



THE
ENVIRONMENT
PARTNERSHIP



GM ALLOCATION 51: WEST OF GIBFIELD ATHERTON ECOLOGICAL REPRESENTATION

TEP

Genesis Centre
Birchwood Science Park
Warrington
WA3 7BH

Tel: 01925 844004
Email: tep@tep.uk.com
www.tep.uk.com

Offices in Warrington, Market Harborough, Gateshead, London and Cornwall

Document Title	Ecological Representation
Prepared for	Peel Land and Property (North) Ltd
Prepared by	TEP - Warrington
Document Ref	6296.04.002

Author	Kerry Stead
Date	March 2019
Checked	David Sweeting
Approved	David Sweeting

Amendment History					
Version	Date	Modified by	Check / Approved by	Reason(s) issue	Status
1.0	Nov 2017	KS	DS	Original issue	Superseded
2.0	Dec 2017	KS	DS	Updated to include northwestern section originally excluded from survey	Superseded
3.0	Mar 2019	AWE	DS	Jan 2019 draft GMSF & policies update	Current

CONTENTS		PAGE
1.0	Overview	1
2.0	Areas of Constraint	3
3.0	Opportunities.....	7

APPENDICES

APPENDIX A: Phase 1 Habitat Survey

APPENDIX B: Desktop Study

DRAWINGS

507A-23 GMSF Illustrative Masterplan

G6296.04.001 - Ecological Constraints Plan

1.0 Overview

Introduction

- 1.1 TEP was commissioned by Peel Land and Property (North) Ltd in March 2017 to provide an ecological representation of Land West of Gibfield (91ha) outlining potential ecological constraints and opportunities in relation to developing the site for housing and employment uses.
- 1.2 The site is currently designated as Green Belt in Wigan's Local Plan; however, the revised draft of the Greater Manchester Spatial Framework (GMSF) January 2019 allocates the land for approximately 700 dwellings and 45,500m² of floor space for employment use (GM Allocation 51).
- 1.3 An extended Phase 1 Habitat Survey was undertaken on 6th November 2017 by Kerry Stead GradCIEEM (FISC Level 4); the Phase 1 Habitat Survey map is shown at Appendix A. Areas of high, medium and low ecological constraint have been identified and are shown on Drawing G6296.04.001 Ecological Constraints Plan.
- 1.4 An assessment of pre-existing information, including Ordnance Survey mapping and aerial imagery, has been undertaken and areas of high, medium and low ecological constraints have been identified and are shown on Drawing G6296.04.001 Ecological Constraints Plan. A Phase 1 Habitat Map has been produced based on this information and is presented in Appendix A.
- 1.5 TEP's assessment indicates that there are ecological constraints that will need to be carefully considered in order to enable sustainable development of the land.

Desktop and Background Study

- 1.6 There are no nationally or internationally designated wildlife sites within 1km of the site. The proposed development of the site would not pose a risk to any Natural England Impact Risk Zones for Sites of Special Scientific Interest (SSSIs).
- 1.7 There are two Local Nature Reserves (LNRs) and five Sites of Biological Importance (SBI) within 1km of the site boundary. Two SBI's (Gibfield Park (North) and Gibfield Park (South)) are located on the northern half of the site.
- 1.8 Records of protected species within 1km of the site were returned, including great crested newt, common toad, water vole, bats, brown hare and birds of conservation concern.
- 1.9 Full results of the desktop survey, including maps of designated sites, are found in Appendix B.

Site Description

- 1.10 The site comprises a number of different habitats, varying in quality. The southern part of the site comprises lower quality habitats including horse-grazed semi-improved grassland fields (west of Gibfield Park Avenue) and arable fields cut for silage (east of Gibfield Park Avenue). The northern part of the site, which includes the Gibfield Park (North) and Gibfield Park (South) SBI's, is dominated by tussocky, largely unmanaged grassland and broadleaved trees, with the easternmost section cut for silage.
- 1.11 The site contains a number of hedgerows, ditches and brooks. These features are shown as Area A - Wildlife Corridors on Drawing G6296.04.001.
- 1.12 There are 29 ponds within the site boundaries and of these, 14 have records of great crested newts. The ponds comprise Area B on Drawing G6296.04.001.
- 1.13 There is an area of dry heath/acid grassland crossing the central part of the site. This is located across an area of colliery spoil. This comprises Area C on Drawing G6296.04.001.
- 1.14 An area of plantation broadleaved woodland and dense scrub is located to the south of the dry heath. The trees are young to middle-aged in this area. Further sections of broad-leaved trees exist in the northern part of the site. These features comprise Areas D and F respectively on Drawing G6296.04.001.
- 1.15 The more tussocky, unmanaged, grassland and silage fields in the north of the site that form part of the SBI's are shown as Area E on Drawing G6296.04.001.
- 1.16 An area of marshy grassland exists in the northernmost part of the site. This habitat is shown as Area G on Drawing G6296.04.001.
- 1.17 The horse-grazed fields and silage fields in the southern part of the site comprise Area H and the existing roads on site are shown as Area I on Drawing G6296.04.001.

2.0 Areas of Constraint

High Constraint

- 2.1 The following features comprise Area A - Wildlife Corridors, and represent a High Constraint to development:
- Numerous ditches across the site;
 - Numerous hedgerows across the site.
- 2.2 These wildlife corridors should be retained in the masterplan and be protected by habitat buffers. A sensitive lighting strategy should be adopted to prevent light spillage onto these features, to maintain their potential as bat commuting corridors.
- 2.3 Area B also represents a High Constraint to development. Of the 29 ponds within the site boundaries, 14 of these are known to support populations of great crested newts. There is known to be an exceptional population of great crested newts across this site and common toad, a Section 41 species, is also known to be present.
- 2.4 The masterplan for the site should be carefully designed to retain those ponds that are of importance to the great crested newt population. A Natural England mitigation licence would be required to ensure the continued Favourable Conservation Status of the species, as, even if all breeding habitat is retained, there will undoubtedly be losses of terrestrial amphibian habitat.
- 2.5 Given the extent of the site, there would be opportunity to mitigate or compensate for losses of great crested newt terrestrial habitat within the masterplan. There is thus no reason to believe that Natural England would refuse a licence.
- 2.6 Area C represents a High Constraint to development. The dry heath/acid grassland mix has developed upon an area of colliery spoil and this has characteristics of the Section 41 habitats¹ lowland dry acid grassland and lowland heathland. This habitat is rare in this area as it has developed due to historical colliery operations. It will be important to retain this habitat within any future development and the masterplan should be designed to incorporate this.

Medium Constraint

- 2.7 The plantation woodland and scrub in Areas D and F represent a Medium Constraint to development. These habitats and features provide valuable habitat for a wide range of species and prior to development of this area a wide range of surveys would be required to ascertain its importance for any particular species. The results of the surveys can then be fed directly into the masterplan and mitigation provided where required.

¹ Under S41 of the Natural Environment and Rural Communities Act, 2006, Local Planning Authorities are under a duty to have regard to habitats and species of principal importance for biodiversity (such as native hedgerows, natural watercourses, deciduous woodland, lowland meadows etc)

- 2.8 Areas E and G also represent a Medium Constraint to development. These areas of grassland are located within the Gibfield Park (North) and Gibfield Park (South) SBI's and additionally these areas provide good terrestrial habitat for a wide range of species, including great crested newts. Any development within these areas will require careful planning and a range of surveys would be required.
- 2.9 Himalayan balsam, Japanese knotweed and montbretia, all Schedule 9² invasive species, exist at various locations across the site. Aquatic invasives, curly waterweed and Nutall's pondweed, exist in numerous ponds on site. Clearance and/or management of these invasive species would be required to facilitate development.

Low Constraint

- 2.10 Area H represents a Low Constraint to development. The horse-grazed semi-improved grassland and arable habitats that dominate Area H are not Section 41 habitats and only provide low quality terrestrial habitat for protected species.
- 2.11 Area I represents a Low Constraint to development. This area comprises the existing access roads through the site.

Protected and Priority Fauna

- 2.12 Constraints relating to protected and Section 41 species are considered in Table 1.
- 2.13 The development would require a Natural England licence for great crested newts (Section 41 and European Protected Species (EPS³)).
- 2.14 Loss of grassland would result in the reduction in range for farmland bird species barn owl and brown hares (Section 41 species), along with a reduction in foraging habitat for badger. The effect of losses of Area H habitats should be balanced by creation of new habitats of value to birds and badgers; e.g. new ponds, wetlands, species-rich grasslands and woodland.
- 2.15 These new habitats would be capable of supporting populations of Section 41 birds, albeit not the same species that would be displaced from the farmed area.
- 2.16 Policy GM-G 10 of the revised GMSF January 2019 states that a net enhancement of biodiversity resources will be sought across the plan as a whole.

² Schedule 9: It is illegal to plant or otherwise cause to grow in the wild any plant listed in Schedule 9 of the Wildlife and Countryside Act, 1981 (as amended)

³ European Protect Species (EPS) are animals and plants that are listed under Annex IV of the European Habitats Directive and receive protection in England under Regulation 41 of The Conservation of Habitats and Species Regulations (2010).

Table 1. Summary of constraints related to Fauna

Fauna Group/ Species (Protected ⁴)	Constraint	Details
Amphibians	Yes	There are 29 ponds located on the site, which have been regularly surveyed for over ten years. A large population of great crested newt (European Protected Species ⁵ (EPS)) is present, with 14 ponds confirmed as breeding habitat. A development licence from Natural England is required to permit development and ensure mitigation for terrestrial habitat loss. Common toad, a Section 41 species, has also been recorded in ponds on site.
Reptiles	Yes	The southern part of site contains only limited habitat for reptiles in the grazed and arable fields. The remaining area does, however, provide suitable reptile habitat due to numerous ponds, tall grassland, dry heath and areas of tall ruderal vegetation. Targeted reptile surveys would be required to inform any planning application.
Birds	Yes	Breeding bird surveys have historically been undertaken on site and a relatively high diversity of species has been recorded. The majority of species are common and widespread, and include ground-nesting bird species. Skylark has historically been recorded nesting on site. The broad-leaved woodland on site should be retained where possible and enhanced, improving habitat for tree nesting bird species. New strategic planting should be undertaken to strengthen the hedgerow network within the site and provide more habitat for hedgerow bird species. Consideration will also need to be given to ground nesting bird species, particularly skylark, which have been recorded on site.
Bats	Yes	No bat (EPS) roosts have been identified on site. A full ground-based assessment of all trees on site has not been undertaken but trees are generally young to middle-aged, and some may have potential to support roosting bats. Common pipistrelle, soprano pipistrelle, noctule, Daubenton's and Myotis sp. have all been recorded in the area; however, no records of roosts, or bats, relate to the site. The areas of broad-leaved trees should be retained where possible as these provide good foraging and commuting habitat for bats. However, the loss of any bat foraging habitat and habitat severance impacts can be mitigated within the design and through habitat creation. All trees which will be affected by development will need to be assessed for bat roost potential.
Badger	No	Although there are records of badgers within 1km of the site, no evidence of badgers was found within the site or immediately adjacent to the site (within 30m). There are no implications for the development with regard to badgers.

⁴ The rarest and most threatened species in England are listed under Section 41 of the 2006 Natural Environment and Rural Communities (NERC) Act. Protecting and enhancing S41 species is key delivering the Biodiversity 2020 strategy.

⁵ European Protect Species (EPS) are animals and plants that are listed under Annex IV of the European Habitats Directive and receive protection in England under Regulation 41 of The Conservation of Habitats and Species Regulations (2010).

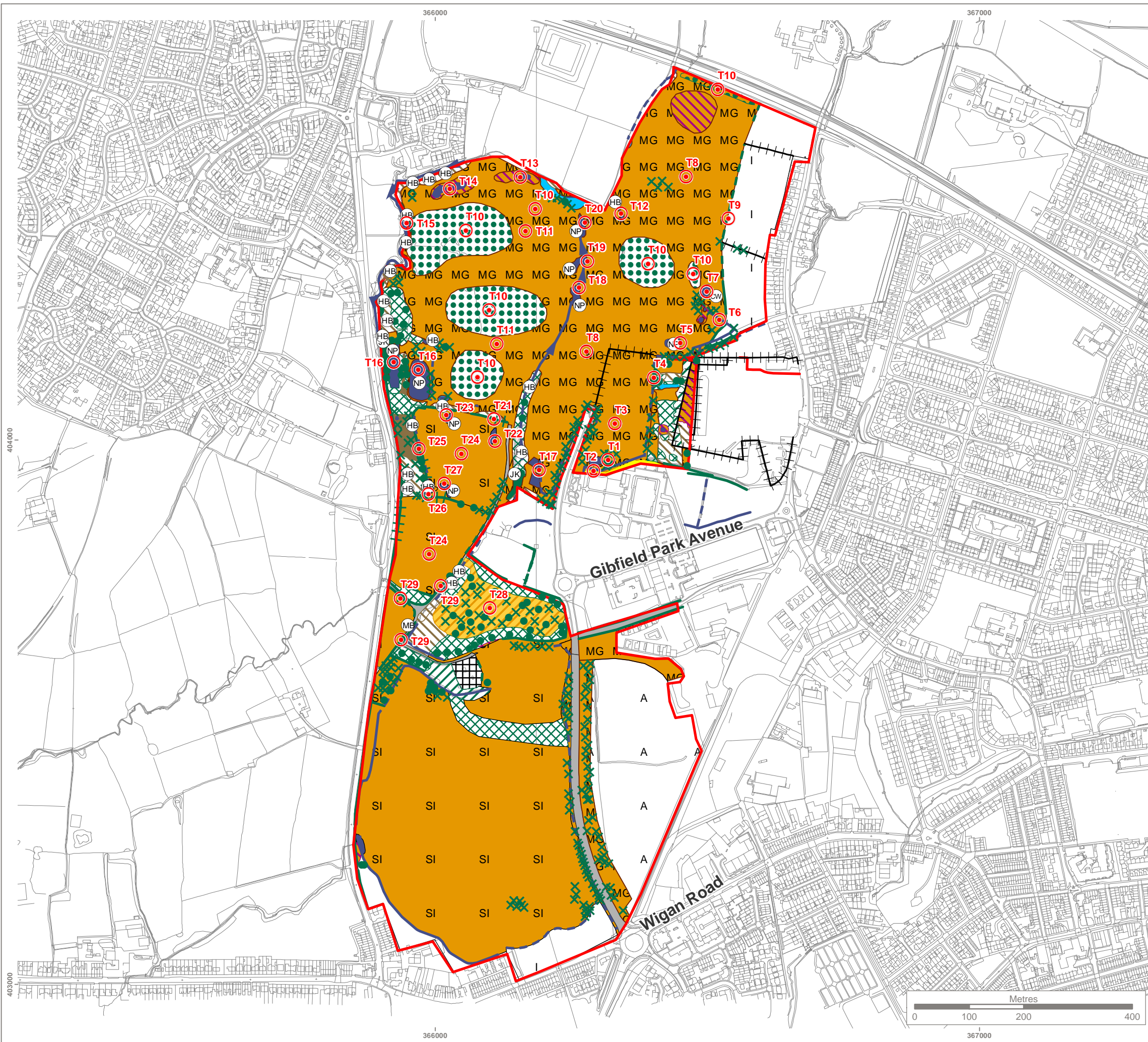
Fauna Group/ Species (Protected ⁴)	Constraint	Details
Water vole	Yes	Water vole surveys have been carried out historically on site and no evidence of water voles was found. There are, however, records of water vole associated with a watercourse to the immediate west of the site. A water vole survey should be undertaken to inform any planning application.
Otter	No	The site does not support otter. There are no implications for the development with regard to otter.
Brown Hare	Yes	There are records of brown hare in close proximity to the site and suitable habitat for brown hare is present within the site. There will be habitat loss as a result of the proposals, as brown hare makes use of a mosaic of habitats including arable land. Leaving grassland tall in buffer zones and keeping the hedgerows will retain some value in the site for brown hare.

3.0 Opportunities

- 3.1 There are opportunities to enhance biodiversity through the process of development, in line with National Planning Policy Framework (NPPF, 2018), under Section 40 of the Natural Environment and Rural Communities (NERC) Act 2016⁶, and the GMSF revised draft January 2019 policies as outlined in Chapter 8 'A Greener Greater Manchester'.
- 3.2 The GMSF revised draft January 2019 states that development of the site (GM Allocation 51) in relation to ecology will need to:
- Provide a new high quality, landscaped gateway into Wigan Borough from the north.
 - Provide a substantive accessible green infrastructure corridor and country park from Wigan Road (Small Brook) in the south across Schofield Lane to the Atherton railway line in the north, east of Daisy Hill, on land remaining in the Green Belt, and ensure ongoing arrangements for maintenance.
 - Make appropriate provision within that green infrastructure for great crested newts sufficient to mitigate the development.
- 3.3 An Illustrative Masterplan is provided in Drawing: 507A-23. The above points can be incorporated into the proposed development.
- 3.4 Where practicable, opportunities to integrate new and existing green infrastructure into new development should be taken to protect, enhance and expand the green infrastructure network in accordance with Policy GM-G 2 'Green Infrastructure Network'. Where new or improved green infrastructure is delivered as part of a development, the developer should make appropriate provision for its long term management and maintenance.
- 3.5 The masterplan includes a large amount of green infrastructure with the enhancement of ecological features and the provision of new footpaths, cycleways and a mountain bike trail. Retention and enhancement of wildlife corridors will seek to facilitate dispersal across Manchester.
- 3.6 Under Policy GM Allocation 51 'West of Gibfield' within the revised draft GMSF January 2019, it is stated that the green infrastructure requirement will need to be delivered in advance and alongside the housing development and should provide effectively for a country park with wildlife habitats and recreational space.
- 3.7 Habitat creation includes woodland and ponds (including attenuation ponds) with the enhancement of habitat achieved through ongoing management plans.

⁶ Section 40 of the Natural Environment and Rural Communities Act 2016 places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity which in turn will seek to contribute to the achievement of the commitments of the Biodiversity 2020 strategy.

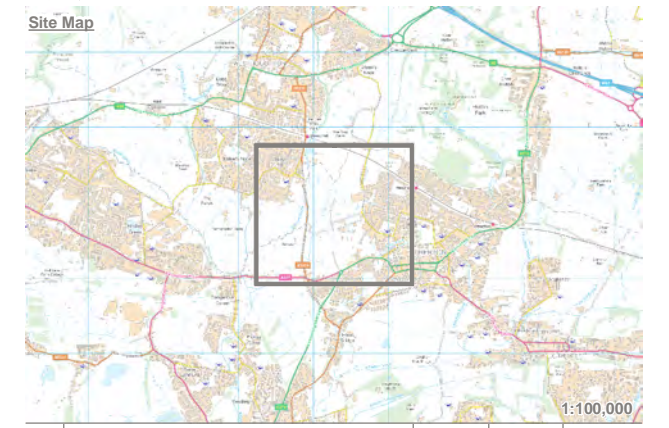
APPENDIX A: Phase 1 Habitat Survey



KEY

- Site Boundary
- Target Note
- Curly Waterweed
- Himalayan Balsam
- Japanese Knotweed
- Montbretia
- Nuttall's Pondweed
- Scattered Scrub
- Scattered Broad-leaved Trees
- Scattered Bracken
- Standing water
- Running water
- Species-poor intact hedge
- Species-poor defunct hedge
- Species-poor hedge and trees
- Fence
- Wall
- Dry ditch
- Semi-natural Broad-leaved Woodland
- Plantation Broad-leaved Woodland
- Dense/Continuous Scrub
- Broad-leaved Parkland/Scattered Trees
- Semi-improved Neutral Grassland
- Modified Neutral Grassland
- Improved Grassland
- Marsh/Marshy Grassland
- Continuous Bracken
- Tall Ruderal
- Dry Heath/Acid Grassland Mosaic
- Swamp
- Standing Water

- Arable
- Amenity Grassland
- Caravan Site
- Not Surveyed
- Hardstanding



Rev	Description	Drawn	Approved	Date
A	Updates to Phase 1 Habitats	RH	KS	04/12/2017

TEP | THE ENVIRONMENT PARTNERSHIP

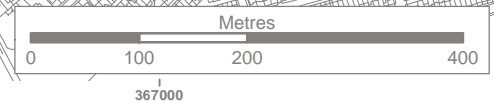
Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
 Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
West of Gibfield, Ecology

Title
Phase 1 Habitat Survey

Drawing Number G6296.04.002A.1	Sheet 1 of 3
-----------------------------------	--------------

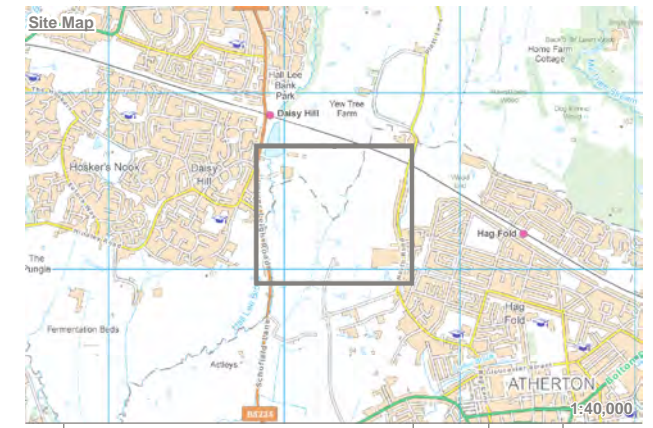
Drawn	Checked	Approved	Scale	Date
RH	JS	KS	1:7,000 @ A3	04/12/2017





KEY

- Site Boundary
- Target Note
- Curly Waterweed
- Himalayan Balsam
- Japanese Knotweed
- Nuttall's Pondweed
- X Scattered Scrub
- Scattered Broad-leaved Trees
- X Scattered Bracken
- Standing water
- Running water
- Species-poor intact hedge
- Species-poor defunct hedge
- Species-poor hedge and trees
- Fence
- Wall
- Dry ditch
- Semi-natural Broad-leaved Woodland
- Plantation Broad-leaved Woodland
- Dense/Continuous Scrub
- Broad-leaved Parkland/Scattered Trees
- Semi-improved Neutral Grassland
- Modified Neutral Grassland
- Improved Grassland
- Marsh/Marshy Grassland
- Continuous Bracken
- Tall Ruderal
- Swamp
- Standing Water
- Amenity Grassland
- Hardstanding



A	Updates to Phase 1 Habitats	RH	KS	04/12/2017
Rev	Description	Drawn	Approved	Date

THE ENVIRONMENT PARTNERSHIP

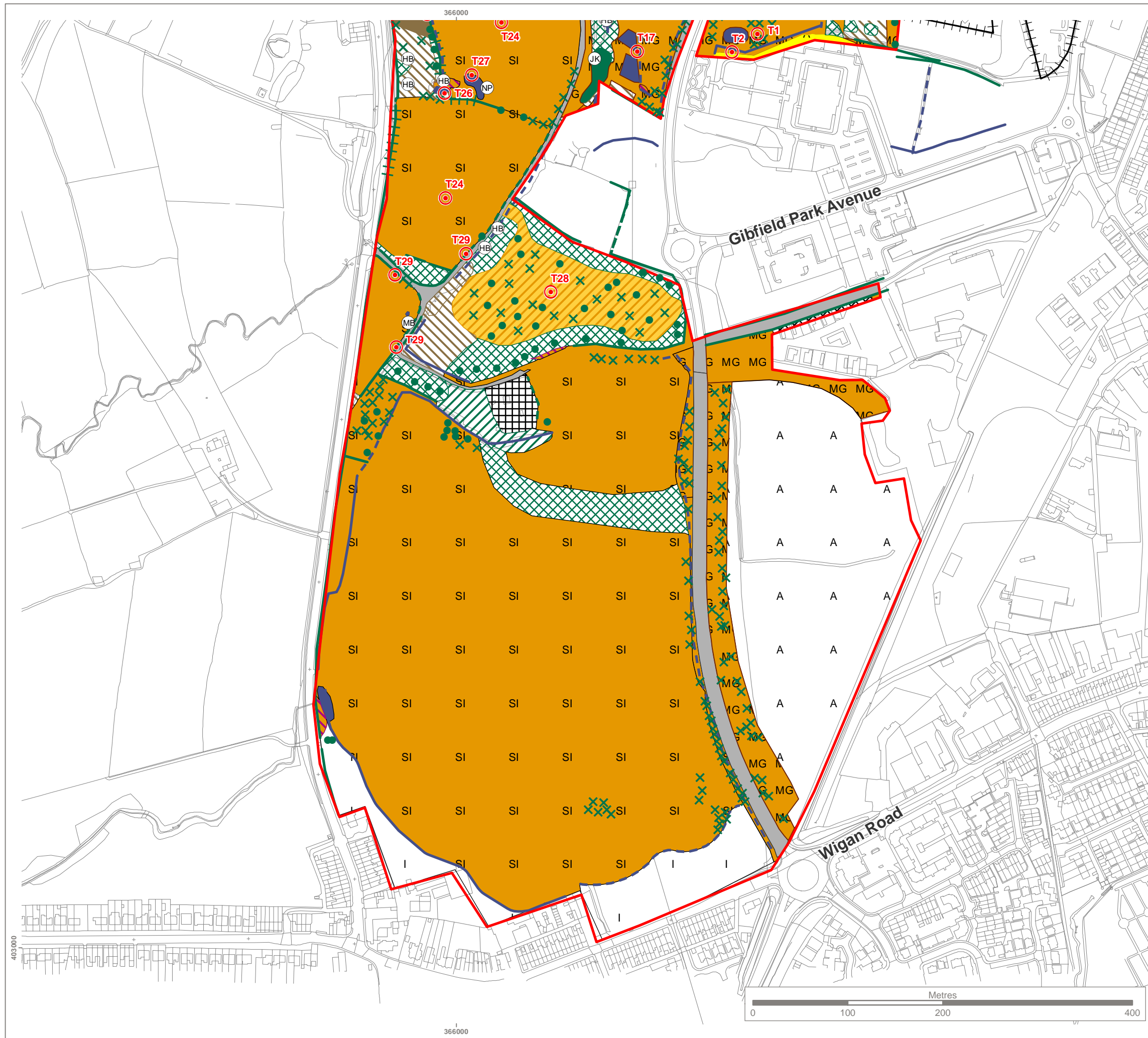
Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
 Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
West of Gibfield, Ecology

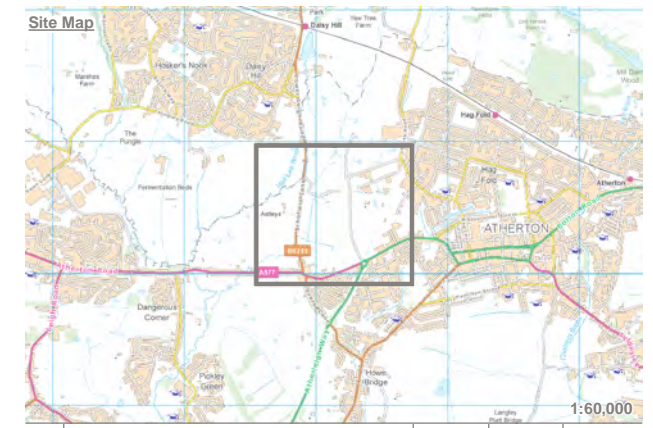
Title
Phase 1 Habitat Survey

Drawing Number G6296.04.002A.2	Sheet 2 of 3
-----------------------------------	--------------

Drawn RH	Checked JS	Approved KS	Scale 1:3,000 @ A3	Date 04/12/2017
-------------	---------------	----------------	-----------------------	--------------------



- KEY**
- Site Boundary
 - Target Note
 - Himalayan Balsam
 - Japanese Knotweed
 - Montbretia
 - Nuttall's Pondweed
 - X Scattered Scrub
 - Scattered Broad-leaved Trees
 - Standing water
 - Running water
 - Species-poor intact hedge
 - Species-poor defunct hedge
 - Species-poor hedge and trees
 - Fence
 - Dry ditch
 - Semi-natural Broad-leaved Woodland
 - Plantation Broad-leaved Woodland
 - Dense/Continuous Scrub
 - Semi-improved Neutral Grassland
 - Modified Neutral Grassland
 - Improved Grassland
 - Marsh/Marshy Grassland
 - Continuous Bracken
 - Tall Ruderal
 - Dry Heath/Acid Grassland Mosaic
 - Standing Water
 - Arable
 - Amenity Grassland
 - Caravan Site
 - Not Surveyed
 - Hardstanding



Rev	Description	Drawn	Approved	Date
A	Updates to Phase 1 Habitats	RH	KS	04/12/2017

TEP | **THE ENVIRONMENT PARTNERSHIP**

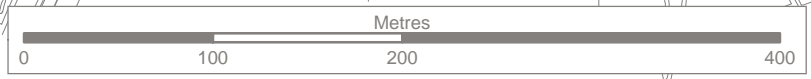
Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
 Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
West of Gibfield, Ecology

Title
Phase 1 Habitat Survey

Drawing Number
G6296.04.002A.3 Sheet 3 of 3

Drawn	Checked	Approved	Scale	Date
RH	JS	KS	1:4,000 @ A3	04/12/2017



Target Notes Report

M61C4: WEST OF GIBFIELD, ATHERTON

Target Note TN1

An area of MG grassland, damp in places with some scattered scrub. This includes an area of a former pond.

<i>Agrostis stolonifera</i>	Creeping Bent	A
<i>Arrhenatherum elatius</i>	False Oat-grass	F
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Juncus conglomeratus</i>	Compact Rush	F
<i>Poa pratensis</i>	Smooth Meadow-grass	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Carex flacca</i>	Glaucous Sedge	O
<i>Cerastium fontanum</i>	Common Mouse-ear	O
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Cynosurus cristatus</i>	Crested Dog's-tail	O
<i>Elytrigia repens</i>	Common Couch	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Festuca rubra</i>	Red Fescue	O
Moss sp.	Moss species	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O
<i>Phleum pratense</i>	Timothy	O
<i>Poa trivialis</i>	Rough Meadow-grass	O
<i>Prunus spinosa</i>	Blackthorn	O
<i>Rumex crispus</i>	Curled Dock	O
<i>Salix caprea</i>	Goat Willow	O
<i>Senecio jacobaea</i>	Ragwort	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Corylus avellana</i>	Hazel	R
<i>Epilobium sp.</i>	Willowherb species	R
<i>Juncus effusus</i>	Soft Rush	R
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	R
<i>Ulex europaeus</i>	Gorse	R

Target Note TN2

A very shallow ditch.

<i>Ranunculus repens</i>	Creeping Buttercup	A
<i>Juncus effusus</i>	Soft Rush	F
Moss sp.	Moss species	F
<i>Myosotis sp.</i>	Forget-me-not species	F
<i>Typha latifolia</i>	Greater Reedmace	F
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Rumex crispus</i>	Curled Dock	O
<i>Trifolium repens</i>	White Clover	R

Target Note TN3

An area of level and low lying MG grassland with some sedge-dominated damper areas.

<i>Agrostis stolonifera</i>	Creeping Bent	A
<i>Carex flacca</i>	Glaucous Sedge	A
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	F
<i>Cynosurus cristatus</i>	Crested Dog's-tail	F
<i>Holcus lanatus</i>	Yorkshire-fog	F

KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

<i>Lotus corniculatus sativus</i>	Corn Bird's-foot	F
<i>Moss sp.</i>	Moss species	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Centaurea nigra</i>	Knapweed	O
<i>Dysenterica pulicaria</i>	Fleabane	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Lolium perenne</i>	Ryegrass	O
<i>Phleum pratense</i>	Timothy	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Poa pratensis</i>	Smooth Meadow-grass	O
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	O
<i>Taraxacum officinale agg.</i>	Dandelion	O
<i>Trifolium hybridum</i>	Alsike Clover	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Trifolium repens</i>	White Clover	O
<i>Vicia cracca</i>	Tufted Vetch	O
<i>Vicia tetrasperma</i>	Smooth Tare	O
<i>Carex hirta</i>	Hairy Sedge	R
<i>Carex viridula ssp.brach</i>	Yellow-sedge	R
<i>Centaureum erythraea</i>	Common Centaury	R
<i>Dactylorhiza sp.</i>	Marsh-orchid	R
<i>Deschampsia cespitosa</i>	Tufted Hair-grass	R
<i>Epilobium parviflorum</i>	Hoary Willowherb	R
<i>Eriophorum angustifolium</i>	Common Cottongrass	R
<i>Hypochaeris radicata</i>	Common Cat's-ear	R
<i>Iris pseudacorus</i>	Yellow Flag Iris	R
<i>Juncus inflexus</i>	Hard Rush	R
<i>Lysimachia vulgaris</i>	Yellow Loosestrife	R
<i>Medicago lupulina</i>	Black Medick	R
<i>Rubus fruticosus agg.</i>	Bramble	R
<i>Senecio erucifolius</i>	Hoary Ragwort	R
<i>Stachys sylvatica</i>	Hedge Woundwort	R
<i>Tussilago farfara</i>	Colt's-foot	R

Target Note TN4

A dry ditch with a bank of *Arrhenatherum* and Great Willowherb. MG/tall ruderal vegetation is present along the eastern boundary.

<i>Arrhenatherum elatius</i>	False Oat-grass	D
<i>Cirsium arvense</i>	Creeping Thistle	F
<i>Dactylis glomerata</i>	Cock's-foot	F
<i>Epilobium hirsutum</i>	Great Willowherb	F
<i>Epilobium sp.</i>	Willowherb species	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Salix caprea</i>	Goat Willow	O
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Salix fragilis</i>	Crack Willow	R

Target Note TN5

Pond 31

<i>Elodea nutallii</i>	Nuttall's Pondweed	A
<i>Typha latifolia</i>	Greater Reedmace	A
<i>Mentha aquatica</i>	Water Mint	F
<i>Potamogeton natans</i>	Broad-leaved Pondweed	F
<i>Epilobium hirsutum</i>	Great Willowherb	O

KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

<i>Juncus articulatus</i>	Jointed Rush	O
<i>Myosotis sp.</i>	Forget-me-not species	O
<i>Nuphar lutea</i>	Yellow Waterlily	O

Target Note TN6

Two small pools in a hollow with marshy grassland joining them. A similar mix of species as found in TN7 with some MG grassland species also present in a marshy grassland area. There are no Schedule 9 plants.

Target Note TN7

Pond 33.

<i>Typha latifolia</i>	Greater Reedmace	A
<i>Lagarosiphon major</i>	Curly Waterweed	F
<i>Mentha aquatica</i>	Water Mint	F
<i>Potamogeton natans</i>	Broad-leaved Pondweed	F
<i>Eleocharis palustris</i>	Common Spike-rush	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Lemna trisulca</i>	Ivy-leaved Duckweed	O
<i>Moss sp.</i>	Moss species	O
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	O
<i>Epilobium hirsutum</i>	Great Willowherb	R
<i>Glyceria fluitans</i>	Floating Sweet-grass	R
<i>Solanum dulcamara</i>	Bittersweet	R

Target Note TN8

MG grassland.

<i>Arrhenatherum elatius</i>	False Oat-grass	A
<i>Agrostis stolonifera</i>	Creeping Bent	F
<i>Alopecurus pratensis</i>	Meadow Foxtail	F
<i>Festuca rubra</i>	Red Fescue	F
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Phleum pratense</i>	Timothy	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Cirsium arvense</i>	Creeping Thistle	O
<i>Cynosurus cristatus</i>	Crested Dog's-tail	O
<i>Elytrigia repens</i>	Common Couch	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Lathyrus pratensis</i>	Meadow Vetchling	O
<i>Lolium perenne</i>	Ryegrass	O
<i>Lotus corniculatus sativus</i>	Corn Bird's-foot	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O
<i>Poa pratensis</i>	Smooth Meadow-grass	O
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Rumex crispus</i>	Curled Dock	O
<i>Rumex obtusifolius</i>	Broad-leaved Dock	O
<i>Senecio jacobaea</i>	Ragwort	O
<i>Taraxacum officinale agg.</i>	Dandelion	O
<i>Trifolium repens</i>	White Clover	O
<i>Vicia cracca</i>	Tufted Vetch	O
<i>Agrostis capillaris</i>	Common Bent	R
<i>Carex hirta</i>	Hairy Sedge	R
<i>Chamerion angustifolium</i>	Rosebay Willowherb	R
<i>Cirsium vulgare</i>	Spear Thistle	R
<i>Dactylorhiza sp.</i>	Marsh-orchid	R

KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

<i>Dysenterica pulicaria</i>	Fleabane	R
<i>Epilobium hirsutum</i>	Great Willowherb	R
<i>Persicaria maculosa</i>	Redshank	R
<i>Poa annua</i>	Annual Meadow-grass	R
<i>Tussilago farfara</i>	Colt's-foot	R
<i>Urtica dioica</i>	Nettle	R

Target Note TN9

A species-poor planted hedge.

<i>Crataegus monogyna</i>	Hawthorn	D
<i>Arrhenatherum elatius</i>	False Oat-grass	F
<i>Urtica dioica</i>	Nettle	F
<i>Acer campestre</i>	Field Maple	O
<i>Corylus avellana</i>	Hazel	O
<i>Galium aparine</i>	Cleavers	O
<i>Solanum dulcamara</i>	Bittersweet	R

Target Note TN10

Young plantation areas surrounded by MG grassland.

<i>Betula pendula</i>	Silver Birch	A
<i>Alnus glutinosa</i>	Alder	F
<i>Corylus avellana</i>	Hazel	F
<i>Pinus sp.</i>	Pine species	F
<i>Quercus robur</i>	English Oak	F
<i>Acer campestre</i>	Field Maple	O
<i>Crataegus monogyna</i>	Hawthorn	O
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	O
<i>Salix fragilis</i>	Crack Willow	O
<i>Sorbus aucuparia</i>	Mountain Ash	O
<i>Sorbus aucuparia</i>	Rowan	O
<i>Fraxinus excelsior</i>	Ash	R

Target Note TN11

MG grassland on the western half of the northern section of the site.

<i>Arrhenatherum elatius</i>	False Oat-grass	A
<i>Holcus lanatus</i>	Yorkshire-fog	A
<i>Agrostis stolonifera</i>	Creeping Bent	F
<i>Elytrigia repens</i>	Common Couch	F
<i>Poa pratensis</i>	Smooth Meadow-grass	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Senecio jacobaea</i>	Ragwort	F
<i>Achillea millefolium</i>	Yarrow	O
<i>Alopecurus geniculatus</i>	Marsh Foxtail	O
<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	O
<i>Carex flacca</i>	Glaucous Sedge	O
<i>Carex hirta</i>	Hairy Sedge	O
<i>Centaurea nigra</i>	Knapweed	O
<i>Cerastium fontanum</i>	Common Mouse-ear	O
<i>Dactylorhiza sp.</i>	Marsh-orchid	O
<i>Dysenterica pulicaria</i>	Fleabane	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Euphrasia nemoralis agg.</i>	Eyebright	O
<i>Holcus mollis</i>	Creeping Soft-grass	O
<i>Hypochaeris radicata</i>	Common Cat's-ear	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Lolium perenne</i>	Ryegrass	O

KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

<i>Odontites verna</i>	Red Bartsia	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Rumex acetosa</i>	Common Sorrel	O
<i>Rumex conglomeratus</i>	Clustered Dock	O
<i>Trifolium hybridum</i>	Alsike Clover	O
<i>Vicia cracca</i>	Tufted Vetch	O
<i>Vicia sativa</i>	Common Vetch	O
<i>Achillea ptarmica</i>	Sneezewort	R
<i>Angelica sylvestris</i>	Wild Angelica	R
<i>Cirsium palustre</i>	Marsh Thistle	R
<i>Heracleum sphondylium</i>	Hogweed	R
<i>Leucanthemum vulgare</i>	Oxeye daisy	R
<i>Schedonorus arundinaceus</i>	Tall Fescue	R

Target Note TN12

A linear water body known as Pond 15.

<i>Phragmites australis</i>	Reed	A
<i>Typha latifolia</i>	Greater Reedmace	A
<i>Juncus inflexus</i>	Hard Rush	F
<i>Lemna minor</i>	Common Duckweed	F
<i>Eleocharis palustris</i>	Common Spike-rush	O
<i>Equisetum fluviatile</i>	Water Horsetail	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Myosotis sp.</i>	Forget-me-not species	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O

Target Note TN13

Pond 14 and surrounding marshy grassland. The pond is dominated by typha and rushes.

<i>Agrostis stolonifera</i>	Creeping Bent	A
<i>Holcus lanatus</i>	Yorkshire-fog	A
<i>Juncus inflexus</i>	Hard Rush	F
<i>Lemna trisulca</i>	Ivy-leaved Duckweed	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Carex hirta</i>	Hairy Sedge	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Typha latifolia</i>	Greater Reedmace	O
<i>Eriophorum angustifolium</i>	Common Cottongrass	R

Target Note TN14

Ponds 26 and 27.

<i>Eleocharis palustris</i>	Common Spike-rush	F
<i>Potamogeton natans</i>	Broad-leaved Pondweed	F
<i>Typha latifolia</i>	Greater Reedmace	F
<i>Alisma plantago-aquaticum</i>	Water-plantain	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Sparganium erectum</i>	Branched Bur-reed	O

Target Note TN15

A tree-lined stream on the north-western boundary of the site with a gravel/stone/silt base.

<i>Crataegus monogyna</i>	Hawthorn	A
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Arrhenatherum elatius</i>	False Oat-grass	F

KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

<i>Fraxinus excelsior</i>	Ash	F
<i>Impatiens glandulifera</i>	Himalayan Balsam	F
<i>Pteridium aquilinum</i>	Bracken	F
<i>Alnus glutinosa</i>	Alder	O
<i>Angelica sylvestris</i>	Wild Angelica	O
<i>Athyrium filix-femina</i>	Lady-fern	O
<i>Carex remota</i>	Remote Sedge	O
<i>Dryopteris dilatata</i>	Broad Buckler-fern	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Epilobium sp.</i>	Willowherb species	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Heracleum sphondylium</i>	Hogweed	O
<i>Populus sp.</i>	Poplar species	O
<i>Quercus robur</i>	English Oak	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	O
<i>Salix fragilis</i>	Crack Willow	O
<i>Salix species</i>	Willow species	O
<i>Sambucus nigra</i>	Elder	O
<i>Urtica dioica</i>	Nettle	O
<i>Cardamine flexuosa</i>	Wavy Bitter-cress	R
<i>Carex pendula</i>	Pendulous Sedge	R
<i>Carpinus betulus</i>	Hornbeam	R
<i>Cytisus striatus</i>	Hairy Broom	R
<i>Elymus caninus</i>	Bearded Couch	R
<i>Ilex aquifolium</i>	Holly	R
<i>Persicaria bistorta</i>	Bistort	R
<i>Rosa canina agg.</i>	Dog Rose	R

Target Note TN16

Ponds 12 and 13 (lagoons) with marginal and aquatic vegetation.

<i>Elodea nutallii</i>	Nuttall's Pondweed	A
<i>Potamogeton natans</i>	Broad-leaved Pondweed	F
<i>Typha latifolia</i>	Greater Reedmace	F
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Equisetum arvense</i>	Field Horsetail	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Nymphaea alba</i>	White Water-lily	O
<i>Eupatorium cannabinum</i>	Hemp-agrimony	R

Target Note TN17

Ponds 7 and 8. The adjacent area of marsh to the north-west has abundant common bog cotton with typha, great willowherb and hard rush.

<i>Juncus inflexus</i>	Hard Rush	F
<i>Typha latifolia</i>	Greater Reedmace	F
<i>Acorus calamus</i>	Sweet Flag	O
<i>Alisma plantago-aquaticum</i>	Water-plantain	O
<i>Crassula helmsii</i>	New Zealand Pygmyweed	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Mentha aquatica</i>	Water Mint	O
<i>Potamogeton crispus</i>	Curled Pondweed	O
<i>Potamogeton natans</i>	Broad-leaved Pondweed	O
<i>Dysenterica pulicaria</i>	Fleabane	R

Target Note TN18

<i>Elodea nutallii</i>	Nuttall's Pondweed	A
<i>Eleocharis palustris</i>	Common Spike-rush	F
<i>Epilobium hirsutum</i>	Great Willowherb	F

KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

<i>Potamogeton natans</i>	Broad-leaved Pondweed	F
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Typha latifolia</i>	Greater Reedmace	O
<i>Juncus inflexus</i>	Hard Rush	

Target Note TN19

<i>Elodea nutallii</i>	Nuttall's Pondweed	A
<i>Typha latifolia</i>	Greater Reedmace	A
<i>Eleocharis palustris</i>	Common Spike-rush	F
<i>Potamogeton natans</i>	Broad-leaved Pondweed	F
<i>Carex flacca</i>	Glaucous Sedge	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Myosotis sp.</i>	Forget-me-not species	O
<i>Carex viridula ssp.brach</i>	Yellow-sedge	R

Target Note TN20

<i>Elodea nutallii</i>	Nuttall's Pondweed	D
<i>Potamogeton natans</i>	Broad-leaved Pondweed	F
<i>Glyceria sp.</i>	Sweet-grass species	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Juncus articulatus</i>	Jointed Rush	R

Target Note TN21

A species-poor hedge along the northern boundary of horse fields.

<i>Crataegus monogyna</i>	Hawthorn	D
<i>Urtica dioica</i>	Nettle	F
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Corylus avellana</i>	Hazel	O
<i>Dryopteris filix-mas</i>	Male-fern	O
<i>Impatiens glandulifera</i>	Himalayan Balsam	O
<i>Quercus robur</i>	English Oak	O
<i>Rubus fruticosus agg.</i>	Bramble	O
<i>Ilex aquifolium</i>	Holly	R
<i>Sambucus nigra</i>	Elder	R

Target Note TN22

Pond 10. This pond has horse poached banks and very little aquatic vegetation.

<i>Persicaria maculosa</i>	Redshank	A
<i>Gnaphalium uliginosum</i>	Marsh Cudweed	O
<i>Potamogeton natans</i>	Broad-leaved Pondweed	O

Target Note TN23

Pond 18. This pond is horse poached and turbid.

<i>Elodea nutallii</i>	Nuttall's Pondweed	A
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Potamogeton natans</i>	Broad-leaved Pondweed	O

Target Note TN24

Semi-improved fields.

<i>Holcus lanatus</i>	Yorkshire-fog	A
<i>Agrostis stolonifera</i>	Creeping Bent	F
<i>Cynosurus cristatus</i>	Crested Dog's-tail	F

KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

<i>Lolium perenne</i>	Ryegrass	F
<i>Phleum pratense</i>	Timothy	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Hypochaeris radicata</i>	Common Cat's-ear	O
<i>Juncus conglomeratus</i>	Compact Rush	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Persicaria maculosa</i>	Redshank	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Prunella vulgaris</i>	Selfheal	O
<i>Ranunculus acris</i>	Meadow Buttercup	O
<i>Rumex crispus</i>	Curled Dock	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Trifolium repens</i>	White Clover	O
<i>Vicia sativa</i>	Common Vetch	O
<i>Bellis perennis</i>	Daisy	R
<i>Centaurea nigra</i>	Knapweed	R
<i>Malva sylvestris</i>	Common Mallow	R
<i>Persicaria bistorta</i>	Bistort	R

Target Note TN25

A species-poor hedge which is outgrown and unmanaged with some trees at the southern end. It is adjacent to a dry ditch at present.

<i>Crataegus monogyna</i>	Hawthorn	A
<i>Acer pseudoplatanus</i>	Sycamore	F
<i>Impatiens glandulifera</i>	Himalayan Balsam	F
<i>Pteridium aquilinum</i>	Bracken	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Fraxinus excelsior</i>	Ash	O
<i>Quercus robur</i>	English Oak	O
<i>Sambucus nigra</i>	Elder	O
<i>Urtica dioica</i>	Nettle	O
<i>Acer platanoides</i>	Norway Maple	R

Target Note TN26

Pond 20. A shallow, rush-dominated pond with some Himalayan balsam.

<i>Juncus effusus</i>	Soft Rush	A
<i>Mentha aquatica</i>	Water Mint	F
<i>Impatiens glandulifera</i>	Himalayan Balsam	O
<i>Phalaris arundinacea</i>	Reed Canary-grass	O
<i>Sparganium erectum</i>	Branched Bur-reed	O

Target Note TN27

Pond 21. A horse poached field pond.

<i>Elodea nuttallii</i>	Nuttall's Pondweed	F
<i>Ranunculus repens</i>	Creeping Buttercup	F
<i>Glyceria fluitans</i>	Floating Sweet-grass	O
<i>Juncus articulatus</i>	Jointed Rush	O
<i>Juncus effusus</i>	Soft Rush	O
<i>Juncus inflexus</i>	Hard Rush	O
<i>Lotus pedunculatus</i>	Marsh Bird's-foot Trefoil	O
<i>Myosotis sp.</i>	Forget-me-not species	O
<i>Potamogeton natans</i>	Broad-leaved Pondweed	O
<i>Epilobium parviflorum</i>	Hoary Willowherb	R
<i>Epilobium sp.</i>	Willowherb species	R
<i>Hypericum tetrapterum</i>	Square-stalked St John's-wort	R

Target Note TN28

An acid grassland/heath mosaic with much scrub and trees on colliery waste in the centre of the site.

<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	A
------------------------------	--------------------	---

KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

<i>Betula pendula</i>	Silver Birch	F
<i>Calluna vulgaris</i>	Heather	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Danthonia decumbens</i>	Heath Grass	F
<i>Deschampsia flexuosa</i>	Wavy Hair-grass	F
<i>Festuca rubra</i>	Red Fescue	F
<i>Holcus lanatus</i>	Yorkshire-fog	F
<i>Juncus conglomeratus</i>	Compact Rush	F
<i>Quercus robur</i>	English Oak	F
<i>Rubus fruticosus agg.</i>	Bramble	F
<i>Achillea ptarmica</i>	Sneezewort	O
<i>Agrostis capillaris</i>	Common Bent	O
<i>Agrostis stolonifera</i>	Creeping Bent	O
<i>Arrhenatherum elatius</i>	False Oat-grass	O
<i>Betula pubescens</i>	Downy Birch	O
<i>Carex flacca</i>	Glaucous Sedge	O
<i>Carex hirta</i>	Hairy Sedge	O
<i>Chamerion angustifolium</i>	Rosebay Willowherb	O
<i>Cytisus scoparius</i>	Broom	O
<i>Hieracium sp.</i>	Hawkweed species	O
<i>Holcus mollis</i>	Creeping Soft-grass	O
<i>Nardus stricta</i>	Mat-grass	O
<i>Plantago lanceolata</i>	Ribwort Plantain	O
<i>Polytrichum sp.</i>	Moss species	O
<i>Salix cinerea ssp. cinerea</i>	Grey Willow	O
<i>Sorbus aucuparia</i>	Rowan	O
<i>Sorbus aucuparia</i>	Mountain Ash	O
<i>Sorbus intermedia</i>	Swedish Whitebeam	O
<i>Trifolium pratense</i>	Red Clover	O
<i>Ulex europaeus</i>	Gorse	O
<i>Aster sp.</i>	Michaelmas-daisy species	R
<i>Carex leporina</i>	Oval Sedge	R
<i>Empetrum nigrum</i>	Crowberry	R
<i>Lotus pedunculatus</i>	Marsh Bird's-foot Trefoil	R

Target Note TN29

Species-poor defunct and intact hedges parallel to trackways.

<i>Chamerion angustifolium</i>	Rosebay Willowherb	F
<i>Corylus avellana</i>	Hazel	F
<i>Crataegus monogyna</i>	Hawthorn	F
<i>Fraxinus excelsior</i>	Ash	F
<i>Urtica dioica</i>	Nettle	F
<i>Acer pseudoplatanus</i>	Sycamore	O
<i>Artemisia vulgaris</i>	Mugwort	O
<i>Epilobium hirsutum</i>	Great Willowherb	O
<i>Geranium robertianum</i>	Herb-Robert	O
<i>Hedera helix</i>	Ivy	O
<i>Heraclium sphondylium</i>	Hogweed	O
<i>Impatiens glandulifera</i>	Himalayan Balsam	O
<i>Lapsana communis</i>	Nipplewort	O
<i>Lathyrus pratensis</i>	Meadow Vetchling	O
<i>Pteridium aquilinum</i>	Bracken	O
<i>Rosa canina agg.</i>	Dog Rose	O
<i>Salix caprea</i>	Goat Willow	O
<i>Solanum dulcamara</i>	Bittersweet	O
<i>Sorbus aucuparia</i>	Rowan	O
<i>Sorbus aucuparia</i>	Mountain Ash	O
<i>Syringa vulgaris</i>	Lilac	O
<i>Tussilago farfara</i>	Colt's-foot	O
<i>Angelica sylvestris</i>	Wild Angelica	R
<i>Crocsmia x crocosmiiflora</i>	Montbretia	R

KEY - D = Dominant, A = Abundant, F = Frequent, O = Occasional, R = Rare

APPENDIX B: Desktop Study

**Desk Based Ecology Assessment
West of Gibfield (Policy GM Allocation 51)
Atherton, Wigan M46 0RH
Approximate Central Grid Reference: SD 66180 03742**

Contents

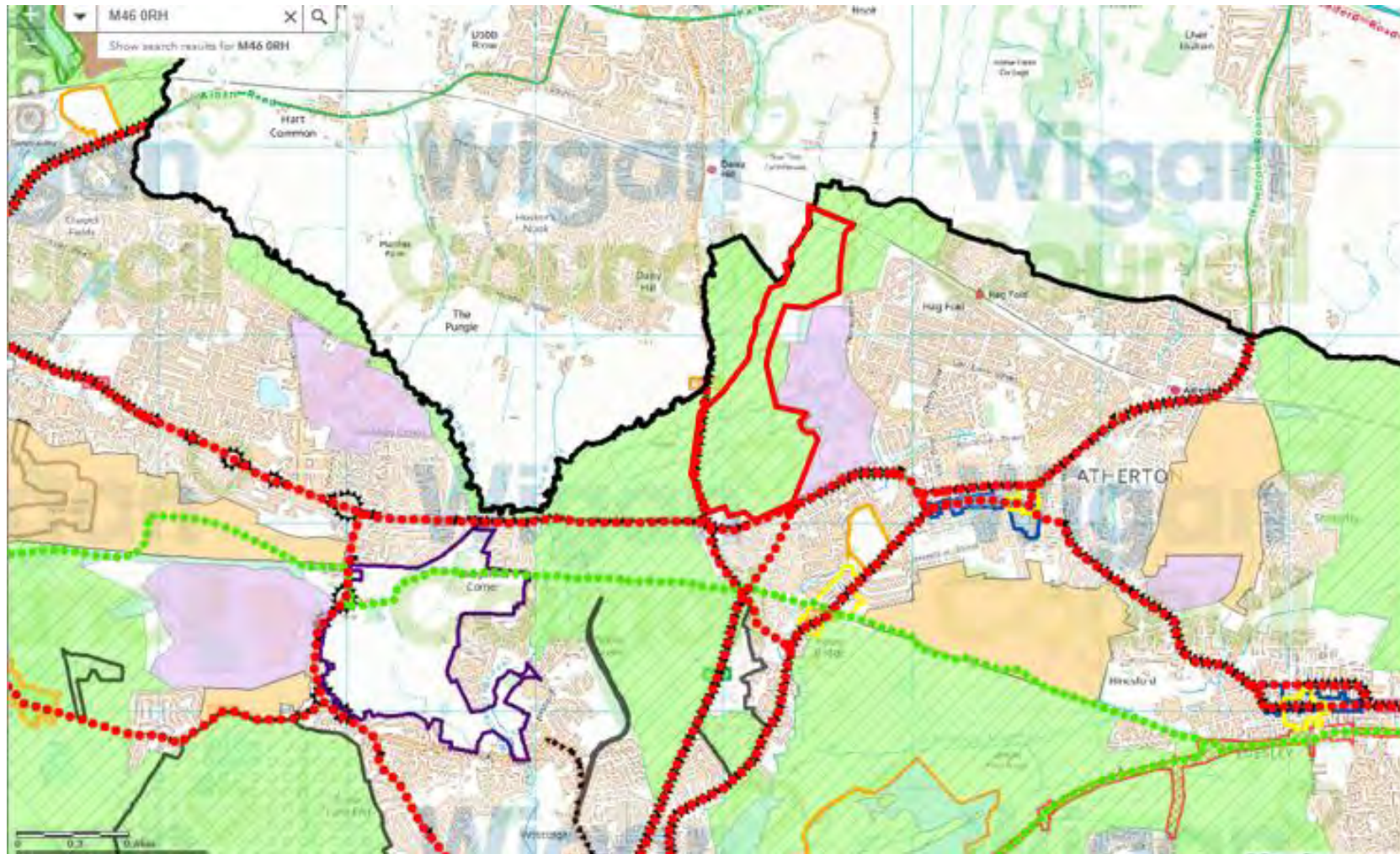
- **Site location plan**
- **Extracts of relevant planning policies**
- **Local site designations**
- **Local species records**
- **National site designations**
- **Habitat inventory records**
- **Wildlife site citations**

Site Location Plan



Contains OS data © Crown copyright and database right act 2016

Extract of Wigan Council Local Plan (adopted September 2013) - Proposals Map and Supporting Key



Local Plan

- River Douglas Canal Network
- Physical Improvements to Bus Network
- Strategic Route Network
- Greenway Network
- Scheduled Ancient Monuments
- Greenbelt Settlements
- Key Strategic Site
- Safeguarded Land
- Primary Employment Areas
- Mixed Use Developments
- Land Reclamation Renewal
- Air Quality Management Areas
- Special Areas Of Conservation
- Special Areas of Scientific Interest
- Sites of Biological Importance
- Local Nature Reserve
- Wildlife Corridor
- Conservation Areas as at UDP adoption
- Historic Parks Gardens Cemeteries
- Public Transport Corridor
- Rail Infrastructure
- Integration Wigan Rail Stations
- Major Highway Schemes
- Principal Shopping Area
- Town Centres
- Local Centres
- Retail Development
- Leigh Sports Village
- Area of Search
 - Gravel
 - Sand
- Mineral Safeguarding
- Waste Management Sites
 - Area
 - Site
 - Landfill
- Green Belt

Extracts of relevant planning policies and supplementary planning guidance

Policy SP 5 Greenheart

An area from north to south through the core of the borough, its 'Greenheart', will be developed as a high quality countryside park that helps boost the borough's image, supports regeneration and encourages healthier lifestyles, by:

1. Promoting and supporting the extensive wildlife habitats including wetlands, waterways and woodland.
2. Providing attractive and accessible sporting, recreational and leisure facilities to be enjoyed by residents and visitors.
3. Continuing the regeneration of derelict and despoiled land, including the site of the former Bickershaw Colliery and boosting the attractiveness of key employment sites such as Westwood, to provide sustainable economic benefits for local communities.
4. Enhancing and developing key gateway locations to Greenheart at Haigh Hall Country Park in the north, Wigan Flashes and Three Sisters at Ashton-in-Makerfield in the west, Amberswood near Hindley in the centre and Pennington Flash and the former Bickershaw Colliery at Leigh in the east to help make Greenheart an attractive and accessible visitor destination.
5. Linking local communities in the borough and beyond, to a wide network of individual sites through good quality paths and trails, signage, interpretation materials and public art, including routes for cyclists and horse-riders.

Policy CP 2 Open space, sport and recreation

We will protect and enhance valuable open spaces, sporting and recreational facilities so as to maximise opportunities for people to undertake a wide range of sport and recreation activities throughout the borough, by:

1. Maintaining and enhancing our 3 'principal parks' (Mesnes Park, Wigan and Haigh Hall and Pennington Flash Country Parks) and 15 'township parks' as the focus for a wide range of informal and formal play, recreation and sports activities within the borough or their township respectively.
2. Enabling better allotment provision in the borough in terms of quantity, accessibility and quality.
3. Maintaining and enhancing our Local Nature Reserves and designating new reserves, especially in the east of the borough.
4. Maintaining and enhancing our other natural and semi-natural green space and our larger areas of amenity green space (over 0.25 hectares), so that they are safe and that informal play and compatible recreational uses are encouraged and good public access is maintained where appropriate, only allowing the loss of such an area where it is of low community value and there is comparable or better alternative provision.
5. Supporting the community use of school and club-based sport and recreation facilities and ensuring that such use is incorporated in new or replacement provision when possible.
6. Maintaining and enhancing walking and cycling routes through parks and open

space where they provide appropriate links within the wider network of routes.

7. Determining proposals for development that would result in the loss of open space or land or buildings in use or most recently in use for sport and recreation, in accordance with national planning policy and our local standards which will be established in a subsequent development plan document.

8. Maintaining and improving other opportunities for sport and recreation activities, notably:

1. Play space for people who live more than 500 metres from one of the principal parks or township parks.
2. Provision for football, rugby, cricket and other pitch sports, with an emphasis on improving the quality of pitches and the provision of changing facilities and increasing provision for mini and junior players relative to senior pitch provision.
3. Provision for non pitch sports (including tennis, bowls and athletics).

Policy CP 8

Green Belt and safeguarded land

There will be no alterations to the boundaries of the Green Belt.

Development within the Green Belt will only be allowed in accordance with national planning policy. Limited infilling or redevelopment will continue to be allowed at previously-developed, brownfield sites in the Green Belt, in accordance with national planning policy.

Infilling development will continue to be allowed within the settlement boundaries of Haigh and Bickershaw in the Green Belt, in accordance with national planning policy. Outside of the broad locations for new development, the function, status and detailed boundaries of safeguarded land will be reviewed in a subsequent plan. Where appropriate, sites will be allocated for development on safeguarded land within the east-west core. Following this review, remaining safeguarded land both within and outside of the east-west core will be kept free of permanent development in order to maintain its availability for development in the longer term.

Policy CP 9

Strategic landscape and green infrastructure

We will improve the natural environments and open spaces within and between our towns and other settlements - our strategic landscape and green infrastructure - for the benefit of people and wildlife, and help make the borough a better place to live and visit and for businesses to locate and thrive, by:

1. Strengthening the landscape character of the borough through the appropriate location and treatment of development and the ongoing restoration of despoiled landscapes and natural and semi-natural features, particularly in Greenheart, other locations close to the edge of our towns and other settlements, and in the mosslands.
2. Managing our green infrastructure as one extensive high quality and multi-functional network and safeguarding it from development that would compromise its integrity, by:
 1. Safeguarding and, where possible and practicable, managing land sensitively and positively to support a diverse range of wildlife, again notably in Greenheart and the mosslands.

2. Enhancing and extending networks and other access opportunities for walkers, cyclists, horse-riders and other outdoor recreational pursuits in ways that are compatible with food production, wildlife and carbon storage, particularly in Greenheart but also at other countryside and greenway locations.
3. Identifying appropriate green areas to store flood waters away from homes, businesses and community buildings.
4. Incorporating measures that will help to reduce the extent of climate change and/or adapt to a changing climate.
5. Requiring key strategic landscaping on all new major development proposals and incorporating new green infrastructure in larger areas of new development, to help secure regeneration and/or economic development.
6. Greening the urban environment by developing and improving networks of smaller scale, urban green infrastructure including parks, gardens, allotments, trees and green roofs.
7. Protecting trees and woodlands of value to amenity.

Policy CP 11

Historic environment

We will conserve and enhance our historic environment, thereby helping to make the borough a better place to live, visit and work in, by:

1. Conserving and enhancing where appropriate our heritage assets and their settings, including scheduled monuments, listed buildings, conservation areas, historic parks and gardens, locally listed buildings and structures, key historic landscape characteristics and other important features, in accordance with legislation and national planning policy as appropriate.
2. Encouraging the sympathetic and appropriate re-use of existing buildings and structures, especially those which make a positive contribution to the special character of their locality and are identified as 'at risk'.
3. Promoting the value of our historic environment through signing, interpretation, public art and other measures as appropriate.

Policy CP 12

Wildlife habitats and species

We will help wildlife to prosper and safeguard important geological features by:

1. Protecting our Special Area of Conservation at Manchester Mosses (and other internationally designated sites outside of the borough) and European protected species in accordance with legislation.
2. Protecting and enhancing our Sites of Special Scientific Interest and Species of Principal Importance in England in accordance with legislation and national planning policy as applicable.
3. Protecting our Sites of Biological Importance and regionally important geological sites from development that would adversely affect the integrity of a site, unless there is an overriding public interest, and encouraging active management to maintain and enhance sites.
4. Protecting, maintaining and promoting the active management of our Local Nature Reserves.
5. Protecting and enhancing regional and local priority habitats and species and

other features of value to wildlife ensuring, as far as practicable, that habitats are part of linked networks and not fragmented.

6. Requiring reasonable provision to be made for wildlife habitats and features beneficial to geological conservation as part of new development.
7. Taking account of the impact of climate change in the enhancement of existing and the creation of new wildlife habitats.
8. Enabling more people to appreciate, enjoy and learn about wildlife and geo-diversity in the borough, particularly within Greenheart.

Policy CP 13

Low-carbon development

We will reduce the emissions of carbon dioxide arising from new development and help reduce the impacts of climate change on our environment, economy and quality of life by:

1. Encouraging all development, where relevant, to conform to the energy hierarchy by:
 1. minimising the demand for energy, before
 2. maximising the efficiency of energy use, before
 3. implementing low-carbon dioxide and renewable energy technologies.
2. Encouraging those proposing residential development of 10 units or more and/or non-residential development of more than 700 square metres to produce and submit a carbon reduction strategy setting out how the development will incorporate or make provision for, subject to viability, decentralised, renewable or low carbon energy sources to reduce the carbon dioxide emissions of energy use by at least 15%.
3. Encouraging new development to be designed, orientated and constructed so that it can maximise energy efficiency, reduce reliance on fossil fuel energy and take advantage of opportunities for renewable or low carbon dioxide technologies.
4. Encouraging reasonable improvements to be made to the energy performance of the existing building when an extension or other change to a building is proposed.

Policy CP 17

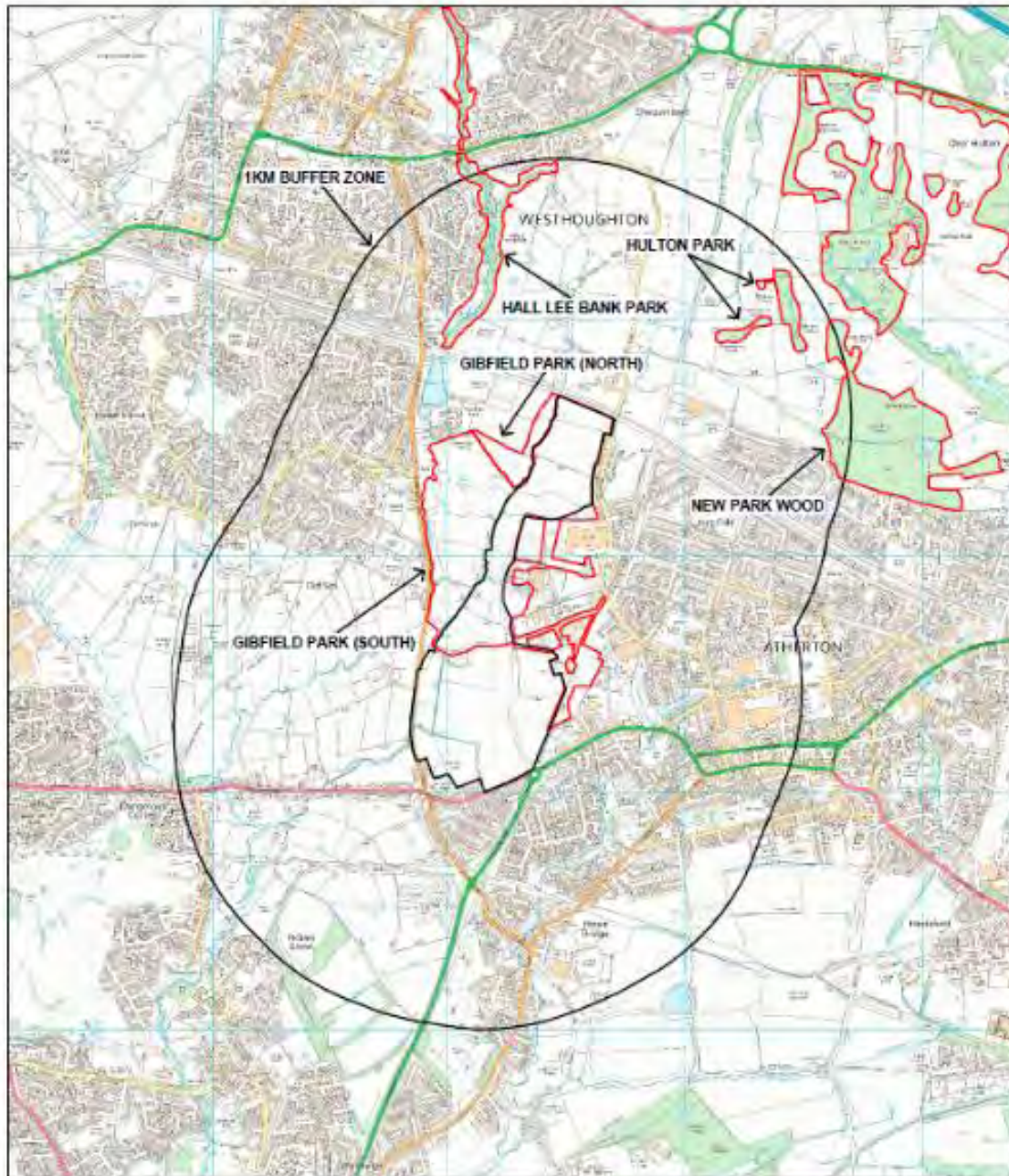
Environmental protection

We will help maintain, enhance and protect our environment for the benefit of people and wildlife, and make the borough a better place for people to live and businesses to locate and thrive, by:

1. Protecting our 'best and most versatile' agricultural land from irreversible loss in accordance with national planning policy and where appropriate seeking to retain and re-use soils on major development sites.
2. Actively seeking the reclamation and re-use of derelict and other previously-developed sites to bring land back into positive use.
3. Tackling land contamination and land stability issues, primarily on sites affected by past industrial uses and coal mining activities, by promoting the appropriate re-use of sites, supporting the identification of contamination and stability issues and requiring appropriate remediation.
4. Managing air quality, particularly in our Air Quality Management Areas, including by minimising the air pollution (and carbon dioxide emissions) likely to arise from new development.

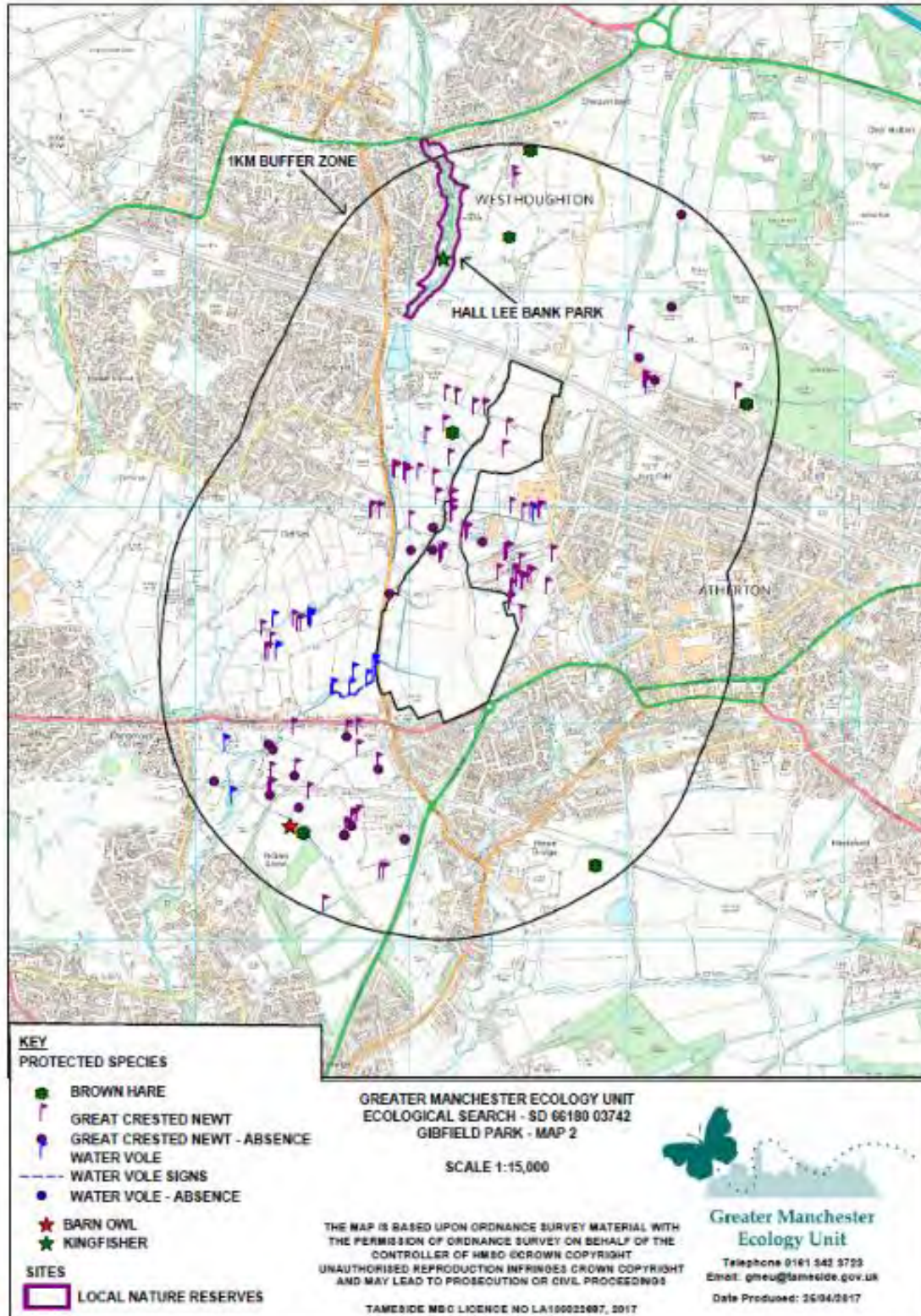
5. Ensuring that new development does not give rise to the pollution of any watercourse, groundwater or mossland or result in the transfer of contaminated run-off to surface water sewers.
6. Supporting strategies, projects and plans to improve water quality within the Rivers Douglas and Mersey and their tributaries.
7. Ensuring that new development is planned and designed so that it does not have an unacceptable adverse impact on amenity and quality of life and/or that it will not itself be impacted upon in such a way by existing uses or activities in the area.

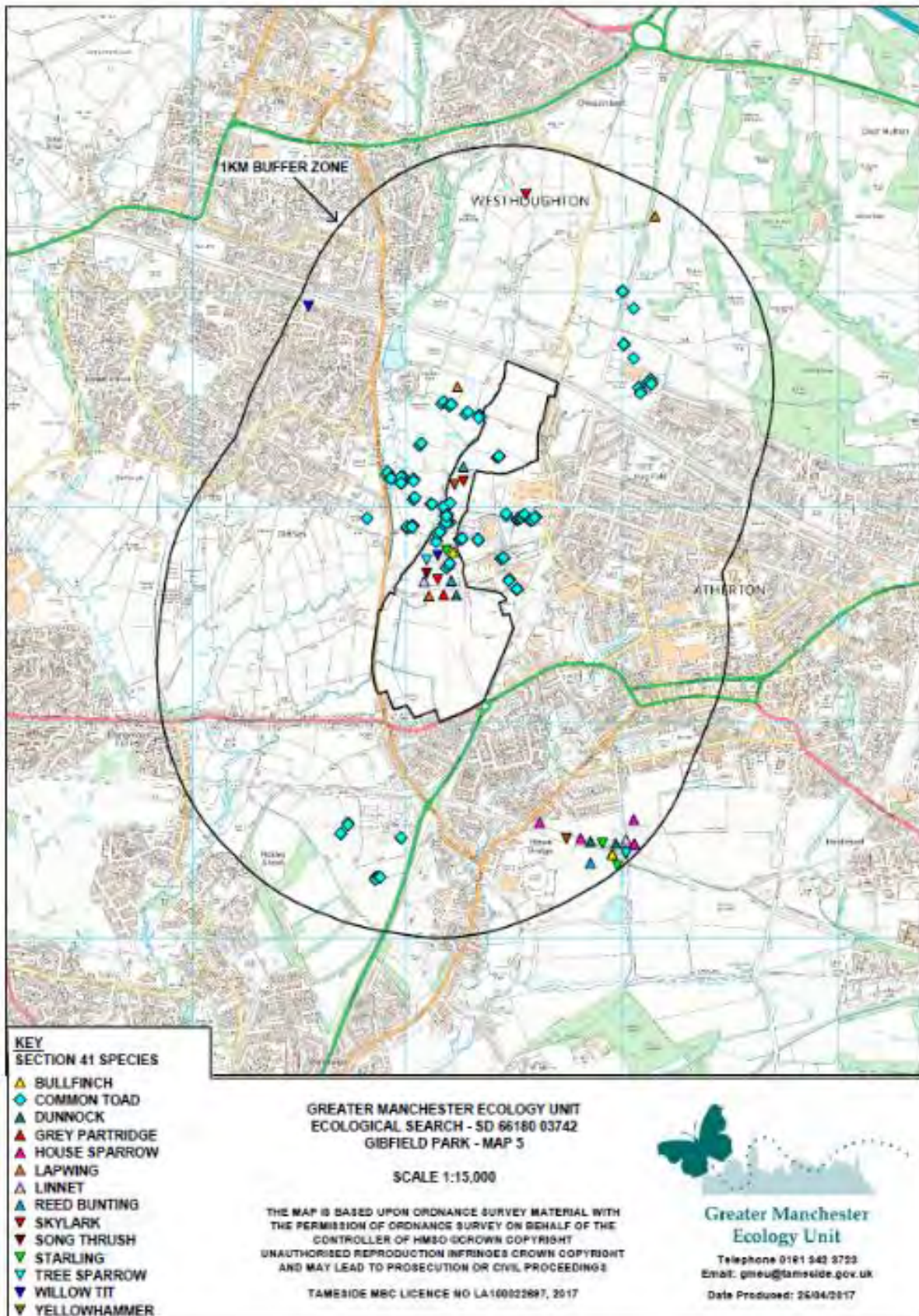
Map provided by Greater Manchester Ecology Unit (GMEU) of site designations within 1 km

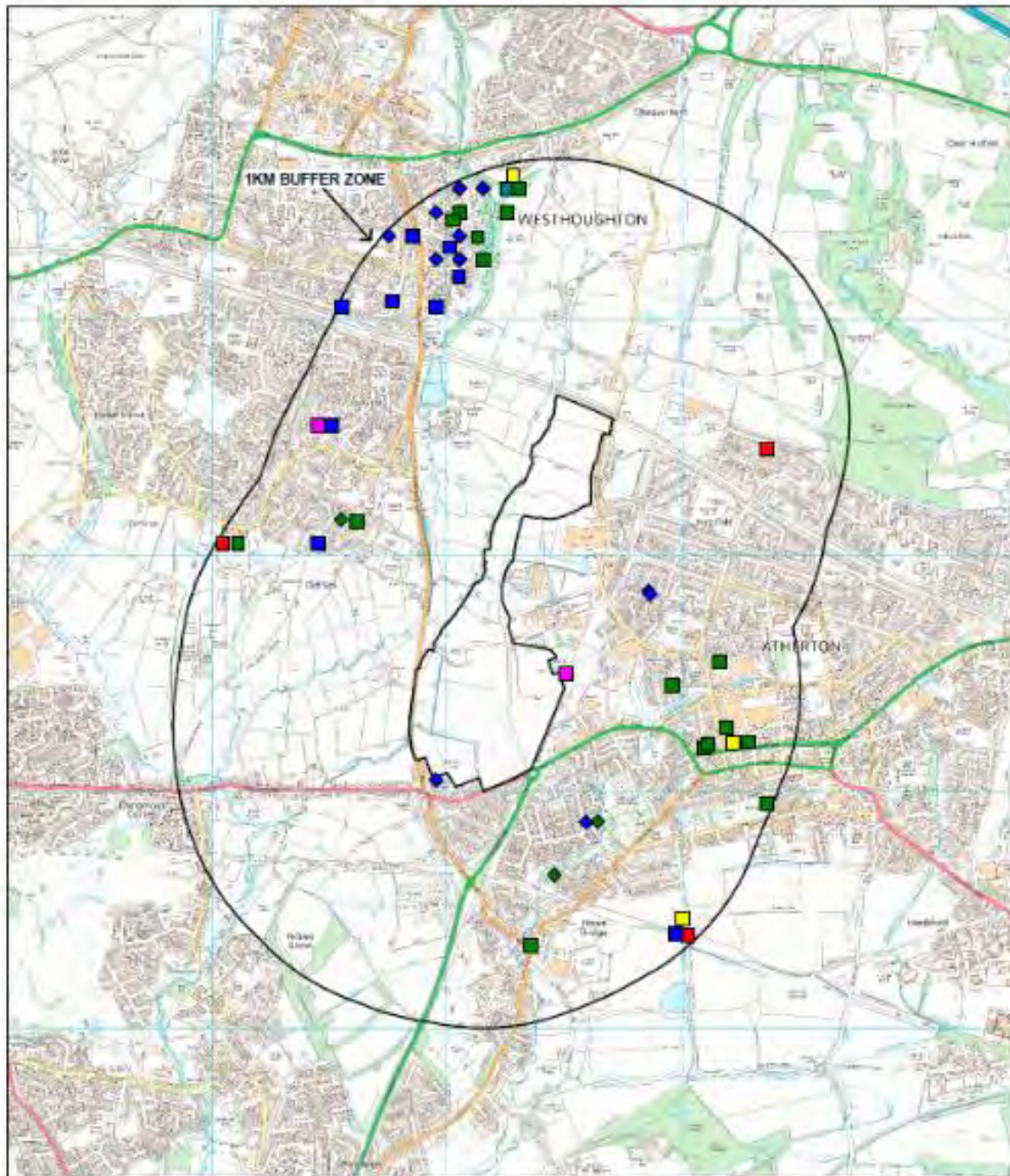



KEY SITE OF BIOLOGICAL IMPORTANCE SBI BOUNDARY	GREATER MANCHESTER ECOLOGY UNIT ECOLOGICAL SEARCH - SD 06180 03742 GIBFIELD PARK - MAP 1 SCALE 1:15,000 THE MAP IS BASED UPON ORDNANCE SURVEY MATERIAL WITH THE PERMISSION OF ORDNANCE SURVEY ON BEHALF OF THE CONTROLLER OF HMSO ©CROWN COPYRIGHT UNAUTHORISED REPRODUCTION INFRINGES CROWN COPYRIGHT AND MAY LEAD TO PROSECUTION OR CIVIL PROCEEDINGS TAMESIDE MBC LICENCE NO LA100022607, 2017	 Greater Manchester Ecology Unit Telephone 0161 542 3753 Email: gmeu@tameside.gov.uk Date Produced: 25/04/2017
---	---	---

Extract of species data provided by Greater Manchester Ecology Unit (GMEU) within 1 km







<p>KEY</p> <p>BAT ROOSTS</p> <ul style="list-style-type: none"> ◆ COMMON PIPISTRELLE ◆ PIPISTRELLE SP <p>BATS OTHER SIGNS</p> <ul style="list-style-type: none"> ■ COMMON PIPISTRELLE ■ DAUBENTON'S BAT ■ MYOTIS SP ■ NOCTULE BAT ■ PIPISTRELLE SP ■ SOPRANO PIPISTRELLE 	<p>GREATER MANCHESTER ECOLOGY UNIT ECOLOGICAL SEARCH - SD 66180 03742 GIBFIELD PARK - MAP 4</p> <p>SCALE 1:15,000</p> <p>BAT DATA COURTESY OF SOUTH LANCS BAT GROUP</p> <p>THE MAP IS BASED UPON ORDNANCE SURVEY MATERIAL WITH THE PERMISSION OF ORDNANCE SURVEY ON BEHALF OF THE CONTROLLER OF HMSO CROWN COPYRIGHT UNAUTHORISED REPRODUCTION INFRINGES CROWN COPYRIGHT AND MAY LEAD TO PROSECUTION OR CIVIL PROCEEDINGS</p> <p>TAMESIDE MSC LICENCE NO LA198622697, 2017</p>	 <p>Greater Manchester Ecology Unit</p> <p>Telephone 0161 542 3793 Email: gneug@tameside.gov.uk Date Produced: 26/04/2017</p>
---	---	---

Magic Map 1 km search zone for designated wildlife sites - Map



Legend

- Limestone Pavement Ordors (England)
- Local Nature Reserves (England)
- Moorland Linc (England)
- National Nature Reserves (England)
- National Parks (England)
- Ramsar Sites (England)
- Sites of Special Scientific Interest (England)
- SDDI Impact Risk Zones - to assess planning applications for likely impacts on SDDIs/SACs/DRAs & Ramsar sites (England)
- Special Areas of Conservation (England)
- Special Protection Areas (England)
- Biosphere Reserves (England)

Project no - 020202
 date - 20/11/20
 scale - 1:25,000
 scale - 1:25,000
 scale - 1:25,000

Map produced by MASTC on 21 March 2017
 Copyright holder with the data supplier and the user shall not be responsible without their permission. Some information is MASTC is a snapshot of the information that is being reviewed or otherwise updated by the originating organisation. Issues refer to the original data source as information may be outdated or inaccurate rather than defective at the scale.

Magic Map 1km search zone for designated wildlife sites - Report

Local Nature Reserves (England) - points

Reference

1082886

Name

HALL LEE BANK PARK

Hectares

5.31

Hyperlink
http://www.lnr.naturalengland.org.uk/special/lnr/lnr_details.asp?themeid=1082886

Local Nature Reserves (England)

Reference

1082886

Name

HALL LEE BANK PARK

Hectares

5.31

Hyperlink
http://www.lnr.naturalengland.org.uk/special/lnr/lnr_details.asp?themeid=1082886
Reference

1481542

Name

PRETORIA PIT

Hectares

9.75

Hyperlink
http://www.lnr.naturalengland.org.uk/special/lnr/lnr_details.asp?themeid=1481542

Magic Map search for SSSI Impact Risk Zones for site only

SSSI Impact Risk Zones - to assess planning applications for likely impacts on SSSIs/SACs/SPAs & Ramsar sites (England)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?

2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications
Infrastructure

Airports, helipads and other aviation proposals.

Wind & Solar Energy
Minerals, Oil & Gas
Rural Non Residential
Residential
Rural Residential
Air Pollution
Pig & poultry units, slurry lagoons > 4000m³
Combustion

General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

Waste
Composting
Discharges
Water Supply
GUIDANCE – How to use the Impact Risk Zones
/Metadata_for_magic/SSSI_IRZ_User_Guidance_MAGIC.pdf

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?

2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications

Infrastructure

Airports, helipads and other aviation proposals.

Wind & Solar Energy

Minerals, Oil & Gas

Rural Non Residential

Residential

Rural Residential

Air Pollution

Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, pig & poultry units, slurry lagoons > 750m³ & manure stores > 3500t).

Combustion

General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

Waste

Composting

Discharges

Water Supply

GUIDANCE – How to use the Impact Risk Zones

[/Metadata_for_magic/SSSI_IRZ_User_Guidance_MAGIC.pdf](#)

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?

2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications

Infrastructure

Airports, helipads and other aviation proposals.

Wind & Solar Energy

Minerals, Oil & Gas

Rural Non Residential

Residential

Rural Residential

Air Pollution

Pig & poultry units, slurry lagoons > 750m³ & manure stores > 3500t.

Combustion

General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

Waste

Composting

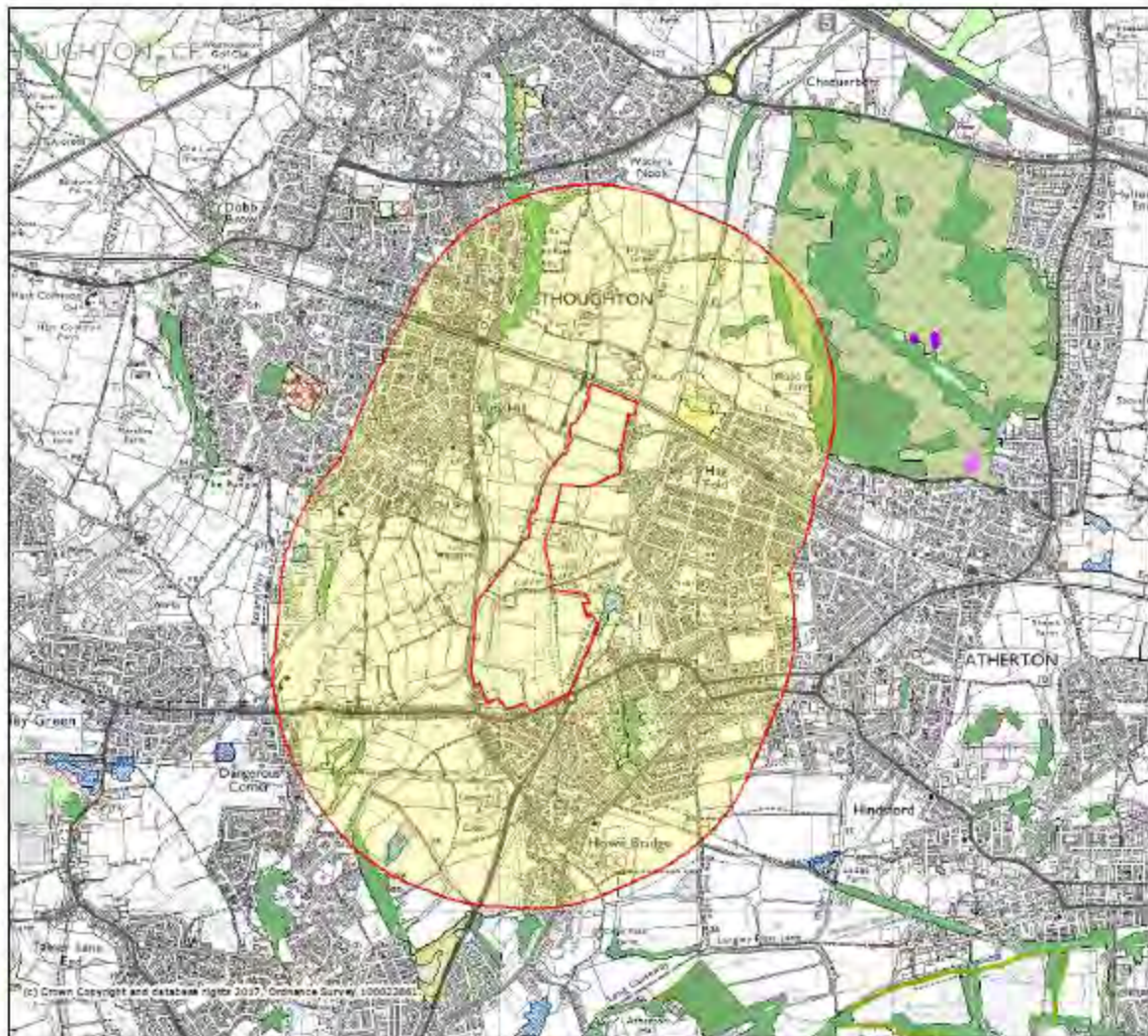
Discharges

Water Supply


GUIDANCE – How to use the Impact Risk Zones

[/Metadata_for_magic/SSSI_IRZ_User_Guidance_MAGIC.pdf](#)


Magic Map 1 km search zone for habitat inventory data




Wildlife Site Citations

SITES OF BIOLOGICAL IMPORTANCE IN GREATER MANCHESTER Greater Manchester Ecology Unit Ryecroft Hall, Manchester Road, Audenshaw, M34 5ZJ (Private & Confidential)				 Greater Manchester Ecology Unit
SITE NAME: Gibfield Park (South)			District: Wigan	
LOCATION: Atherton			GRID REF: SD662041	
GRADE: A	AREA (HA): 51.9	ALTITUDE (M): 50-65m	DATE: 2.12.08	
STATUS: BAP		SURVEYOR: TR Hughes	INITIAL SURVEY DATE: 27.5.08	
NO OF REVISIONS: 1		OWNER: Private	District REF: A67	
HABITATS PRESENT	Area (ha)	HABITATS PRESENT	Area (ha)	
Woodland broadleaved (semi-nat)		Woodland plantation		
Scrub	6.0	Acid grassland	0.6	
Neutral grassland – species rich	2.8	Neutral grassland – species poor	40.2	
Marshy grassland/flush	0.01	Calcareous grassland		
Tall ruderal	1.5	Ericaceous heath lowland/upland		
Bog		Swamp/Fen/Reedbed	0.01	
Pond/small lodge	0.9	Reservoir/large area of open water		
Canal		Running water - River/stream/ditch	0.1	
Quarry/cliff/rock/wall		Other - Hedgerow	2.15km	
Areas of habitat covering less than 0.1ha. recorded as 0.01				
Qualifying Features Code (taken from Part 2 or Part 3 of the Greater Manchester SBI Selection Guidelines 2008). Fw2 – Ponds & lodges Am1 - Amphibians				
Supplementary Features Code - for other features that are not the primary reason for SBI selection, but are identified either as a supplementary attribute (taken from Part 1) and/or by almost reaching the Guideline threshold (Parts 2 & 3). Dr1 – Dragonflies Br5 – Birds – UK Biodiversity Species				
COMPLETE FOR GAINS AND PARTIAL LOSSES ONLY				
Loss since Last Survey: 0.2		Loss since First Survey: 1.7		
Primary cause: lost to development (1.4ha)		Secondary cause: car park extension (0.1ha) Correction of boundary error (0.2ha)		
Gain since Last Survey: 0		Gain since First Survey: 52.0		
Primary cause: reassessment of habitats (45ha)		Secondary cause:		
Net change since Last Survey: -0.2		Net change since First Survey: +50.3		

SITES OF BIOLOGICAL IMPORTANCE IN GREATER MANCHESTER Greater Manchester Ecology Unit Ryecroft Hall, Manchester Road, Audenshaw, M34 5ZJ (Private & Confidential)		
SITE NAME : Gibfield Park (South)		District : Wigan
LOCATION : Atherton	GRID REF : SD662041	GRADE : A
SITE DESCRIPTION		
<p>An area of wetlands, grassland, tall ruderal and scrub communities that supports a long established population of great crested newts. Ponds and lodges are a Greater Manchester Biodiversity Habitat and ponds of high ecological value are a UK Biodiversity Priority Habitat. The site is of county importance for amphibians and supports great crested newt and toad (both UK Biodiversity Priority Species) in addition to smooth newt and frog.</p> <p>The site was previously known as 'Wetlands, grassland & scrub of Colliery Lane SBI', but has now been extended to include an extensive area of restored habitats (Gibb Lane Tip & BLOCCS) to the west of the original SBI. Extensive amphibian surveys and rescues have been undertaken during the restoration and an emerging picture of the use of the whole site by amphibians is being established.</p> <p>The site supports 33 water bodies in total of which 31 are within Wigan. The wetlands include a series of ponds and pools that occur across the site and are at different successional stages - including ponds created in 2006 - together with a number of ditches. Some of the ponds are only seasonally wet.</p> <p>The large pond at SD665039 has limited marginal vegetation of bulrush and occasional water plantain. This pond is within the grounds of a factory (Barrs) and is surrounded by a car park and tightly mown grass. Crack willow and poplars also occur around the edges. Three new ponds have been created adjacent to this pond in the west. The pond shown on the O.S. Map at SD664035 is no longer present, but an additional pond is present just to the north of this. Both the additional pond and the pond at SD665036 together with the ditch to the north, support great crested newts.</p> <p>Three ponds occur within the grounds of the <u>Omerod Works</u> (SD 66510359, SD66510362 and SD66480363). These ponds were surveyed in 2002 and supported 4 amphibian species - great crested newt, smooth newt, frog and toad.</p> <p>The pond at SD66430376 is at a late successional stage and is overgrown with vegetation. This pond will be lost to Phase 1 of Gibfield Business Park. The pond is currently dominated by bulrush with water forget-me-not, soft rush, water horsetail, bittersweet, water mint and water starwort. Some small areas of open water remain. Great crested newt, frog and smooth newt have all been recorded from this pond. The ditch adjacent to this pond has a marginal vegetation including greater bird's-foot trefoil, bulrush, bittersweet, soft rush, cuckoo-flower, compact rush, brooklime, marsh bedstraw, water forget-me-not, creeping jenny and field horsetail together with bracken and false oat-grass. Three other ponds occur in the Business Park. The pond at SD66320384 is an old pond, which has been managed to create more areas of open water in the bulrush swamp. It supports toad, smooth newt and frog. Two new ponds have been created in this area with the new pond at SD 66250386 supporting all 4 amphibian species (2005) found on the site. The marginal vegetation includes bulrush, hard rush and small amounts of willow. Blanket weed was abundant on the survey visit.</p> <p>The 23 ponds on the restoration site support abundant soft rush with various other species depending on their extent of colonisation and length of establishment including bulrush, water plantain, great hairy willowherb, common reed, branched bur-reed, marsh foxtail, bittersweet, flote grass, water mint and broad-leaved pondweed.</p>		
Continued		

SITES OF BIOLOGICAL IMPORTANCE IN GREATER MANCHESTER Greater Manchester Ecology Unit Ryecroft Hall, Manchester Road, Audenshaw, M34 5ZJ (Private & Confidential)		
SITE NAME : Gibfield Park (South)		DISTRICT : Wigan
LOCATION : Atherton	GRID REF : SD662041	GRADE : A
SITE DESCRIPTION CONTINUED		
<p>The terrestrial areas of the site, while not of high botanical interest, are important habitats for animals including great crested newts, other amphibians and birds. Tall ruderal areas support species such as rosebay willowherb, nettle, bramble, great hairy willowherb, ragwort, tufted vetch and meadow vetchling together with garden escapes such as yellow loosestrife, lady's mantle and geraniums. The invasive Japanese knotweed is also present. Neutral grassland parts of the site include newly reseeded areas of bare ground, unmanaged and horse-grazed areas. Both the unmanaged and grazed areas support false oat-grass, reed canary-grass, <u>Yorkshire fog</u> and meadow foxtail. Other species include creeping buttercup, spear thistle, broad leaved dock and creeping thistle. Species rich areas are limited and support common bird's foot trefoil, ox-eye daisy and several species of <i>Dactylorhiza</i> orchids. Acid grassland occurs along the old railway line. Here species such as mat-grass and heather are found.</p> <p>The old railway line also supports areas of dense willow scrub. Elsewhere scattered clumps of willow species (grey & goat), hawthorn, gorse and silver birch are present. The site includes over 2km of hedgerows. These are dominated by hawthorn but have been included within the site as they are important corridors for amphibian movement and breeding birds. Extensive areas of tree planting have been undertaken on the restored landform, but at present the trees are small and dominated by grass.</p> <p>The site supports a number of common bryophytes such as <i>Polytrichum commune</i>, <i>Brachythecium rutabulum</i>, <i>Eurhynchium praelongum</i>, <i>Lophocolea bidentata</i>, <i>Calliergon cuspidatum</i>, <i>Pellia epiphylla</i> and <i>Bryum capillare</i>. Cladonia lichens have also been recorded.</p> <p>Water vole (UK Biodiversity Priority Species) has been recorded in 2001 at the pond at SD66570396 (Bars). Breeding moorhen, mallard and coot were observed on various ponds across the site during the site visit. Other confirmed breeding birds on territory during the survey visit include skylark (more than 4 pairs), yellowhammer (at least 2 singing males) and reed bunling – all UK Biodiversity Priority Species, in addition to whitethroat, willow warbler and chiffchaff. Breeding birds recorded from the site in the past include little owl, sedge warbler, linnet (UK Biodiversity Action Plan Species) and redpoll together with feeding swift, swallows and house martins.</p> <p>The ponds support abundant dragonflies and damselflies. Species recorded during the site visit include blue tailed damselfly, common blue damselfly, common darter (newly emerged in high numbers) and brown hawket.</p> <p>Several footpaths in addition to a network of other paths cross the site, although the new landforms are not well used at present. One of the ponds is used for fishing. The site continues into Bolton.</p> <p><i>Additional information supplied by Anthony Gregory, Judith Smith, David Bentley and TEP.</i></p> <p>Note: Areas of great crested newt habitat are included within the SBI boundary, but great crested newts are known to utilise terrestrial habitat up to 500m away from their breeding ponds.</p> <p>The current revision corrects a minor error in the boundary – no survey was undertaken in 2008.</p> <p><i>The habitat figures given are an approximation and are only intended to give an indication of the relative proportions of each habitat.</i></p>		

SITES OF BIOLOGICAL IMPORTANCE IN GREATER MANCHESTER Greater Manchester Ecology Unit Ryecroft Hall, Manchester Road, Audenshaw, M34 5ZJ (Private & Confidential)			
SITE NAME : Gibfield Park (North)			District : Bolton
LOCATION : Westhoughton			GRID REF : SD663044
GRADE : A	AREA (HA) : 3.9	ALTITUDE (M) : 75m	DATE : 2.12.08
STATUS : BAP		SURVEYOR : TR Hughes	INITIAL SURVEY DATE : 12.6.07
No OF REVISIONS : 1		OWNER : Private	District REF : B75
HABITATS PRESENT	Area (ha)	HABITATS PRESENT	Area (ha)
Woodland broadleaved (semi-nat)		Woodland plantation	
Scrub	0.01	Acid grassland	
Neutral grassland – species rich	0.2	Neutral grassland – species poor	3.5
Marshy grassland/flush		Calcareous grassland	
Tall ruderal		Ericaceous heath lowland/upland	
Bog		Reedbed	0.1
Pond/small lodge	0.1	Reservoir/large area of open water	
Canal		Running water - River/stream/ditch	0.01
Quarry/cliff/rock/wall		Other	
Areas of habitat covering less than 0.1ha. recorded as 0.01			
Qualifying Features Code (taken from Part 2 or Part 3 of the Greater Manchester SBI Selection Guidelines 2008). Fw2 – Ponds & Small Lodges Am1 - Amphibians			
Supplementary Features Code - for other features that are not the primary reason for SBI selection, but are identified either as a supplementary attribute (taken from Part 1) and/or by almost reaching the Guideline threshold (Parts 2 & 3).			
COMPLETE FOR GAINS AND PARTIAL LOSSES ONLY			
Loss since Last Survey		Loss since First Survey	
Primary cause :		Secondary cause :	
Gain since Last Survey :		Gain since First Survey :	
Primary cause :		Secondary cause :	
Net change since Last Survey :		Net change since First Survey :	

SITES OF BIOLOGICAL IMPORTANCE IN GREATER MANCHESTER Greater Manchester Ecology Unit Ryecroft Hall, Manchester Road, Audenshaw, M34 5ZJ (Private & Confidential)		
SITE NAME: Gibfield Park (North)		District: Bolton
LOCATION: Westhoughton	GRID REF: SD663044	GRADE: A
SITE DESCRIPTION		
<p>An area of wetlands, grassland, tall ruderal and scrub communities that supports a long established population of great crested newts. Ponds and lodges are a Greater Manchester Biodiversity Habitat and ponds of high ecological value are a UK Biodiversity Priority Habitat. The site is of county importance for amphibians and supports great crested newt and toad (both UK Biodiversity Priority Species) in addition to smooth newt and frog.</p> <p>The site was previously known as 'Wetlands, grassland & scrub of Colliery Lane SBI', but has now been extended to include an extensive area of restored habitats (Gibb Lane Tip & BLOCCS) to the northwest of the original SBI. Extensive amphibian surveys and rescues have been undertaken during the restoration and an emerging picture of the use of the whole site by amphibians is being established.</p> <p>The site supports 33 water bodies in total of which 2 are within Bolton. The wetlands include a series of ponds and pools that occur across the site and are at different successional stages - including ponds created in 2006 - together with a number of ditches. Some of the ponds are only seasonally wet.</p> <p>The pond at SD66280444 and a smaller pond at SD66160448 were both surveyed in 2005 and both were found to support all 4 amphibian species, which are also present elsewhere on the site. The larger pond supports both open water and a small reedbed of common reed (UK Biodiversity Priority Habitat). Other species present include bulrush, great hairy willowherb, water plantain, hard rush and water starwort.</p> <p>The terrestrial areas of the site, while not of high botanical interest, are important habitats for animals including great crested newts, other amphibians and birds. Neutral grassland areas include newly reseeded areas of bare ground, unmanaged and horse-grazed areas. Both the unmanaged and grazed areas support false oat-grass, reed canary-grass, Yorkshire fog and meadow foxtail. Other species include creeping buttercup, spear thistle, broad leaved dock and creeping thistle. Species rich areas are limited and support common bird's foot trefoil, knapweed, ox-eye daisy, great hairy willowherb, ragwort, tufted vetch, meadow vetchling and several species of <i>Dactylorhiza</i> orchids. Other species such as rosebay willowherb, nettle and bramble occur locally.</p> <p>Breeding moorhen, mallard and coot were observed on various ponds across the site during the site visit. Other confirmed breeding birds or on territory during the survey visit include skylark (more than 4 pairs), yellowhammer (at least 2 singing males) and reed bunting - all UK Biodiversity Priority Species, in addition to whitethroat, willow warbler and chiffchaff. Breeding birds recorded from the site in the past include little owl, sedge warbler, linnet (UK Biodiversity Action Plan Species) and redpoll together with feeding swift, swallows and house martins. Lapwing (UK Biodiversity Priority Species) were observed nesting in adjacent fields outside the SBI.</p>		
Continued		

SITES OF BIOLOGICAL IMPORTANCE IN GREATER MANCHESTER Greater Manchester Ecology Unit Ryecroft Hall, Manchester Road, Audenshaw, M34 5ZJ (Private & Confidential)		 Greater Manchester Ecology Unit
SITE NAME : Gibfield Park (North)		DISTRICT : Bolton
LOCATION : Westfoughton	GRID REF : SD663044	GRADE : A
SITE DESCRIPTION CONTINUED		
<p>Several footpaths in addition to a network of other paths cross the site, although the new landforms are not well used at present. One of the ponds is used for fishing. The site continues into Wigan.</p> <p><i>Additional information supplied by Anthony Gregory, Judith Smith, David Bentley and TEP.</i></p> <p>Note: Areas of great crested newt habitat are included within the SBI boundary, but great crested newts are known to utilise terrestrial habitat up to 500m away from their breeding ponds.</p> <p>The current revision corrects a minor error in the boundary – no survey was undertaken in 2008.</p> <p><i>The habitat figures given are an approximation and are only intended to give an indication of the relative proportions of each habitat.</i></p>		

DRAWINGS

507A-23 GMSF Illustrative Masterplan

G6296.04.001 - Ecological Constraints Plan



10.3 ha / 25.5 ac

1.9 ha / 4.7 ac

6.7 ha / 16.6 ac

4.1 ha / 10.1 ac

6.3 ha / 15.6 ac

Area Measures:

Total site area:	77.1 ha / 190.5 ac
Total development area:	29.3 ha / 72.5 ac
Total green space area:	43.8 ha / 108.1 ac
Link road corridor within site:	0.7 ha / 1.7 ac
Landscape buffer areas adjacent to development cells:	3.3 ha / 8.2 ac

RANDALLTHORP Canada House
3 Chepstow Street
Manchester M1 5FW
Tel: 0161 228 7721

Drwg No: 507A-23 Date: 09.12.15
Drawn by: SR Checked by: PR

Scale: 1:5,000 @ A3

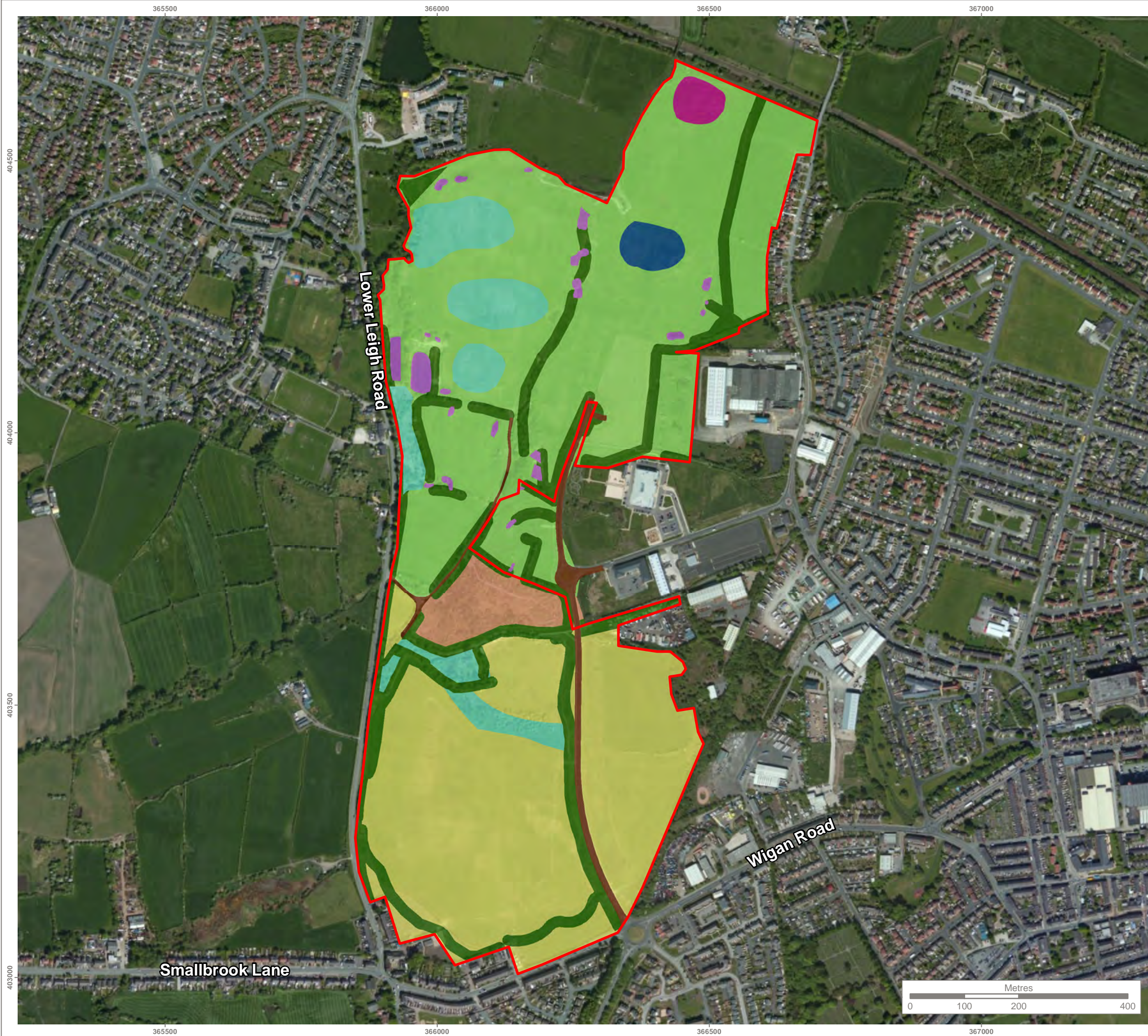
Key

- Site boundary
- Existing trees
- Existing water
- Site of Biological Importance
- Existing electricity pylon line
- Existing PRoW
- Existing PRoW to form new cycleway
- Potential cycleway
- Potential pedestrian route
- Potential mountain bike trail
- Potential link road
- Potential Development cell
- Potential green space
- Potential trees
- Potential SuDS/ water
- Key viewpoint
- View corridor
- Potential vehicular access



Gibfield, Atherton

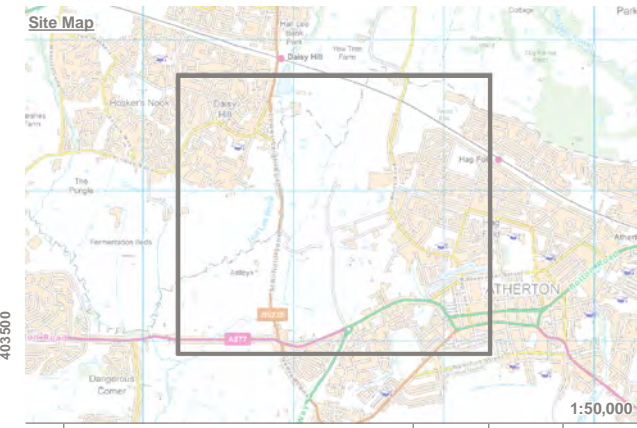
Illustrative Masterplan



KEY

- Site Boundary
- High Constraint: Area A - Wildlife Corridors
- High Constraint: Area B - Ponds
- High Constraint: Area C - Dry Heath Acid Grassland Mosaic
- Medium Constraint: Area D - Plantation Woodland + Scrub
- Medium Constraint: Area E - Grassland Within SBI
- Medium Constraint : Area F - Broadleaved Trees
- Medium Constraint: Area G - Marsh Grassland
- Low Constraint: Area H - Grassland
- Low Constraint: Area I - Hardstanding

Reproduced by permission of Ordnance Survey on behalf of Her Majesty's Stationery Office.
 Contains OS data © Crown Copyright and database right 2017. All rights reserved.
 Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Rev	Description	Drawn	Approved	Date
A	Changes to the site boundary and constraints	RH	KS	01/12/2017

THE ENVIRONMENT PARTNERSHIP

Genesis Centre, Birchwood Science Park, Warrington WA3 7BH
 Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
West of Gibfield, Ecology

Title
Ecological Constraints Plan

Drawing Number
G6296.04.001A

Drawn	Checked	Approved	Scale	Date
RH	JS	CH	1:7,000 @ A3	01/12/2017



HEAD OFFICE

Genesis Centre,
Birchwood Science Park,
Warrington
WA3 7BH

Tel: 01925 844004
E-mail: tep@tep.uk.com

**MARKET
HARBOROUGH**

Harborough Innovation
Centre,
Airfield Business Park,
Leicester Road,
Market Harborough
Leicestershire
LE16 7WB

Tel: 01858 383120
E-mail: mh@tep.uk.com

GATESHEAD

Office 26, Gateshead
International Business
Centre,
Mulgrave Terrace,
Gateshead
NE8 1AN

Tel: 0191 605 3340
E-mail: gateshead@tep.uk.com

LONDON

8 Trinity Street,
London,
SE1 1DB

Tel: 020 3096 6050
E-mail: london@tep.uk.com

CORNWALL

4 Park Noweth,
Churchtown,
Cury,
Helston
Cornwall
TR12 7BW

Tel: 01326 240081
E-mail: cornwall@tep.uk.com
