Qr - *Quercus robur* (pedunculate oak)
Qx - *Quercus sp.* (oak species [non-native])
Rf - *Rubus fruticosus* agg. (bramble)
Sn - *Sambucus nigra* (elder)
Sx - *Salix* sp. (willow)
Sxf - *Salix fragilis* (crack willow)
Til - *Tilia x europaea* (common lime)
Ud - *Urtica dioica* (common nettle)



0 20 40 80 m

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| | |
|---|---|
| **Project** | Aireborough |
| **Title** | Figure 1 – Extended Phase 1 Habitat Survey, Ings Lane, Guiseley (HG2-1) |
| **Client** | Leeds City Council |

| Date | Reviewer | Version | Size |
|---|---|---|---|
| 07/04/16 | MP | 1.2 | A3 |

| Target Note | Description |
|---|---|
| 1 | Species-poor grassland community replicated across all fields. Predominantly a perennial rye-grass dominated sward with limited floristic diversity: creeping buttercup being the most obvious component. Areas of the |
| 2 | A small deciduous woodland planation with pedunculate oak, ash and sycamore as the main canopy species. Underscrub of willows and planted snow-berry (*Symphorocarpus* sp.). A small waterbody in plantation overshaded with willows. Other species such as elder (*Sambucus nigra*) and ivy (*Hedera helix*) present but rare to occasional. |
| 3 | Western end of plantation more open with a mix of conifer such as European larch (*Larix deciduosa*) and Bhutan pine (*Pinus wallichianus*) and ash. |
| 4 | Clipped blackthorn hedgerow with a ditch that feeds waterbody. |
| 5 | Area of poorly drained grassland on an old ditch or broken drain. |
| 6 | Mire Beck along western boundary of site. Unvegetated within the channel. Mature ash trees as standards. |
| 7 | Mire Beck channel widens with alder overhanging. |
| 8 | Similar grassland community to Target Note 1. |

# Photos

**Photograph 1:** Improved grassland field

**Photograph 2:** Improved grassland field

**Photograph 3:** Small pond in adjacent woodland

**Photograph 4:** Typical hedgerow with mature tree as a standard

**Photograph 5:** Mire Beck

**Photograph 6:** Improved grassland pasture

[i] Rodwell, J.S. (Ed.). (1998) *British Plant Communities. Volume 3: Grasslands and montane communities*. Cambridge University Press, Cambridge.

[ii] Available on the Forum's website here: https://aireboroughnf.files.wordpress.com/2016/02/hg2-1-ings-lane-sustainability-appraisal-15-11-15.pdf; last accessed on 31st March 2016

[iii] West Yorkshire Local Sites Partnership. (2016) *West Yorkshire Local Wildlife Site Selection Criteria*. West Yorkshire Ecology, Wakefield.

[iv] English Nature. (2001) *Great crested newt mitigation guidelines.* Version: August 2001. English Nature, Peterborough

[v] Collins, J. (Ed.). (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*. 3rd Edition. Bat Conservation Trust, London

# Aireborough Neighbourhood Development Plan

# Site Citation Sheet

| | | | |
|---|---|---|---|
| **Site Name** | HG2-10 (Gill Lane) | **Location** | Yeadon |
| **Grid Reference** | SE 200 405 | **Surveyor** | Richard Wilson Ecology |
| **Date of Survey** | 14th March 2016 | **Area (hectares)** | 5.8 ha |
| **Geology (Bedrock)** | Millstone Grit | **Geology (Superficial)** | Glacial Till |
| **Dominant Habitats** | Improved grassland with small unnamed watercourse flowing through, resulting in small areas of impeded drainage (marshy grassland). Some unmanaged overgrown hedgerows and mature trees. | | |

## Summary

An area of grassland, formerly divided by fields, but now defunct hedgerows, surrounded by residential development within Yeadon. Dominant habitat is an improved to species-poor semi-improved grassland with a small watercourse flowing through centre from north to south.

## Setting

The site is located on the south-western edge of Yeadon, within a residential area and surrounded by major roads or dwellings. The site is more or less two fields divided by an unnamed watercourse that flows north-south; though formerly, it would have been divided in to smaller units as evidenced by the now defunct hedgerows.

The site is isolated ecologically from non-statutory sites; the nearest being Engine Fields Leeds Nature Area (LNA) to the north and Spring & Jerrison Wood Bradford Nature Area (BNA) to the east. However, the LNA and BNA are effectively isolated from the site by the residential development and existing road network, including the A65 such that no likelihood of migration between the sites is considered likely.

The site is bounded to the north, west and south by residential development and to the east by the main A65 linking Yeadon with Leeds.

## Site Description

The site comprises two large fields that are divided by an unnamed minor tributary (watercourse) of the River Aire. This watercourse is lined with mature trees and scrub and the remnants of former field boundaries are defined by defunct species-poor hedgerows.

The grassland is typically species-poor with perennial rye-grass (*Lolium perenne*) forming the dominant component of the sward with red fescue (*Festuca rubra* agg.), creeping buttercup cock's-foot (*Dactylis glomerata*) and spear thistle (*Cirsium vulgare*) present. Evidence of recent cattle-grazing is present.

The watercourse forms a bare channel under shade, which is silting up and shallow. No aquatic vegetation is evident and the banks, where vegetated and not heavily poached supports a scattered patchwork of lesser celandine (*Ficaria verna* s.l.) and cow parsley (*Anthriscus sylvestris*). The trees lining the watercourse are mostly mature sycamore (*Acer pseudoplatanus*), ash (*Fraxinus excelsior*) with an underscrub of holly (*Ilex aquifolium*), blackthorn (*Prunus spinosa*) and ivy (*Hedera helix*).

A small area of marshy grassland is located at the southern end of the site with locally frequent soft rush (*Juncus effusus*), brooklime (*Veronica beccabunga*), sweet-grass (*Glyceria* sp.) and willowherb (*Epilobium* sp.).

The now defunct hedgerows support holly, hawthorn (*Crataegus monogyna*) with a limited headland (due to the grazing pressure) with small pockets of ramsons [wild garlic] (*Allium ursinum*) where the cattle cannot reach.

## Historical Observations of Fauna/ Flora

West Yorkshire Ecology holds no records for the site.

Passing mention is made to the site's importance for bats and tawny owl in the [i]sustainability report. Reference to red oak (*Quercus rubra*) and 'railway poplar' is made in the report. Red oak is a non-native species from North America and has no nature conservation value (which is different from a landscape or arboricultural value). It is assumed that 'railway poplar' refers to the hybrid poplar.

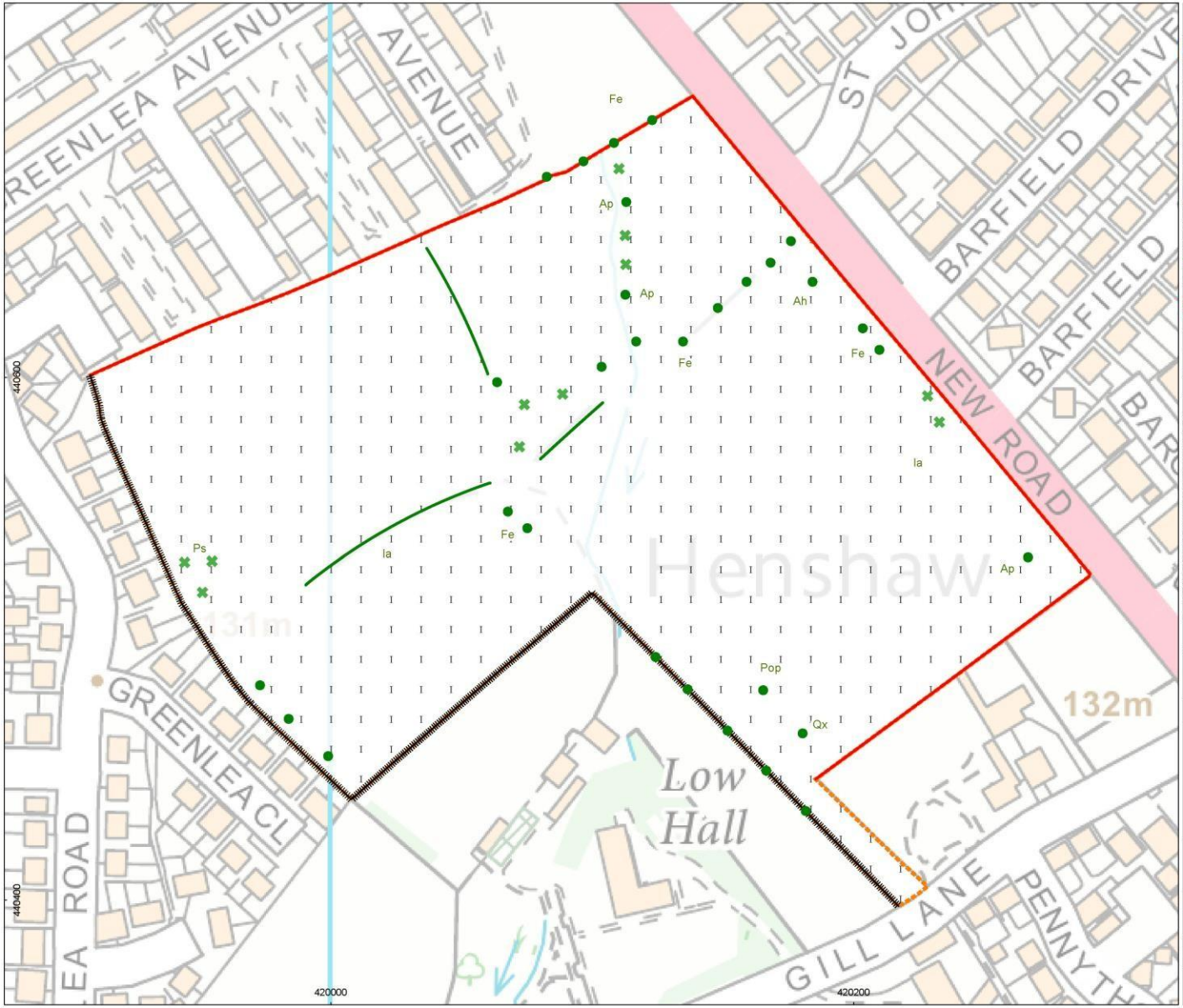
## Incidental Observations of Fauna

None.

## Evaluation and Further Survey

The habitats identified within the site are common and widespread throughout lowland Britain and at the county level (i.e. West Yorkshire). Based on the evidence observed to date, the site's habitats won't meet the minimum thresholds for Local Wildlife Sites when compared against the criteria set out in the appropriate [ii]guidelines, even if surveys at a more optimal time of year (i.e. May to July) are completed.

A butterfly transect may be a useful option for this site, owing to its size, and notes on bird species use, including breeding bird survey could also benefit the site.




## Map Legend

| | |
|---|---|
| | Survey extent |
| | Semi-natural broadleaved woodland |
| | Plantation broadleaved woodland |
| | Tall ruderal |
| | Semi-improved grassland |
| | Marshy grassland |
| | Improved grassland |
| | Waterbody |
| | Building |
| | Track / hardstanding |
| | Species poor intact hedgerow |
| | Species poor defunct hedgerow |
| | Wet ditch |
| | Wall |
| | Fence |
| | Boundary removed |

| | | | |
|---|---|---|---|
| | Tree | | Shrub |
| | Scrub | X | Target note |

**Species Codes:**
Ag - *Alnus glutinosa* (alder)
Ah - *Aesculus hippocastanum* (horse chestnut)
Ap - *Acer pseudoplatanus* (sycamore)
Bpu - *Betula pubescens* (downy birch)
Cm - *Crataegus monogyna* (hawthorn)
Fe - *Fraxinus excelsior* (ash)
Ia - *Ilex aquifolium* (holly)
Je - *Juncus effusus* (soft rush)
Lp - *Lolium perenne* (perennial rye-grass)
Pop - *Populus sp.* (hybrid poplar)
Ps - *Prunus spinosa* (blackthorn)
Qr - *Quercus robur* (pedunculate oak)
Qx - *Quercus sp.* (oak species [non-native])
Rf - *Rubus fruticosus* agg. (bramble)
Sn - *Sambucus nigra*(elder)
Sx - *Salix* sp. (willow)
Sxf - *Salix fragilis*(crack willow)
Til - *Tilia x europaea* (common lime)
Ud - *Urtica dioica* (common nettle)



0 15 30 60 m

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| | |
|---|---|
| **Project** | Aireborough |
| **Title** | Figure 7 – Extended Phase 1 Habitat Survey, Gill Lane, Nether Yeadon |
| **Client** | Leeds City Council |

| Date | Reviewer | Version | Size |
|---|---|---|---|
| 07/04/16 | MP | 1.2 | A3 |

| Target Note | Description |
|---|---|
| 1 | Improved/ species-poor grassland. |
| 2 | Watercourse flowing through site with mature trees and scrub lining the banks |
| 3 | Marshy grassland |
| 4 | Old hedgerow |

# Photos

**Photograph 1:** Improved grassland sward

**Photograph 2:** Narrow channel of watercourse

**Photograph 3:** Narrow but vegetated channel through grassland with sweet-grass (floating).

**Photograph 4:** Wider view of site and improved grassland

[i] Available on the Forum's website: https://aireboroughnf.files.wordpress.com/2016/02/hg2-10-gill-lane-nether-yeadon.pdf; last accessed on 31st March 2016

[ii] West Yorkshire Local Sites Partnership. (2016) *West Yorkshire Local Wildlife Site Selection Criteria*. West Yorkshire Ecology, Wakefield.

# Aireborough Neighbourhood Development Plan

# Site Citation Sheet

| | | | |
|---|---|---|---|
| **Site Name** | HG2-2 (Wills Gill) | **Location** | Guiseley |
| **Grid Reference** | SE 197 422 | **Surveyor** | Richard Wilson Ecology |
| **Date of Survey** | 15th March 2016 | **Area (hectares)** | 5.1 ha |
| **Geology (Bedrock)** | Guiseley Grit (Millstone Grit Group) | **Geology (Superficial)** | Glacial Till |
| **Dominant Habitats** | Improved grasslands (pasture), mature trees as standards and unnamed drains. | | |

## Summary

The site consists of cattle-grazed fields on the northern urban fringe of Guiseley.

## Setting

The site is located on the northern edge of Guiseley as the land starts to gently incline up towards Guiseley Moor and The Chevin. The site is at the southern extent of a network of open agricultural land that extends north from Guiseley towards higher ground before descending in to the Wharfe Valley.

A single non-statutory site (Deipkier Leeds Nature Area (LNA); SE 205 424)) is located approximately 450 m east of the site (straight-line distance between nearest boundaries) and has been designated for its woodland communities and in particular the presence of bluebells (*Hyacinthoides non-scripta*). There are no ecological barriers between the LNA and the site though the habitats between the two are sheep-grazed fields.

The site is bounded to the south and partially to the north by gardens of adjacent dwellings, but essentially it forms a component of a much more extensive area of sheep, horse and cattle pasture.

## Site Description

The site is essentially a large field with a few smaller paddocks divided by fences. The grassland community is more-or-less uniform throughout the site, consisting of improved pasture with limited floristic diversity. Perennial rye-grass (*Lolium perenne*) with frequent creeping buttercup (*Ranunculus repens*) are the two most frequent species within the sward with occasional Yorkshire fog (*Holcus lanatus*) and red fescue (*Festuca rubra* agg.). Surveys at a more optimal time of year are likely to reveal a greater but limited diversity of grasses and small forbs tolerant of grazing. Towards the margins of some fields, cock's-foot (*Dactylis glomerata*), broad-leaved dock (*Rumex obtusifolius*) and common nettle (*Urtica dioica*) occur.

The fields are the classic permanent pasture of lowland Britain and can be assigned to the MG6 *Lolium perenne* – *Cynosurus cristatus* [perennial rye-grass – crested dog's-tail] community in the National Vegetation Classification ([i]Rodwell, 1998).

A number of mature trees are present along the site's boundaries; most of which are sycamore (*Acer pseudoplatanus*) and hybrid poplar (*Populus* x cf. *canadensis*) though ash (*Fraxinus excelsior*) occurs too.

A small flowing beck (unnamed) forms the western boundary of the site and sits within a narrow unvegetated channel.

## Historical Observations of Fauna/ Flora

West Yorkshire Ecology (WYE) hold no records for this site.

The [ii]sustainability report makes reference to hole-nesting species of birds such as tawny owl (*Strix aluco*) and woodpeckers. The grasslands may be more diverse in places.

## Incidental Observations of Fauna

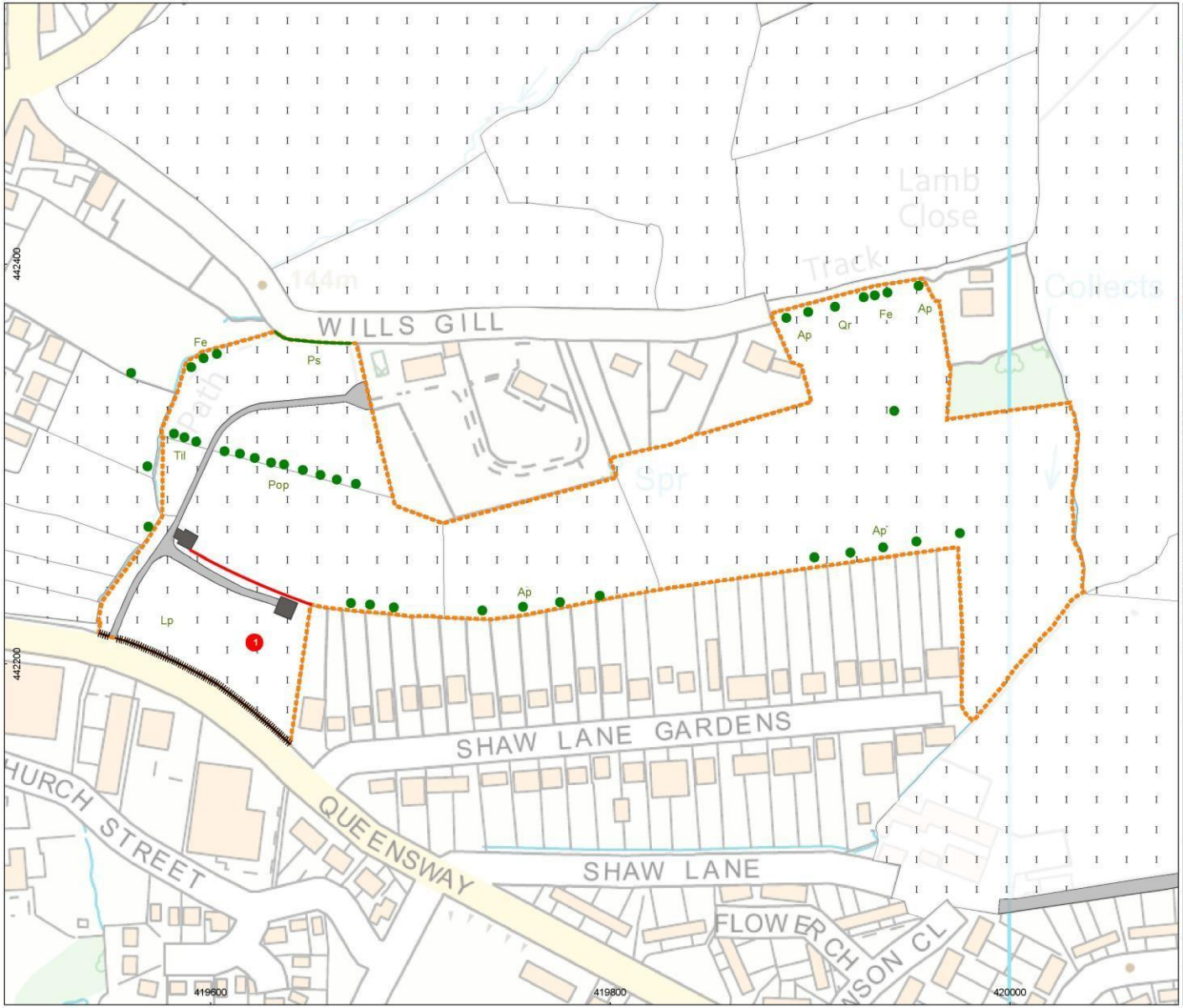
A single great spotted woodpecker (*Dendrocopus major*) was observed on one of the mature ash trees on site.

## Evaluation and Further Survey

The habitats identified within the site are common and widespread throughout lowland Britain and at the county level (i.e. West Yorkshire). Based on the evidence observed to date, none of the habitats are likely to meet the minimum thresholds for Local Wildlife Sites when compared against the criteria set out in the appropriate [iii]guidelines for grassland communities if surveys at a more optimal time of year (i.e. May to July) are completed.

Some of the mature trees within or on the site's boundaries may have the potential to support breeding birds such as barn owl (*Tyto alba*), or starling (*Sturnus vulgaris*); or roosting bats though more careful scrutiny would be required to confirm this. They may also provide a local resource for wood decay (saproxylic) invertebrates, though given the isolated nature of the site with other significant wooded habitats, the likelihood of any notable species of nature conservation concern is reduced.

Any further ecological surveys that would materially benefit the Aireborough NDP should focus on the mature trees' potential value for roosting bats/ breeding birds and the grassland's botanical diversity.




## Map Legend

| | |
|---|---|
| | Survey extent |
| | Semi-natural broadleaved woodland |
| | Plantation broadleaved woodland |
| | Tall ruderal |
| | Semi-improved grassland |
| | Marshy grassland |
| | Improved grassland |
| | Waterbody |
| | Building |
| | Track / hardstanding |
| | Species poor intact hedgerow |
| | Species poor defunct hedgerow |
| | Wet ditch |
| | Wall |
| | Fence |
| | Boundary removed |

| | | | |
|---|---|---|---|
| | Tree | | Shrub |
| | Scrub | x | Target note |

**Species Codes:**
Ag - *Alnus glutinosa* (alder)
Ah - *Aesculus hippocastanum* (horse chestnut)
Ap - *Acer pseudoplatanus* (sycamore)
Bpu - *Betula pubescens* (downy birch)
Cm - *Crataegus monogyna* (hawthorn)
Fe - *Fraxinus excelsior* (ash)
Ia - *Ilex aquifolium* (holly)
Je - *Juncus effusus* (soft rush)
Lp - *Lolium perenne* (perennial rye-grass)
Pop - *Populus sp.* (hybrid poplar)
Ps - *Prunus spinosa* (blackthorn)
Qr - *Quercus robur* (pedunculate oak)
Qx - *Quercus sp.* (oak species [non-native])
Rf - *Rubus fruticosus* agg. (bramble)
Sn - *Sambucus nigra*(elder)
Sx - *Salix* sp. (willow)
Sxf - *Salix fragilis*(crack willow)
Til - *Tilia x europaea* (common lime)
Ud - *Urtica dioica* (common nettle)



0 20 40 80 m

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| | |
|---|---|
| **Project** | Aireborough |
| **Title** | Figure 2 – Extended Phase 1 Habitat Survey, Wills Gill, Guiseley (HG2-2) |
| **Client** | Leeds City Council |

| Date | Reviewer | Version | Size |
|---|---|---|---|
| 07/04/16 | MP | 1.2 | A3 |

| Target Note | Description |
|---|---|
| 1 | Improved grassland pasture with perennial rye-grass (*Lolium perenne*) dominating the sward. |

# Photos

**Photograph 1:** Improved grassland pasture

**Photograph 2:** Improved grassland pasture with mature trees as standards

[i] Rodwell, J.S. (Ed.). (1998) *British Plant Communities. Volume 3: Grasslands and montane communities*. Cambridge University Press, Cambridge.

[ii] Available on the Forum's website: https://aireboroughnf.files.wordpress.com/2016/02/full-site-sustainability-report-wills-gill-hg2-2-3029.pdf; last accessed on 31st March 2016

[iii] West Yorkshire Local Sites Partnership. (2016) *West Yorkshire Local Wildlife Site Selection Criteria*. West Yorkshire Ecology, Wakefield.

# Aireborough Neighbourhood Development Plan

# Site Citation Sheet

| | | | |
|---|---|---|---|
| **Site Name** | HG2-3 (Shaw Lane) | **Location** | Guiseley |
| **Grid Reference** | SE 201 421 | **Surveyor** | Richard Wilson Ecology |
| **Date of Survey** | 15th March 2016 | **Area (hectares)** | 8.6 ha |
| **Geology (Bedrock)** | Guiseley Grit (Millstone Grit Group) | **Geology (Superficial)** | Glacial Till |
| **Dominant Habitats** | Improved grasslands (pasture) and unnamed drain. | | |

## Summary

Essentially, a continuation of HG2-2 (Wills Gill) on the northern urban fringe of Guiseley.

## Setting

The site is located on the northern edge of Guiseley as the land starts to gently incline up towards Guiseley Moor and The Chevin. The site is at the southern extent of a network of open agricultural land that extends north from Guiseley towards higher ground before descending in to the Wharfe Valley.

A single non-statutory site (Deipkier Leeds Nature Area (LNA); SE 205 424)) is located approximately 130 m north of the site (straight-line distance between nearest boundaries) and has been designated for its woodland communities and in particular the presence of bluebells (*Hyacinthoides non-scripta*). There are no ecological barriers between the LNA and the site though the habitats between the two are pasture.

The site is bounded to the south by gardens of adjacent dwellings, but essentially it forms a component of a much more extensive area of sheep, horse and cattle pasture.

## Site Description

The site is essentially three large fields divided by Shaw Lane, which is defined by a clipped blackthorn (*Prunus spinosa*) hedge. The grassland community is more-or-less uniform throughout the site, consisting of improved pasture with limited floristic diversity. Perennial rye-grass (*Lolium perenne*) with frequent creeping buttercup (*Ranunculus repens*) are the two most frequent species within the sward with occasional Yorkshire fog (*Holcus lanatus*) and red fescue (*Festuca rubra* agg.). Surveys at a more optimal time of year are likely to reveal a greater but limited diversity of grasses and small forbs tolerant of grazing. Towards the margins of some fields, cock's-foot (*Dactylis glomerata*), broad-leaved dock (*Rumex obtusifolius*) and common nettle (*Urtica dioica*) occur.

The fields are the classic permanent pasture of lowland Britain and can be assigned to the MG6 *Lolium perenne* – *Cynosurus cristatus* [perennial rye-grass – crested dog's-tail] community in the National Vegetation Classification ([i]Rodwell, 1998).

There are no trees associated with the site.

A small flowing beck (unnamed) flows through the site and sits within a narrow unvegetated channel.

## Historical Observations of Fauna/ Flora

West Yorkshire Ecology holds no data for this site.

A submission by a local resident and available on the Forum's [ii]website makes reference to wildlife such as regularly occurring winter birds (e.g. fieldfare (*Turdus pilaris*)), and use by curlew (*Numenius arquata*).

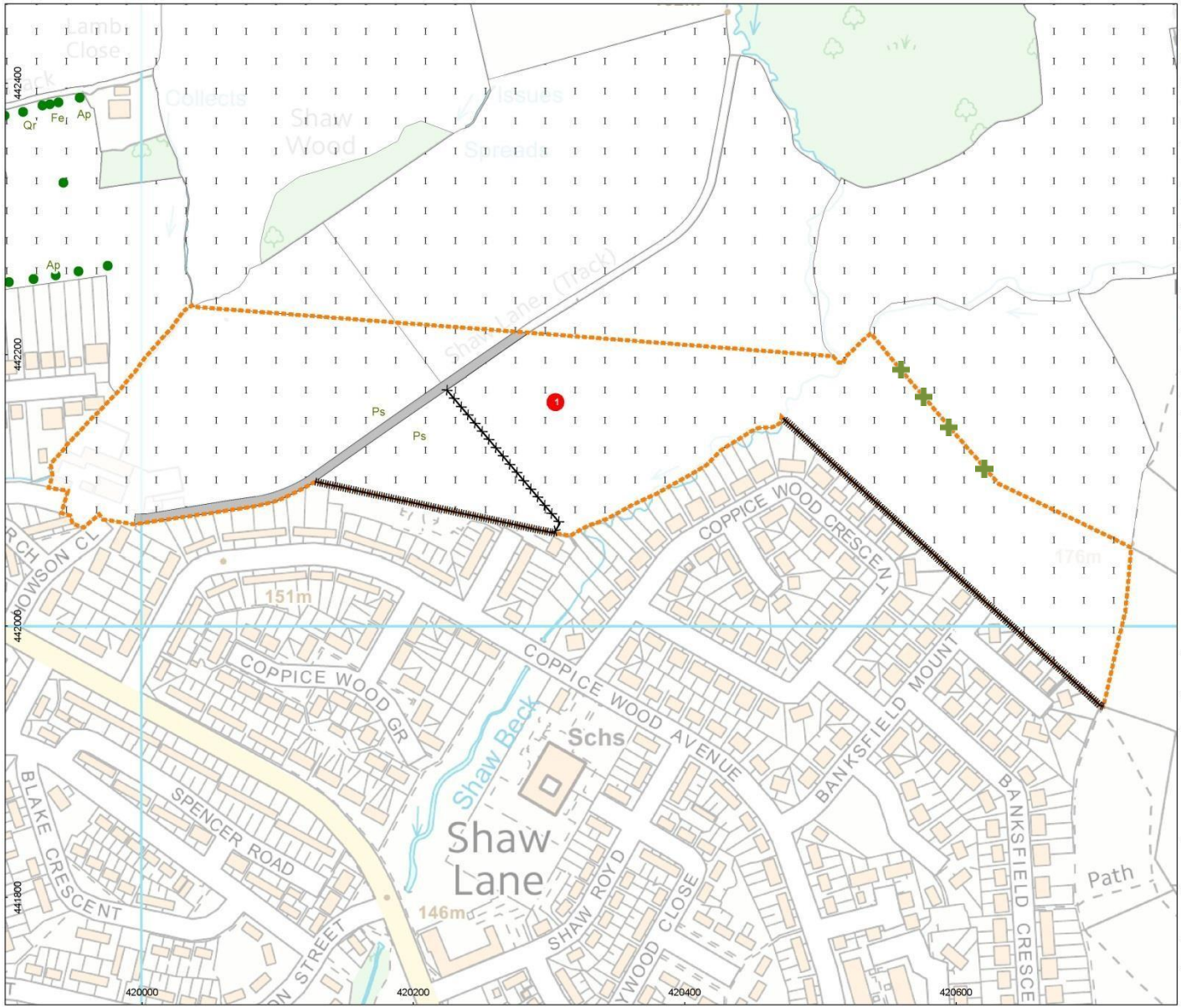
## Incidental Observations of Fauna

None.

## Evaluation and Further Survey

The habitats identified within the site are common and widespread throughout lowland Britain and at the county level (i.e. West Yorkshire). Based on the evidence observed to date, none of the habitats are likely to meet the minimum thresholds for Local Wildlife Sites when compared against the criteria set out in the appropriate [iii]guidelines for grassland communities if surveys at a more optimal time of year (i.e. May to July) are completed.

Bird surveys could establish if the site is used by curlew during the breeding season.




## Map Legend

| | |
|---|---|
| | Survey extent |
| | Semi-natural broadleaved woodland |
| | Plantation broadleaved woodland |
| | Tall ruderal |
| S S S | Semi-improved grassland |
| | Marshy grassland |
| | Improved grassland |
| | Waterbody |
| | Building |
| | Track / hardstanding |
| | Species poor intact hedgerow |
| | Species poor defunct hedgerow |
| | Wet ditch |
| | Wall |
| | Fence |
| | Boundary removed |

| | | | |
|---|---|---|---|
| ● | Tree | ✖ | Shrub |
| ✖ | Scrub | X | Target note |

**Species Codes:**
Ag - *Alnus glutinosa* (alder)
Ah - *Aesculus hippocastanum* (horse chestnut)
Ap - *Acer pseudoplatanus* (sycamore)
Bpu - *Betula pubescens* (downy birch)
Cm - *Crataegus monogyna* (hawthorn)
Fe - *Fraxinus excelsior* (ash)
Ia - *Ilex aquifolium* (holly)
Je - *Juncus effusus* (soft rush)
Lp - *Lolium perenne* (perennial rye-grass)
Pop - *Populus sp.* (hybrid poplar)
Ps - *Prunus spinosa* (blackthorn)
Qr - *Quercus robur* (pedunculate oak)
Qx - *Quercus sp.* (oak species [non-native])
Rf - *Rubus fruticosus* agg. (bramble)
Sn - *Sambucus nigra*(elder)
Sx - *Salix* sp. (willow)
Sxf - *Salix fragilis*(crack willow)
Til - *Tilia x europaea* (common lime)
Ud - *Urtica dioica* (common nettle)



0 30 60 120 m

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| | |
|---|---|
| **Project** | Aireborough |
| **Title** | Figure 3 – Extended Phase 1 Habitat Survey, Banksfield, Yeadon (HG2-3) |
| **Client** | Leeds City Council |

| Date | Reviewer | Version | Size |
|---|---|---|---|
| 07/04/16 | MP | 1.2 | A3 |

| Target Note | Description |
|---|---|
| 1 | Improved grassland pasture with limited botanical diversity. |

# Photos

**Photograph 1:** Improved grassland and clipped species-poor hedgerow

**Photograph 2:** Improved grassland field

[i] Rodwell, J.S. (Ed.). (1998) *British Plant Communities. Volume 3: Grasslands and montane communities*. Cambridge University Press, Cambridge.

[ii] https://aireboroughnf.files.wordpress.com/2016/02/hg2-3-banksfield.pdf; last accessed on 31st March 2016

[iii] West Yorkshire Local Sites Partnership. (2016) *West Yorkshire Local Wildlife Site Selection Criteria*. West Yorkshire Ecology, Wakefield.

# Aireborough Neighbourhood Development Plan

# Site Citation Sheet

| | | | |
|---|---|---|---|
| **Site Name** | HG2-4 (Hollins Lane) | **Location** | Guiseley |
| **Grid Reference** | SE 183 411 | **Surveyor** | Richard Wilson Ecology |
| **Date of Survey** | 14th March 2016 | **Area (hectares)** | 3.1 ha |
| **Geology (Bedrock)** | Rough Rock Sandstone | **Geology (Superficial)** | Glacial Till |
| **Dominant Habitats** | Improved grasslands (pasture). | | |

## Summary

A single field comprising species-poor improved grassland pasture.

## Setting

The site is located on the southern edge of Guiseley overlooking the Aire Valley. The site is a single field of which there are several adjoining the neighbouring residential areas on Guiseley's southern extent.

A number of non-statutory sites are located within 1 km of the site's boundaries; of which Hawkstone Wood Bradford Nature Area (BNA) (SE 178 409); and Spring & Jerrison Woods BNA (SE 189 404)) are located approximately 245 m west and 355 m south of the site (straight-line distance between nearest boundaries) respectively. They have both been designated for their woodland communities and in particular the presence of bluebells (*Hyacinthoides non-scripta*). The A6038 acts as an ecological barrier between Hawkstone Wood BNA. However, there are no significant barriers between the site and Spring & Jerrison Wood BNA.

The site is bounded to the east by gardens of adjacent dwellings; north by the A6038 and the curtilage of Hollibns Hill Farm to the west. To the south lies further sheep pasture.

## Site Description

The site is essentially a single field with a single isolated holly (*Ilex aquifolium*) shrub. The grassland community is more-or-less uniform throughout the site, consisting of improved pasture with limited floristic diversity. Perennial rye-grass (*Lolium perenne*) with frequent creeping buttercup (*Ranunculus repens*) are the two most frequent species within the sward with occasional Yorkshire fog (*Holcus lanatus*) and red fescue (*Festuca rubra* agg.). Surveys at a more optimal time of year are likely to reveal a greater but limited diversity of grasses and small forbs tolerant of grazing.

There are no trees associated with the site.

## Historical Observations of Fauna/ Flora

West Yorkshire Ecology holds no data for the site.

The [i]sustainability report makes reference to 'loss of wildlife' but no evidence of species using the site is provided.

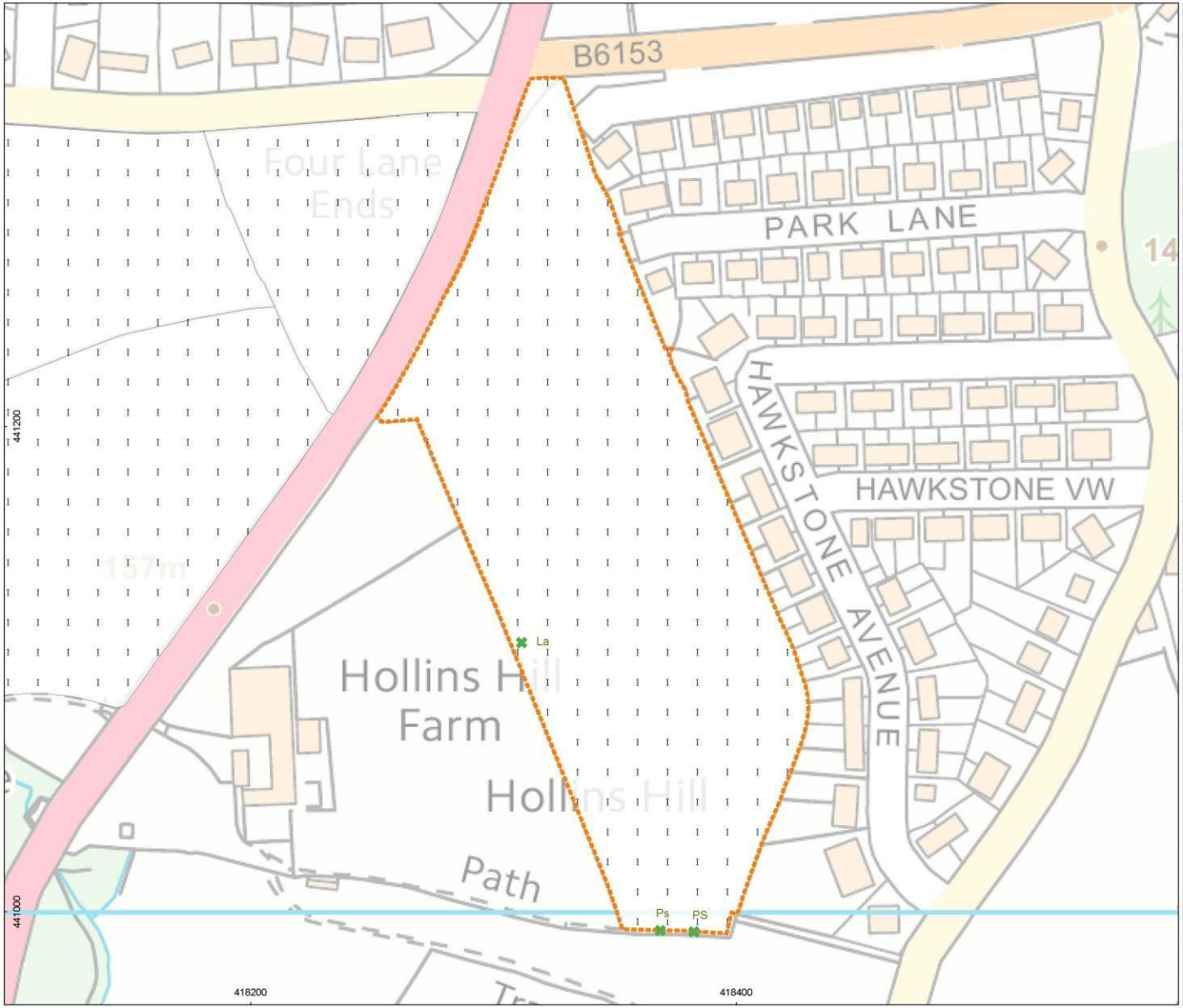
## Incidental Observations of Fauna

None.

## Evaluation and Further Survey

The habitats identified within the site are common and widespread throughout lowland Britain and at the county level (i.e. West Yorkshire). Based on the evidence observed to date, the grassland field won't meet the minimum thresholds for Local Wildlife Sites when compared against the criteria set out in the appropriate [ii]guidelines for grassland communities, even if surveys at a more optimal time of year (i.e. May to July) are completed.

No meaningful ecology surveys could contribute towards advancing the knowledge of the site's nature conservation value.




## Map Legend

| | |
|---|---|
| | Survey extent |
| | Semi-natural broadleaved woodland |
| | Plantation broadleaved woodland |
| | Tall ruderal |
| | Semi-improved grassland |
| | Marshy grassland |
| | Improved grassland |
| | Waterbody |
| | Building |
| | Track / hardstanding |
| | Species poor intact hedgerow |
| | Species poor defunct hedgerow |
| | Wet ditch |
| | Wall |
| | Fence |
| | Boundary removed |

| | | | |
|---|---|---|---|
| | Tree | | Shrub |
| | Scrub | X | Target note |

**Species Codes:**
Ag - *Alnus glutinosa* (alder)
Ah - *Aesculus hippocastanum* (horse chestnut)
Ap - *Acer pseudoplatanus* (sycamore)
Bpu - *Betula pubescens* (downy birch)
Cm - *Crataegus monogyna* (hawthorn)
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Qx - *Quercus sp.* (oak species [non-native])
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Til - *Tilia x europaea* (common lime)
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| | |
|---|---|
| **Project** | Aireborough |
| **Title** | Figure 4 – Extended Phase 1 Habitat Survey, Hollins Hill, Guiseley (HG2-4) |
| **Client** | Leeds City Council |

| Date | Reviewer | Version | Size |
|---|---|---|---|
| 07/04/16 | MP | 1.2 | A3 |

| Target Note | Description |
|---|---|
| 1 | Improved grassland pasture with limited botanical diversity. |

# Photos

**Photograph 1:** Improved grassland field

**Photograph 2:** Improved grassland within field

[i] Available on the Forum's website: https://aireboroughnf.files.wordpress.com/2016/02/full-site-sustainability-report-hollins-hill-hg-4-4020.pdf; last accessed on 31st March 2016

[ii] West Yorkshire Local Sites Partnership. (2016) *West Yorkshire Local Wildlife Site Selection Criteria*. West Yorkshire Ecology, Wakefield.

# Aireborough Neighbourhood Development Plan

# Site Citation Sheet

| | | | |
|---|---|---|---|
| **Site Name** | HG2-5 (Coach Road) | **Location** | Guiseley |
| **Grid Reference** | SE 190 412 | **Surveyor** | Richard Wilson Ecology |
| **Date of Survey** | 15th March 2016 | **Area (hectares)** | 6.0 ha |
| **Geology (Bedrock)** | Millstone Grit | **Geology (Superficial)** | Glacial Till |
| **Dominant Habitats** | Improved grassland (pasture), species-poor semi-improved grassland, tall ruderal vegetation and plantation woodland. | | |

## Summary

Three fields divided by dry-stone walls. Two fields of pasture and one of taller, tussocky grassland. A small plantation woodland is present abutting the boundary with Coach Road.

## Setting

The site is located on the southern edge of Guiseley overlooking the Aire Valley. The site is a single field of which there are several adjoining the neighbouring residential areas on Guiseley's southern extent.

A number of non-statutory sites are located close to the site's boundaries; of which Hawkstone Wood Bradford Nature Area (BNA) (SE 178 409); and Spring & Jerrison Woods BNA (SE 189 404)) are located approximately 820 m west and 525 m south of the site (straight-line distance between nearest boundaries) respectively. They have both been designated for their woodland communities and in particular the presence of bluebells (*Hyacinthoides non-scripta*). The A6038 acts as an ecological barrier between Hawkstone Wood BNA. However, there are no significant barriers between the site and Spring & Jerrison Wood BNA.

The site is bounded to the north and west by Coach Road and/ or residential development; to the east by the Leeds – Ilkley railway line which is set within a cutting. To the south lies further sheep pasture.

## Site Description

The site comprises three fields of which the eastern one is separated from the remaining two by an unmetalled track. The grassland is typically species-poor with perennial rye-grass (*Lolium perenne*) dominating and creeping buttercup (*Ranunculus repens*) being occasional. In the north-west corner, there is a small mature broadleaved deciduous woodland with pedunculate oak (*Quercus robur*), beech (*Fagus sylvatica*), sycamore (*Acer pseudoplatanus*) and ash (*Fraxinus excelsior*) all occurring in more or less equal abundances. The understorey comprises a similar grassland but with a slightly increased diversity of forbs (e.g. ribwort plantain (*Plantago lanceolata*) and lesser celandine (*Ficaria verna* s.l.)).

The easternmost field supports a tussocky grassland community with Timothy (*Phleum pratense*), or an agricultural variant seemingly dominant with a likely increase in species diversity if surveys were completed at a more favourable time of year.

The unmetalled track is bounded by mature trees and the verge either side of a partially collapsed wall supports a tall ruderal vegetation such as common nettle (*Urtica dioica*), broad-leaved dock (*Rumex obtusifolius*) and in a few patches, variegated yellow-archangel (*Lamiastrum galeobdolon* ssp. *argentatum*). This latter species is included in Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) and is therefore a [1]controlled species.

## Historical Observations of Fauna/ Flora

West Yorkshire Ecology hold no records for this site.

[1] Controlled species are those that are considered to be highly invasive and therefore potentially deleterious to natural habitats and/ or species assemblages. It is an offence to knowingly cause the species to spread.

The sustainability report makes reference to a number of fauna, including curlew (*Numenius arquata*) and interestingly goshawk (*Accipiter gentilis*) though this should be queried, owing to its extreme rarity and no known records published in the Bird Atlas 2007-2011 by the BTO for the wider Leeds area. Hole-nesting species such as owls and woodpeckers are also mentioned.

## Incidental Observations of Fauna

None.

## Evaluation and Further Survey

The habitats identified within the site are common and widespread throughout lowland Britain and at the county level (i.e. West Yorkshire). Based on the evidence observed to date, the grassland field won't meet the minimum thresholds for Local Wildlife Sites when compared against the criteria set out in the appropriate [i] guidelines for grassland communities, even if surveys at a more optimal time of year (i.e. May to July) are completed.

A more detailed map illustrating the location of variegated yellow-archangel would be of benefit. Breeding bird surveys and a butterfly transect would also be useful.


## Map Legend

| | |
|---|---|
| | Survey extent |
| | Semi-natural broadleaved woodland |
| | Plantation broadleaved woodland |
| | Tall ruderal |
| | Semi-improved grassland |
| | Marshy grassland |
| | Improved grassland |
| | Waterbody |
| | Building |
| | Track / hardstanding |
| | Species poor intact hedgerow |
| | Species poor defunct hedgerow |
| | Wet ditch |
| | Wall |
| | Fence |
| | Boundary removed |

| | | | |
|---|---|---|---|
| | Tree | | Shrub |
| | Scrub | X | Target note |

**Species Codes:**

Ag - *Alnus glutinosa* (alder)
Ah - *Aesculus hippocastanum* (horse chestnut)
Ap - *Acer pseudoplatanus* (sycamore)
Bpu - *Betula pubescens* (downy birch)
Cm - *Crataegus monogyna* (hawthorn)
Fe - *Fraxinus excelsior* (ash)
Ia - *Ilex aquifolium* (holly)
Je - *Juncus effusus* (soft rush)
Lp - *Lolium perenne* (perennial rye-grass)
Pop - *Populus sp.* (hybrid poplar)
Ps - *Prunus spinosa* (blackthorn)
Qr - *Quercus robur* (pedunculate oak)
Qx - *Quercus sp.* (oak species [non-native])
Rf - *Rubus fruticosus* agg. (bramble)
Sn - *Sambucus nigra*(elder)
Sx - *Salix* sp. (willow)
Sxf - *Salix fragilis*(crack willow)
Til - *Tilia x europaea* (common lime)
Ud - *Urtica dioica* (common nettle)



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| | |
|---|---|
| **Project** | Aireborough |
| **Title** | Figure 5 – Extended Phase 1 Habitat Survey, Coach Road, Guiseley (HG2- |
| **Client** | Leeds City Council |

| Date | Reviewer | Version | Size |
|---|---|---|---|
| 07/04/16 | MP | 1.2 | A3 |

| Target Note | Description |
|---|---|
| 1 | Planted mature trees on northern edge of site. Pedunculate oak, beech and ash frequent. |
| 2 | Grassland under the plantation comprising a taller, slightly more species-rich assemblage than the grazed pasture. Cock's-foot (*Dactylis glomerata*), lesser celandine, dandelion (*Taraxacum* agg.) and false oat-grass (*Arrhenatherum elatius*) present. |
| 3 | Species-poor improved grassland pasture dominated by perennial rye-grass. |
| 4 | Verge either side of unmetalled track with cow parsley (*Anthriscus sylvestris*), variegated yellow-archangel and bramble (*Rubus fruticosus* agg.) scrub. Some garden plants too. |
| 5 | Tussocky species-poor grassland with tall ruderal vegetation on margins. |

# Photos

**Photograph 1:** Species-poor semi-improved grassland under plantation woodland

**Photograph 2:** Species-poor grassland within fields

**Photograph 3:** Unmetalled track with mature trees

**Photograph 4:** Variegated yellow-archangel on edge of track

[i] West Yorkshire Local Sites Partnership. (2016) *West Yorkshire Local Wildlife Site Selection Criteria*. West Yorkshire Ecology, Wakefield.

# Aireborough Neighbourhood Development Plan

# Site Citation Sheet

| | | | |
|---|---|---|---|
| **Site Name** | HG2-9 (Victoria Avenue) | **Location** | Yeadon |
| **Grid Reference** | SE 217 414 | **Surveyor** | Richard Wilson Ecology |
| **Date of Survey** | 15th March 2016 | **Area (hectares)** | 3.9 ha |
| **Geology (Bedrock)** | Millstone Grit | **Geology (Superficial)** | Glacial Till |
| **Dominant Habitats** | Species-poor semi-improved grassland, marshy grassland, tall ruderal vegetation and scattered trees. | | |

## Summary

A single field sandwiched between Yeadon Tarn and the A658 (Victoria Avenue), just south of Leeds Bradford International Airport. The majority of the field consists of semi-improved grassland with a small area of marshy grassland at the western end.

## Setting

The site is located on the north-eastern edge of Yeadon, abutting Yeadon Tarn and on the periphery of Leeds Bradford International Airport (LBIA). The site is currently a single field.

Yeadon Tarn Leeds Nature Area (LNA) abuts the site's western boundary and Rawdon Ponds Site of Ecological or Geological Importance (SEGI) is *c.* 450 m south-east but ecologically isolated by the industrial estate associated with LBIA. The SEGI has been designated for its aquatic vegetation communities and the long documented (since the 1950s) amphibian population, including great crested newt (*Triturus cristatus*). However, due to the ecological isolation from the site, there is no likelihood of migration from the SEGI.

The site is bounded to the north by LBIA airfield and to the east by the A658. Residential development lies to the south and the aforementioned LBA to the west.

## Site Description

The site comprises a single field with scattered early-mature trees and scrub; with an extensive area, within the context of the site, of marshy grassland.

The grassland is typically species-poor with tussocky grasses frequent; namely cock's-foot (*Dactylis glomerata*) and false oat-grass (*Arrhenatherum elatius*). Occasional common ragwort (*Senecio jacobaea*) is evident as is creeping buttercup (*Ranunculus repens*).

An area of marshy grassland occurs in the western fifth of the site, with tufted hair-grass (*Deschampsia cespitisa*), soft rush (*Juncus effusus*), creeping thistle (*Cirsium arvense*) and creeping buttercup.

A smaller area of tall ruderal vegetation is developing on the northern fringes of the site with common couch (*Elytrigia repens*), common nettle (*Urtica dioica*) and cow parsley (*Anthriscus sylvestris*).

A few scattered early-mature sycamore (*Acer pseudoplatanus*) and ash (*Fraxinus excelsior*) are present within the site and a defunct species-poor hawthorn (*Crataegus monogyna*) is also present, just outside the site's northern boundary. The majority of the shrubs which form the hedge are dead.

## Historical Observations of Fauna/ Flora

West Yorkshire Ecology has no records for the site.

No information is available on the Forum's website.

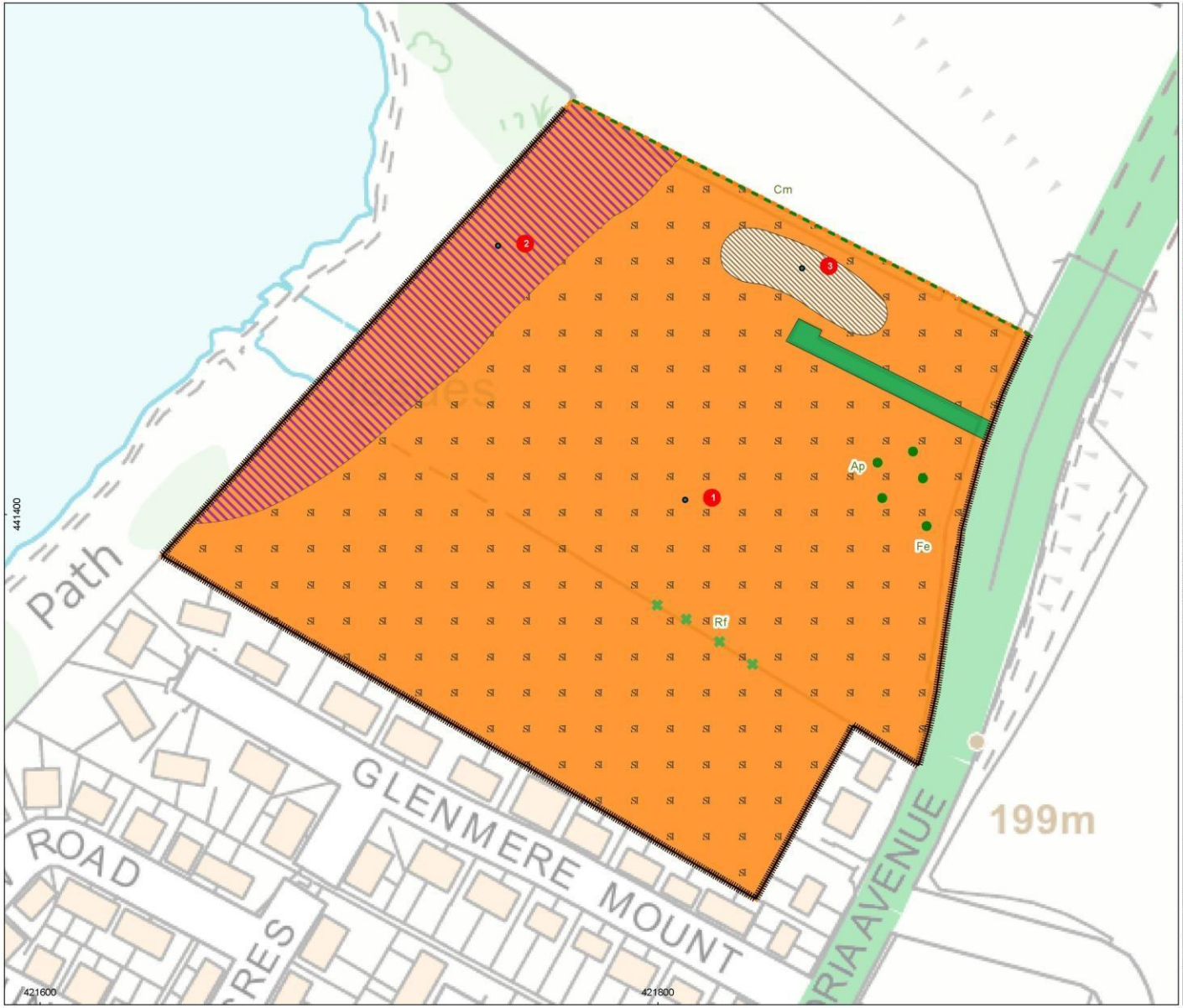
## Incidental Observations of Fauna

None.

## Evaluation and Further Survey

The habitats identified within the site are common and widespread throughout lowland Britain and at the county level (i.e. West Yorkshire). Based on the evidence observed to date, the site's habitats won't meet the minimum thresholds for Local Wildlife Sites when compared against the criteria set out in the appropriate [i] guidelines, even if surveys at a more optimal time of year (i.e. May to July) are completed.

No additional survey would benefit this site.




## Map Legend

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|---|---|
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| | Wall |
| | Fence |
| | Boundary removed |

| | | | |
|---|---|---|---|
| | Tree | | Shrub |
| | Scrub | X | Target note |

**Species Codes:**
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| | |
|---|---|
| **Project** | Aireborough |
| **Title** | Figure 6 – Extended Phase 1 Habitat Survey, Victoria Avenue, Leeds (HG2- |
| **Client** | Leeds City Council |

| Date | Reviewer | Version | Size |
|---|---|---|---|
| 07/04/16 | MP | 1.2 | A3 |

| Target Note | Description |
|---|---|
| 1 | Species-poor tussocky grassland. |
| 2 | Marshy grassland |
| 3 | Tall ruderal vegetation |

# Photos

**Photograph 1:** Species-poor tussocky grassland

**Photograph 2:** Marshy grassland at southern end of site

[i] West Yorkshire Local Sites Partnership. (2016) *West Yorkshire Local Wildlife Site Selection Criteria*. West Yorkshire Ecology, Wakefield.