Nuneaton and Bedworth Borough Council Ecology and Geodiversity Assessment (EGA) Borough Plan Publication Version

EMP1 FAULTLANDS

Prepared by

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull, Warwickshire Wildlife Trust

Habitat Biodiversity Audit

and

Warwickshire Biological Record Centre

Ecological Services, Warwickshire County Council

September 2016

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Employment Site: EMP1 FAULTLANDS

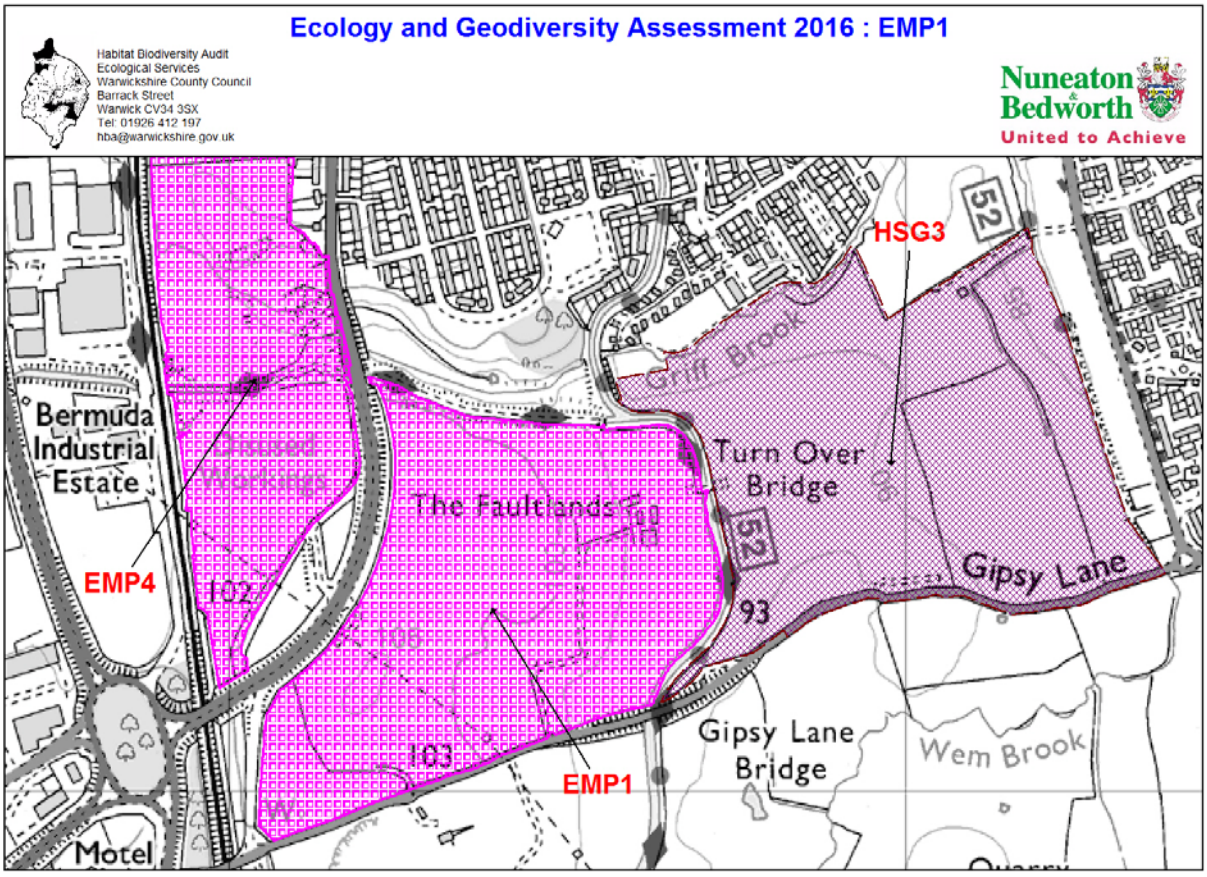


Figure 1 Location map

Area: 7.8 HA

Overview

EMP1 is located between both EMP4 and HSG3 by the separated by the Coventry Canal. The site comprises of and surrounded on the north, west and southern sides by good quality habitats designated within/as Local Wildlife Sites

The development parcel is dominated around the farmstead named as The Faultlands and comprises in the majority of improved grassland, intensively grazed with a shelf of un-managed poor semi-improved grassland and prominent hedgerows which mark the periphery of the parcel particularly adjacent to the Coventry Canal on the eastern periphery and the on the western border.

Immediately opposite the development parcel across Gipsy Lane is the Griff Asphalt and Aggregate Quarry.

Key Features

- Coventry Canal
- Wetland Habitats Associated with Coventry Canal and Griff Brooks
- Acidic Grasslands Associated with Former Quarry Sites
- Water Voles (nationally endangered species)

Recommendations

It is recommended that the ecological corridors of the Coventry Canal, Griff Hollows and the railway alongside the hedgerow and trees along Gipsy Lane are retained and enhanced to maintain the strong Arden Landscape features.

The landscape design should consider local context and benefit ecology through planting of trees, retention and enhancement of native hedges in addition to the creation of wetlands, ponds and meadow areas with log, grass and stone piles. The development should be considered in the wider landscape to ensure opportunities to promote green infrastructure and connectivity are maximised. Green corridors connect fragmented and/or isolated habitats by allowing species to travel between them. Natural areas can cost less in maintenance than formal landscaping. Careful habitat enhancement will enable ecosystems to adapt to the effects of climate change and contribute to the development's long term resilience. To benefit ecology most, those native and locally appropriate species detailed in HBA Target Notes and Local Wildlife Site Citations as occurring in the local area should be planted.

In addition to ensuring appropriate site-wide landscape design which supports biodiversity, specifically designed wildlife areas should also be provided outside amenity areas of green space. Meadows, wetlands and woodlands can be incorporated into the wider landscape whilst ponds contribute a huge amount of biodiversity value. Small lightly grazed or managed hay meadows make a valuable contribution to retention of biodiversity in regard to developments. Trees and shrubs which contribute greatly to habitat diversity should be created as a mosaic across the development parcel and ensure benefits are delivered to the widest range of species.

Areas of Medium to High Distinctiveness category (value: 4, 5 & 6) are retained and enhanced within any proposal.

It is important to note that until protected species survey work is undertaken there cannot be certainty over the potentially developable area and the quantity and scale of retained / enhanced habitat that may be required to adequately address protected species issues.

Opportunities

To combine contributions from EMP4, EMP1 and HSG3 to deliver an area wide Green Infrastructure Supplementary Planning Document (SPD) or equivalent that promotes species movement along identified green corridors.

Designated Sites:

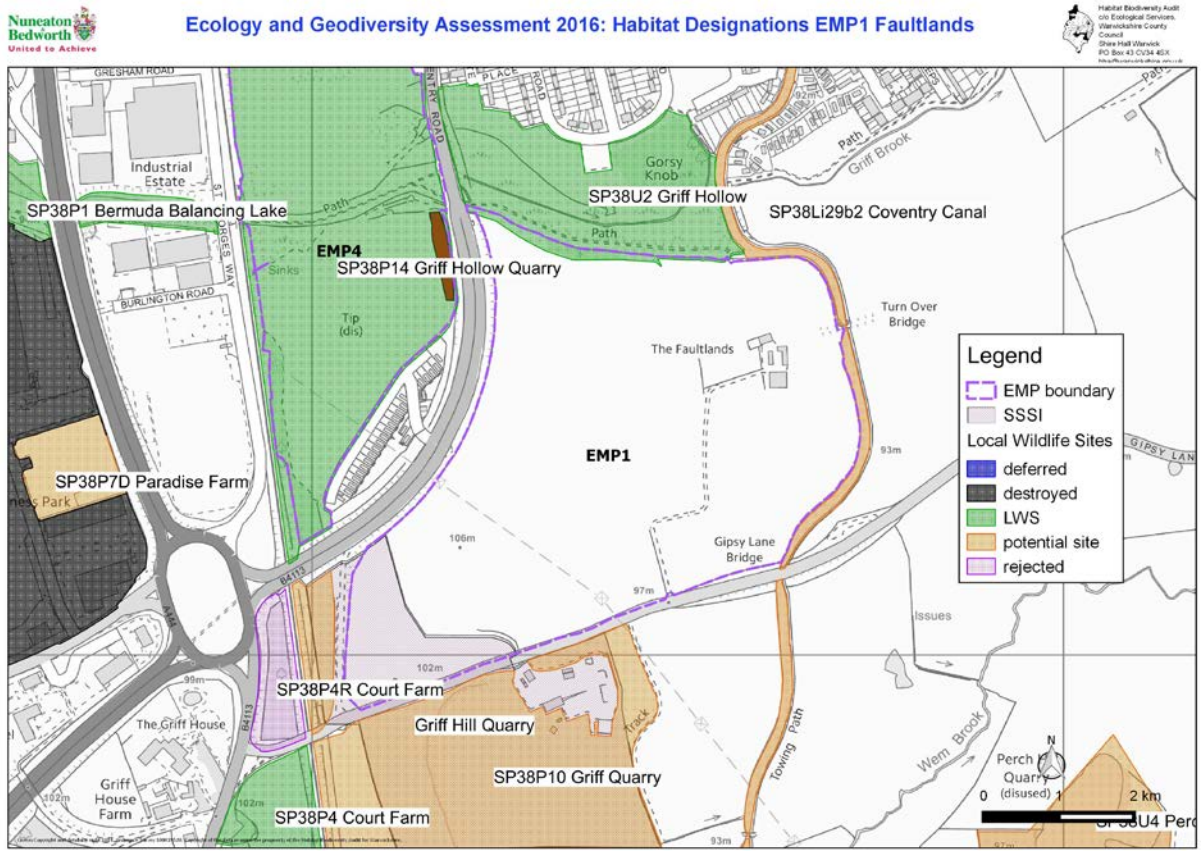


Figure 2 Site Designation Map

Griff Hill Quarry Geological SSSI

Griff Hill Quarry is an active quarry located 1km north of Bedworth. The site boundary encompasses the working faces and an area of proposed quarry extension which is of key importance to facilitate further study at the site.

Local Wildlife Sites

Griff Hollow SP38U2 [1]

Griff Hollows SINC is a mosaic site of 5.77 ha consisting of scrub, tall herb mire, rank neutral grassland and acid grassland. The mire, dominated by meadowsweet and

[1] Griff Hollow SP38U2 LWS 14.13.2001 LWSP

the acid grassland are the most important vegetation types present, both are rare habitat types in the county. 85 species of vascular plant have been recorded recently including Climbing Corydalis, which is very rare in the county. The invertebrate fauna is likely to be rich, three species of county rarity have been recorded. Water Vole and Common Lizard have also been recorded recently. The site is public open space.

Griff Hollow Quarry SP38P142

The LWS comprises a large area of semi-improved grassland which has colonised the site of two restored 20th century granite quarries and is situated at Griff Hollow about 2km south of Nuneaton town centre. The site is sandwiched between the B4113 Coventry Road to the west and the main railway line between Coventry and Nuneaton to the west, with the A444 Bedworth Bypass beyond. The recently demolished Griff School and its playing fields borders the site to the north, while a small travellers park centred around a detached section of the old Coventry Road adjoins the southern border.

The LWS forms an important direct link between Bermuda Pool LWS to the west (which then feeds into the extensive series of LWS habitats in Arbury Park and the Ensor's Pool Corridor LWS/SSSI/SAC beyond), and to Griff Hollows LWS to the east.

Court Farm SP38P43

Court Farm consists of two large blocks of semi-improved, rather acid, grassland situated on either side of the B4113 Coventry Road in the hamlet of Griff, situated in a 0.75km wide open corridor of land separating the towns of Bedworth and Nuneaton. To the north of the site are the large A444 traffic island and the Bermuda Business Park, while to the south is the Bedworth suburb of Collycroft. To the west several improved grass fields separate the LWS from the embanked A444, while to the east the site is bounded by the Coventry-Nuneaton railway line, beyond which is Griff Hill Quarry Geological SSSI.

Local Wildlife Sites

- Coventry Canal SP38Li29b2
- Griff Quarry SP38P10

[2] Griff Hollow Quarry SP38P14 LWS 05/02/2015 LWSP

[3] Court Farm SP38P4 LWS 16/04/2013 LWSP

Phase 1 Habitat Distinctiveness

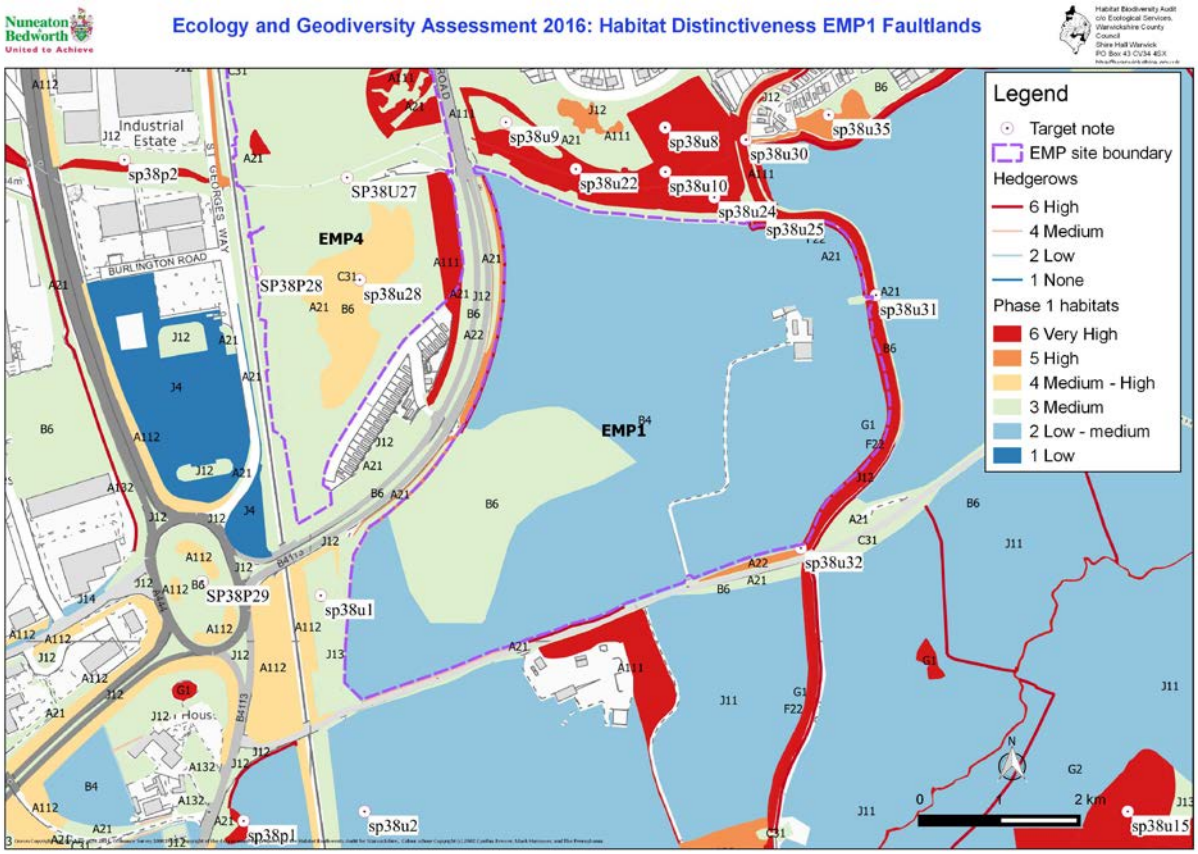


Figure 3 Phase 1 habitat distinctiveness

Target Notes

Reference	Grid Reference	Location
SP38U1	**SP3601389051**	**Gipsy Lane**

Small area of semi-improved grassland which appears to be mildly acidic. The sward is dominated by common bent (Agrostis capillaris), red fescue (Festuca rubra) with locally abundant common knapweed (Centaurea nigra), yarrow (Achillea millefolium) and large patches of lady's bedstraw (Galium verum). Creeping soft-grass (Holcus mollis) and oxeye daisy (Leucanthemum vulgare) also occur. There's a high percentage of moss cover within the sward suggesting that management of the site may have varied from time to time. The site is currently being periodically grazed by horses.

SP38U8	**SP3644689640**	**Griff Hollow**

Old quarry site surrounded by semi-natural ash woodland with bluebells (Hyacinthoides non-scripta) and encroaching scrub. The open grassland areas tend to occur on mineral spoil and contain a variety of dry acid tolerant plants including

locally dominant early hair-grass (Aira praecox), dwarf haircap (Polytrichum aloides), common bent (Agrostis capillaris) with locally abundant sheep's sorrel (Rumex acetosella), rat's-tail fescue (Vulpia myuros) and occasional hare's-foot clover (Trifolium arvense), foxglove (Digitalis purpurea), cup lichens (Cladonia sp.) with some bracken (Pteridium aquilinum) occurring in parts where the open ground meets young woodland. The site has high potential for invertebrates.

SP38U22 SP3633489588 Griff Brook

Griff Brook containing a strong population of water vole (Arvicola amphibius).

Maturing scrub of hawthorn with scattered specimens of ash (Fraxinus excelsior) adjoining wet woodland of predominately willow (Salix sp.) and alder (Alnus glutinosa) which border the water's edge of Griff Brook

SP38U24 SP3652689583 Griff Hollow

Griff Hollow (SINC). Small clearing of tall herb along a path. Locally abundant great horsetail (Equisetum telemateia), false oat-grass (Arrhenatherum elatius), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris) and bramble (Rubus fruticosus agg.).

Tall ruderal vegetation of rosebay willowherb (Chamerion angustifolium) and common nettle (Urtica dioica) with locally abundant great horsetail (Equisetum telmateia). Griff Hollow Local Wildlife Site with a small clearing of tall herb vegetation along a walked path with locally abundant great horsetail (Equisetum telemateia), false oat-grass (Arrhenatherum elatius), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris) and bramble (Rubus fruticosus agg.).

SP38U25 SP3656889530 Griff Brook

Small backwater inlet with marginal vegetation as the Griff Brook enters the Coventry Canal with swamp vegetation of dominant reed sweet-grass (Glyceria maxima) plus rare yellow flag (Iris pseudacorus) and Indian balsam (Impatiens glanduifera).

SP38U27 SP3604689577 Griff Hollow Quarry

The two patches of very similar poor semi-improved grassland are separated by a concrete path and a raised bank of scattered scrub of hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa). Damper patches of grassland are characterised by tufted hair-grass (Deschamspia cespitosa), great willowherb (Epilobium hirsutum), a willowherb (Epilobium sp) and hard rush (Juncus inflexus). Updated 01/10/2014 Griff Hollow Quarry LWS frequent Great Burnet (Sanguisorba officinalis).

SP38U28 SP3605489458 Griff Hollow Quarry LWS

Griff Hollow Quarry LWS area of species rich short grassland dominated by Common Bent (Agrostis capillaris) and Red Fescue ssp. (Festuca rubra) with areas of Common Knapweed (Centaurea nigra) and Wood small-reed (Calamagrostis epigejos). Grassland is surrounded by less species rich grassland, bramble and dense scrub.

SP38U30 SP3654889634 Coventry Canal

Coventry Canal plws Wet woodland of alder (Alnus glutinosa) and willow (Salix sp.) which borders the Griff Brook and adjacent arable farmland.

SP38U31 SP3671189439 Coventry Canal

Coventry Canal plws: Turnover Bridge 17 The entire canal edge between Griff Lane Bridge No 17 and the Arbury Park Bridge No 16 is swamp and inundated vegetation comprising of water plantain (Alisma plantago-aquatica), water dock (Rumex hydrolapathum), greater pond-sedge (Carex riparia) and bulrush (Typha latifolia) with occasional willow (Salix sp.) Scrub present on both sides of the canal and bridge comprising of hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa). Wall rue (Asplenium ruta-muraria) present on the bridge. Otter spraint (Lutra lutra) under bridge at Griff Lane.

Wall rue (Asplenium ruta-muraria) present on Turnover Bridge No 18. Scrub present on both sides of the canal and bridge comprising of hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa)

The mown grassland of the towpath periodically becomes more natural with overhanging vegetation and inundated plants of yellow iris (Iris pseudacorus), greater pond-sedge (Carex riparia), crack willow (Salix fragilis) and water figwort (Scrophularia nodosa). Within the mown grassland, prickly ox-tongue (Picris echioides), common mouse-ear (Cerastium fontanum), perennial rye-grass (Lolium perenne), creeping cinquefoil (Potentilla reptans), smooth hawk's-beard (Crepis capillaris), cleavers (Galium aparine), shepherd's-purse (Capsella bursa-pastoris), groundsel (Senecio vulgaris) and common vetch (Vicia sativa) occur.

SP38U32 SP3661789120 Coventry Canal

Coventry Canal plws Gipsy Lane Bridge No. 16 The canal bank flanking the Arbury Park Bridge No 16 comprises of inundated vegetation with reed sweet-grass (Glyceria maxima) and greater pond-sedge (Carex riparia) alongside wet woodland on a steep bank which grades down to the waters' edge adjacent to the former quarry site with crack willow (Salix fragilis), hawthorn (Crataegus monogyna), ash (Fraxinus excelsior) on the lower and silver birch (Betula pendula) on the steeper upper slope.

Intact hedgerow of hawthorn (Crataegus monogyna), blackthorn (Prunus spinosa), and dog rose (Rosa canina), on a raised bank with standards of ash (Fraxinus excelsior) alongside hedgerow (Geranium pyrenaicum) and cut-leaved cranesbill (G. dissectum).

Water-pepper (Persicaria hydropiper), watercress (Rorippa nasturtium-aquaticum), water figwort (Scrophularia auriculata), water mint (Mentha aquatica), hard rush (Juncus inflexus) and false fox-sedge (Carex otrubae) occur periodically along the water's edge of the towpath.

The marginal vegetation of the canal edge comprises of bulrush (Typha latifolia), reed sweet-grass (Glyceria maxima), reed canary-grass (Phalaris arundinacea), water dock (Rumex hydrolapathum) and gypsywort (Lycopus europaeus) close to the waters' edge. Meadowsweet (Fillipendula ulmaria), great willowherb (Epilobium hirsutum), bramble (Rubus fruticosus agg.) and some scattered hawthorn (Crataegus monogyna) dominate the grassland field margin behind.

SP38U35 sp38uccnb29 Wem Meadows

Red Deeps and Wem Meadows Wildspace comprises of poor semi-improved grassland alongside scattered scrub of willow (Salix sp.) and hazel (Corylus avellana).

Biodiversity Units

NBBC requests Biodiversity Impact Assessments (BIAs) to be carried out for all Minor and Major applications. BIAs are based on the Defra Offsetting Metircs (2012), as applied locally, to measure the gain or loss of habitat value as a result of development. It essentially is a mechanism of valuing the existing and future habitat of a development site and assessing if it is of more value (gain) or less value (loss). This assessment shows conformity to No Net Loss and Net Gain objectives within the NBBC Core Strategy and National Planning Policy Frameworks.
The BIA process also enables development to demonstrate sustainable development, assist in viability assessments and the application of the Mitigation Hierarchy. The Mitigation Hierarchy is illustrated in Figure4 below. To avoid doubt one must not progress to a subsequent step until all opportunities have been demonstrably explored and discounted.

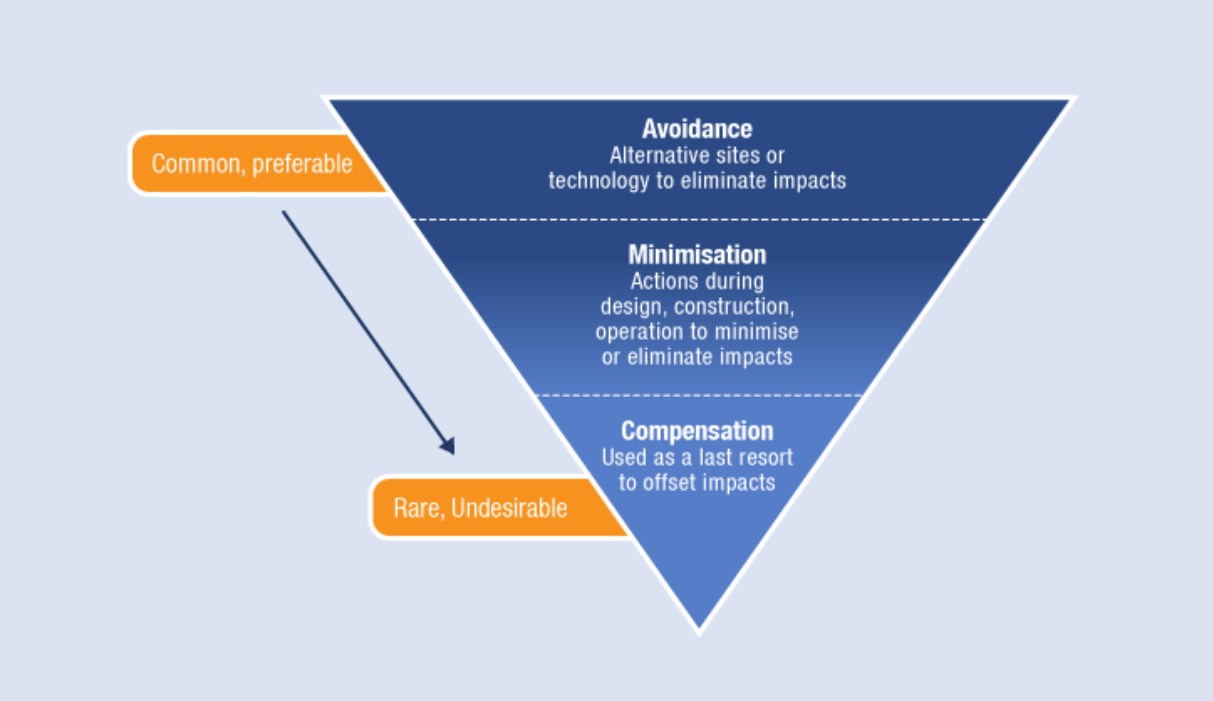


Figure 4: The Mitigation Hierarchy (UNU Online Learning, 2007)

The next table shows the habitats and their values measured by Habitat Distinctiveness x Habitat Condition x area. To apply the Mitigation Hierarchy it is recommended that

- High Distinctiveness (Value 6) habitats are avoided, retained and enhanced during and after the development
- Areas of higher value are retained where possible and enhanced during and after the development

In this way the need to compensate for any residual habitat biodiversity loss is minimised; thus reducing the cost of compensation.

Site Reference	Habitat	Area hectares	Biodiversity Distinctiveness	Biodiversity Condition	Biodiversity Units
EMP1	Poor Semi-improved grassland	4.17	3	2	25.02
EMP1	Inundation vegetation	0.18	6	3	3.17
EMP1	Improved grassland	21.61	2	1	43.23
EMP1	Dense/continuous scrub	0.02	3	2	0.13
				Biodiversity Units	**71.55**

Phase 1 Habitat Connectivity

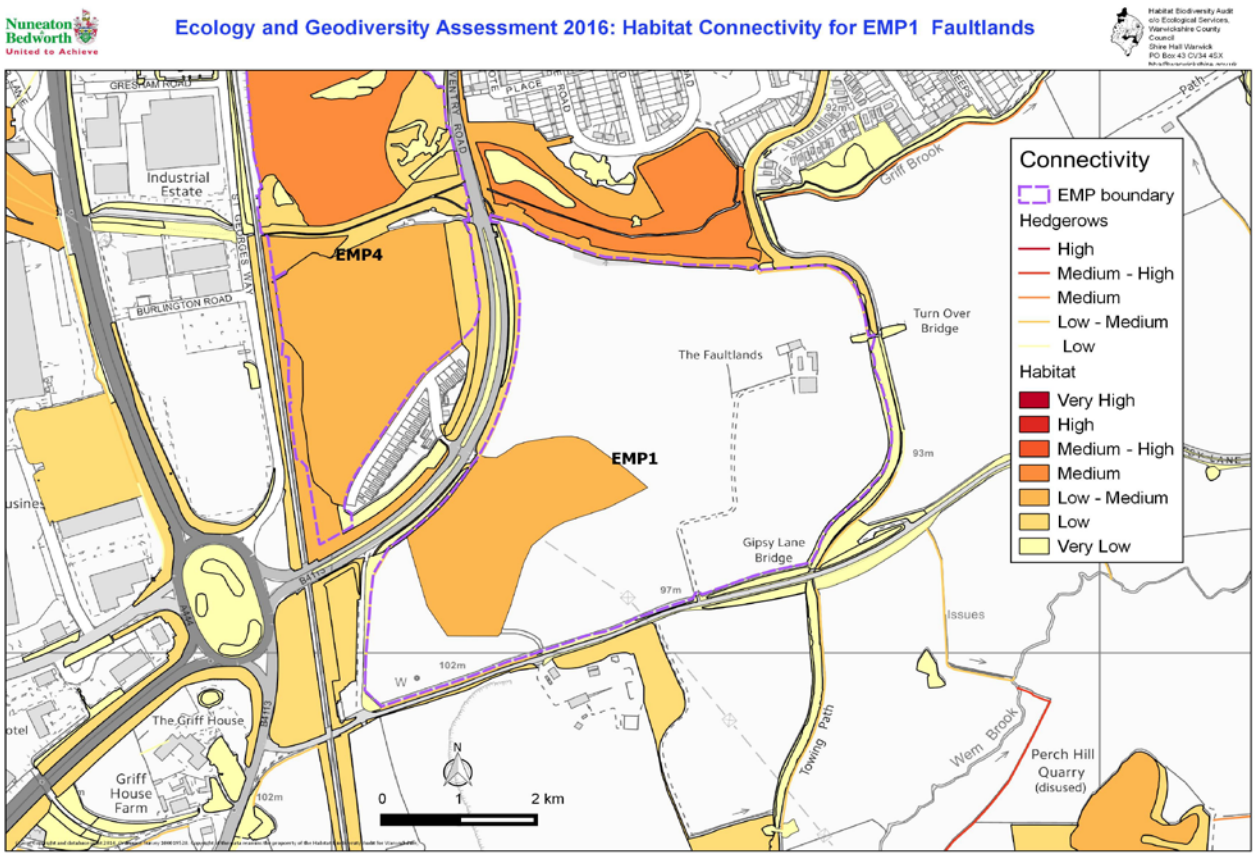


Figure 5 Phase 1 habitat connectivity

Protected & Important Species

There are the following protected and/or important species[4] recorded within the proposed boundary:

- Moths & Butterflies: Small heath
- Amphibians & Reptiles: Great crested newt have been found onsite but not reported to the WBRC so is not shown on Figure 6

There are the following additional protected and/or important species recorded within 500m of the proposed site boundary:

- Amphibians & Reptiles: Smooth Newt, Grass snake, common lizard
- Mammals: Water vole
- Birds: Dunnock, Bullfich, Song Thrush and Mistle Thrush
- Invertebrates: Altica brevicollis (bettle) and Wall butterfly
- Rare Plants: White Ramping-fumitory, Spiny Restharrow, Climbing Corydalis and Rough Hawk's-beard

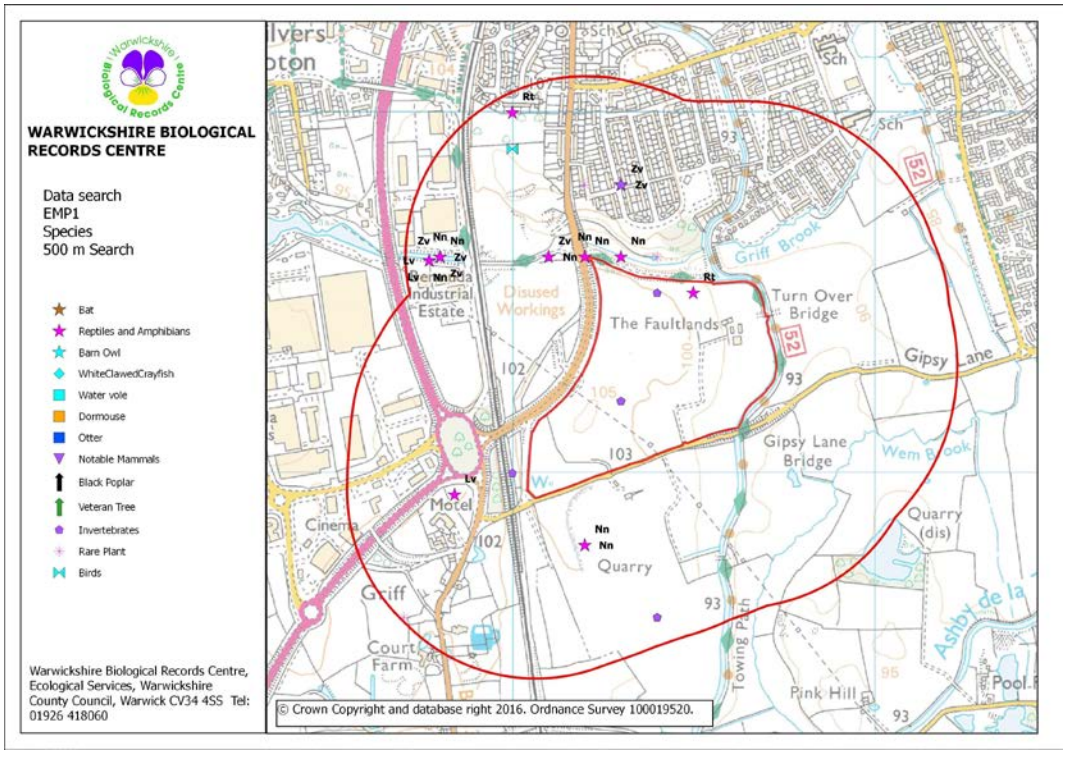
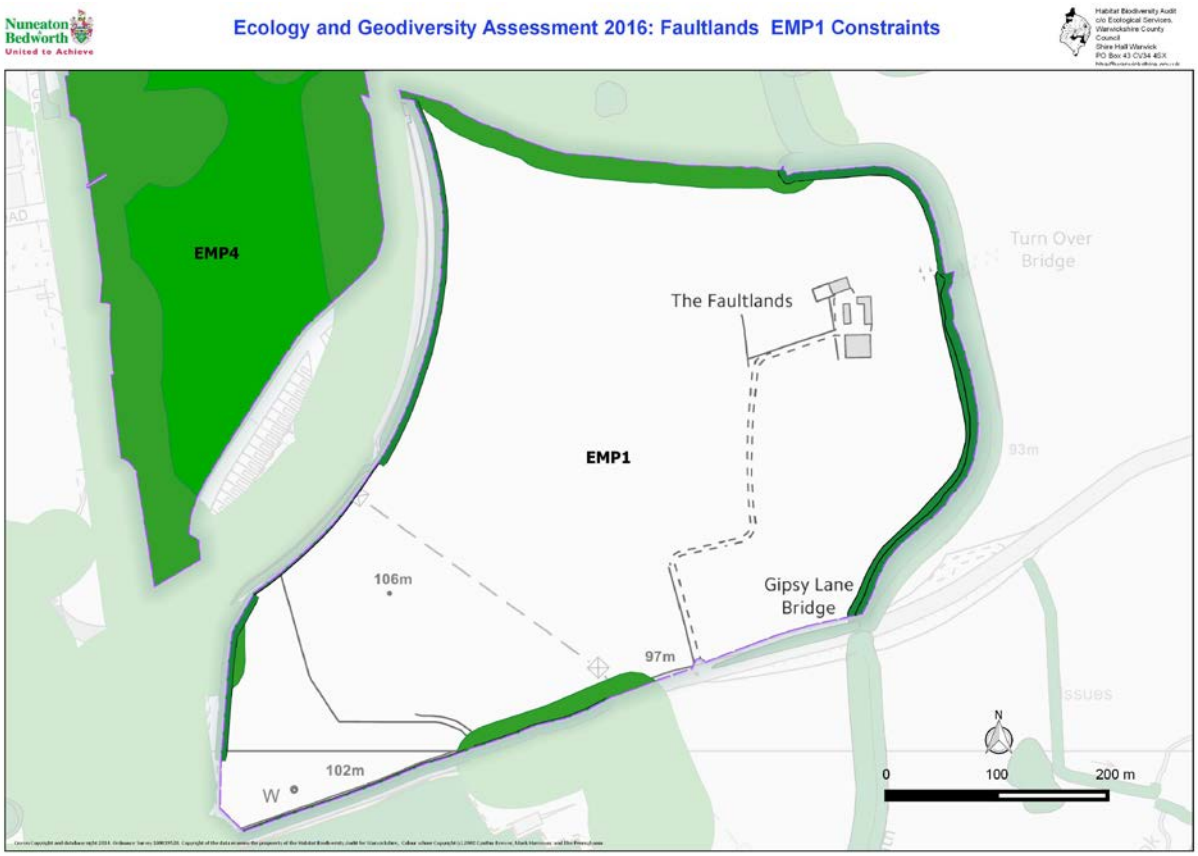


Figure 6: Protected Species

[4] The information presented here is based on existing records held within the Warwickshire Biological Records Centre but does not constitute an exhaustive list of known records. The details are descriptive and further information on specific records can be obtained if required. In addition, it should not be taken that the lack of details on specific species groups means that the search area is not valuable for them - only that we have no electronic records. It is possible that unknown species are within this area that only an up-to-date systematic survey would find.

Constraints Map



The areas marked in green on the above constraints map indicate where development should be avoided and ecological enhancement encouraged.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of intact hedgerows
- Areas of medium to high distinctiveness grassland (values 4, 5 & 6)

Nuneaton and Bedworth Borough Council Ecology and Geodiversity Assessment (EGA) Borough Plan Publication Version

EMP2 PHOENIX WAY

Prepared by

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull, Warwickshire Wildlife Trust

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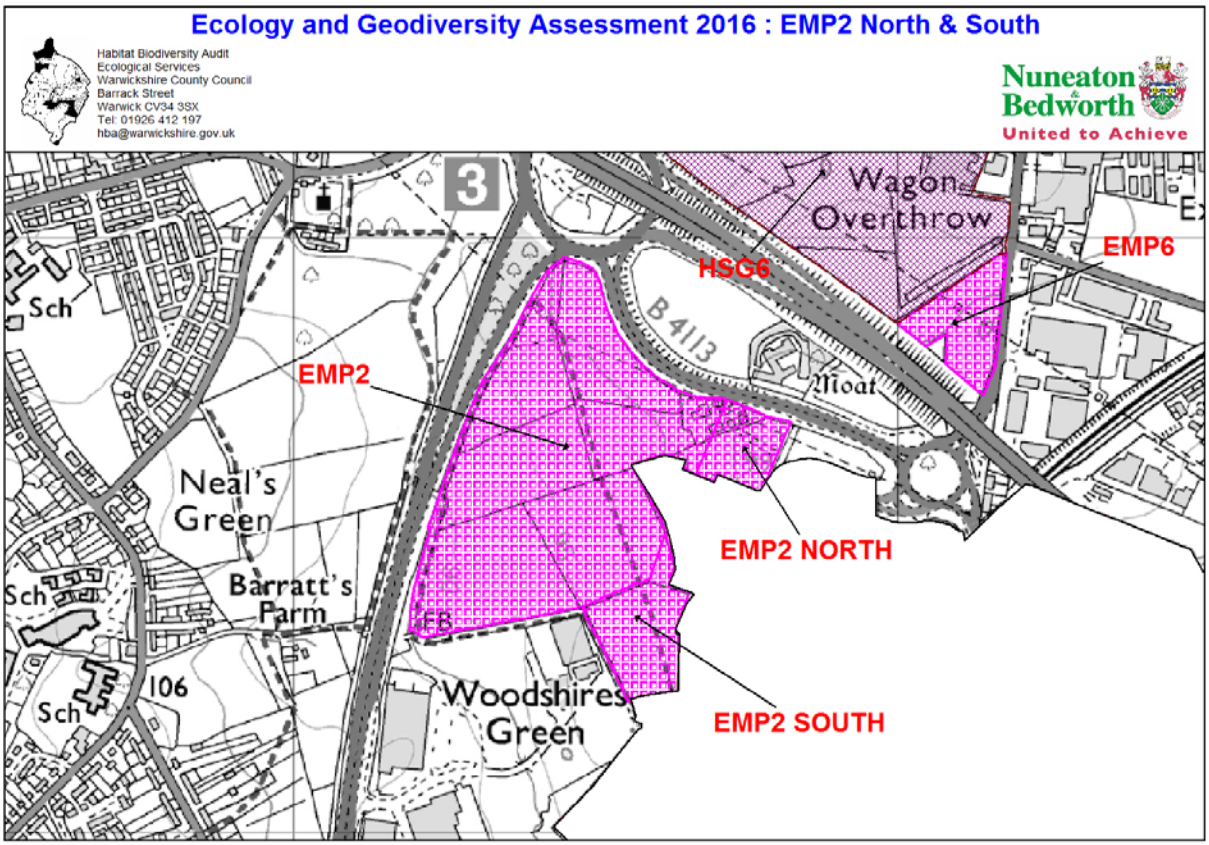

Figure 1 Location map

Area: 22.1 HA

Overview

The development parcel is sandwiched between Junction 3 of the M6 and the B4113 on the north and western boundary and by industrial units of the Rowleys Green Lane Industrial Estate and Gallagher Business Park to the south. The eastern periphery of the development parcel is marked by dwellings off Wilson's Lane forming part of the neighbourhood of Woodshires, Coventry.

The River Sowe marks the south-west parcel boundary continuing under Silverstone Drive and Rowley's Green Lane running under Bassford Bridge. A footpath runs diagonally criss-crossing the majority of fields within the parcel.

Nine parcels of improved grassland equates to 14.4 ha, two arable fields curtailing the southern boundary total 6.5 ha and more ecologically diverse habitats of poor-semi-improved grassland combines 2.5 ha and scattered scrub of 0.48 ha.

Semi-improved neutral grassland immediately adjacent to the southern boundary but outside the development parcel provides roughly 3.8 ha of grassland for potential enhancement.

Key Features

- Poor semi-improved grassland
- Neutral semi-improved grassland
- Scattered Scrub
- Hedgerows

Recommendations

- The ecological corridor of the River Sowe is enhanced
- The central hedgerow is retained and strengthened to maintain an east to west network of green infrastructure
- Areas of Medium to High Distinctiveness category (value: 4, 5 & 6) are retained and enhanced within any proposal.

It is important to note that until protected species survey work is undertaken there cannot be certainty over the potentially developable area and the quantity and scale of retained / enhanced habitat that may be required to adequately address protected species issues.

Opportunities

- Bassford Bridge Meadows LWS could be enhanced through any obligations.

Designated Sites: Local Sites

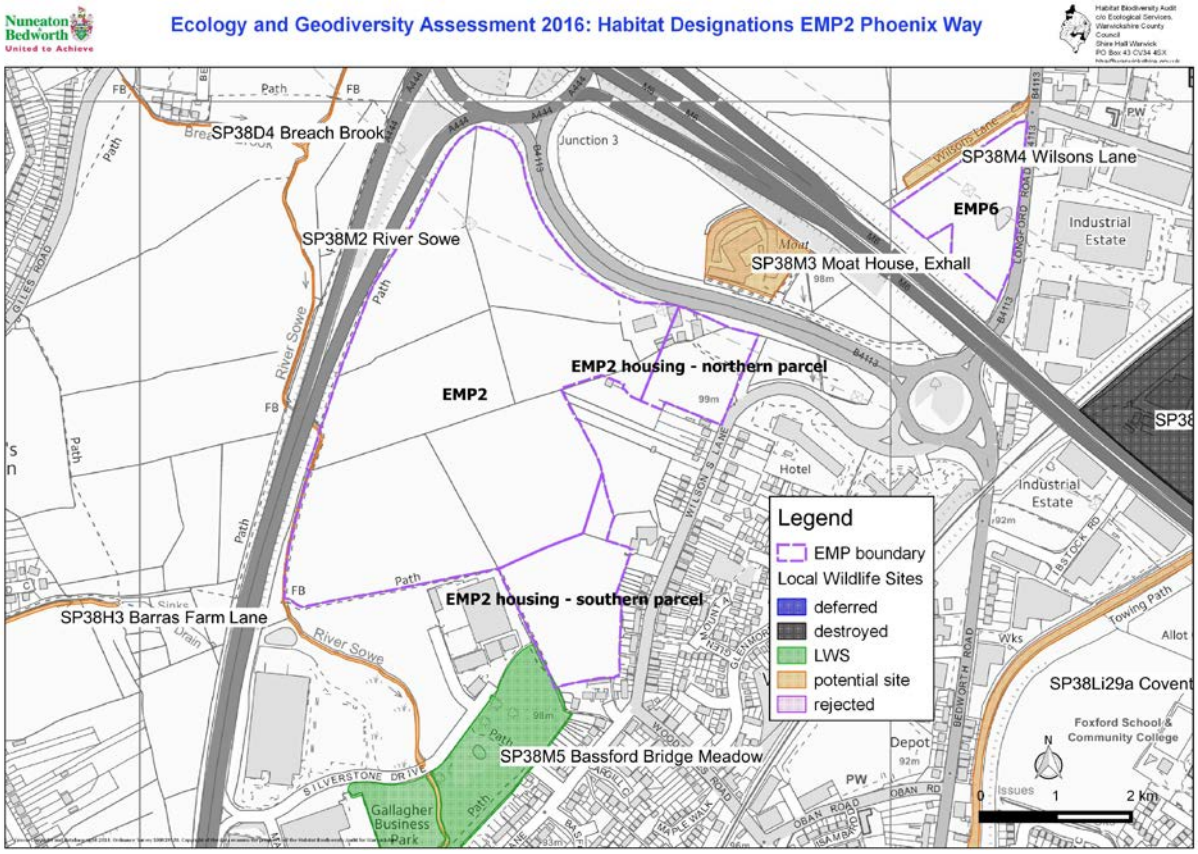

Figure 2 Site Designation Map

Bassford Bridge Meadow SP38M5[1]

The LWS comprises three unmanaged blocks of council-owned semi-natural habitats in the upper Sowe valley astride the border between Exhall parish (in Nuneaton and Bedworth) and the northern Coventry suburb of Woodshires Green. This area was partly built up in the late 1990's following the development of the Ricoh Arena 300m to the south beyond the Hales Park Industrial Estate at Rowley's Green, leaving a corridor of rough undeveloped ground along the river on either side of Bassford Bridge in Rowley's Green Lane. To the north of the lane bordering Silverstone Drive on the new Gallagher Business Park, there is a strip of former pasture to the west of the river which is now mainly overgrown with rank grass and tall herb ("the north meadow"). To the east of the river, a block of young woodland and an area of semi-improved grassland stretches for 250m to the north-east between Silverstone Drive and the backs of gardens in Rowley's Green Lane. This group of habitats was developed as a nature area on a former spoil tip in the early-mid 1990's, with the

[1] Bassford Bridge Meadows SP38M5 LWS 19/03/2014 LWSP

woodland partly planted by local school children. Finally, to the south of Rowley's Green Lane is "the south meadow", covering both sides of the river and extending to the Coventry-Nuneaton railway embankment. The narrower section north of the river is extensively used for recreation and as a through-way by local residents, but to the south the former horse paddocks are now unmanaged and extensively overgrown with tall herb.

The site is now almost cut off from the open countryside, only connected via a narrow corridor of vacant land along the River Sowe north of Silverstone Drive and a small arable field at the north-eastern end of the nature area. Elsewhere the LWS is bordered by industrial estates to the north, west and south, and by residential roads to the east and north-east. At the south-east end, the river flows under the Nuneaton railway before connecting directly with the Coventry Canal LWS and Longford Nature Park LWS; thus the site is part of an important interconnecting wildlife corridor in an otherwise heavily built-up neighbourhood of north Coventry.

Potential Local Wildlife Sites

- River Sowe Sp38M2
- Moat House Exhall SP38M3

Phase 1 Habitat Distinctiveness

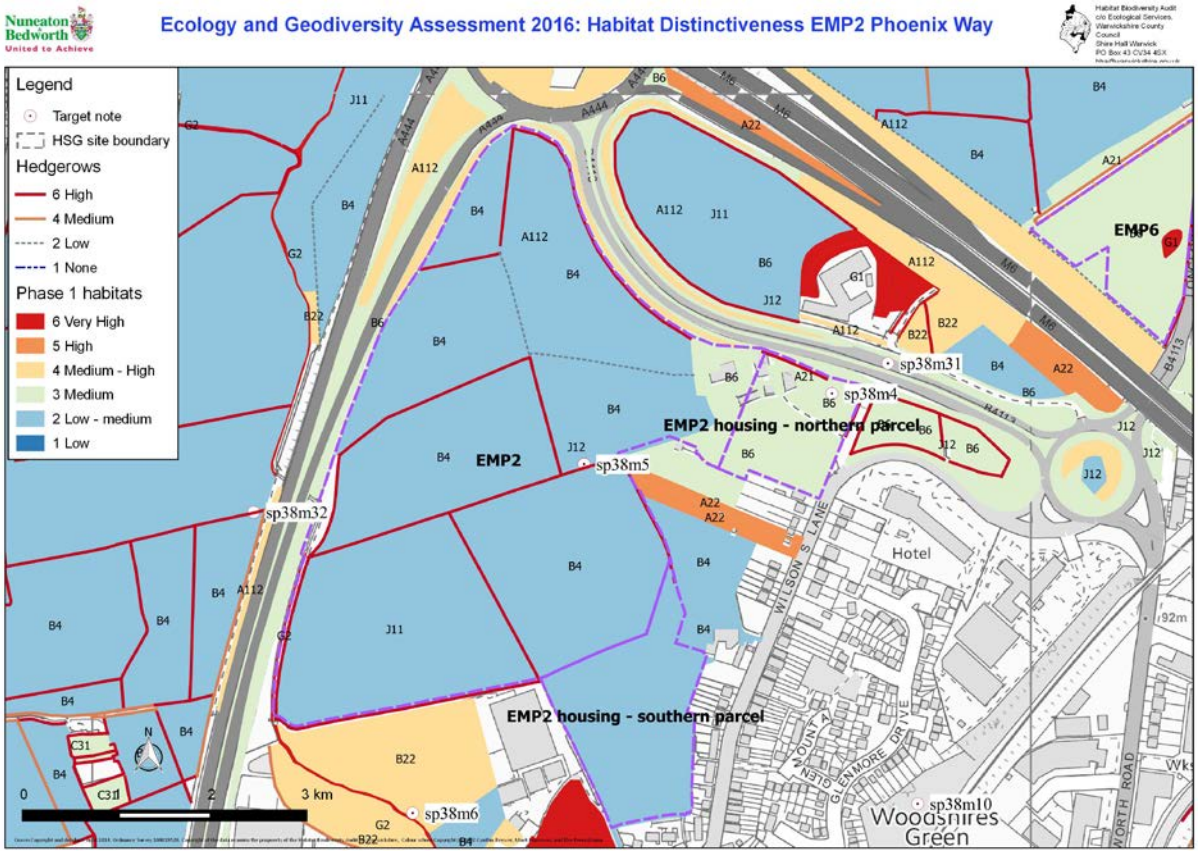

Figure 3 Phase 1 habitat distinctiveness

Target Notes

Reference	Grid Reference	Location
SP38m4	**SP3478884675**	**Phoenix Way – northern parcel**

Old pasture with what appears to be ant hills. However it is heavily grazed and the forb diversity is low with perennial rye-grass (Lolium perenne) locally dominant

SP38m5	**SP3452484600**	**Phoenix Way**

Access denied to survey this pasture with old ridge and furrow. However looks improved from the gateway.

sp38m6	**SP3434184229**	**Phoenix Way – southern parcel**

Running water; heavily shaded by willow; ash and alder. Where it is moreopen Typha latifolia is locally dominant. Occasional along these sides are great willowherb; redshank; water-cress and Phalaris arundinacea.

Biodiversity Units

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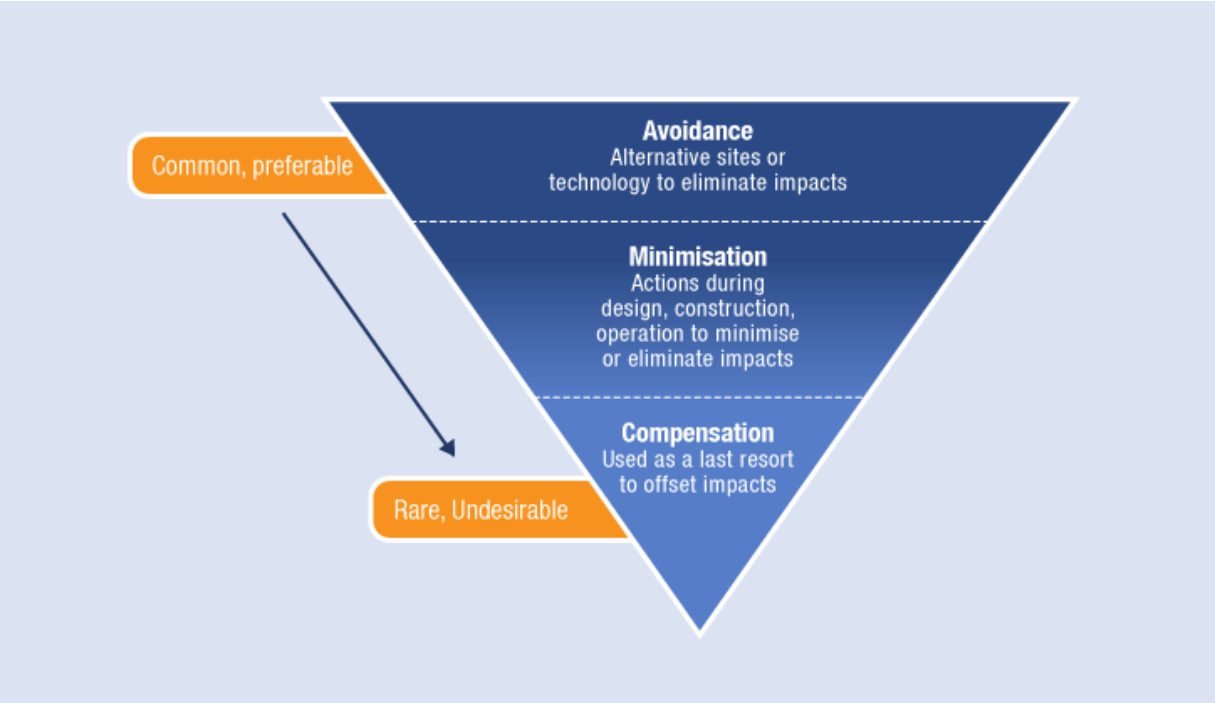


Figure 4: The Mitigation Hierarchy (UNU Online Learning, 2007)

The next table shows the habitats and their values measured by Habitat Distinctiveness x Habitat Condition x area. To apply the Mitigation Hierarchy it is recommended that

- High Distinctiveness (Value 6) habitats are avoided, retained and enhanced

during and after the development

- Areas of higher value are retained where possible and enhanced during and after the development

In this way the need to compensate for any residual habitat biodiversity loss is minimised; thus reducing the cost of compensation.

Site Reference	Habitat	Area hectares	Biodiversity Distinctiveness	Biodiversity Condition	Biodiversity Units
EMP2	Running water	0.00	6	3	0.03
EMP2	Improved grassland	0.65	2	1	1.30
EMP2	Improved grassland	2.61	2	1	5.22
EMP2	Improved grassland	2.07	2	1	4.13
EMP2	Arable	4.19	2	1	8.37
EMP2	Improved grassland	2.84	2	1	5.67
EMP2	Improved grassland	1.60	2	1	3.20
EMP2	Improved grassland	3.43	2	1	6.87
EMP2	Poor Semi-improved grassland	0.35	3	2	2.10
EMP2	Poor Semi-improved grassland	0.19	3	2	1.14
EMP2 North	Poor Semi-improved grassland	0.28	3	2	1.68
EMP2 North	Dense/continuous scrub	0.05	3	2	0.30
EMP2 North	Poor Semi-improved grassland	0.90	3	2	5.38
EMP2 North	Poor Semi-improved grassland	0.08	3	2	0.50
EMP2 South	Arable	2.34	2	1	4.68
EMP2 South	Improved grassland	0.19	2	1	0.38
				Biodiversity Units	**50.95**

Phase 1 Habitat Connectivity

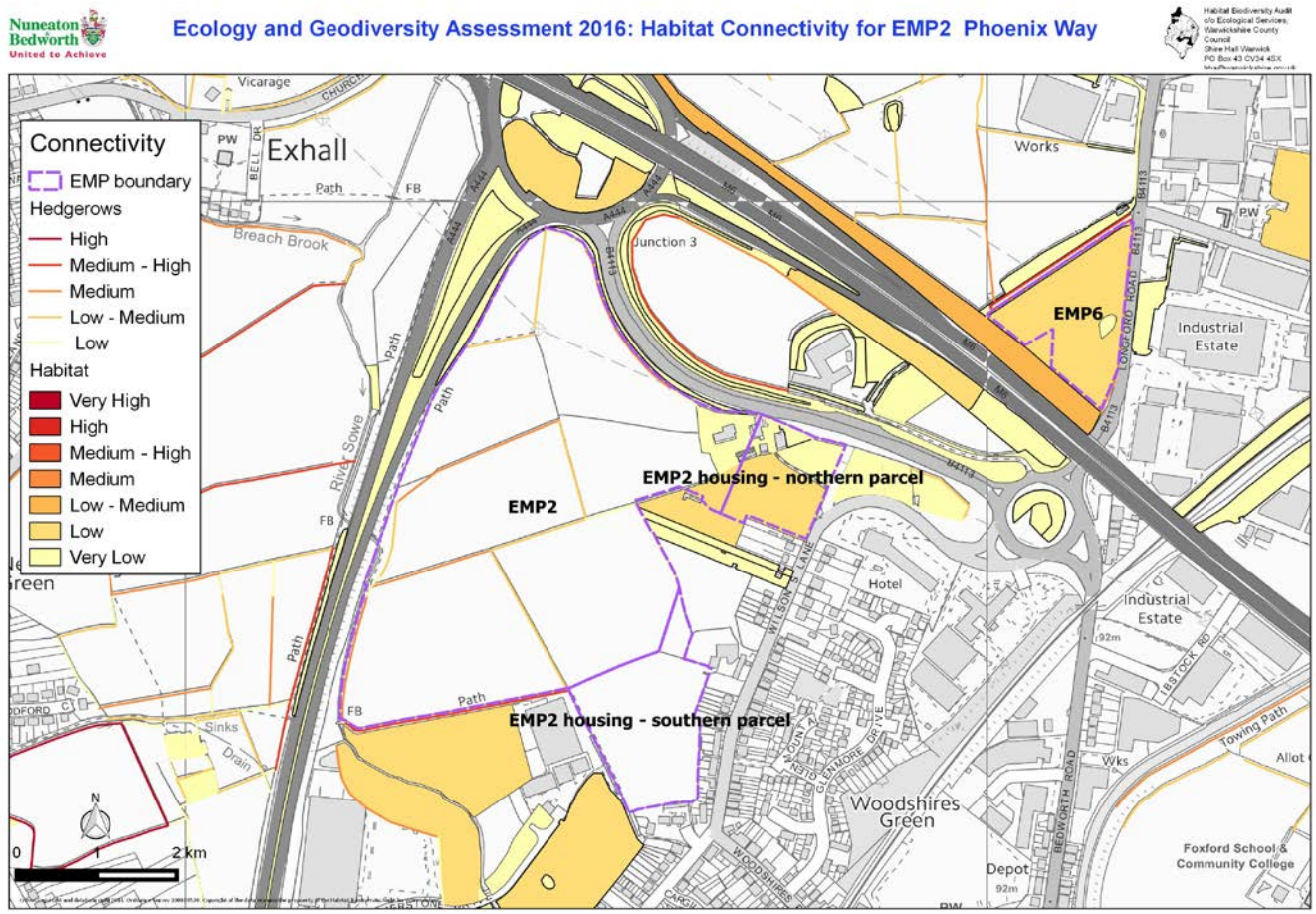
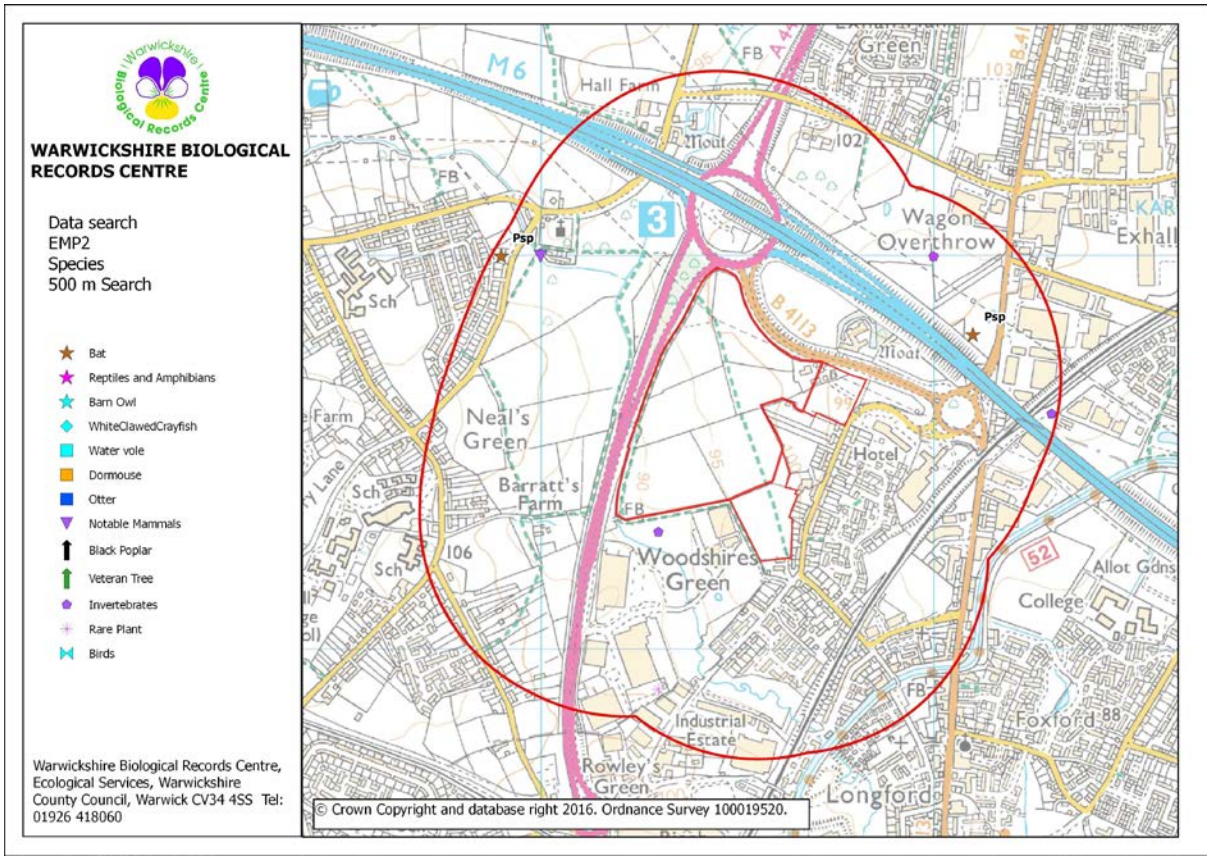


Figure 5 Phase 1 habitat connectivity

Protected & Important Species

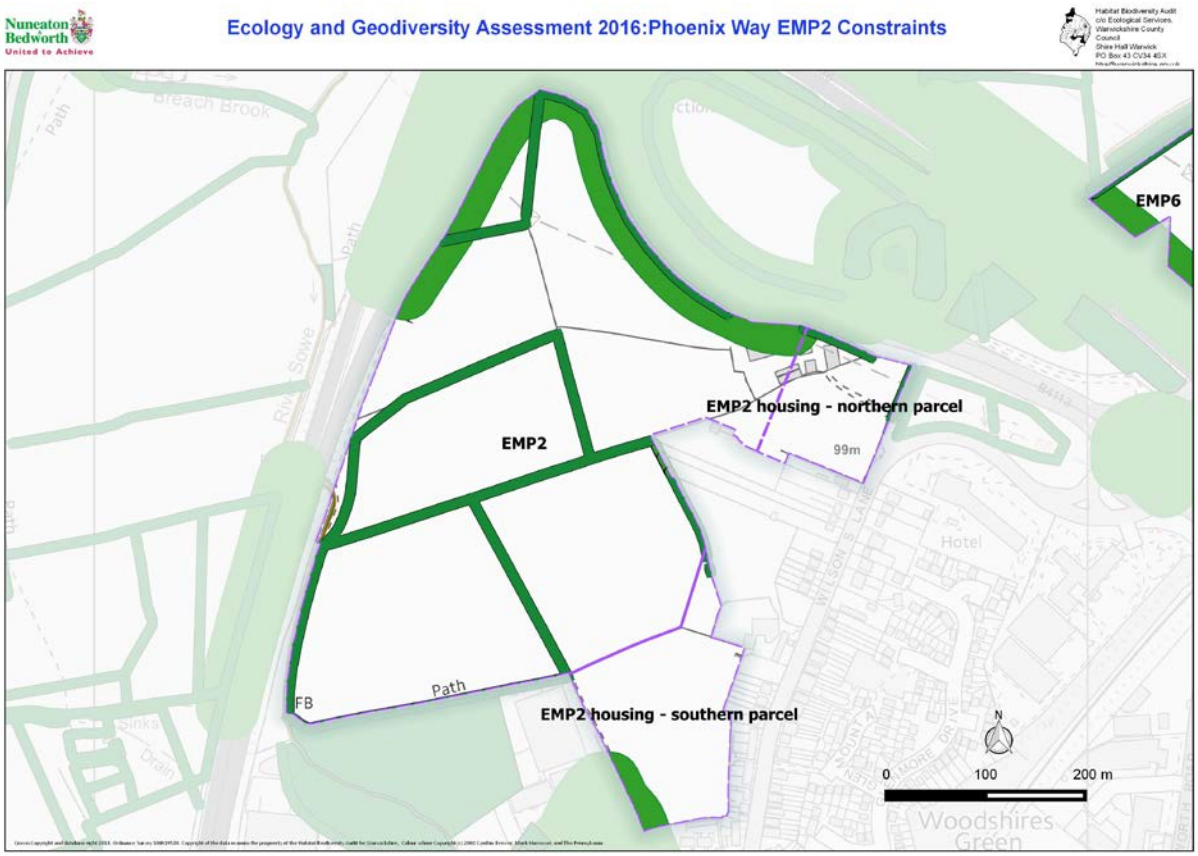
There are no protected and/or important species[2] recorded within the proposed boundary.
There are the following protected and/or important species recorded within 500m of the proposed site boundary:

- Bats: Pipistrelle species
- Mammals: Brown Hare
- Invertebrates: Andrena (Cnemidandrena) nigriceps (Black-headed Mining-bee), Large Yellow-Faced Bee, Latticed Heath and Small Heath
- County Rare Plant: Annual Beard-grass, Greater Chickweed



[2] The information presented here is based on existing records held within the Warwickshire Biological Records Centre but does not constitute an exhaustive list of known records. The details are descriptive and further information on specific records can be obtained if required. In addition, it should not be taken that the lack of details on specific species groups means that the search area is not valuable for them - only that we have no electronic records. It is possible that unknown species are within this area that only an up-to-date systematic survey would find.

Constraints Map



The areas marked in green on the above constraints map indicate where development should be avoided and ecological enhancement encouraged.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of intact hedgerows
- Areas of medium to high distinctiveness grassland (values 4, 5 & 6)

Nuneaton and Bedworth Borough Council Ecology and Geodiversity Assessment (EGA) Borough Plan Publication Version

EMP3 Prologis Park Site

Prepared by

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull, Warwickshire Wildlife Trust

Habitat Biodiversity Audit

and

Warwickshire Biological Record Centre

Ecological Services, Warwickshire County Council

September 2016

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Employment SITE EMP3 – Prologis Park

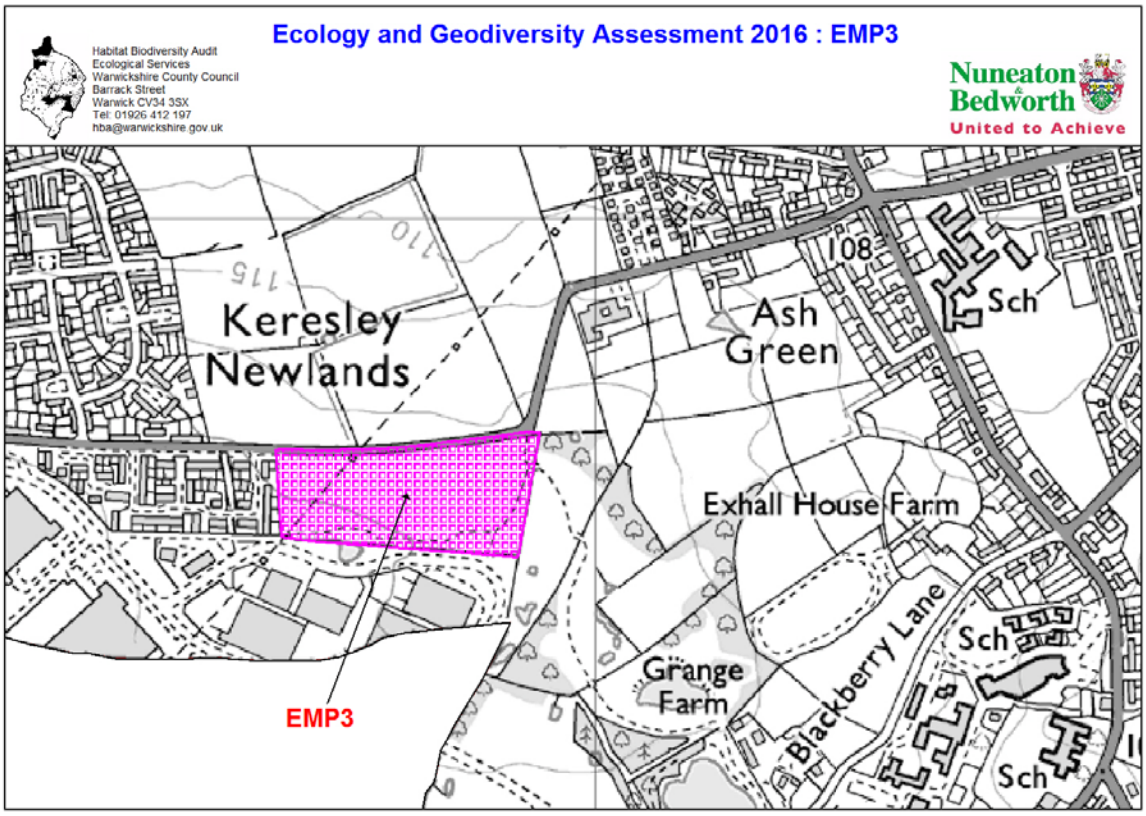


Figure 1 Location map

Area 5.33 hectares

Overview

EMP3 is a medium sized field to the west of the built area along Mercers Meadow and the Prologis Country Park (formerly known as Keresley Park, the name used before construction began of the Prologis Business Park in 1999). To the south of the site is the Prologis Business Park, to the north the site is bounded by the Exhall Road. The site was included in the Prologis Country Park local wildlife site in February 2016.

Key Features

- Semi-improved neutral grassland
- Scrub and woodland edge
- Ponds
- Hedgerows

Recommendations

- The site should be retained as a Local Wildlife Site (LWS) in combination with the adjacent Prologis Country Park LWS. Due to its ecological importance on a landscape scale and ability to support a meta-population of protected species including great crested newt.

DESIGNATED SITES: LOCAL SITES

Prologis Country Park Local Wildlife Site Sp38H4[1]

Prologis Country Park consists of a large block of semi-improved neutral grassland, planted woodland, a network of old hedgerows and a number of ponds, situated on the northern edge of the Coventry conurbation between the former mining village of Keresley Newlands to the north-west and Ash Green to the north-east and Neal's Green to the east, both in Exhall. The Coventry suburb of Holbrooks is situated to the south. The country park (also called Keresley Country Park) was set up in around 2002 in part as mitigation for the development of the old Coventry Colliery and Homefire Plant site to the south-west by Prologis as a major new industrial and distribution park known as Prologis Park. Although open to the public the site is still owned and managed by Prologis.

Before it was redesigned as a country park the site formerly consisted of a group of five small pasture fields divided by tall thick hedgerows and with most containing one or two small ponds. These were owned by the old Keresley Colliery (later renamed Coventry Colliery), which opened in 1911 and presumably used the land for pony grazing as they were still in later years. A sixth larger field to the north-west, also added to the park, was under arable in the 1990's but was originally part of the colliery grounds. After the colliery was closed in 1991 coal was again mined by a new company from 1994-96, before this too closed down. The adjoining Homefire coke-producing plant, also part of the complex, in turn closed down in 2000 and the whole of the land holding was then sold to Prologis. As part of the redevelopment of the land a country park was laid out for the benefit of local people, which contains two large balancing pools for local flood relief where ballast was excavated. From 2002 the park was laid out with a network of both metalled and grass paths, extensive new native woodlands were planted and a number of new ponds were created for amphibians. Most of the remaining pasture is now managed as wildflower meadow and cut in late summer. All of this was designed and put into effect by Middlemarch Environmental.

Although the site is now enclosed by suburban and industrial development on three sides, there is still a connection to the country side to the north via a series of arable fields across Exhall Road. In addition several small pasture fields still exist to the east and north-east, where there is a riding establishment. The nearest LWSs to the site are small suburban sites at Greenwood Farm Pastures 800m to the south-east and Houldsworth Crescent Corridor immediately across Prologis Drive to the south.

[1] Prologis Country Park Local Wildlife Site SP38H4 selected 25/02/2016

Another former LWS (Somers Road Meadow) which was situated 500m to the north was recently (2015) destroyed by ploughing.

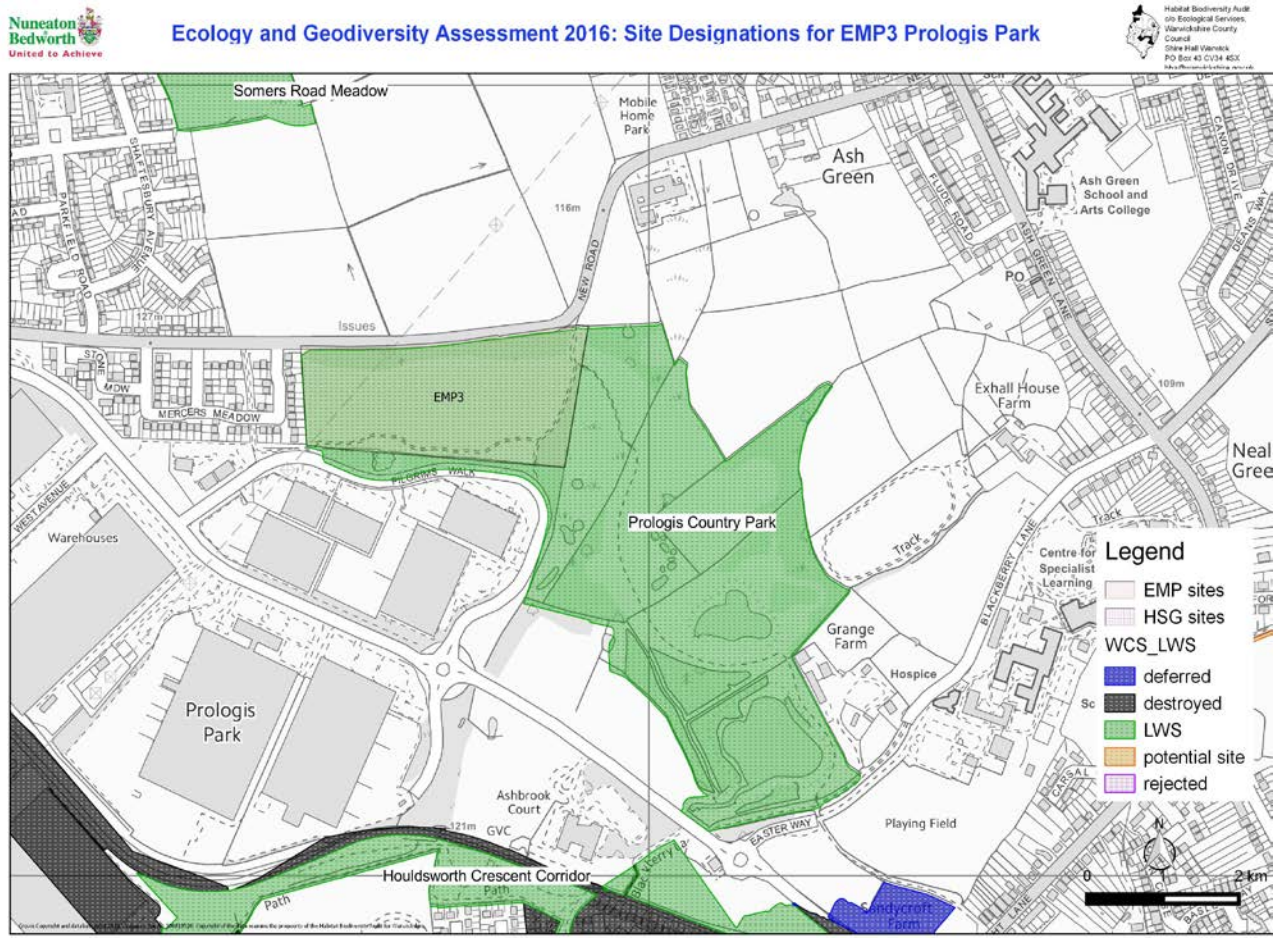


Figure 2 Site Designation Map

PHASE 1 HABITAT DISTINCTIVENESS

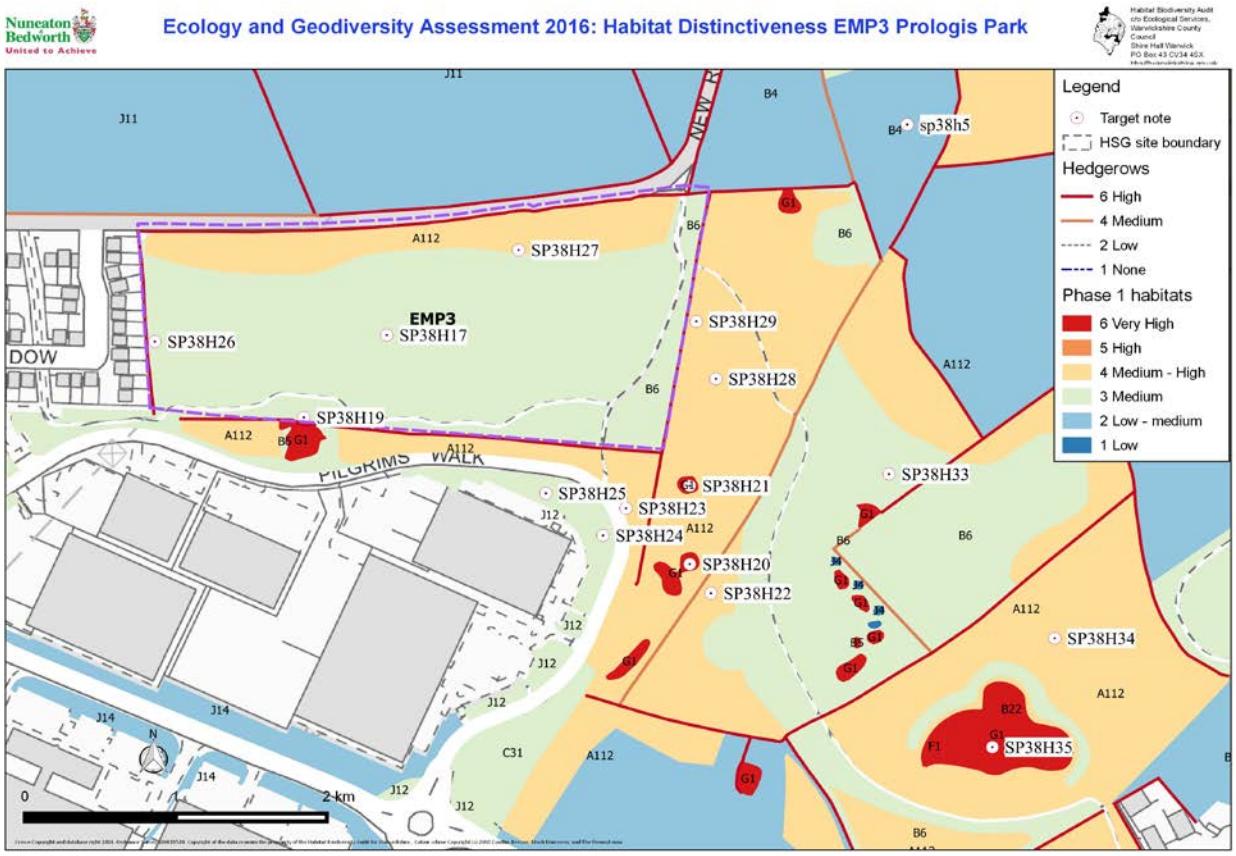


Figure 3 Habitat Distinctiveness Map

Target Notes

Reference	Grid Reference	Location
SP38H17 meadow)	**SP3270084603**	**Prologis Country Park (North West**

28/02/2014 Poor semi-improved neutral grassland typical of many of the surrounding grassland of the Prologis Park development. Grasses dominant with some common-bird's-foot-trefoil (Lotus corniculatus), oxford ragwort (Senecio squalidus), red clover (Trifolium pratense), thistles (Cirsium sp.) and common nettle (Urtica dioica).Updated 27/02/2014 Poor semi-improved grassland cut periodically with a mower and composed of coarse and widespread grasses particularly Yorkshire-fog (Holcus lanatus), meadow foxtail (Alopecurus pratensis), red fescue (Festuca rubra), Common Bent (Agrostis capillaris) and cock's-foot (Dactylis glomerata). Forbs species present within the sward include common knapweed (Centaurea nigra), cut-leaved cranesbill (Geranium dissectum), common nettle (Urtica dioica), ribwort plantain (Plantago lancelota), locally abundant red clover (Trifolium pratense), curled dock (Rumex crispus), dandelion (Taraxacum officinale agg.), cleavers (Galium aparine) and common ragwort (Senecio jacobaea). Locally frequent soft rush (Juncus effuses). Update 03/09/2015 Prologis Park LWS semi-improved grassland

SP38H19 SP3264684547 Prologis Country Park (north west meadow)

28/02/2014 A patch of great willowherb (Epilobium hirsutum).Updated 03/09/2015 Prologis Country Park LWS. Plantation woodland with Pedunculate Oak (Quercus robur), Goat Sallow (Salix caprea), Ash (Fraxinus excelsior),Silver Birch (Betula pendula) also Hawthorn (Crataegus monogyna), Blackthorn (Prunus spinosa) dominated hedgerow and a pond.

SP38H20 SP3288884431 Prologis Country Park

28/02/2014 Fenced off ponds with flooded areas connecting to wet woodland of alder (Alnus glutinosa), marshy grassland of soft rush (Juncus effuses) and willow carr of crack (Salix fragilis) and goat willow (S. caprea) and areas of broad-leaved plantation. The ponds held marginal vegetation of bulrush (Typha latifolia), soft rush (Juncus effuses) and great willowherb (Epilobium hirsutum). Other species present in and surrounding the ponds include creeping bent (Agrostis stolonifera), yarrow (Achillea millefolium) and hogweed (Heracleum sphondylium). Updated 03/09/2015 Prologis Country Park LWS ponds vegetated over and are drying out.

SP38H21 SP3290184500 Prologis Country Park

28/02/2014 The pond contains floating sweet-grass (Glyceria fluitans), creeping buttercup (Ranunculus repens), water plantain (Alisma plantago-aquatica) and false oat-grass (Arrehenatherum elatius). Updated 03/09/2015 Prologis Country Park LWS

SP38H22 SP3291584427 Prologis Country Park

28/02/2014 Dry ditch of a considerable age holds oak (Quercus robur), holly (IIex aquifolium) and bramble (Rubus fruticosus agg.). Updated 03/09/2015 Prologis Country Park LWS

SP38H23 SP3285984485 Prologis Country Park

28/02/2014 Broad-leaved plantation including a specimen of exotic birch (Betula sp.) alongside native planted species of oak (Quercus robur), hazel (Corylus avellana), holly (IIex aquifolium), field maple (Acer campestre) and ash (Fraxinus excelsior).Updated 03/09/2015 Prologis Country park LWS.

SP38H24 SP3284484466 Prologis Park

28/02/2014 Amenity grassland of perennial ryegrass (Lolium perenne) borders the industrial unit but contained dandelion (Taraxacum officinale agg.), daisy (Bellis perennnis) and creeping buttercup (Ranunculus repens).

SP38H25 SP3280684495 Prologis Park

28/02/2014 The mown amenity grassland is accompanied by introduced scrub of red-osier dogwood (Cornus sericea) and yellow barked dogwood (Cornus stolonifera flaviramea) and some hazel (Corylus avelllana).

SP38H26 SP3254784599 Prologis Country Park (north west meadow)

28/02/2014 Scrubland area consisting of of ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), goat willow (Salix caprea) and great willowherb (Epilobium hirsutum). Updated 03/09/2016 Prologis Country Park LWS.

SP38H27 SP3278884661 Prologis Country Park (north west meadow)

28/02/2014 Broad-leaved plantation of silver birch (Betula pendula), holly (IIex aquifolium), oak (Quercus robur), hazel (Corylus avellana), Aspen (Populus tremula) and goat willow (Salix caprea). The ground flora contains hedge woundwort (Stacys sylvatica), ivy (Hedera helix), Osier (Salix viminalis) and hogwood (Heracleum sphondylium).Updated 03/09/2015 Prologis Country park LWS

SP38H28 SP3291884573 Prologis Country Park

28/02/2014 Fenced areas of broad-leaved plantation built as compensation for the original industrial estate and enhancement of the Prologis Country Park. The plantation contains specimens of aspen (Populus tremula), silver birch (Betula pendula), holly (IIex aquifolium), ash (Fraxinus excelsior), field maple (Acer campestre), oak (Quercus robur), bird cherry (Prunus padus), crab apple (Malus sylvestris) and alder (Alnus glutinosa).Updated 03/09/2015 Prologis Country Park LWS

SP38H29 SP3290584613 Prologis Country Park

28/02/2014 Older hedgerow marked alongside a ditch with medium sized oaks (Quercus robur), hazel (Corylus avellana), holly (IIex aquifolium) and blackthorn (Prunus spinosa). One oak holds high bat potential. The ground flora includes bramble (Rubus fruticosus agg.), ivy (Hedera helix), cleavers (Galium aparine), common nettle (Urtica dioica) and hogweed (Heracleum sphondylium). Long-tailed tit (Aegithalos caudatus) present at the time of survey. Updated 03/09/2015 Prologis Country Park LWS.

SP38H33 SP3303984502 Prologis Country Park

Prologis Country Park LWS species poor semi-improved rank grassland dominated by False oat-grass (Arrhenatherum elatius) and Timothy (Phleum pratense).

SP38H34 SP3314884390 Prologis Country Park

Prologis Country Park LWS an area of semi-improved grassland with abudant Greater Burnet-saxifrage (Pimpinella major) and Meadow Vetchling (Lathyrus pratensis).

SP38H35 SP3310784316 Prologis Country Park

Prologis Country Park LWS small balancing pool with Common Reed (Phragmites

australis) surrounded by damp grassland with rushes and sedges.

SP38H36 SP3315684169 Prologis Country Park

Prologis Country Park LWS large balancing pool with Common Reed (Phragmites australis) and Bulrush or Common Reed mace (Typha latifolia). With Blue Fleabane (Erigeron acer) on exposed sand bank. Around the pool is White Willow (Salix alba) and Goat Sallow (Salix caprea); areas of rough meadow grass with False oat-grass (Arrhenatherum elatius), Cock's-foot (Dactylis glomerata) and Creeping Thistle (Cirsium arvense), also plenty of meadow vetchling (Lathyrus pratensis), Birdsfoot-trefoil (Lotus corniculatus), Tufted vetch (Vicia cracca), Lady's Bedstraw (Galium verum) and Zigzag Clover (Trifolium medium). Channel to pool is chocked with Purple Loosestrife (Lythrum salicaria), Bulrush or Common Reed mace (Typha latifolia), Burr-reed etc.

Biodiversity Value

NBBC requests Biodiversity Impact Assessments (BIAs) to be carried out for all Minor and Major applications. BIAs are based on the Defra Offsetting Metircs (2012), as applied locally, to measure the gain or loss of habitat value as a result of development. It essentially is a mechanism of valuing the existing and future habitat of a development site and assessing if it is of more value (gain) or less value (loss). This assessment shows conformity to No Net Loss and Net Gain objectives within the NBBC Core Strategy and National Planning Policy Frameworks.

The BIA process also enables development to demonstrate sustainable development, assist in viability assessments and the application of the Mitigation Hierarchy. The Mitigation Hierarchy is illustrated in Figure x below. To avoid doubt one must not progress to a subsequent step until all opportunities have been demonstrably explored and discounted.

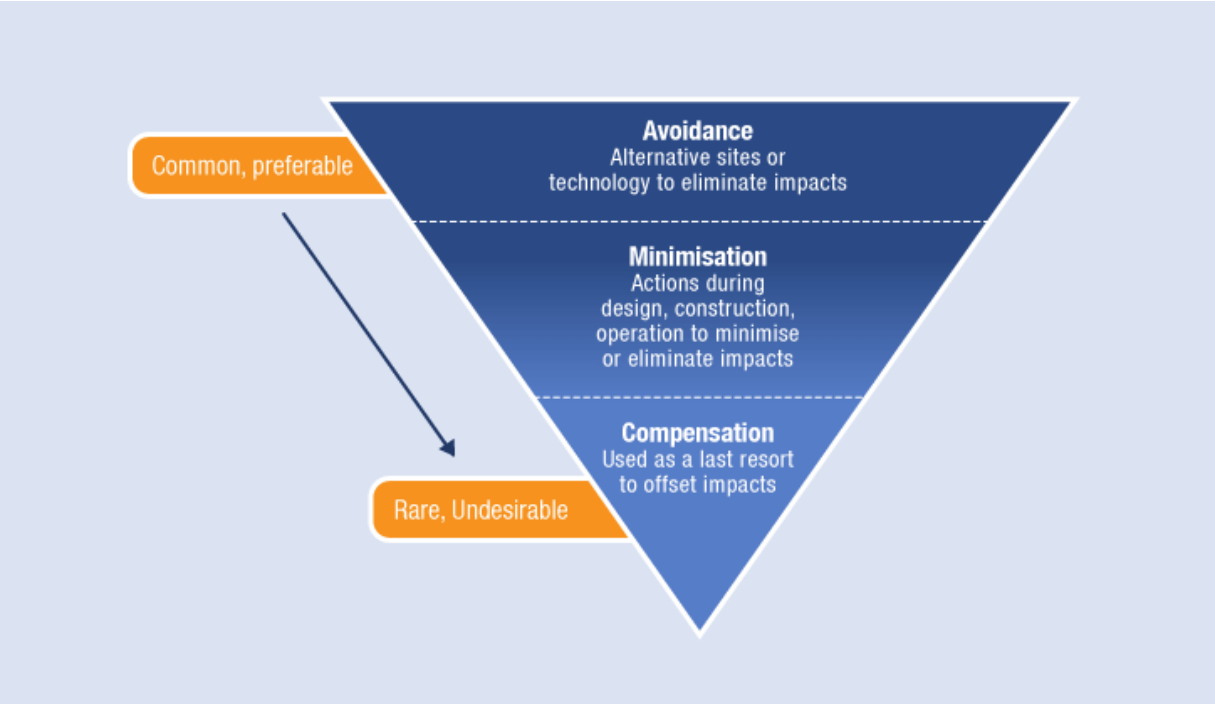


Figure 4: The Mitigation Hierarchy (UNU Online Learning, 2007)

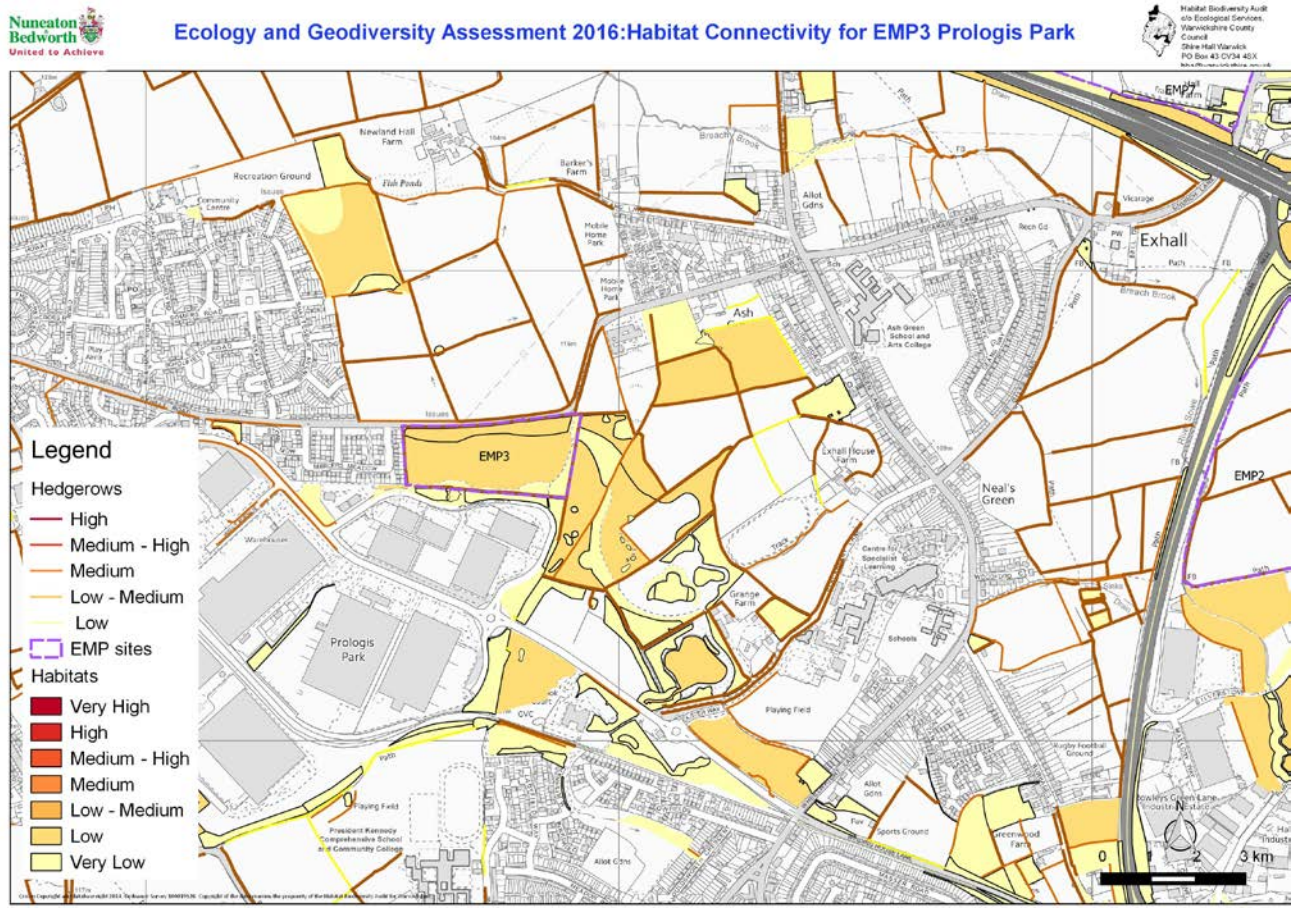
The next table shows the habitats and their values measured by Habitat Distinctiveness x Habitat Condition x area. To apply the Mitigation Hierarchy it is recommended that

- High Distinctiveness (Value 6) habitats are avoided, retained and enhanced during and after the development
- Areas of higher value are retained where possible and enhanced during and after the development

In this way the need to compensate for any residual habitat biodiversity loss is minimised; thus reducing the cost of compensation.

Site Reference	Habitat	Area hectares	Biodiversity Distinctiveness	Biodiversity Condition	Biodiversity Units
EMP3	Broad-leaved plantation	0.03	4	2	0.23
EMP3	Broad-leaved plantation	0.91	4	2	7.29
EMP3	Poor Semi-improved grassland	0.36	3	2	2.14
EMP3	Standing water	0.01	6	3	0.13
EMP3	Broad-leaved plantation	0.01	4	2	0.08
EMP3	Broad-leaved plantation	0.01	4	2	0.06
EMP3	Poor Semi-improved grassland	0.26	3	2	1.57
EMP3	Poor Semi-improved grassland	0.06	3	2	0.36
EMP3	Poor Semi-improved grassland	0.00	3	2	0.01
EMP3	Broad-leaved plantation	0.00	4	2	0.03
EMP3	Poor Semi-improved grassland	3.48	3	2	20.86
				Biodiversity Units	**32.75**

Phase 1 Habitat Connectivity

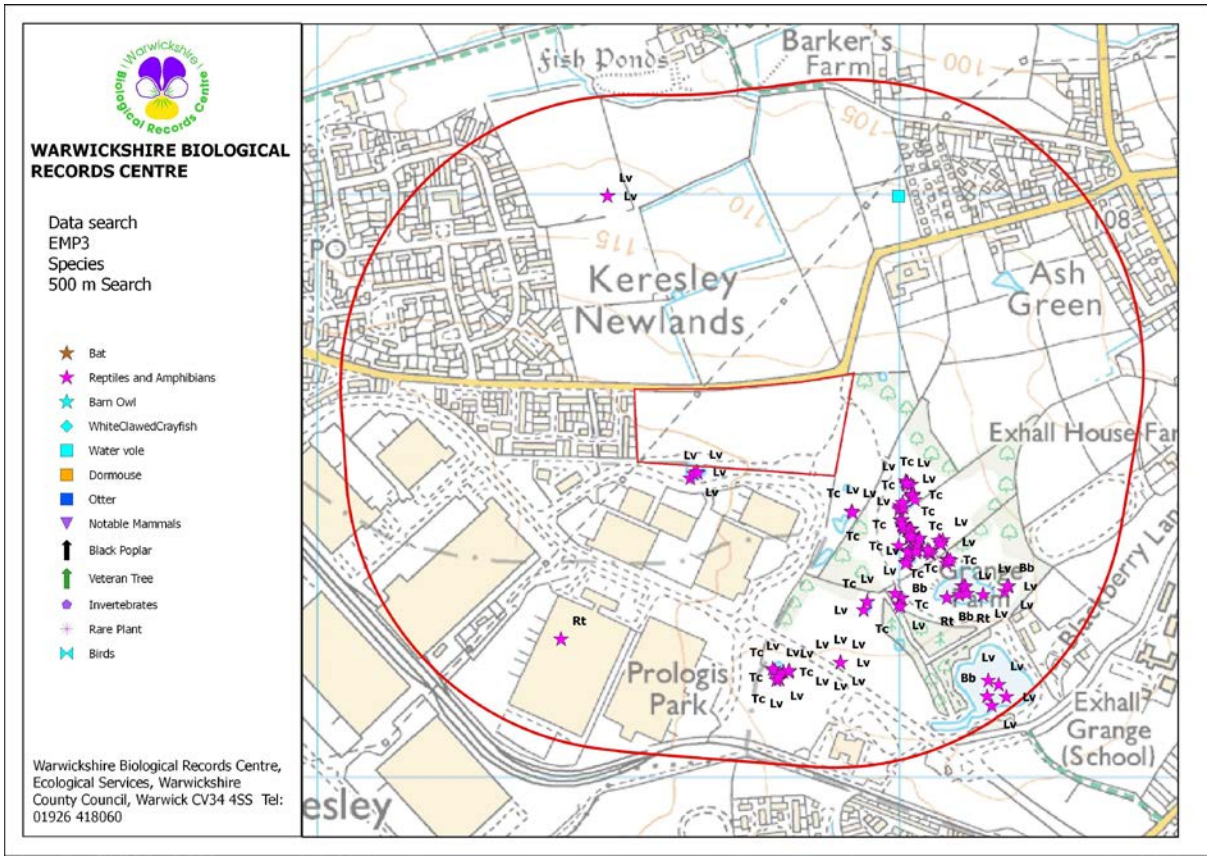


Protected & Important Species

There are no protected and/or important species[2] recorded within the proposed boundary.

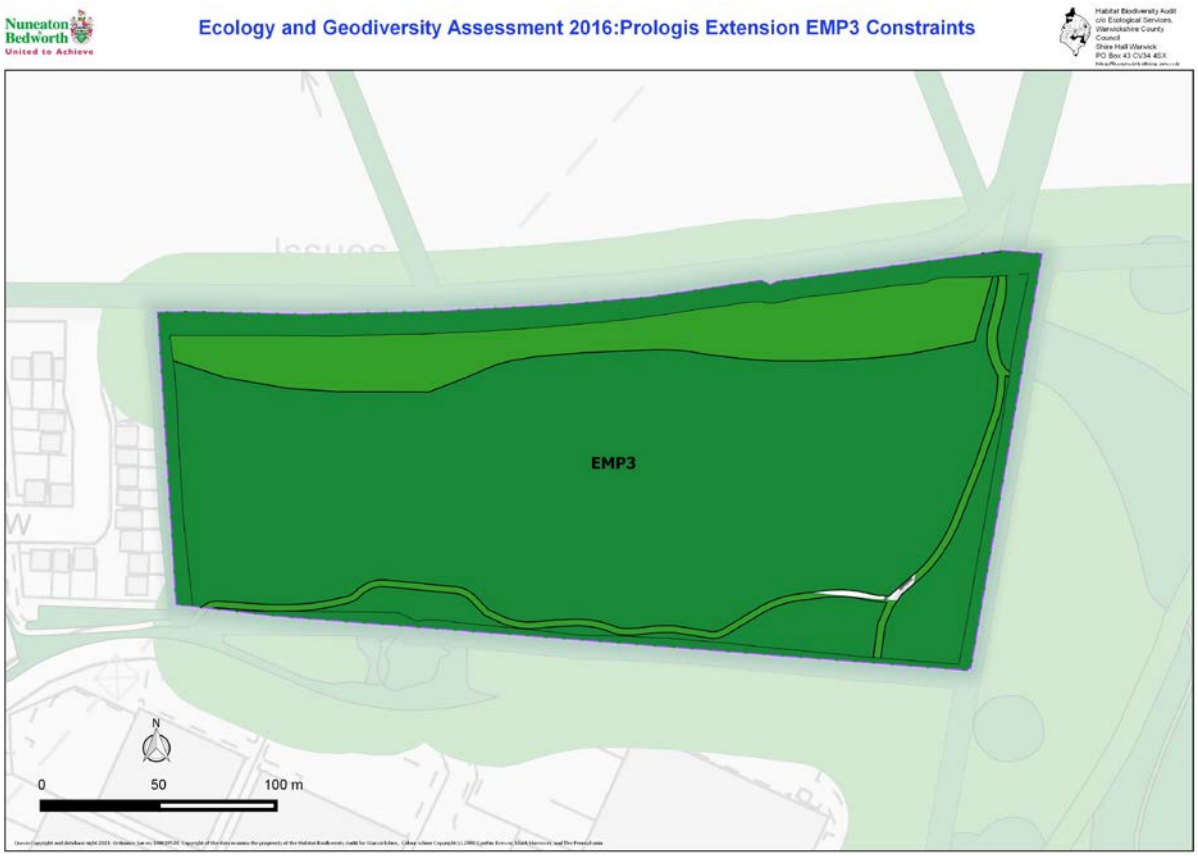
There are the following protected and/or important species recorded within 500m of the proposed site boundary:

- Amphibians and Reptiles: Common Toad, Smooth Newt and Great Crested Newt.
- Mammals: Water Vole, Hazel Dormouse, Hedgehog, Brown Hare, Polecat
- County Rare Plants: Field Scabious and Devil's-bit Scabious



[2] The information presented here is based on existing records held within the Warwickshire Biological Records Centre but does not constitute an exhaustive list of known records. The details are descriptive and further information on specific records can be obtained if required. In addition, it should not be taken that the lack of details on specific species groups means that the search area is not valuable for them - only that we have no electronic records. It is possible that unknown species are within this area that only an up-to-date systematic survey would find.

Constraints Map



The areas marked in green on the above constraints map indicate where development should be avoided and ecological enhancement encouraged.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of intact hedgerows
- Areas of medium to high distinctiveness grassland (values 4, 5 & 6)

Nuneaton and Bedworth Borough Council Ecology and Geodiversity Assessment (EGA) Borough Plan Publication Version

EMP4 GRIFF HOLLOW

Prepared by

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull, Warwickshire Wildlife Trust

Habitat Biodiversity Audit

and

Warwickshire Biological Record Centre

Ecological Services, Warwickshire County Council

September 2016

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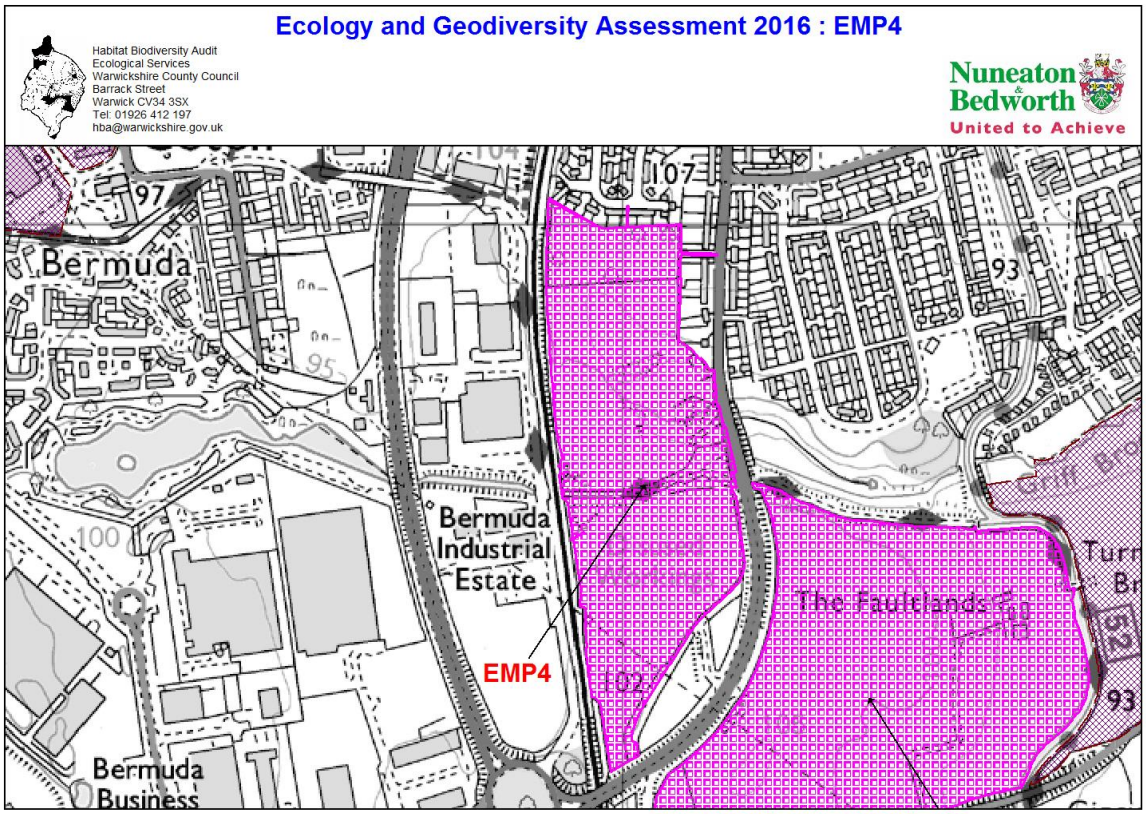


Area: 17.06 hectares

Overview

Employment Site EMP4 is located between St Georges Way to the west and the B4113 Coventry Road to the east. The site is likely to become part of the adjoining Bermuda Business and Industrial complex of large warehouse buildings. Along the southern edge of the site is a travellers park and the northern boundary edge has the former Griff School site.

The site was identified for survey in the Ecology and Geodiversity Assessment 2014[1], and was designated a local wildlife site in 2014, known as Griff Hollow Quarry LWS.

The site sits at a crossroads of north-south and east-west local ecological connectivity and at this point provides a large area for species to reside. It is

[1] Ecology and Geodiversity Assessment Nuneaton and Bedworth Borough Council April 2014: Site PDA3.

essential that the site continues to provide these functions should the site be brought forward for development.

Key Features

- Semi-improved grasslands
- Post-industrial mosaic habitats
- Habitat connectivity and ecological corridor

Recommendations

- The site has been designated as a Local Wildlife Site and should look to be retained. However, should any of the site be brought forward then it is recommended that the northern part is favoured as it is of less overall ecological value and does not contain the Local Geological site. This release should be in tandem with the enhancement of the southern area to ensure ecological functionality being connected to the Griff Hollows LWS and disused canal arm. In other words species flow will be maintained and habitat for species to continue to exist.

- Maintain and enhance the connectivity between the Bermuda Balancing Lake LWS to the west and Griff Hollow LWS and Coventry Canal to the east; plus the railway line through:
    - Re-open the culvert Griff Book and enable mammals to pass under the Old Coventry Road, St David's Way and A444 roads. And
    - Strengthen habitat adjacent to the railway line.

- Broadleaved woodland should be retained and restored to reduce the biodiversity impact

- Re-survey of Griff Hollow Local Wildlife Site which was first surveyed in 2001. Survey should include the water vole survey project which is currently being undertaken by Warwickshire Wildlife Trust.

- Areas of Medium to High Distinctiveness category (value: 4, 5 & 6) are retained and enhanced within any proposal.

It is important to note that until protected species survey work is undertaken there cannot be certainty over the potentially developable area and the quantity and scale of retained / enhanced habitat that may be required to adequately address protected species issues.

Opportunities

- To combine contributions from EMP4, EMP1 and HSG3 to deliver an area wide Green Infrastructure SPD (or equivalent) that promotes species movement along identified green corridors such as Griff Hollows and Bermuda balancing lake.

DESIGNATED SITES: Local Sites and SSSIs

Griff Hollow Quarry Local Wildlife Site[2]

The LWS comprises a large area of semi-improved grassland which has colonised the site of two restored 20th century granite quarries and is situated at Griff Hollow about 2km south of Nuneaton town centre. The site is sandwiched between the B4113 Coventry Road to the west and the main railway line between Coventry and Nuneaton to the west, with the A444 Bedworth Bypass beyond. The recently demolished Griff School and its playing fields borders the site to the north, while a small travellers park centred around a detached section of the old Coventry Road adjoins the southern border. The LWS forms an important direct link between Bermuda Pool LWS to the west (which then feeds into the extensive series of LWS habitats in Arbury Park and the Ensor's Pool Corridor LWS/SSSI/SAC beyond), and to Griff Hollows LWS to the east.

The area was formerly rural and was crossed by the Griff Brook which flowed eastwards through the site in a narrow valley, before turning north to enter the River Anker at Attleborough. In the early 19th century the Griff Arm Canal was constructed in this stream valley, extending from the Coventry Canal 400m in the east to the former Griff Colliery which stood on the site of the present Bermuda Business Park beyond the A444 to the west. This arm was kept partly filled with water pumped out of the mines. The only houses marked on the site of the present LWS in the First Edition of the One Inch OS Map (surveyed 1832-34) was a house standing in its own grounds (called "The Barnstead"), which occupied much of the land to the south of the canal arm; and a pair of cottages ("Griff Hollow") on the north side of the canal overlooking a small basin by the modern Coventry Road. Stone quarrying occurred on both sides of the canal in the post-war years and some of its minor infrastructure remains on site; and when this ceased the flooded quarries known as "Griff 1 and 2" were gradually restored with landfill. The now redundant canal arm was drained and filled during 1979, but a 200m section beyond the railway and the modern St. George's Way to the west remains intact and this forms part of the LWS as it is an important wildlife link with Bermuda Pool LWS. By the mid 1990's the northern quarry had been fully restored and capped, but the southern quarry remained as a landfill site until the beginning of the 21st century, although it too has now been capped and grassed over. Small sections of exposed rock face have been left at the old entrance to the quarry in Coventry Road. There is no management apart from occasional grazing in the southern section by traveller's ponies.

The original underlying geology consisted of Igneous rocks including the Stockingford Shales, but this has been largely quarried out and replaced by imported material. The natural elevation is around 100m ASL, with the topography being gently rolling away from the small valley containing the Griff Brook. The area is

[2] Griff Hollow Quarry SP38P14 Local Wildlife Site 05/02/2015

largely composed of unofficial public open access land, with the northern half containing several regularly mown circular footpaths. A public footpath and cycleway follows the line of the former canal towpath. The short relict section of canal (now a pool), beyond St. George's Way is partly enclosed by factories, and is now surrounded by inaccessible scrub.

Griff Hollow Local Wildlife Site (formerly SINC) SP38U2[3]

Griff Hollows SINC is a mosaic site of 5.77 ha consisting of scrub, tall herb mire, rank neutral grassland and acid grassland. The mire, dominated by meadowsweet and the acid grassland are the most important vegetation types present, both are rare habitat types in the county. 85 species of vascular plant have been recorded recently including Climbing Corydalis, which is very rare in the county. The invertebrate fauna is likely to be rich, three species of county rarity have been recorded. Water Vole and Common Lizard have also been recorded recently. The site is public open space.

Nuneaton and Bedworth Section Coventry Canal plws

The Coventry Canal from Coventry City to Nuneaton was surveyed as a potential local wildlife site in 2012. The Coventry City section of the canal has been written and went to the Local Wildlife Sites panel in 2015. The Nuneaton and Bedworth sections have not yet been formerly written up but the survey itself including habitats and records has been incorporated into the Phase 1 survey which have been used for this report.

[3] Griff Hollow SP38P14 Site of Importance for Nature Conservation 14/13/2001 LWSP

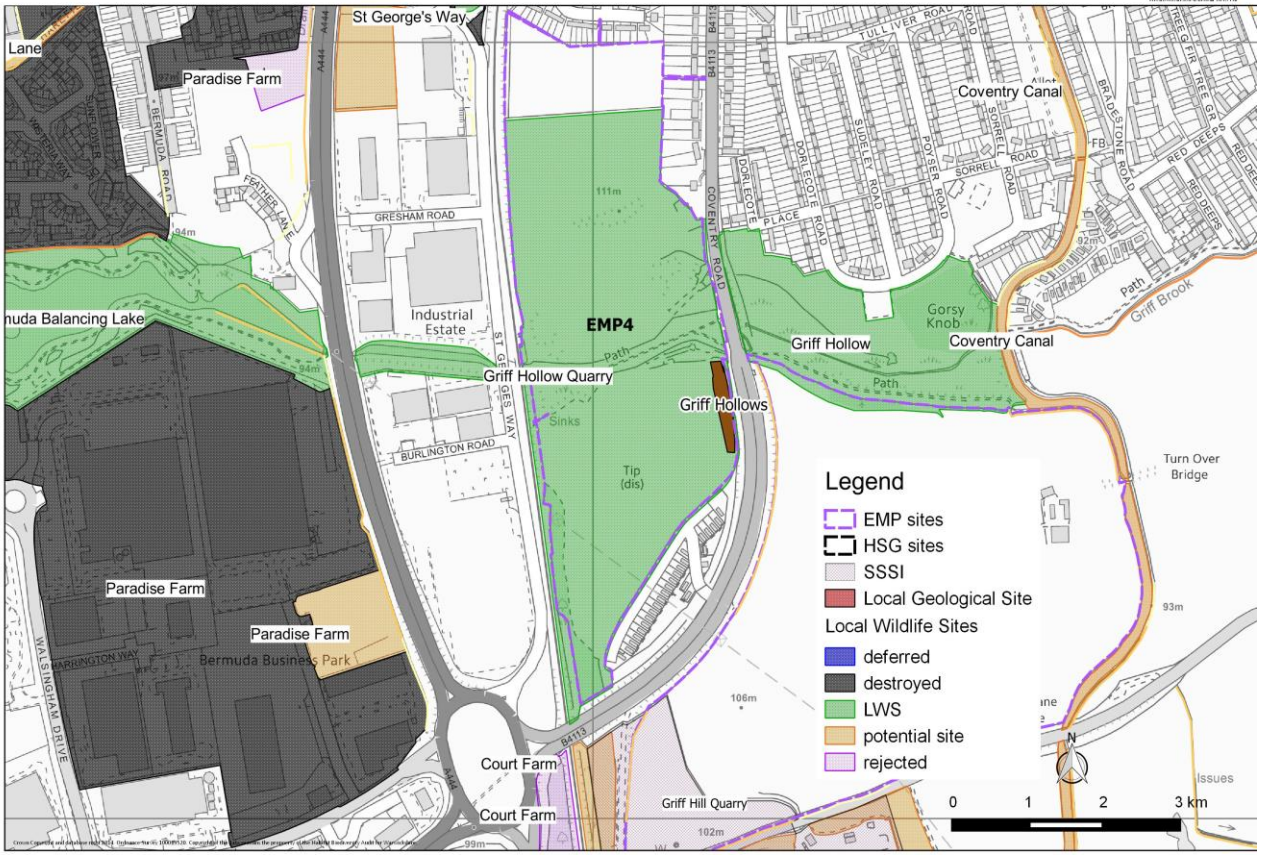


Figure 1 Site Designation Map

Phase 1 Habitat Distinctiveness

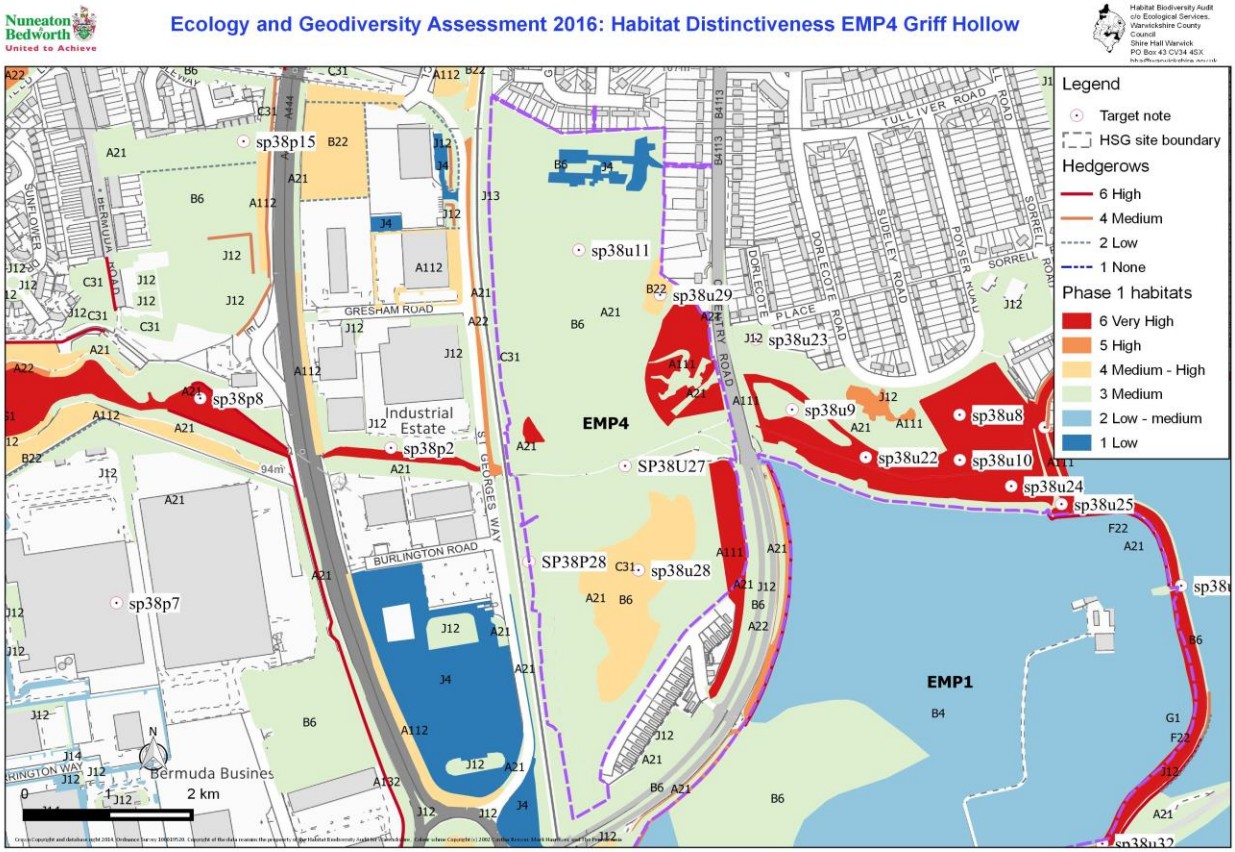


Figure 2 Phase 1 habitat distinctiveness

TARGET NOTES

Reference	Grid Reference	Location
SP38P2	**SP3593089459**	**Griff Hollow Quarry LWS**

17/10/2009 Polluted section of water containing emergent vegetation around the edge. Species include branched bur-reed (Sparganium erectum), greater pond-sedge (Carex riparia) and water-plantain (Alisma plantago-aquatica) occurring along both banks. There is a low flow rate and algae covers the surface of the area of open water. The bank to the south appears to have been disturbed and is dominated by common couch (Elytrigia repens) and perennial rye-grass (Lolium perenne) although a degree of species richness is present. Updated 08/10/2009 MF. Water course no longer polluted/Eutrophic and the surface is clear. Water flow is to the east, then continues underground.

Updated 01/10/2014 Griff Hollow Quarry LWS. Old canal section rich in duckweed and pondweeds and lined with Floating Sweet-grass (Glyceria fluitans), Bur-reed etc. Bordered by dense Goat Sallow (Salix caprea) with Crack Willow (Salix fragilis) and Hawthorn (Crataegus monogyna).

SP38P28 SP3593089459 Griff Hollow Quarry LWS

Steep bank on the east side of railway track with abundant ox-eye daisy (Leucanthemum vulgare), foxglove (Digitalis purpurea), red campion (Silene dioica), tufted vetch (Vicia cracca), yarrow (Achillea millefolium) and green alkanet (Pentaglottis sempervirens). The most diverse area is between two oak (Quercus robur) trees adjacent to the road.Update 14/02/2014 A patch of the invasive Japanese knotweed (Fallopia japonica).Update 01/10/2014 Griff Hollow Quarry LWS Steep bank with areas of tall ruderal with Bramble (Rubus fruticosus), Rosebay Willowherb (Chamerion angustifolium) and occasional Hawthorn (Crataegus monogyna).

SP38U8 SP3644689640 Griff Hollow LWS (SINC)

Old quarry site surrounded by semi-natural ash woodland with bluebells (Hyacinthoides non-scripta) and encroaching scrub. The open grassland areas tend to occur on mineral spoil and contain a variety of dry acid tolerant plants including locally dominant early hair-grass (Aira praecox), dwarf haircap (Polytrichum aloides), common bent (Agrostis capillaris) with locally abundant sheep's sorrel (Rumex acetosella), rat's-tail fescue (Vulpia myuros) and occasional hare's-foot clover (Trifolium arvense), foxglove (Digitalis purpurea), cup lichens (Cladonia sp.) with some bracken (Pteridium aquilinum) occurring in parts where the open ground meets young woodland. The site has high potential for invertebrates.

SP38U9 SP3624689647 Griff Hollow LWS (SINC)

Expanse of marshy grassland, dominated by meadowsweet (Filipendula ulmaria) across most of the site with locally abundant reed sweet-grass (Glyceria maxima), frequent wild angelica (Angelica sylvestris) and some patches of reed canary-grass (Phalaris arundinacea).

SP38U10 SP3649689584 Griff Hollow LWS (SINC)

Area of tall ruderal especially rosebay willowherb (Chamerion angustifolium) and common nettle (Urtica dioica) with locally abundant great horsetail (Equisetum telmateia).

SP38U11 SP3605189808 Griff Hollow Quarry LWS

Updated 14/02/2014 Two areas of poor semi-improved grassland bordered by scattered and continuous scrub which develops into a mosaic of semi-natural woodland with mature hawthorns (Crataegus monogyna) alongside ash (Fraxinus excelsior) and oak (Quercus robur). On the edge of the grassland lies a mosaic of scrub species including butterfly-bush (Buddleja davidii), elder (Sambucus nigra), dog rose (Rosa canina), broom (Cytisus scoparius), gorse (Ulex europaeus), introduced snowberry (Symphoricarpos albus), white bryony (Bryonia dioica) and bramble (Rubus fruticosus agg.). The grass sward comprises of coarse and common grasses including false oat-grass (Arrhenatherum elatius), cock’s-foot (Dactylis glomerata), Yorkshire-fog (Holcus lanatus), creeping bent (Agrostis stolonifera) and red fescue (Festuca rubra). Large and coarse forbs present within the grass sward

include mugwort (Artemsia vulgaris), teasel (Dipsacus fullonum), ox-eye daisy (Leucanthemum vulgare), yarrow (Achillea millefolium), common nettle (Urtica dioica), creeping thistle (Cirsium arvense), spear thistle (C. vulgare), broad-leaved dock (Rumex obtusifolius), curled dock (Rumex crispus), bristly ox-tongue and umbellifiers of cow parsley (Anthriscus sylvestris), greater burnet saxifrage (Pimpinella major) and wild carrot (Daucus carota). Smaller, more delicate forbs include hedgerow crane's-bill (Geranium pyrenaicum), shining-crane's-bill (G. lucidum), common mouse-ear (Cerastium fontanum), wavy bittercress (Cardamine flexuosa), red clover (Trifolium pratense), white clover (T.repens), creeping buttercup (Ranunculus repens), wood avens (Geum urbanum), spotted medick (Medicago arabica), red bartsia (Odontites vernus), common knapweed (Centaurea nigra), creeping cinquefoil (Potentilla reptans) and ribwort plantain (Plantago lancelota).

Old quarry spoil now partially covered in scrub and young trees including broom (Cytisus scoparius), gorse (Ulex europaeus) and bramble (Rubus fruticosus agg.). The north and east facing banks are still predominantly grassland with Yorkshire-fog (Holcus lanatus), creeping bent (Agrostis stolonifera), early hair-grass (Aira praecox) and rat's tail-fescue (Vulpia myuros) especially on more exposed mineral soil with occasional sheep's sorrel (Rumex acetosella) foxglove (Digitalis purpurea), mouse-ear hawkweed (Pilosella officinarum) and some male fern (Dryopteris filix-mas). The area also contain some interesting and extensive bryophyte flora with patches of broom fork-moss (Dicranum scorparium), cypress-leaved plait-moss (Hypnum cupressiforme), aloe haircap (Polytrichum aloides) and cup lichens (Cladonia sp.).

SP38U22 SP3620289733 Griff Hollow LWS (SINC)

Griff Brook containing a strong population of water vole (Arvicola amphibius).

SP38U23 SP3620289733 Griff Hollow LWS (SINC)

Griff Hollow SINC 2001. Steep bank with rank MG1 false oat-grass (Arrhenatherum elatius) grassland and encroaching scrub. The grassland is dominated by false oat-grass (Arrhenatherum elatius) with locally frequent Yorkshire-fog (Holcus lanatus). Occasional cock's-foot (Dactylis glomerata), perennial rye-grass (Lolium perenne), soft-brome (Bromus hordeaceus), smooth meadow-grass (Poa pratensis) with rare meadow foxtail (Alopecurus pratensis).The sward is rather herb poor with locally abundant rosebay willowherb (Chamerion angustifolium) and locally frequent common knapweed (Centaurea nigra), lady's bedstraw (Galium verum) and cow parsley (Anthriscus sylvestris). Hogweed (Heracleum sphondylium) and dandelion (Taraxacum officinale agg.) are frequent. Occasional herbs included cut-leaved cranesbill (Geranium dissectum), ribwort plantain (Plantago lancelota), hedge bindweed (Calystegia sepium) with rare common sorrel (Rumex acetosa), common ragwort (Senecio jacobaea), white dead-nettle (Lamium album), cleavers (Galium aparine), lesser trefoil (Trifolium dubium), creeping buttercup (Ranunculus repens), (Ranunculus repens) common vetch (Vica sativa), horse-radish (Armoracia rusticana) and red clover (Trifolium pratense). The scrub is composed mostly of broom (Cytisus scoparius) and brambles (Rubus fruticosus agg.).

SP38U24 SP3652689583 Griff Hollow LWS (SINC)

Griff Hollow SINC. Small clearing of tall herb along a path with locally abundant great horsetail (Equisetum telemateia), false oat-grass (Arrhenatherum elatius), common nettle (Urtica dioica), cow parsley (Anthriscus sylvestris) and bramble (Rubus fruticosus agg.).

SP38U25 SP3656889530 Coventry Canal plws

Coventry Canal: Small backwater area of the canal with swamp vegetation. Reed sweet-grass (Glyceria maxima) is dominant, plus occasional yellow flag (Iris pseudacorus) and Indian balsam (Impatiens glanduifera).

SP38U27 SP3604689577 Griff Hollow Quarry LWS

Updated 01/10/2014 Griff Hollow Quarry LWS frequent Great Burnet (Sanguisorba officinalis). 07/02/2014 The two patches of very similar poor semi-improved grassland are separated by a concrete path and a raised bank of scattered scrub of hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa). Damper patches of grassland are characterised by tufted hair-grass (Deschamspia cespitosa), great willowherb (Epilobium hirsutum), a willowherb (Epilobium sp) and hard rush (Juncus inflexus).

SP38U28 SP3605489458 Griff Hollow Quarry LWS

Griff Hollow Quarry LWS area of species rich short grassland dominated by Common Bent (Agrostis capillaris) and Red Fescue ssp. (Festuca rubra) with areas of Common Knapweed (Centaurea nigra) and Wood small-reed (Calamagrostis epigejos). Grassland is surrounded by less species rich grassland, bramble and dense scrub.

SP38U29 SP3608889798 Griff Hollow Quarry LWS

Griff Hollow Quarry LWS area of semi-improved grassland with Common Bent (Agrostis capillaris) and Red Fescue ssp. (Festuca rubra), also Lady's Bedstraw (Galium verum) and Haresfoot Clover (Trifolium arvense).

SP38U30 SP3654889634 Coventry Canal plws

Coventry Canal plws Wet woodland of alder (Alnus glutinosa) and willow (Salix sp.) which borders the Griff Brook and adjacent arable farmland

Biodiversity Units

NBBC requests Biodiversity Impact Assessments (BIAs) to be carried out for all Minor and Major applications. BIAs are based on the Defra Offsetting Metircs (2012), as applied locally, to measure the gain or loss of habitat value as a result of development. It essentially is a mechanism of valuing the existing and future habitat of a development site and assessing if it is of more value (gain) or less value (loss). This assessment shows conformity to No Net Loss and Net Gain objectives within the NBBC Core Strategy and National Planning Policy Frameworks.

The BIA process also enables development to demonstrate sustainable development, assist in viability assessments and the application of the Mitigation Hierarchy. The Mitigation Hierarchy is illustrated in Figure 2 below. To avoid doubt one must not progress to a subsequent step until all opportunities have been demonstrably explored and discounted.

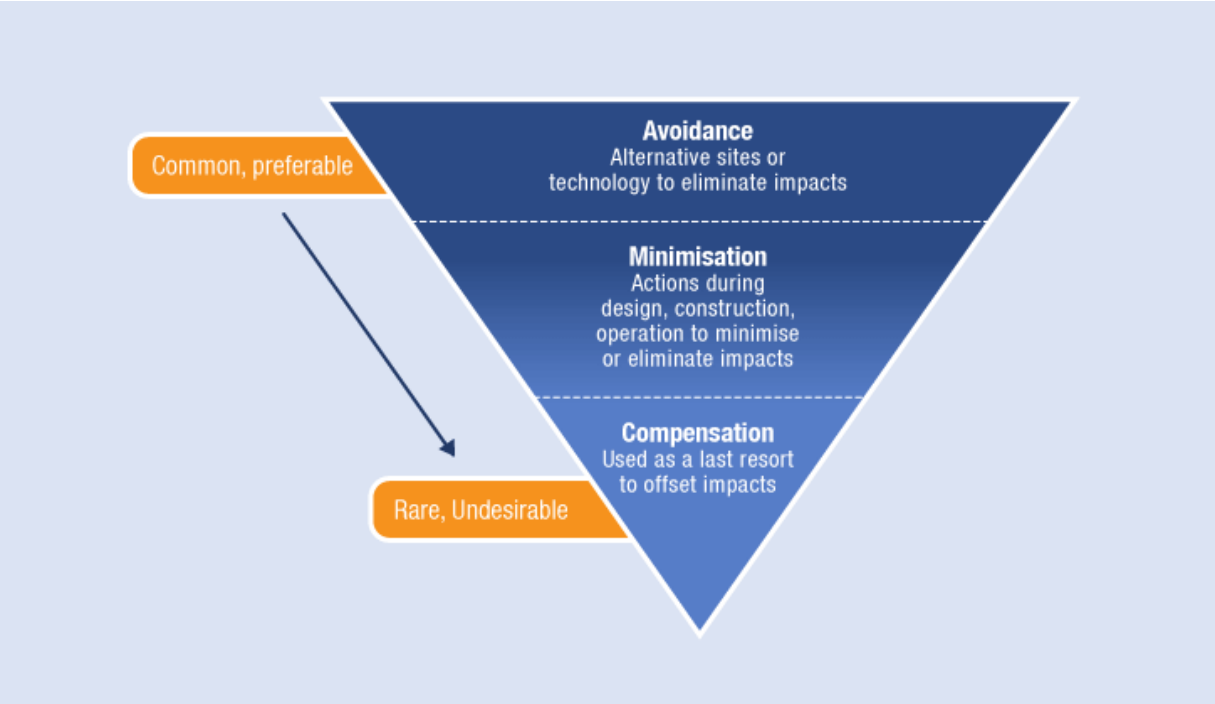


Figure 3: The Mitigation Hierarchy (UNU Online Learning, 2007)

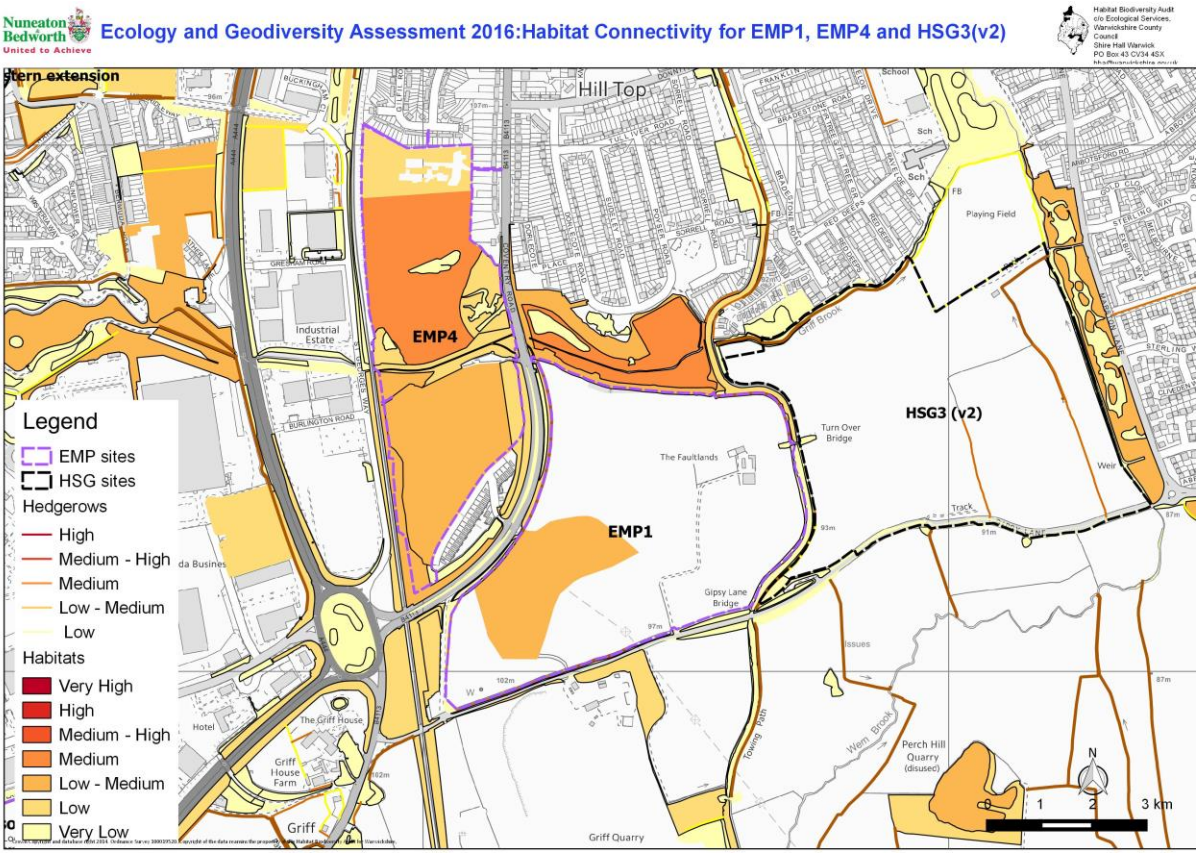
The next table shows the habitats and their values measured by Habitat Distinctiveness x Habitat Condition x area. To apply the Mitigation Hierarchy it is recommended that

- High Distinctiveness (Value 6) habitats are avoided, retained and enhanced during and after the development
- Areas of higher value are retained where possible and enhanced during and after the development

In this way the need to compensate for any residual habitat biodiversity loss is minimised; thus reducing the cost of compensation.

Site Ref.	Habitat	Area hectares	Biodiversity Distinctiveness	Biodiversity Condition	Biodiversity Units
EMP4	Dense/continuous scrub	0.06	3	2	0.36
EMP4	Dense/continuous scrub	0.20	3	2	1.18
EMP4	Broad-leaved semi-natural woodland	0.05	6	3	0.93
EMP4	Dense/continuous scrub	0.06	3	2	0.34
EMP4	Dense/continuous scrub	0.15	3	2	0.90
EMP4	Broad-leaved semi-natural woodland	0.80	6	3	14.41
EMP4	Broad-leaved semi-natural woodland	0.44	6	3	7.97
EMP4	Poor Semi-improved grassland	5.57	3	2	33.39
EMP4	Bare ground	0.38	2	1	0.76
EMP4	Broad-leaved semi-natural woodland	0.84	6	3	15.06
EMP4	Dense/continuous scrub	0.59	3	2	3.53
EMP4	Dense/continuous scrub	0.78	3	2	4.70
				Biodiversity Units	**83.53**

Phase 1 Habitat Connectivity



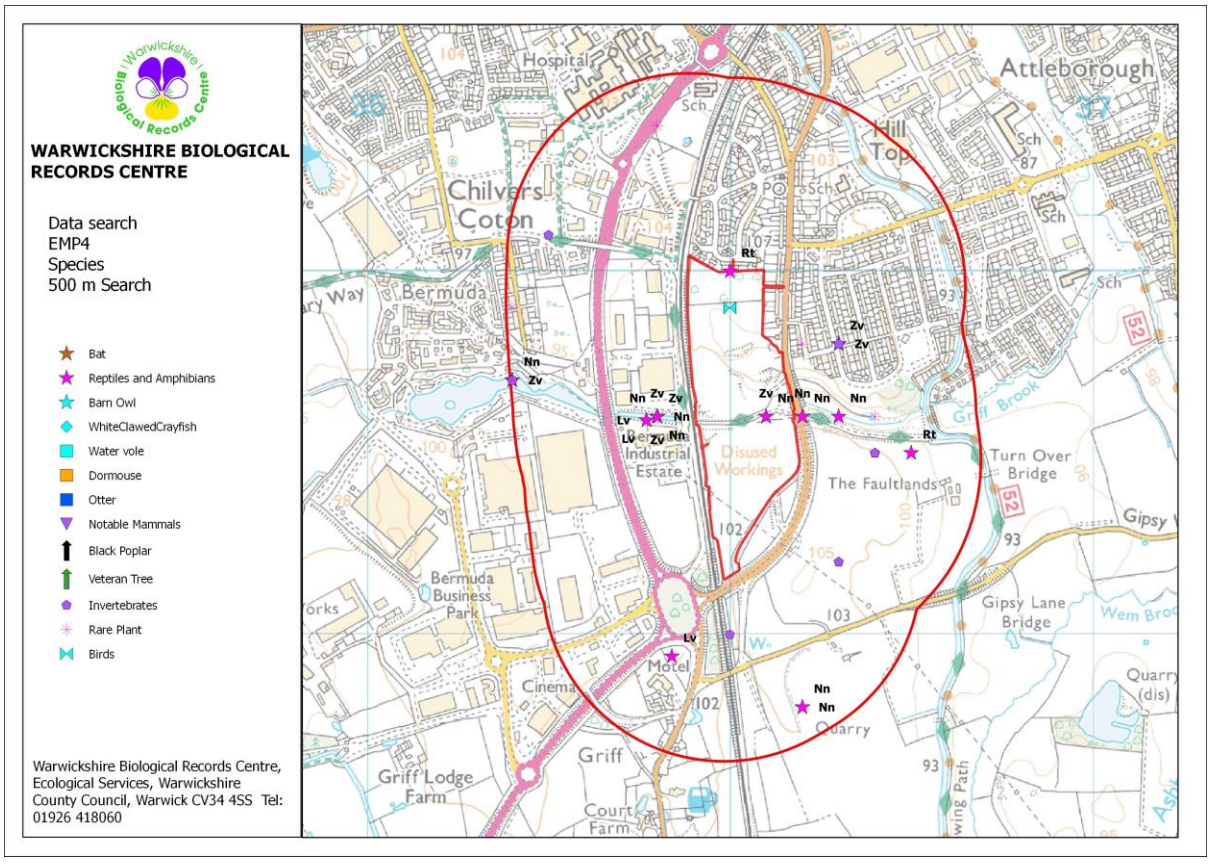
Protected Species

There are the following protected and/or important species[4] recorded within the proposed boundary.

- Amphibians and Reptiles: Grass snake and common lizard

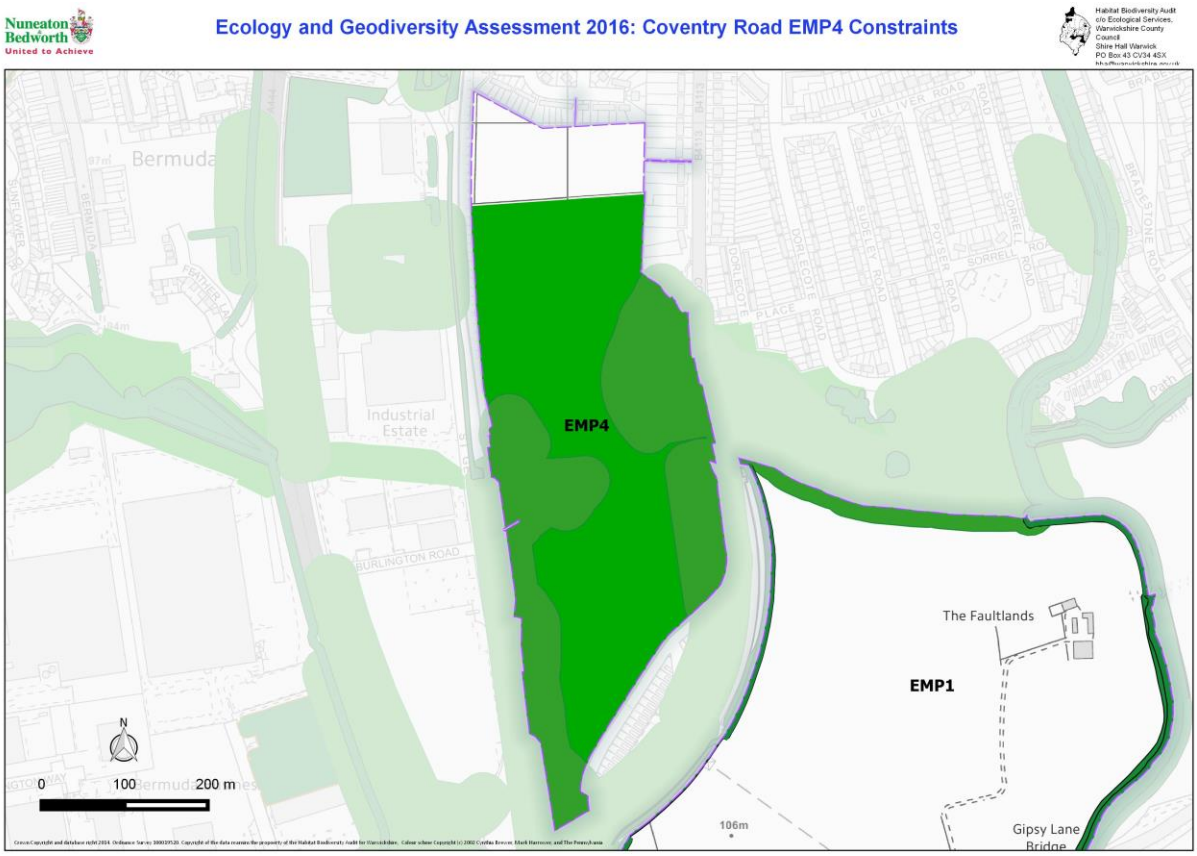
There are the following additional protected and/or important species recorded within 500m of the proposed site boundary:

- Amphibians and Reptiles: Smooth Newt
- Birds: Dunnock, Bullfinch, Song Thrush and Mistle Thrush
- Invertebrates: Altica brevicollis (bettle), Small Heath and Dingy Skipper (butterflies)
- County Rare Plants: Monk's-Hood, White Ramping-fumitory, Tormentil, Climbing Corydalis and Rough Hawk's-beard



[4] The information presented here is based on existing records held within the Warwickshire Biological Records Centre but does not constitute an exhaustive list of known records. The details are descriptive and further information on specific records can be obtained if required. In addition, it should not be taken that the lack of details on specific species groups means that the search area is not valuable for them - only that we have no electronic records. It is possible that unknown species are within this area that only an up-to-date systematic survey would find.

Constraints Map



The areas marked in green on the above constraints map indicate where development should be avoided and ecological enhancement encouraged.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of intact hedgerows
- Areas of medium to high distinctiveness grassland (values 4, 5 & 6)

Nuneaton and Bedworth Borough Council Ecology and Geodiversity Assessment (EGA) Borough Plan Publication Version

EMP5 CALDWELL ROAD

Prepared by

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull, Warwickshire Wildlife Trust

Habitat Biodiversity Audit

and

Warwickshire Biological Record Centre

Ecological Services, Warwickshire County Council

September 2016

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Employment Site: EMP5 CALDWELL ROAD

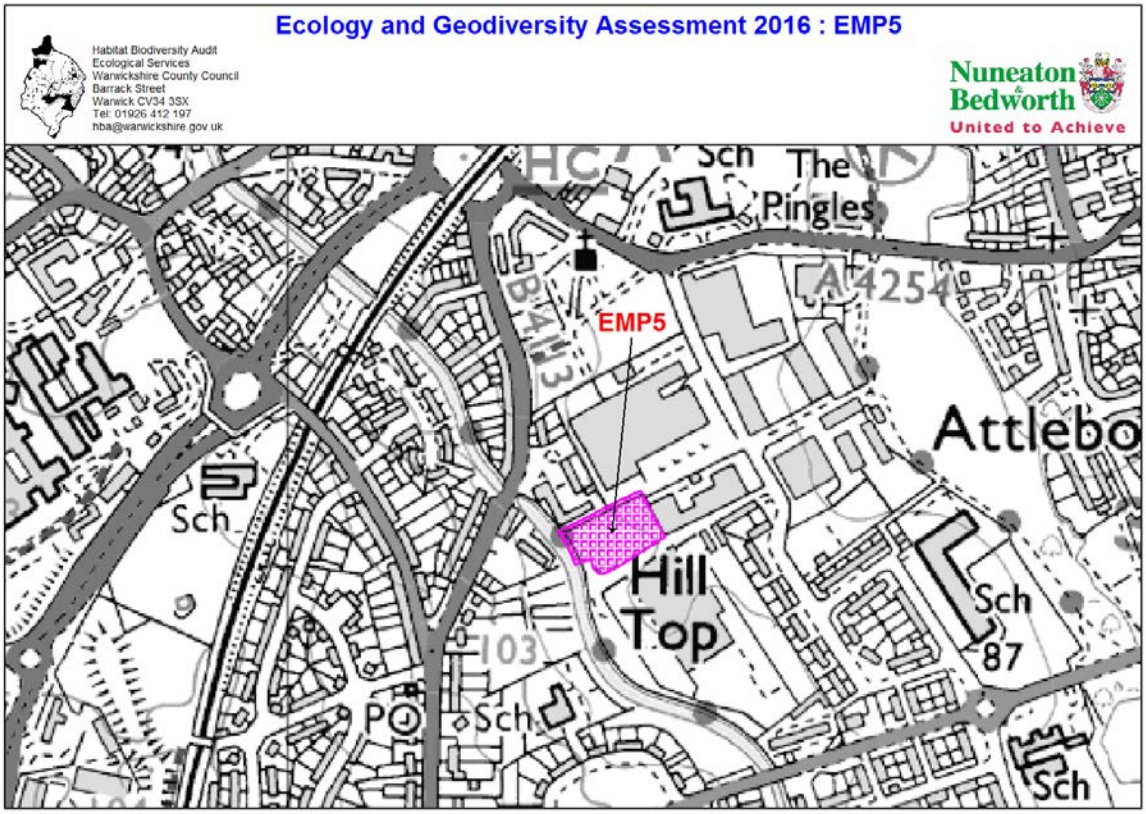


Figure 1 Location map

Area: 0.64 HA

Overview

An area of tall ruderal and bramble (Rubus fruticosus agg.) scrub dominated by rosebay willowherb (Chamerion angustifolium) and creeping thistle (Cirsium arvensis) with scattered silver birch (Betula pendula) and hawthorn (Crataegus monogyna) shrubs. The site has been cut periodically. The development is currently only accessed via Triton Road of Caldwell Road within Hill Top Business Park and Trading Estate. The western boundary is marked immediately by the Coventy Canal and as such a significant buffer of native trees and shrubs should be implemented to prevent the Coventry Canal being affected by this relatively small-scale development. A natural buffer of 10m should be more than adequate to ensure habitat connectivity, limit edge effects and retain Site biodiversity. A section of broad-leaved plantation south of the development parcel bordering the canal edge should be extended northwards along the western boundary.

Key Features

- Tall Ruderal and Bramble Scrub
- Coventry Canal
- Broad-leaved Plantation

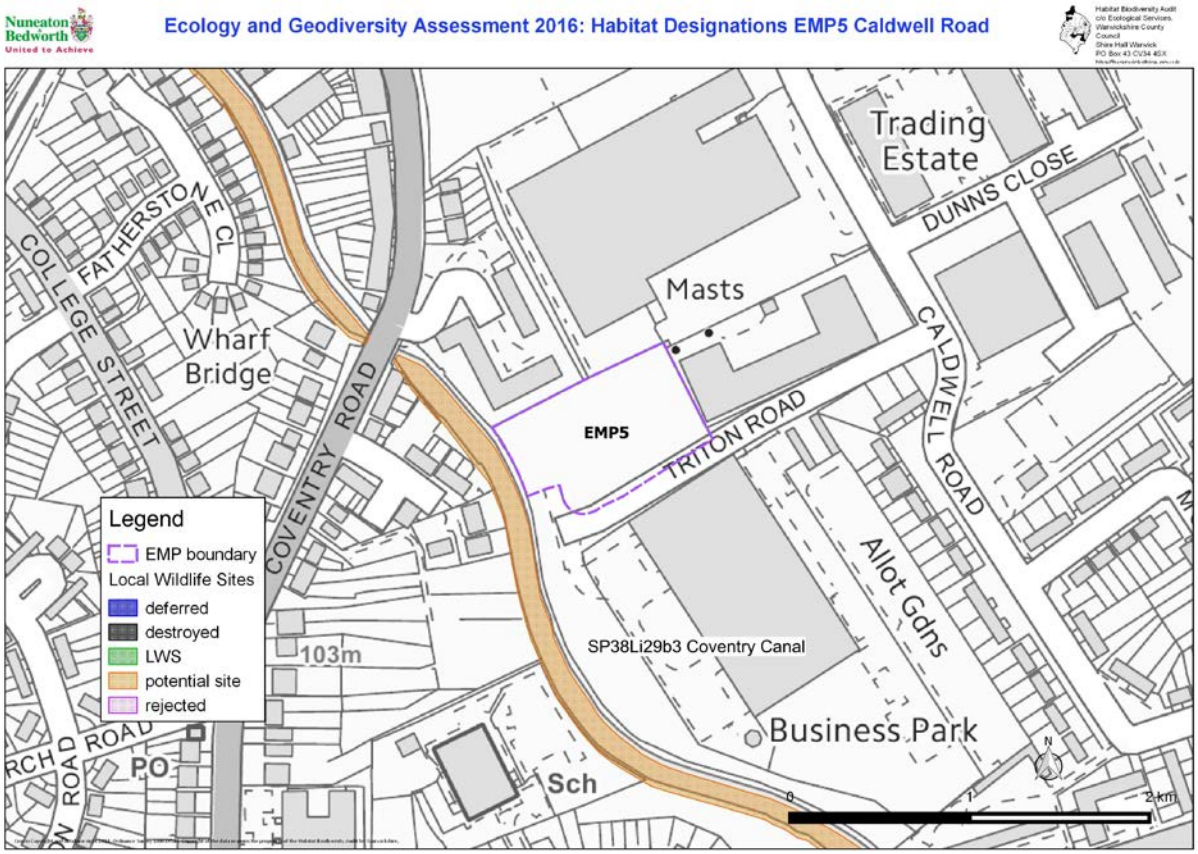
Recommendations

- The boundary to the Coventry Canal is maintained and enhanced for ecological connectivity and the broad-leaved planation is extended.

It is important to note that until protected species survey work is undertaken there cannot be certainty over the potentially developable area and the quantity and scale of retained / enhanced habitat that may be required to adequately address protected species issues.

Designated Sites: Local Sites

Figure 2 Site Designation Map



Potential Local Wildlife Sites

Coventry Canal SP38Li29b3

Phase 1 Habitat Distinctiveness

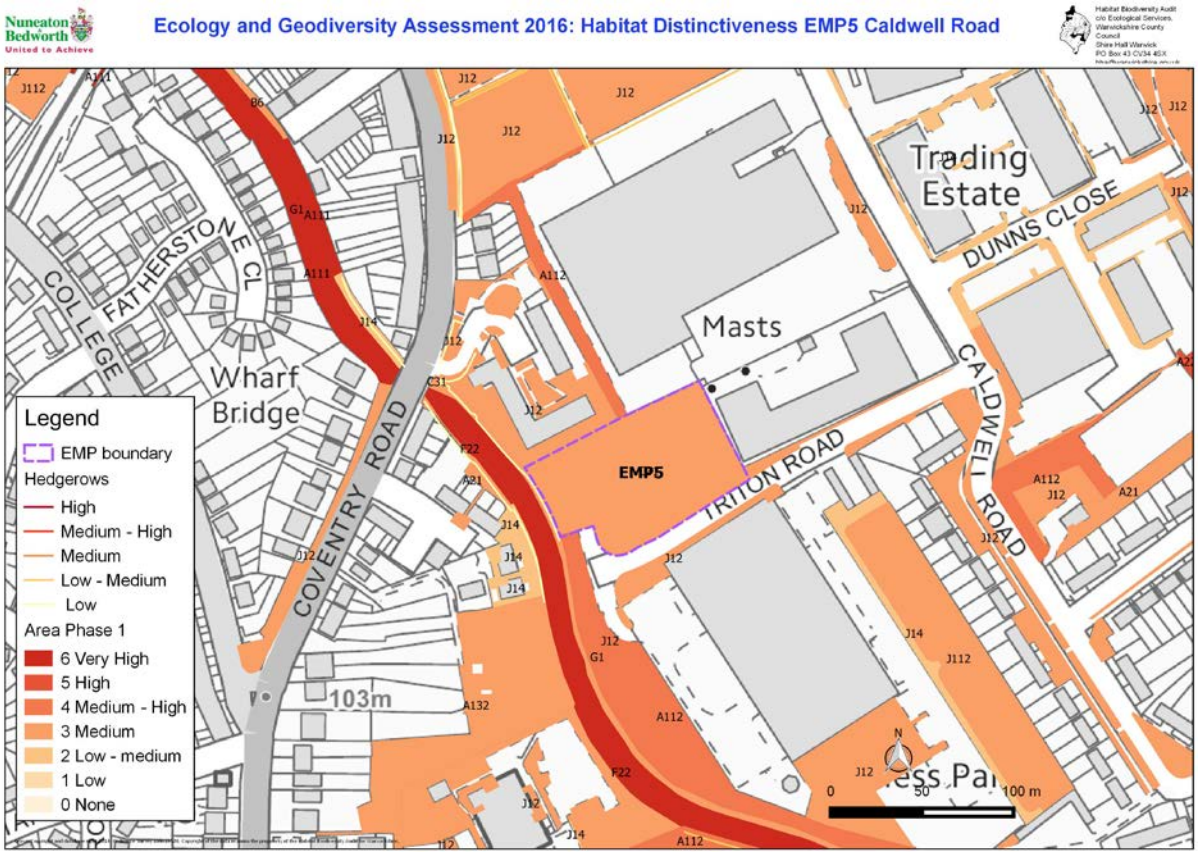


Figure 3 Phase 1 habitat distinctiveness

Target Notes

Reference	Grid Reference	Location
SP38q22	**Sp39qccnb14**	**Coventry Canal**

A large gum tree (Eucalyptus sp.) and Chinese juniper (Juniperus chinensis) planted close to the canal edge, are of garden origin.

SP38q21	**Sp39qccnb13**	**Private garden**

Large Pedunculate/English oak (Quercus robur) in garden.

Biodiversity Units

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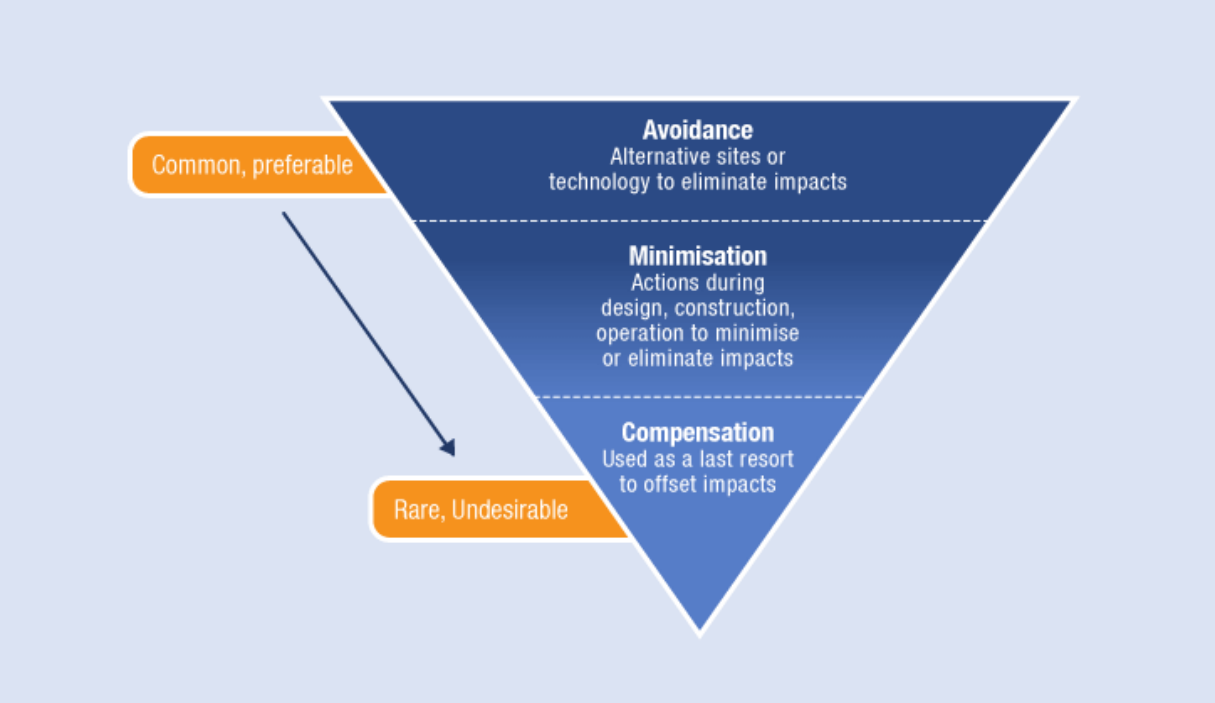


Figure 4: The Mitigation Hierarchy (UNU Online Learning, 2007)

The next table shows the habitats and their values measured by Habitat Distinctiveness x Habitat Condition x area. To apply the Mitigation Hierarchy it is recommended that

- High Distinctiveness (Value 6) habitats are avoided, retained and enhanced during and after the development
- Areas of higher value are retained where possible and enhanced during and after the development

In this way the need to compensate for any residual habitat biodiversity loss is minimised; thus reducing the cost of compensation.

Site Reference	Habitat	Area hectares	Biodiversity Condition	Biodiversity Distinctiveness	Biodiversity Units
EMP5	Broad-leaved plantation	0.00	2	4	0.01
EMP5	Tall ruderal	0.65	1	3	1.94
EMP5	Amenity grassland	0.00	1	2	0.00
				Biodiversity Units	1.95

Phase 1 Habitat Connectivity

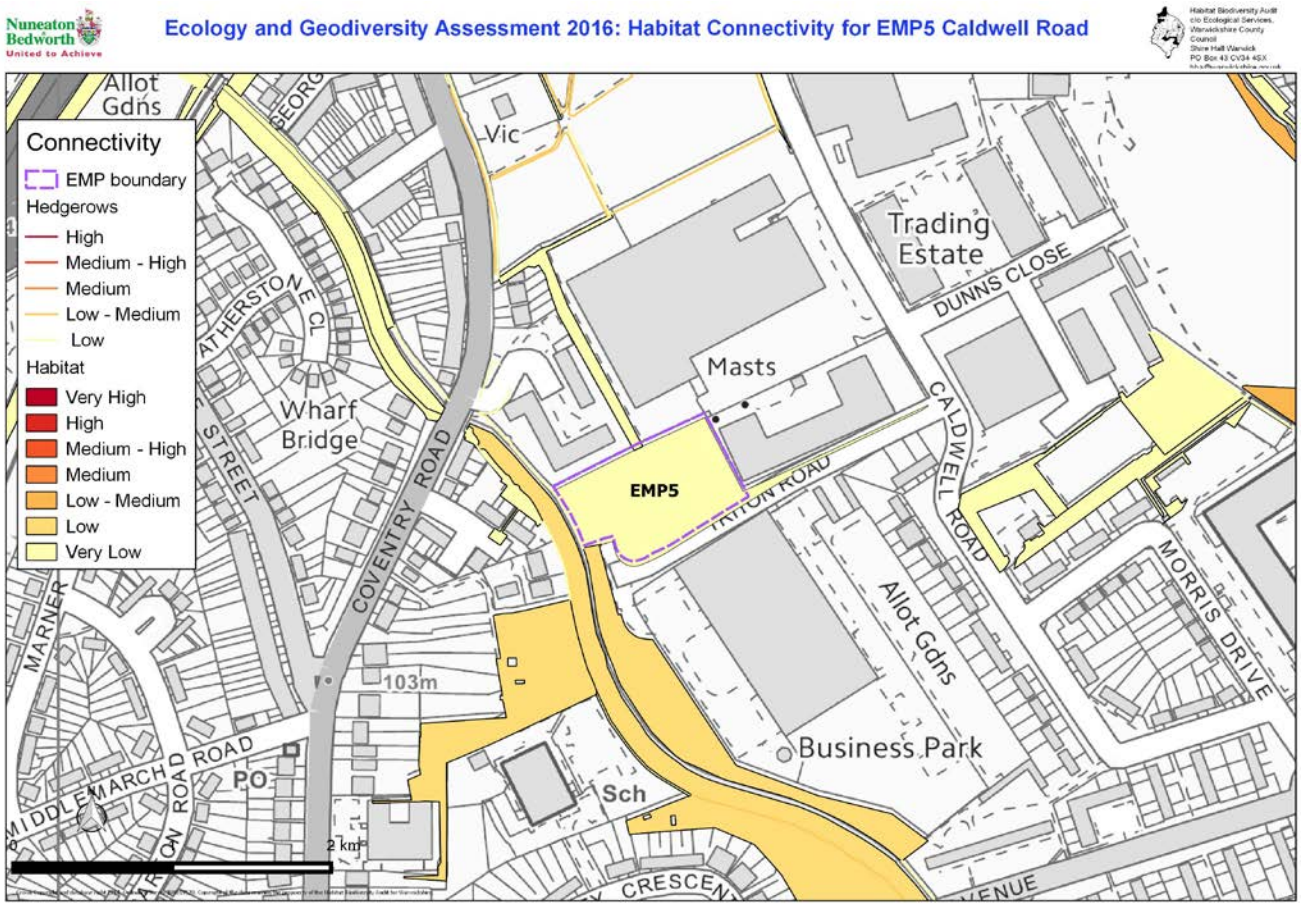
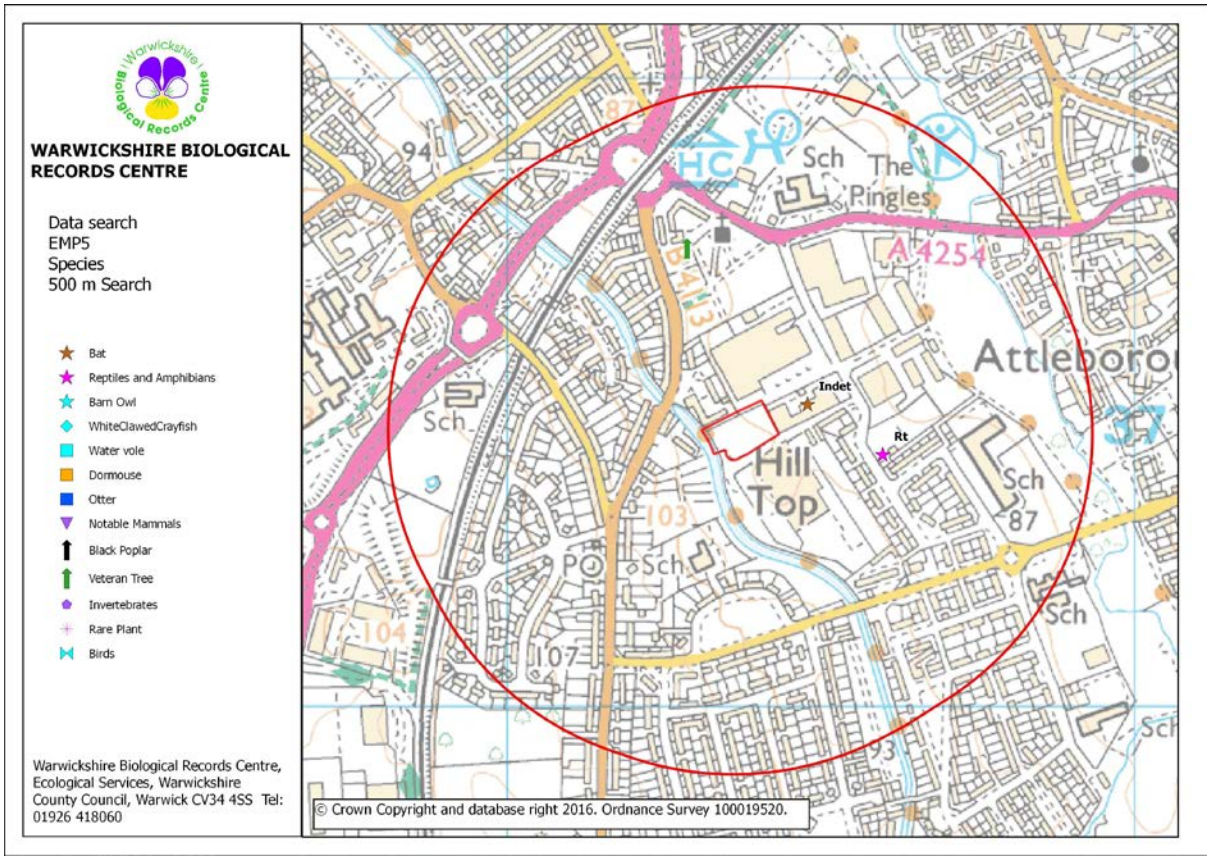


Figure 5 Phase 1 habitat connectivity

Protected and Important Species

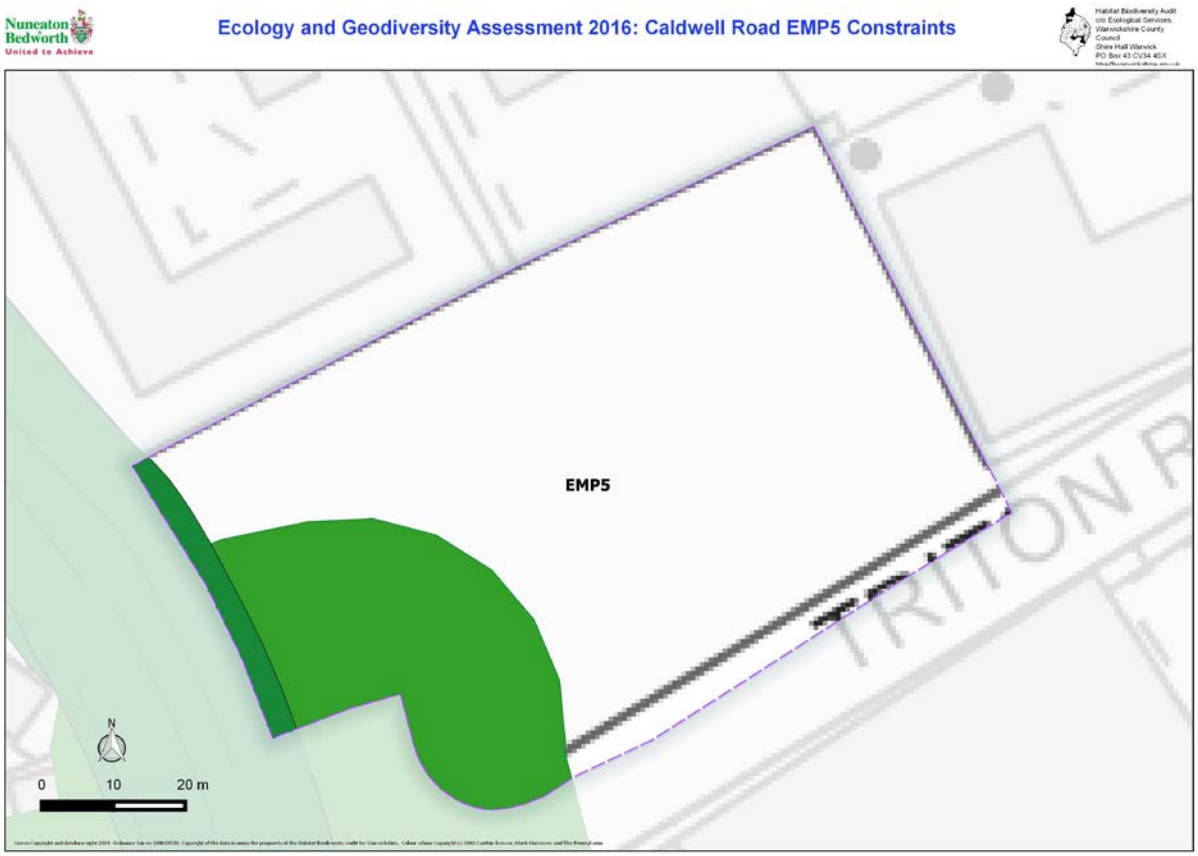
There are no protected and/or important species[1] recorded within the proposed boundary.
There are the following protected and/or important species recorded within 500m of the proposed site boundary:

- Bats: Indeterminate bat



[1] The information presented here is based on existing records held within the Warwickshire Biological Records Centre but does not constitute an exhaustive list of known records. The details are descriptive and further information on specific records can be obtained if required. In addition, it should not be taken that the lack of details on specific species groups means that the search area is not valuable for them - only that we have no electronic records. It is possible that unknown species are within this area that only an up-to-date systematic survey would find.

Constraints Map



The areas marked in green on the above constraints map indicate where development should be avoided and ecological enhancement encouraged.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of intact hedgerows
- Areas of medium to high distinctiveness grassland (values 4, 5 & 6)

Nuneaton and Bedworth Borough Council Ecology and Geodiversity Assessment (EGA) Borough Plan Publication Version

EMP6 LONGFORD ROAD

Prepared by

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull, Warwickshire Wildlife Trust

Habitat Biodiversity Audit

and

Warwickshire Biological Record Centre

Ecological Services, Warwickshire County Council

September 2016

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Employment Site: EMP6 LONGFORD ROAD

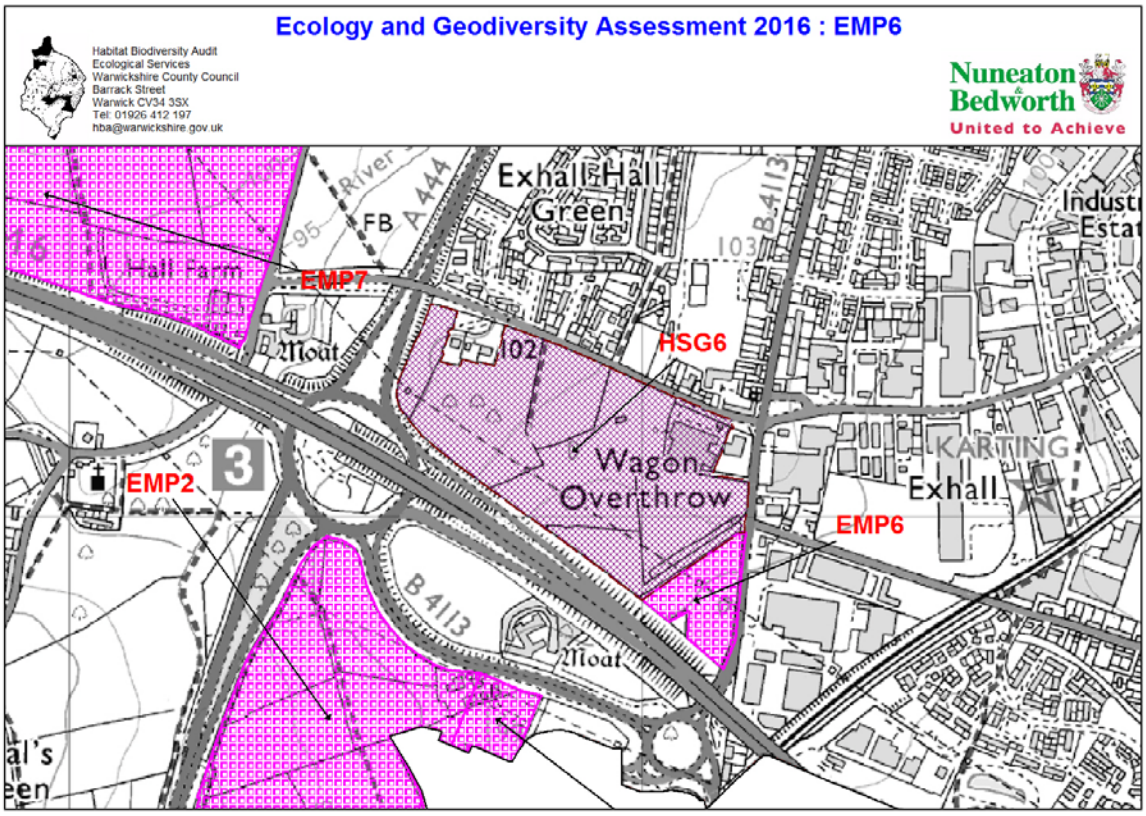

Figure 1 Location map

Area: 2.0 HA

Overview

EMP6 comprises of un-managed rank poor semi-improved grassed dominated by common and coarse grasses. A small pond used for small-scale coarse fishing is bordered by soft rush (*Juncus effuses*) and bounded by much of the poor semi-improved grassland that exists throughout much of the development parcel.

Key Features

- semi-improved grasslands

Recommendations

- Wilsons Lane is surveyed for its ecological importance as a county important site (Local Wildlife Site) and subsequently retained and enhanced.
- Areas of Medium to High Distinctiveness category (value: 4, 5 & 6) are retained and enhanced within any proposal. This includes the pond.

- As the field is semi-improved grassland and contains a pond protected species surveys for great crested nest and reptiles will be required.

It is important to note that until protected species survey work is undertaken there cannot be certainty over the potentially developable area and the quantity and scale of retained / enhanced habitat that may be required to adequately address protected species issues.

Opportunties

- This site is retained and used as a compensatory area (offset) to any losses from any HSG6 development proposals.

Designated Sites: Local Sites

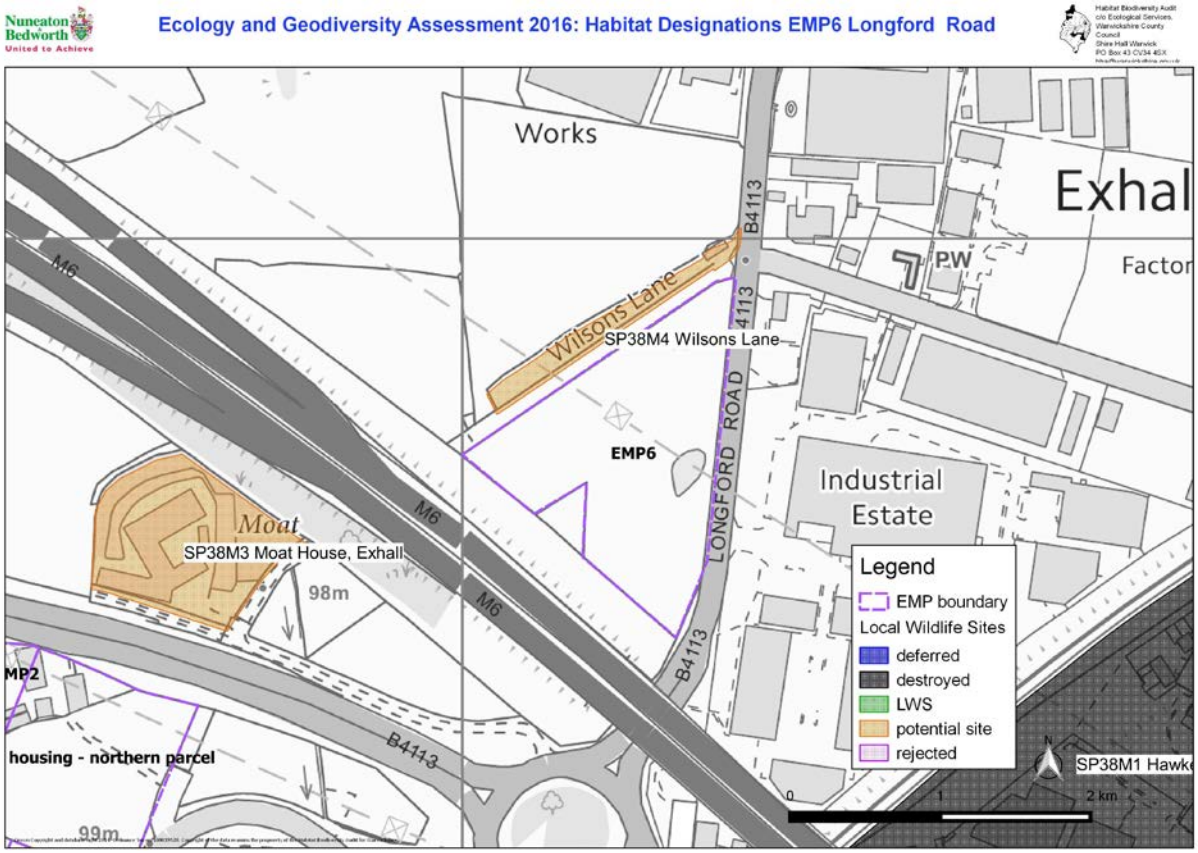

Figure 2 Site Designation Map

Potential Local Wildlife Sites

- Wilsons Lane SP38M4
- Moat House Exhall SP38M3

Phase 1 Habitat Distinctiveness

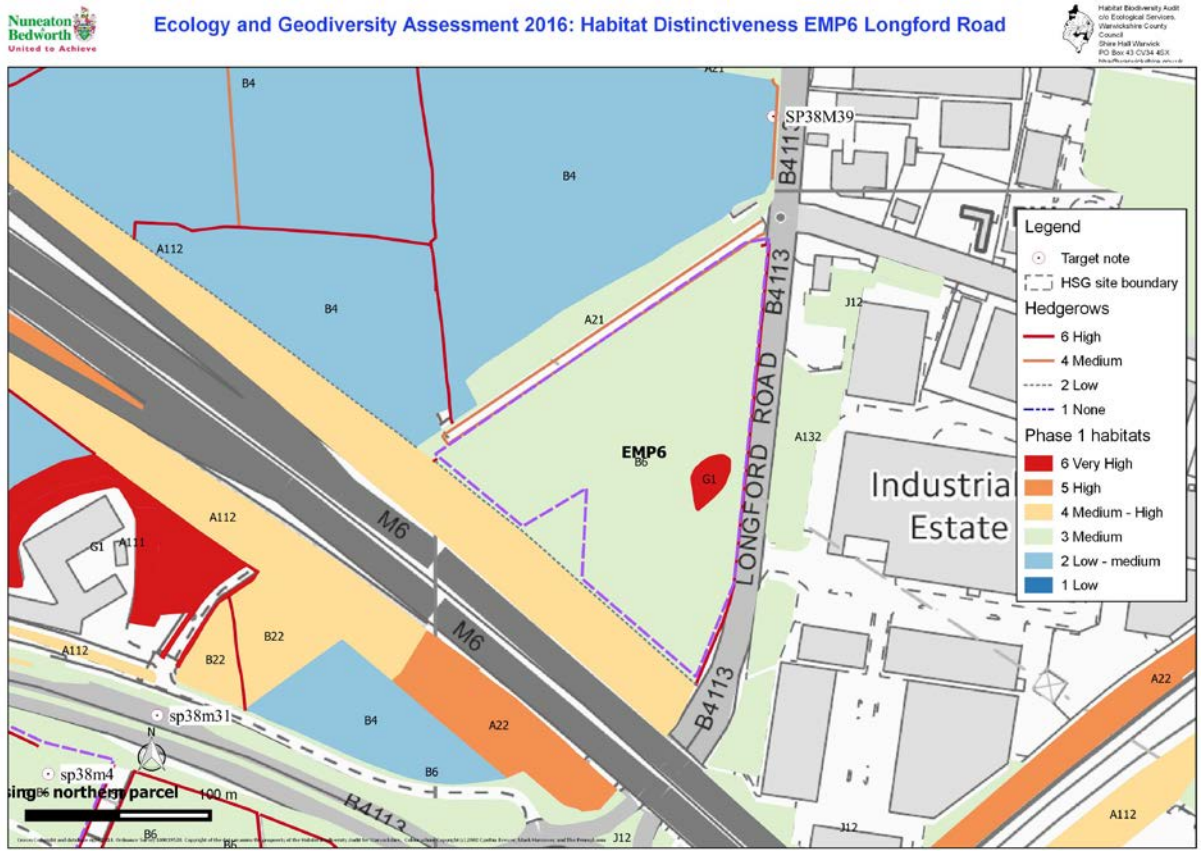

Figure 3 Phase 1 habitat distinctiveness

Target Notes

Reference	Grid Reference	Location
SP38M39	**SP3518485034**	**Longford Road**

The hedge separating poor semi-improved grassland and Longford Road is composed of predominately hawthorn (Crataegus monogyna) with oak (Quercus robur) and ash (Fraxinus excelsior) standards alongside smaller

specimens of blackthorn (Prunus spinosa) and field maple (Acer campestre). The associated ground flora is comprised of common nettle (Urtica dioica), ivy (Hedera helix), cow parsley (Anthriscus sylvestris), smooth sow-thistle (Sonchus oleraceus), groundsel (Senecio vulgaris), garlic mustard (Alliaria petiolata) and white bryony (Bryonica dioica).

Biodiversity Units

NBBC requests Biodiversity Impact Assessments (BIAs) to be carried out for all Minor and Major applications. BIAs are based on the Defra Offsetting Metircs (2012), as applied locally, to measure the gain or loss of habitat value as a result of development. It essentially is a mechanism of valuing the existing and future habitat of a development site and assessing if it is of more value (gain) or less value (loss). This assessment shows conformity to No Net Loss and Net Gain objectives within the NBBC Core Strategy and National Planning Policy Frameworks.

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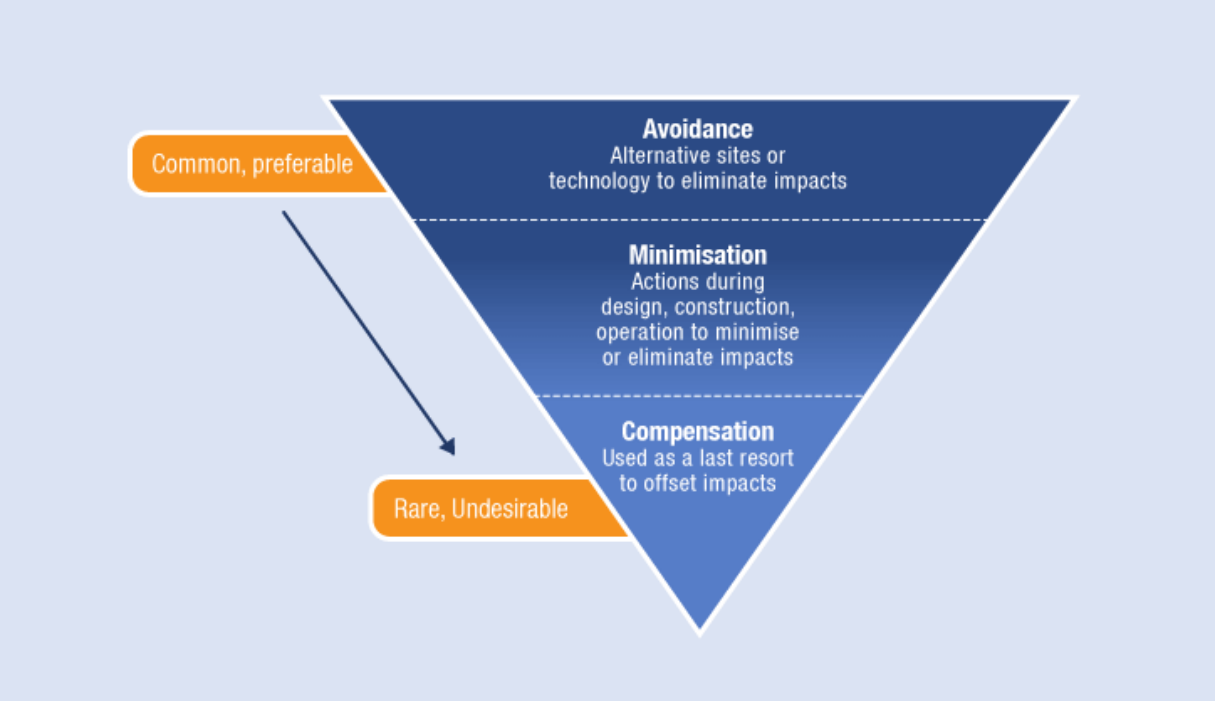


Figure 4: The Mitigation Hierarchy (UNU Online Learning, 2007)

The next table shows the habitats and their values measured by Habitat Distinctiveness x Habitat Condition x area. To apply the Mitigation Hierarchy it is recommended that

- High Distinctiveness (Value 6) habitats are avoided, retained and enhanced during and after the development
- Areas of higher value are retained where possible and enhanced during and after the development

In this way the need to compensate for any residual habitat biodiversity loss is minimised; thus reducing the cost of compensation.

Site Ref.	Habitat	Area hectares	Biodiversity Distinctiveness	Biodiversity Condition	Biodiversity Units
EMP6	Poor Semi-improved grassland	2.00	3	2	12.00
EMP6	Standing water	0.04	6	3	0.81
EMP6	Dense/continuous scrub	0.01	3	2	0.04
				Biodiversity Units	12.85

Phase 1 Habitat Connectivity

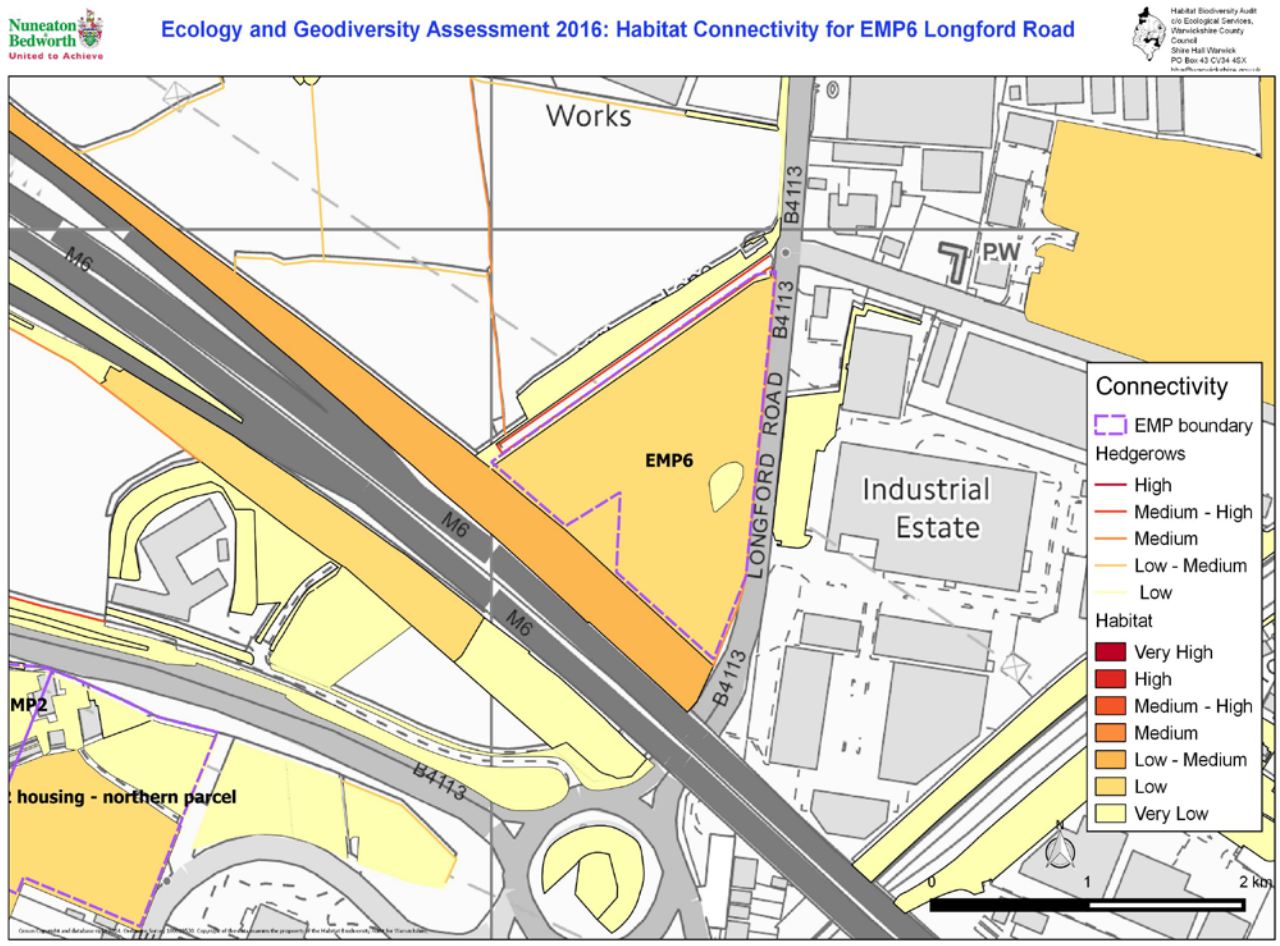


Figure 5 Phase 1 habitat connectivity

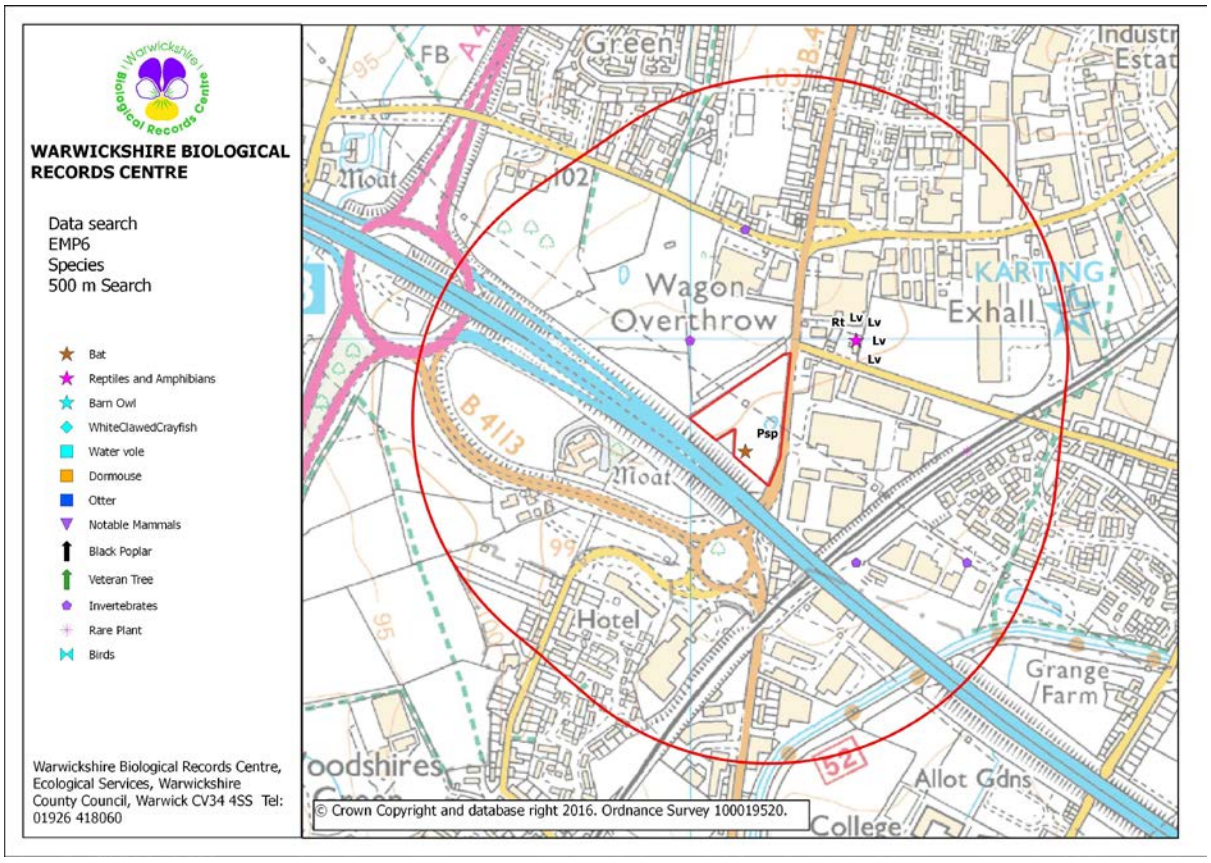
Protected & Important Species

There are the following protected and/or important species[1] recorded within the proposed boundary:

- Bats: *Pipistrellus sp*,

There are the following additional protected and/or important species recorded within 500m of the proposed site boundary:

- Invertebrates: Andrena (Cnemidandrena) nigriceps (Bee), Large Yellow-Faced Bee, Latticed Heath (moth) and Small Heath (moth)
- Rare Plants: Annual Beard-grass (*Polypogon monspeliensis*) and Stinking Hellebore (*Helleborus foetidus*)



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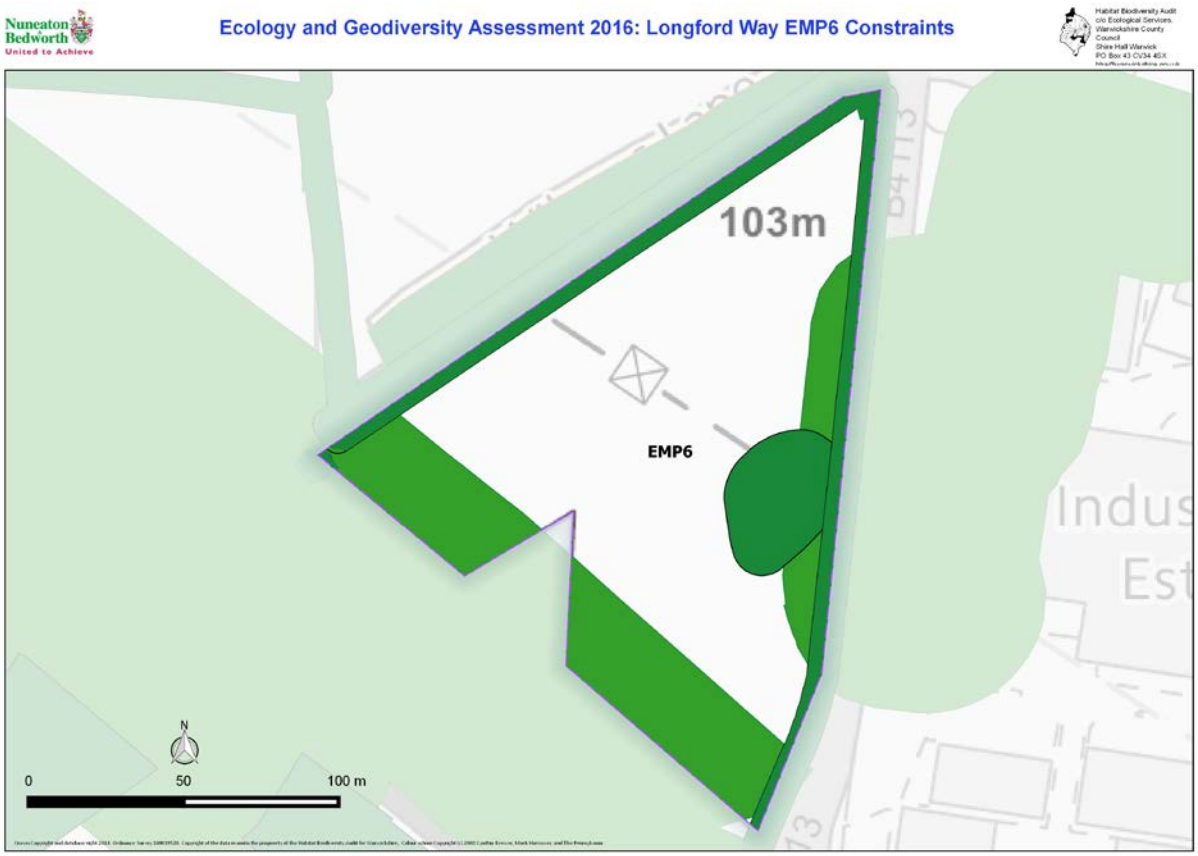
Constraints Map



The areas marked in green on the above constraints map indicate where development should be avoided and ecological enhancement encouraged.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of intact hedgerows
- Areas of medium to high distinctiveness grassland (values 4, 5 & 6)

Nuneaton and Bedworth Borough Council Ecology and Geodiversity Assessment (EGA) Borough Plan Publication Version

EMP7 BOWLING GREEN LANE

Prepared by

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull, Warwickshire Wildlife Trust

Habitat Biodiversity Audit

and

Warwickshire Biological Record Centre

Ecological Services, Warwickshire County Council

September 2016

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Employment Site: EMP7 BOWLING GREEN LANE

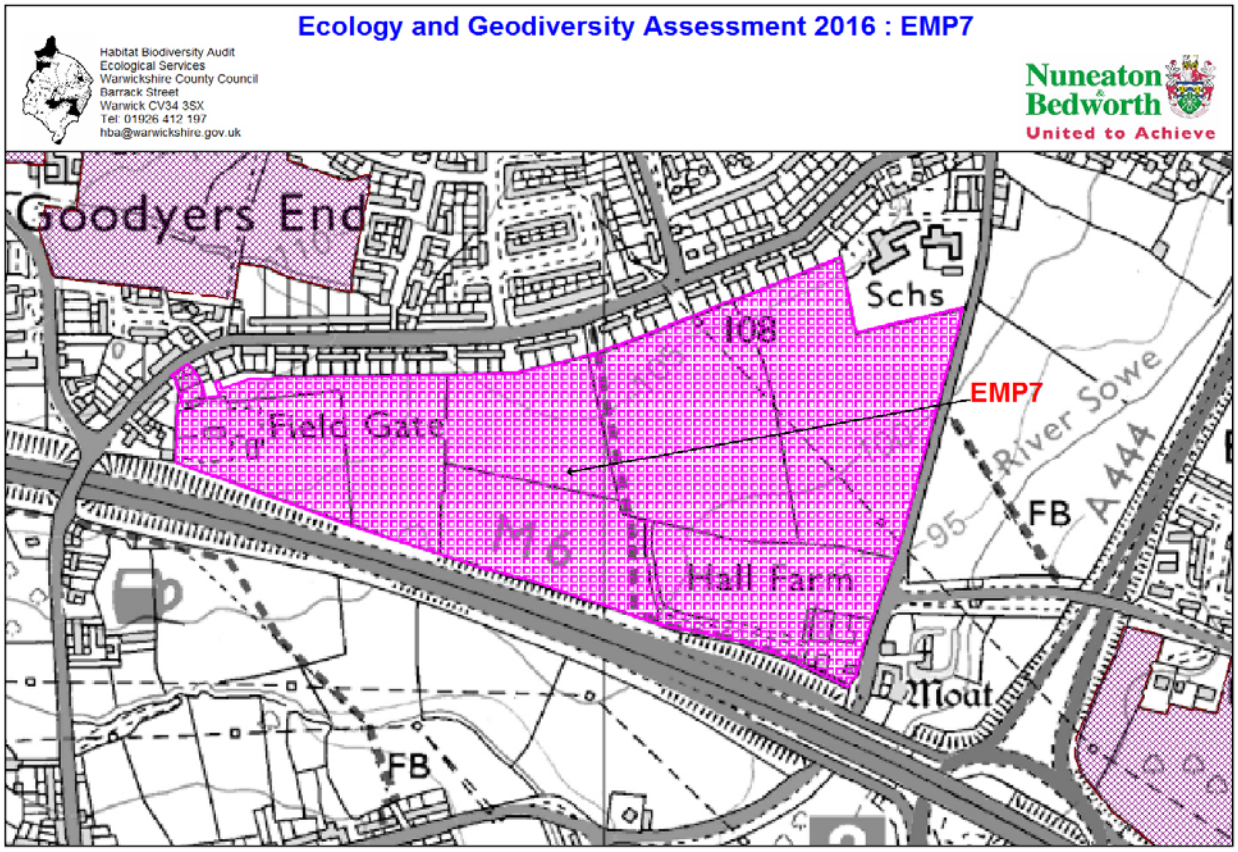


Figure 1 Location map

Area: 26.2 HA

Overview

Site EMP7 consists mostly agricultural land between the M6 motorway to the south and the continuous built up area at Goodyers End to the north. At the eastern section is a Field Gate industrial area, which is enclosed by an area of scrubland. The majority of hedgerows have either been removed or are remnants of the former field system boundaries.

Key Features

- Remnant hedgerows with trees
- Scrubland

Recommendations

- The M6 boundary is enhanced for connectivity
- Areas of tall ruderal around Field gate will need assessments for protected species.
- Areas of Medium to High Distinctiveness category (value: 4, 5 & 6) are retained and enhanced within any proposal.

It is important to note that until protected species survey work is undertaken there cannot be certainty over the potentially developable area and the quantity and scale of retained / enhanced habitat that may be required to adequately address protected species issues.

Designated Sites: Local Sites

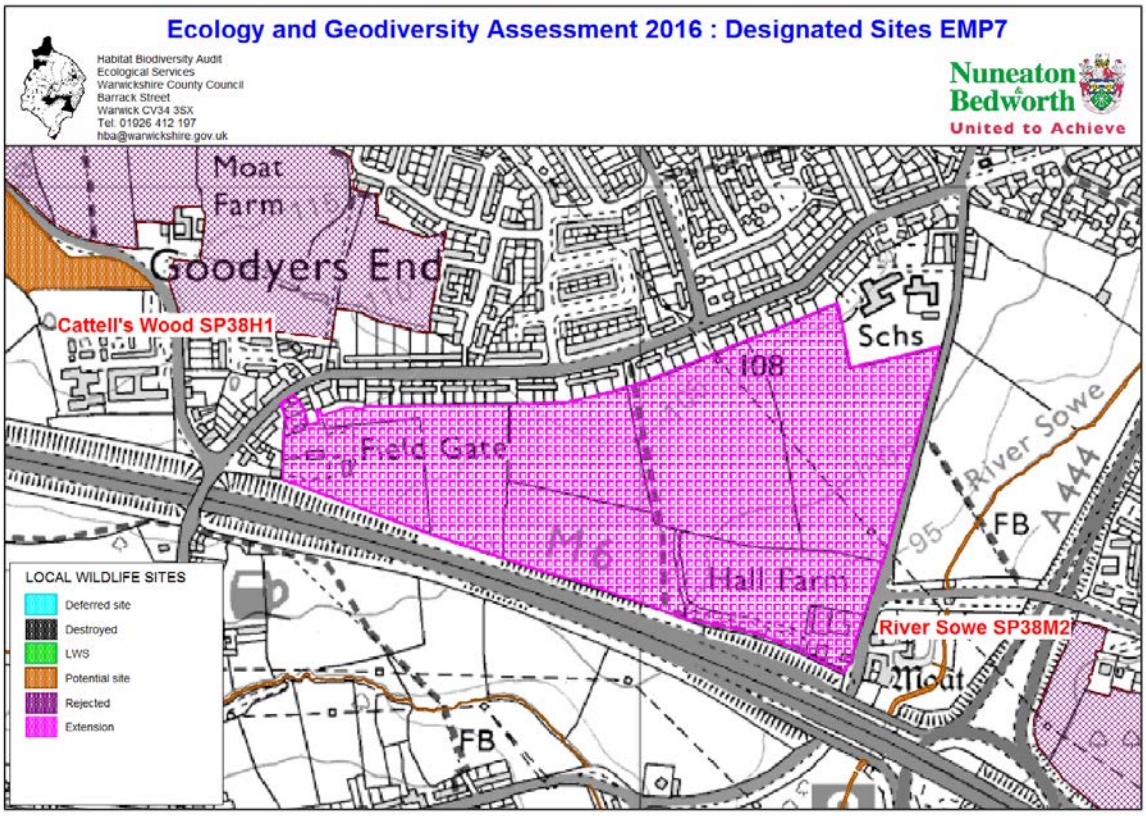


Figure 2 Site Designation Map

Potential Local Wildlife Sites

- River Sowe SP38M2
- Breach Brooks SP38D4

Phase 1 Habitat Distinctiveness

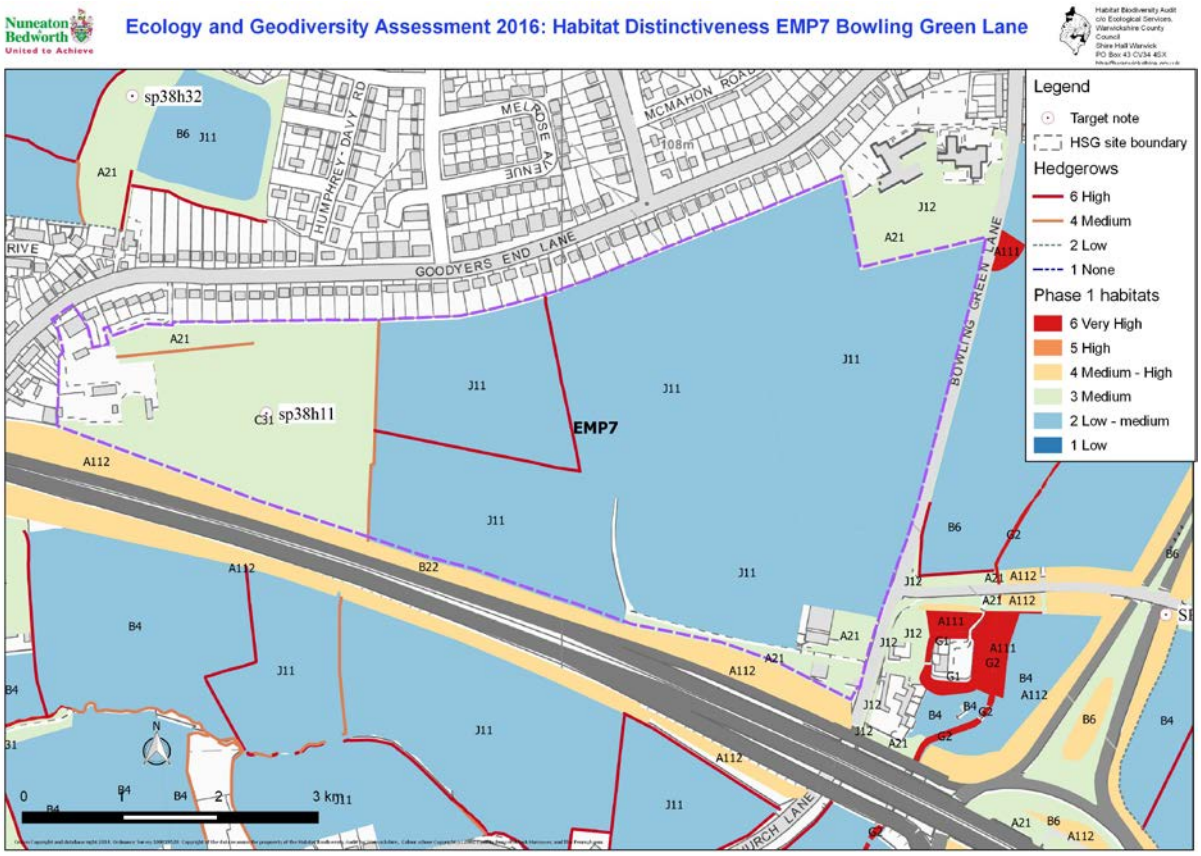


Figure 3 Phase 1 habitat distinctiveness

Target Notes:

Reference	Grid Reference	Location
SP38h11	**SP3369185598**	**Bowling Green Lane**

Disturbed area of rough grassland with tall ruderal species abundant throughout including false oat-grass (Arrhenatherum elatius), Yorkshire-fog (Holcus lanatus), common bent (Agrostis capillaris), broad-leaved dock (Rumex obtusifolius), creeping thistle (Cirsium arvense), rosebay willowherb (Chamerion angustfolium), prickly sow-thistle (Sonchus asper) and prickly lettuce (Lactuca serriola). Areas of tarmac have been colonised by frequent rat's-tail Fescue (Vulpia myorus), annual meadow-grass (Poa annua) and spear thistle (C. vulgare). Field and Meadow Grasshoppers are abundant throughout the area.

sp38h32	**SP3355485923**	**Moat Farm Drive**

Poor semi-improved grassland with public access between Moat Farm Drive and Manor Drive housing estate. Ground cover is mainly coarse grasses, common nettle (Urtica dioica) and dock (Rumex spp.) with occasional patches of lesser celandine (Ranunculus ficaria). There are some mature pedunculate oak (Quercus robur) at

Manor Drive. The grassland extends around an arable field recently planted with maize.

SP38M37 SP3461985376 School Lane

The broad-leaved planation is typical of those bordering car highways and includes alder (Alnus glutinosa), ash (Fraxinus excelsior) and bramble (Rubus fruticosus agg.).

Biodiversity Units

NBBC requests Biodiversity Impact Assessments (BIAs) to be carried out for all Minor and Major applications. BIAs are based on the Defra Offsetting Metircs (2012), as applied locally, to measure the gain or loss of habitat value as a result of development. It essentially is a mechanism of valuing the existing and future habitat of a development site and assessing if it is of more value (gain) or less value (loss). This assessment shows conformity to No Net Loss and Net Gain objectives within the NBBC Core Strategy and National Planning Policy Frameworks.

The BIA process also enables development to demonstrate sustainable development, assist in viability assessments and the application of the Mitigation Hierarchy. The Mitigation Hierarchy is illustrated in Figure 4 below. To avoid doubt one must not progress to a subsequent step until all opportunities have been demonstrably explored and discounted.

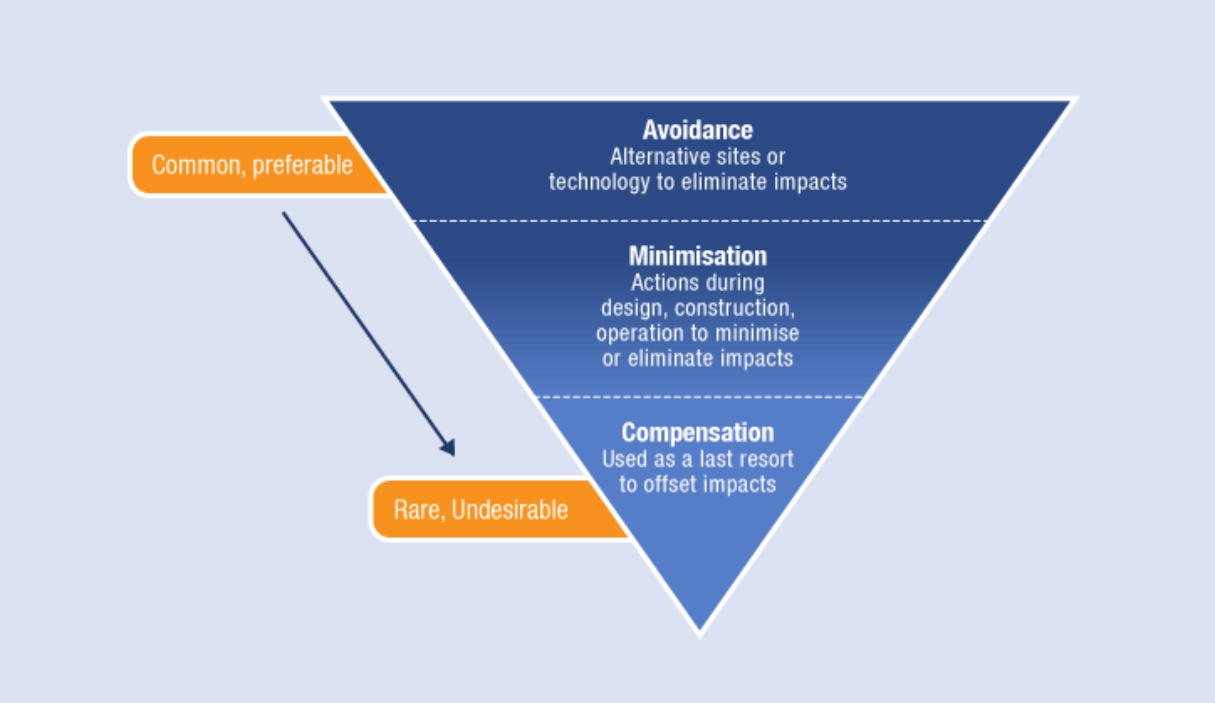


Figure 4: The Mitigation Hierarchy (UNU Online Learning, 2007)

The next table shows the habitats and their values measured by Habitat Distinctiveness x Habitat Condition x area. To apply the Mitigation Hierarchy it is recommended that

- High Distinctiveness (Value 6) habitats are avoided, retained and enhanced during and after the development
- Areas of higher value are retained where possible and enhanced during and after the development

In this way the need to compensate for any residual habitat biodiversity loss is minimised; thus reducing the cost of compensation.

Site Ref.	Habitat	Area hectares	Biodiversity Distinctiveness	Biodiversity Condition	Biodiversity Units
EMP7	Tall ruderal	4.23	3	1	12.70
EMP7	Broad-leaved plantation	0.00	4	2	0.01
EMP7	Arable	3.16	2	1	6.32
EMP7	Arable	2.64	2	1	5.29
EMP7	Dense/continuous scrub	0.34	3	2	2.06
EMP7	Semi-improved grassland	0.00	4	3	0.01
EMP7	Arable	2.91	2	1	5.83
EMP7	Arable	5.91	2	1	11.82
EMP7	Arable	5.32	2	1	10.64
EMP7	Dense/continuous scrub	0.21	3	2	1.27
EMP7	Dense/continuous scrub	0.38	3	2	2.26
				Biodiversity Units	58.23

Phase 1 Habitat Connectivity

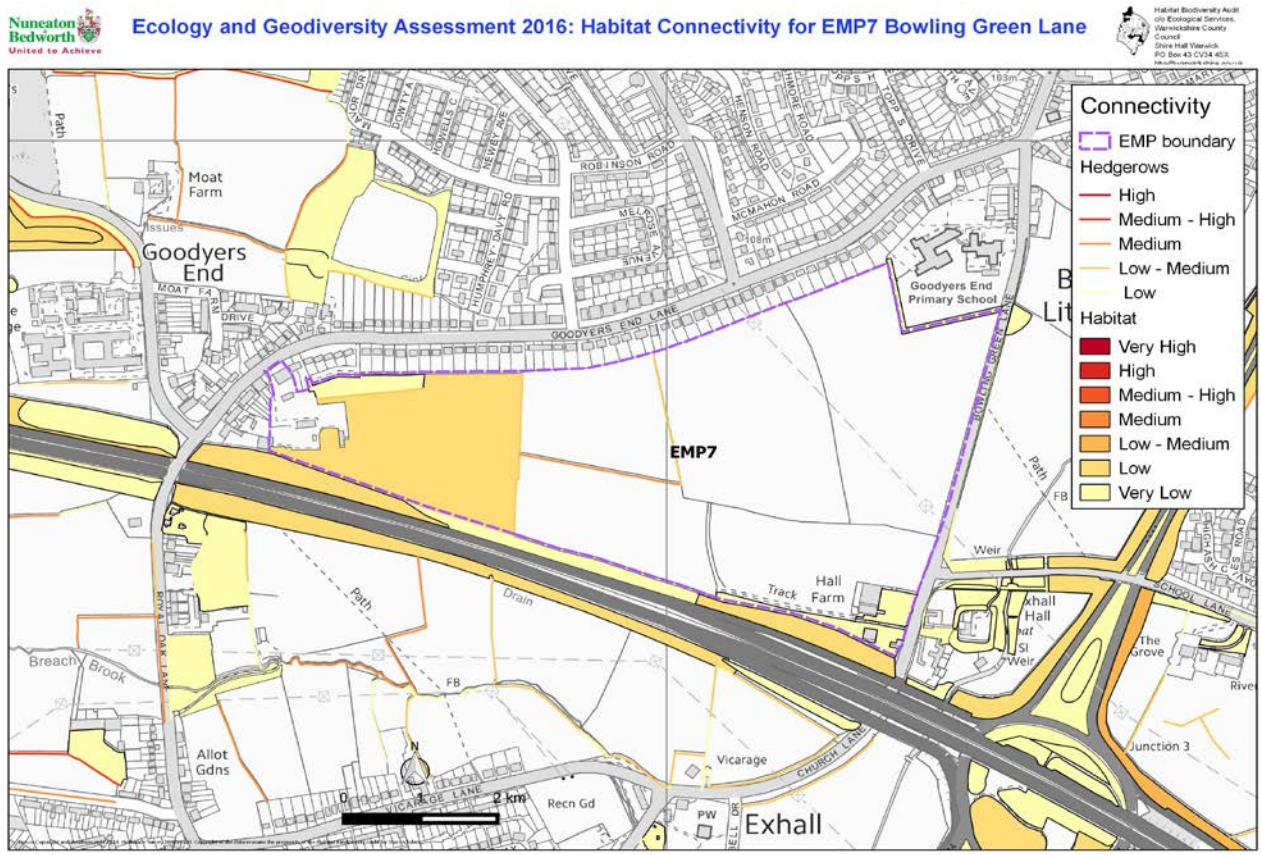
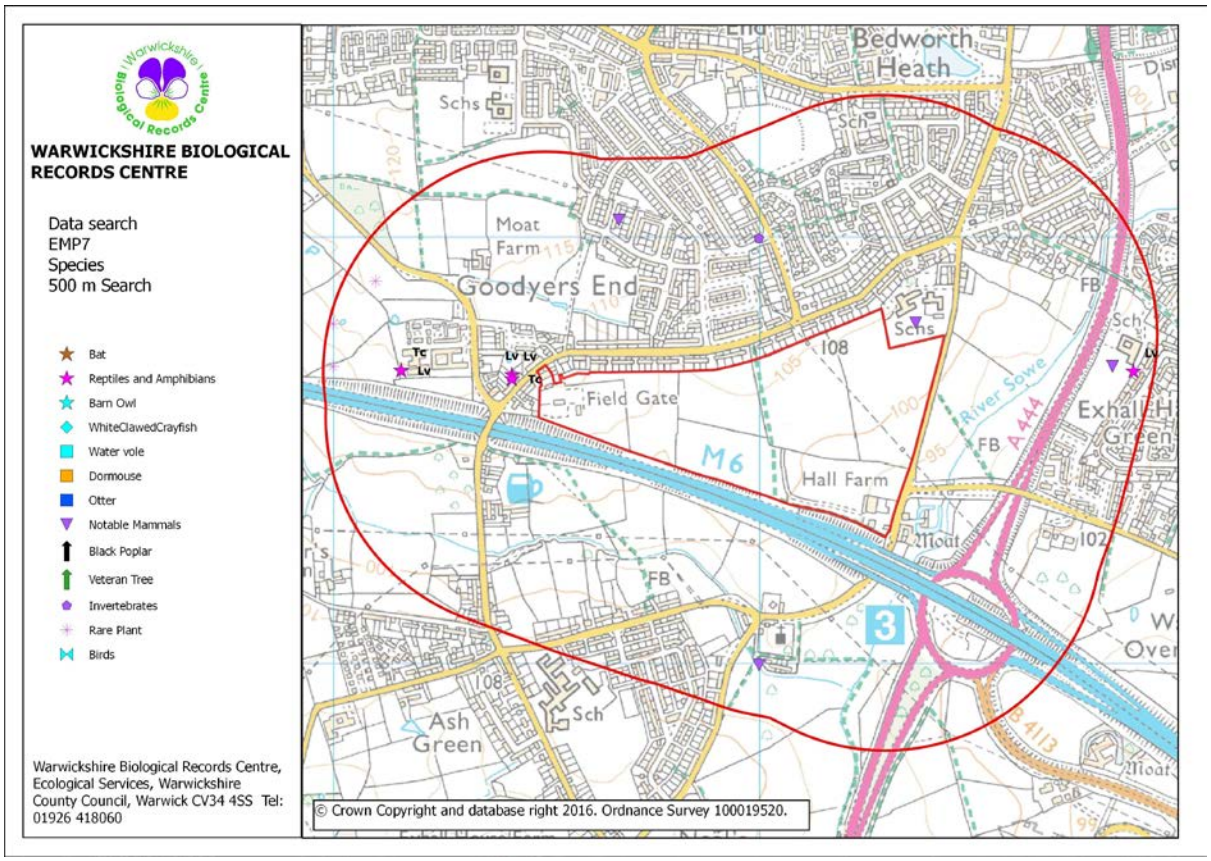


Figure 5 Phase 1 habitat connectivity

Protected & Important Species

There are no protected and/or important species[1] recorded within the proposed boundary.
There are the following protected and/or important species recorded within 500m of the proposed site boundary:

- Amphibians and Reptiles: Smooth Newt and Great Crested Newt
- Mammals: Hedgehog and Brown Hare
- Invertebrates: Small Heath and Dingy Skipper
- County Rare Plants: Galingale, Green-winged Orchid and Bog Pondweed



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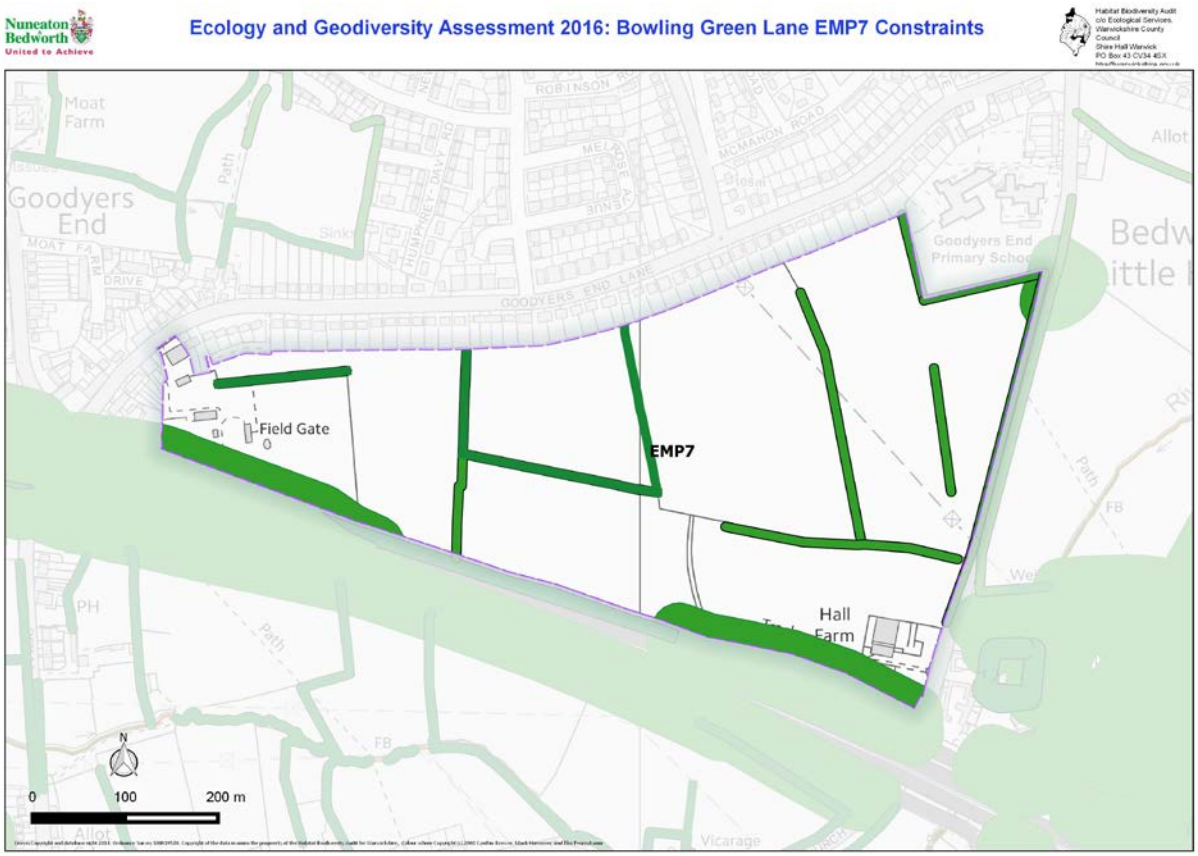
Constraints Map



The areas marked in green on the above constraints map indicate where development should be avoided and ecological enhancement encouraged.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of intact hedgerows
- Areas of medium to high distinctiveness grassland (values 4, 5 & 6)

Nuneaton and Bedworth Borough Council Ecology and Geodiversity Assessment (EGA) Borough Plan Publication Version

EMP8 GRIFF LANE

Prepared by

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull, Warwickshire Wildlife Trust

Habitat Biodiversity Audit

and

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Ecological Services, Warwickshire County Council

September 2016

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Employment Site

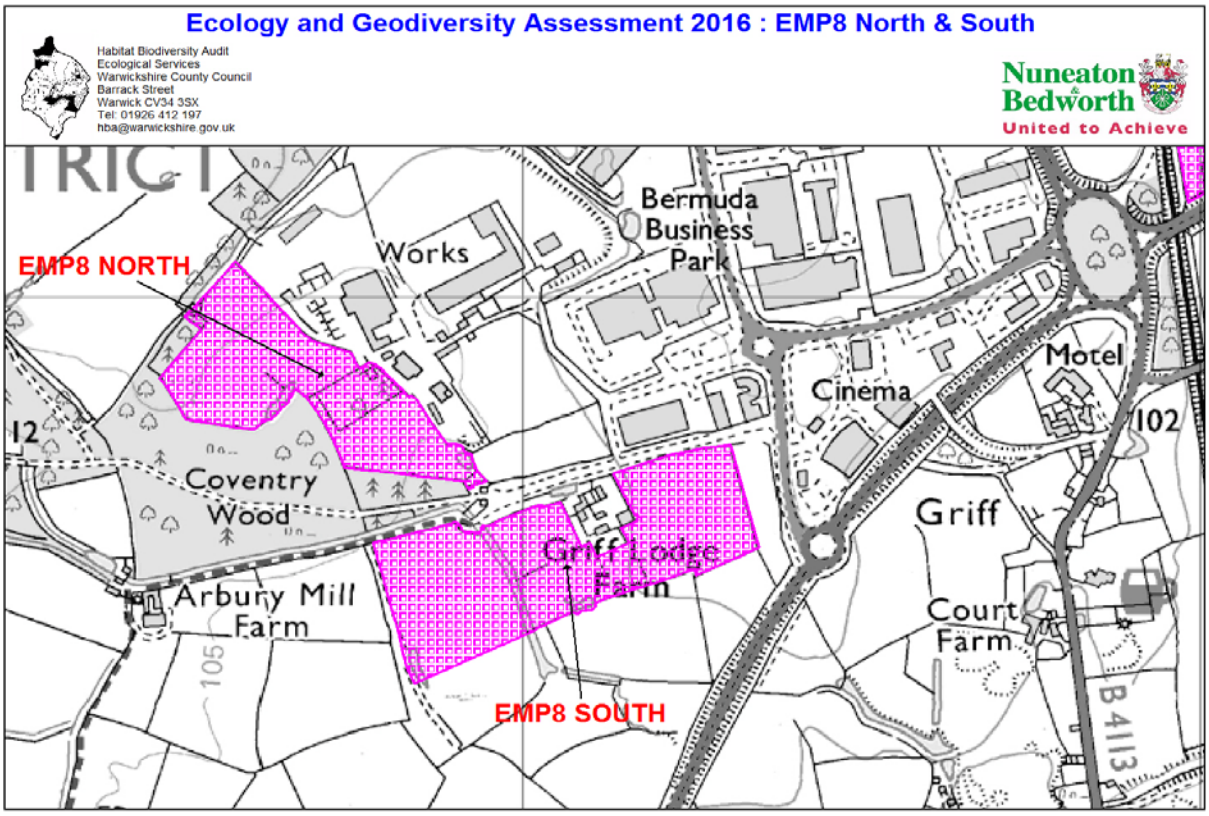


Figure 1 Location map

Area:
EMP8 North 6.57 ha
EMP8 South 9.44 ha

Overview

EMP8 North was previously an area of permanent grassland recently ploughed to provide arable crops with a southern section comprising mixed plantation woodland. The north development parcel is divided by a wooded component of Coventry Wood as seen on the First Edition One Inch Ordnance Survey Map (surveyed 1832-34), beyond which is the continuation of Coventry Wood. A small linear section of semi-natural woodland links Coventry Wood with the adjoining LWS woodland known as The Rough.

EMP8 South covers three grassland fields separated by hedgerows utilised as improved grassland with a high intensity of grazing. The north-west corner borders Griff Lane and the south-eastern section of Coventry Wood. Likewise Griff Lane separates the development parcel from industrial compartments of Bermuda Park. Broad-leaved plantation marks the eastern boundary sandwiched between

Walsingham Drive. Neighbouring grassland fields to the south of the development parcel are squeezed by the A444 managed within the farmstead of Arbury Mil Farm.

There are at least four ponds within Coventry Wood, some remain heavily silted and all will require a Great Crested Newt Habitat Suitability Index Survey as recommended in the LWS survey to determine the presence or absence of great crested newts.

Key Features

- Ancient Woodland
- Broad-leaved Semi-natural Woodland
- Poor Semi-improved Grassland
- Species-rich Hedgerows
- Ponds

Recommendations

- Retain the ancient semi-natural woodland represented, Coventry Wood from development with a 50m buffer.
- The retention and/or creation of trees within hedgerows and small copses will increase connectivity between habitat and landscape types.
- Retain and enhance the disused Lower Arbury Canal and any associated wetland and marginal habitat should be retained and enhanced as part of any green infrastructure elements of any proposals for the site.
- Retain and protect via a buffer of the Arbury Estate approach road as they are of high distinctiveness.
- Areas of Medium to High Distinctiveness category (value: 4, 5 & 6) are retained and enhanced within any proposal.

It is important to note that until protected species survey work is undertaken there cannot be certainty over the potentially developable area and the quantity and scale of retained / enhanced habitat that may be required to adequately address protected species issues.

Opportunities

- The site lies within a strategic area[1] for woodland and grassland enhancement to add to the Arbury Core Areas (a concentration of woodland or

[1] Warwickshire Coventry and Solihull Green Infrastructure Strategy: http://maps.warwickshire.gov.uk/greeninfrastructure/

grassland of 20+ hectares per 1km^2). Any offsetting requirement could be used to enhance these woodlands and grasslands; or create more.

Designated Sites: Local Sites

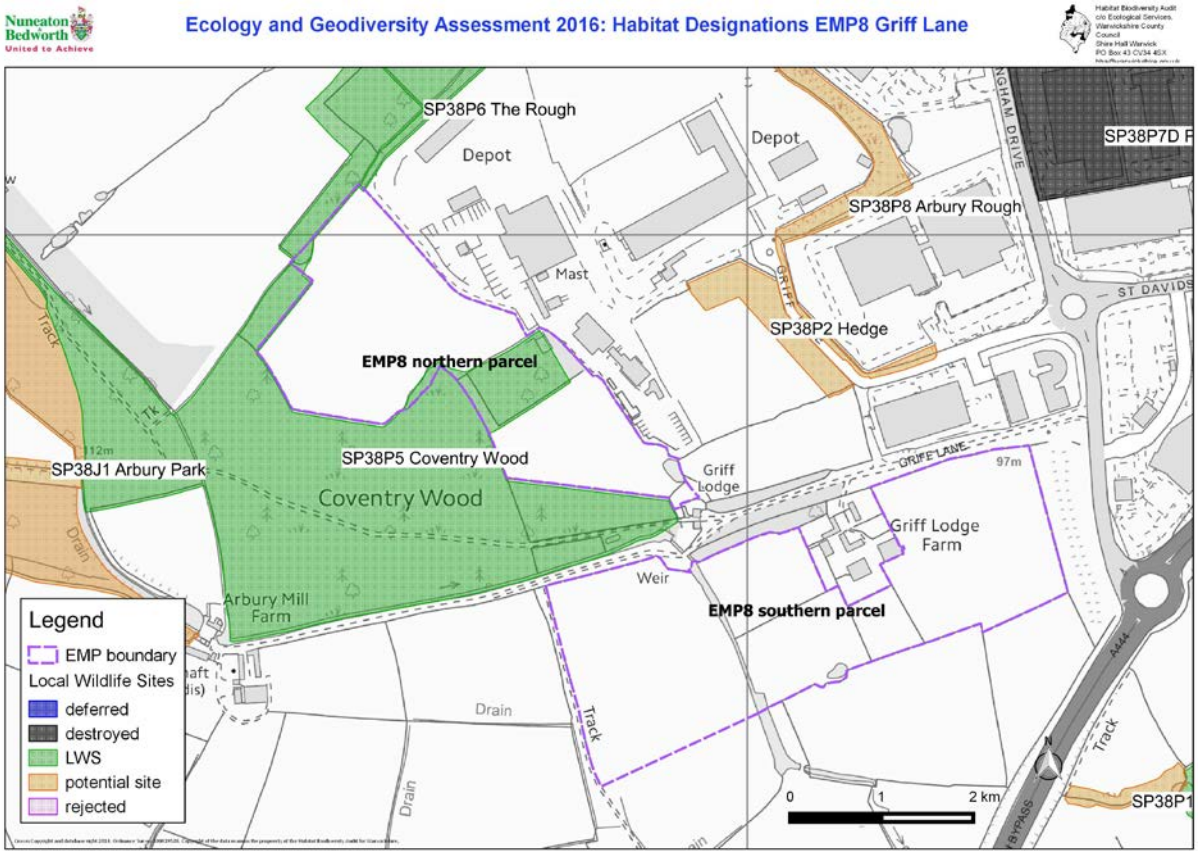


Figure 2 Site designations

Coventry Wood and The Rough Local Wildlife Site SP38P5[2]

Coventry Wood and The Rough are two medium-sized woodlands, the former semi-natural deciduous and the second part plantation woodland, situated on the eastern side of Arbury Park, a mosaic of historic landscaped parkland, farmland, lakes and woodland located 3.5 km south-west of Nuneaton town centre. There is no public access.

Coventry Wood:
Much of the wood is listed ancient woodland in the Ancient Woodland Inventory for Warwickshire, although parts of it have been replanted at different times by trees such as Beech and Norway Spruce. It is shown on the first edition of the one inch OS map (surveyed 1832-34) much as it is today, although it has lost the south-west corner to farmland but gained two appendages on the north side. The longest appendage connected the site with a smaller block of woodland known as Brooks

[2] Coventry Wood and The Rough SP38P5 LWS 06/04/2011 and 21/02/2013 LWSP

Rough, now part of the wood known simply as The Rough. Coventry Wood is bisected by one of the main estate driveways which exits the park at Griff Lodge, at the eastern end of the wood. Although surrounded by a mix of plantations and small-medium sized arable and grass fields, the site is now bordered on the east side by Bermuda Business Park.

The wood is naturally damp and is drained by a series of small streams and drains which flow out of a narrow pool just beyond the north-western corner of the wood, before going on to feed the former Arbury Mill situated on the southern border. The main drain follows the course of the former Arbury Canal, which ran along the southern border of the wood and took coal from the Newdigate's family mines at Griff up to Arbury Hall. There are also several small ponds within this part of the LWS, although these are now badly silted.

The Rough
Also known as Arbury Rough, this is a small mainly plantation woodland situated to the north of Coventry Wood but connected by a belt of deciduous woodland. Although mainly replanted, the wood still contains a reasonable flora which is considered to be recoverable and it is an important link in local connectivity.
The woodland is bordered by large poorly drained arable fields to the north and west, by an area of post-industrial land part planted with trees to the north-east, the large and expanding Bermuda Business Park to the east and south, and is connected to Coventry Wood to the south-west. Another LWS, Bermuda Pool, is present 350m to the north-east and connected to the site via a watercourse and a strip of pLWS land in the shape of a scrubby bank.

This part of the park formerly consisted of wet pasture fields which were subject to flooding, due to the presence of several headwater streams of the Griff Brook which flow eastwards across the area. The site of the wood was apparently particularly wet and the presence of a network of minor drains (now silted up) within the wood suggest there was an attempt to drain it. Subsequently it was allowed to scrub over, to compliment the western third which was already an Oak-Hazel coppice woodland known anciently as Brooks Rough, of probably considerable age. By the 1970's a report (in WBRC) stated that the western half of the site was by then deciduous woodland, while the eastern half was occupied by a mosaic of scrub and wet grassland, with a reedbed following the eastern drain for much of its length and a pool situated at the southern end of the western drain. In the early 1990's much of the site was cleared and replanted with a mix of conifers and hardwoods, but with Scots Pine predominant. The only remnants of the old woodland left intact comprised narrow shelter belts along the northern, western and south-western sides.

Potential Local Wildlife Sites

- Hedge Sp38P2
- Arbury Rough SP38P8
- Arbury Park SP38J1

Phase 1 Habitat Distinctiveness

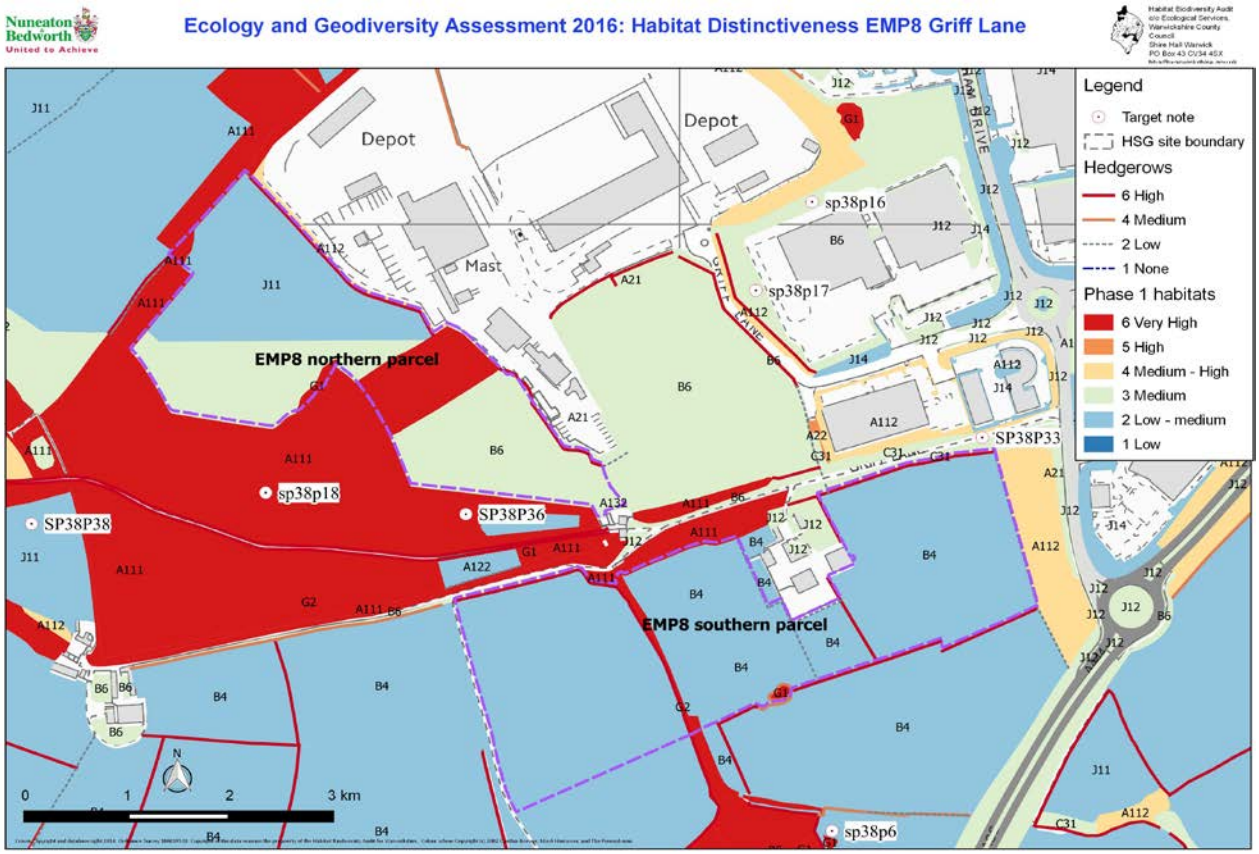


Figure 3 Phase 1 habitat distinctiveness

Target Notes

Reference	Grid Reference	Location
sp38p16	**SP3512989016**	**Griff Lane**

Rich strip of grassland containing abundant false oat-grass (Arrhenatherum elatius) with common knapweed (Centaurea nigra), yarrow (Achillea millefolium), oxeye daisy (Leucanthemum vulgare) and weld (Reseda luteola).This lies adjacent to an area of dense scrub - much of which has been planted and includes young trees

Reference	Grid Reference	Location
sp38p17	**SP3507488926**	**Griff Lane**

Diverse overgrown hedge containing blackthorn (Prunus spinosa), ash (Fraxinus excelsior), hawthorn (Crataegus monogyna), midland hawthorn (Crataegus

laevigata), hazel (Corylus avellana), oak (Quercus robur) and dog rose (Rosa canina). Some mature oak also occur.

SP38P18 **SP3459588718** **Coventry Wood**

Semi-natural oak (Quercus robur) woodland with hazel (Corylus avellana), holly (Iiex aquifolium), field maple (Acer campestre) and bramble (Rubus fruticosus agg.). Bounded by an interesting ditch to the south which contains cyperus sedge (Carex pseudocyperus), pendulous sedge (Carex pendula), gypsywort (Lycopus europaeus), wild angelica (Angelica sylvestris), great willowherb (Epiliobium hirsutum), water mint (Mentha aquatica) and water forget-me-not (Myosotis scorpioides

SP38P36 **SP3479188696** **Coventry Wood**

Coniferous plantation with occasional ash (Fraxinus excelsior), elm (Ulmus sp.), beech (Fagus sylvatica), blackthorn (Prunus spinosa), hazel (Corylus avelllana), bramble (Rubus fruticosus agg.), elder (Sambucus nigra), sycamore (Acer pseudoplatanus), hornbeam (Carpinus betulus), cherry (Prunus sp.), field maple (Acer campestre), holly (IIex aquifolium), yew (Tacus bacata) and hawthorn (Crataegus monogyna). Ground flora of wood avens (Geum urbanum), herb-Robert (Geranium robertianum), ground ivy (Glechoma hederacea), ground-elder (Aegopodium podagraria), common nettle (Urtica dioica) and wild strawberry (Fragaria vesca). There is a wet ditch alongside the track with male fern (Dryopteris filix-mas), soft rush (Juncus effuses), great willowherb (Epilobium hirsutum), goat willow (Salix caprea), wild angelica (Angelica sylvestris) and a duckweed (Lemna sp.).

Biodiversity Units

NBBC requests Biodiversity Impact Assessments (BIAs) to be carried out for all Minor and Major applications. BIAs are based on the Defra Offsetting Metircs (2012), as applied locally, to measure the gain or loss of habitat value as a result of development. It essentially is a mechanism of valuing the existing and future habitat of a development site and assessing if it is of more value (gain) or less value (loss). This assessment shows conformity to No Net Loss and Net Gain objectives within the NBBC Core Strategy and National Planning Policy Frameworks.

The BIA process also enables development to demonstrate sustainable development, assist in viability assessments and the application of the Mitigation Hierarchy. The Mitigation Hierarchy is illustrated in Figure 4 below. To avoid doubt one must not progress to a subsequent step until all opportunities have been demonstrably explored and discounted.

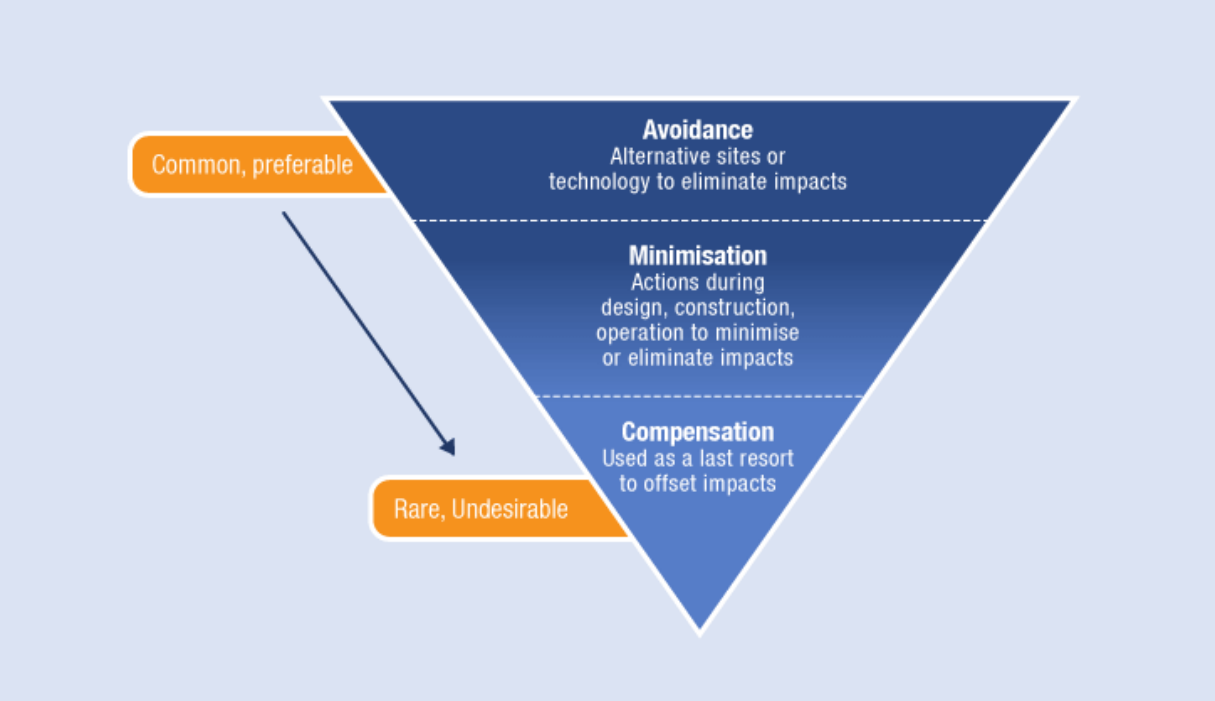


Figure 4: The Mitigation Hierarchy (UNU Online Learning, 2007)

The next table shows the habitats and their values measured by Habitat Distinctiveness x Habitat Condition x area. To apply the Mitigation Hierarchy it is recommended that

- High Distinctiveness (Value 6) habitats are avoided, retained and enhanced during and after the development
- Areas of higher value are retained where possible and enhanced during and after the development

In this way the need to compensate for any residual habitat biodiversity loss is minimised; thus reducing the cost of compensation.

Site Ref.	Habitat	Area hectares	Biodiversity Distinctiveness	Biodiversity Condition	Biodiversity Units
EMP8 North	Broad-leaved semi-natural woodland	0.03	6	3	0.54
EMP8 North	Poor Semi-improved grassland	1.71	3	2	10.25
EMP8 North	Broad-leaved semi-natural woodland	0.79	6	3	14.14
EMP8 North	Standing water	0.06	6	3	1.07
EMP8 North	Mixed plantation	1.53	2	2	6.10
EMP8 North	Arable	2.38	2	1	4.76
EMP8 North	Broad-leaved semi-natural woodland	0.01	6	3	0.17
EMP8 South	Standing water	0.02	6	3	0.42
EMP8 South	Improved grassland	3.15	2	1	6.30
EMP8 South	Improved grassland	0.39	2	1	0.78
EMP8 South	Improved grassland	1.08	2	1	2.17
EMP8 South	Improved grassland	0.99	2	1	1.98
EMP8 South	Running water	0.12	6	3	2.08
EMP8 South	Improved grassland	3.65	2	1	7.31
				Biodiversity Units	**58.09**

Phase 1 Habitat Connectivity

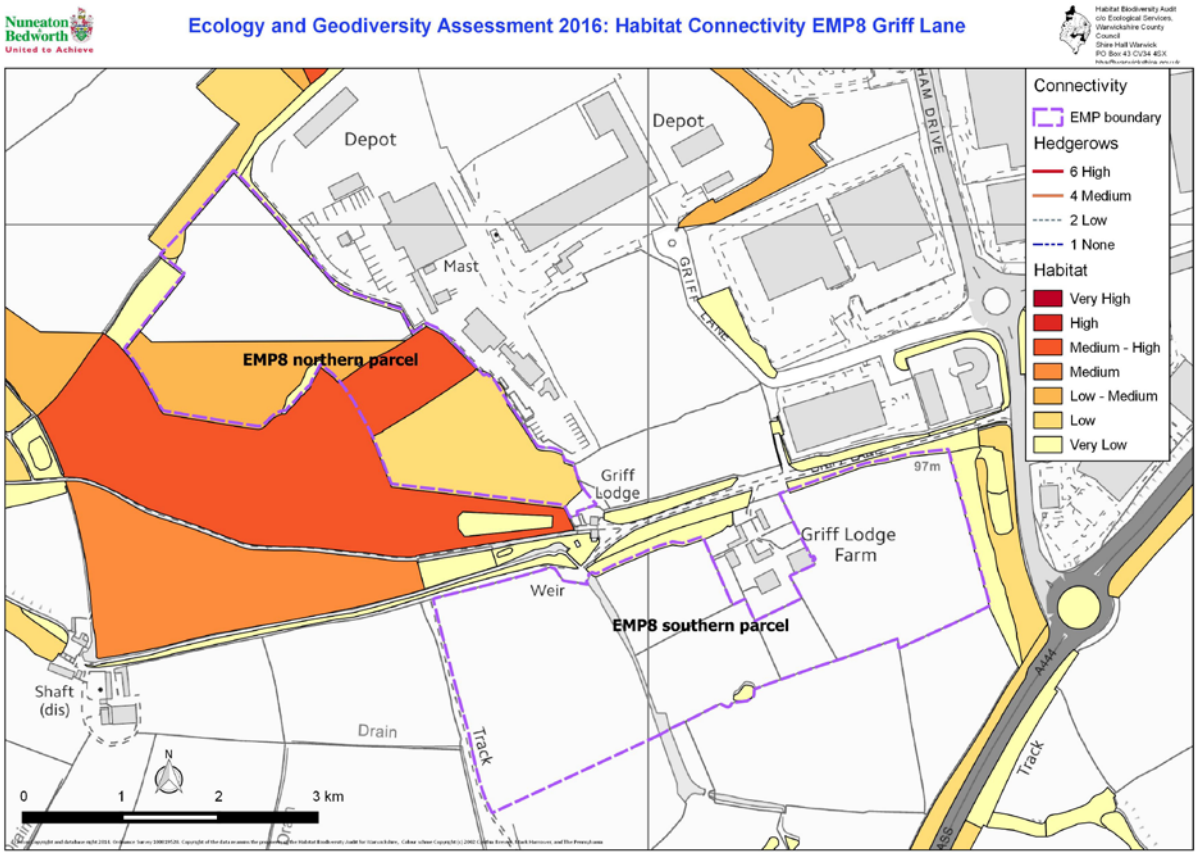


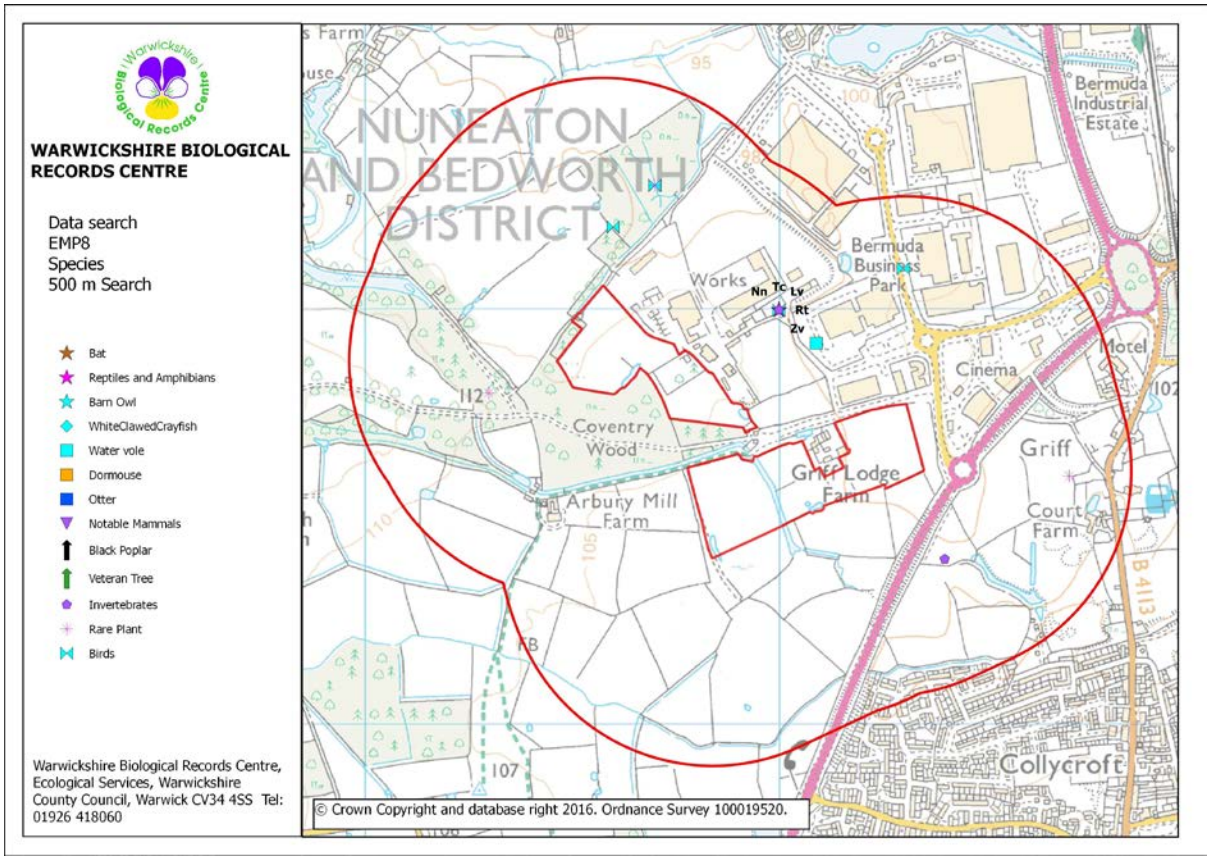
Figure 5 Habitat connectivity

Protected & Important Species

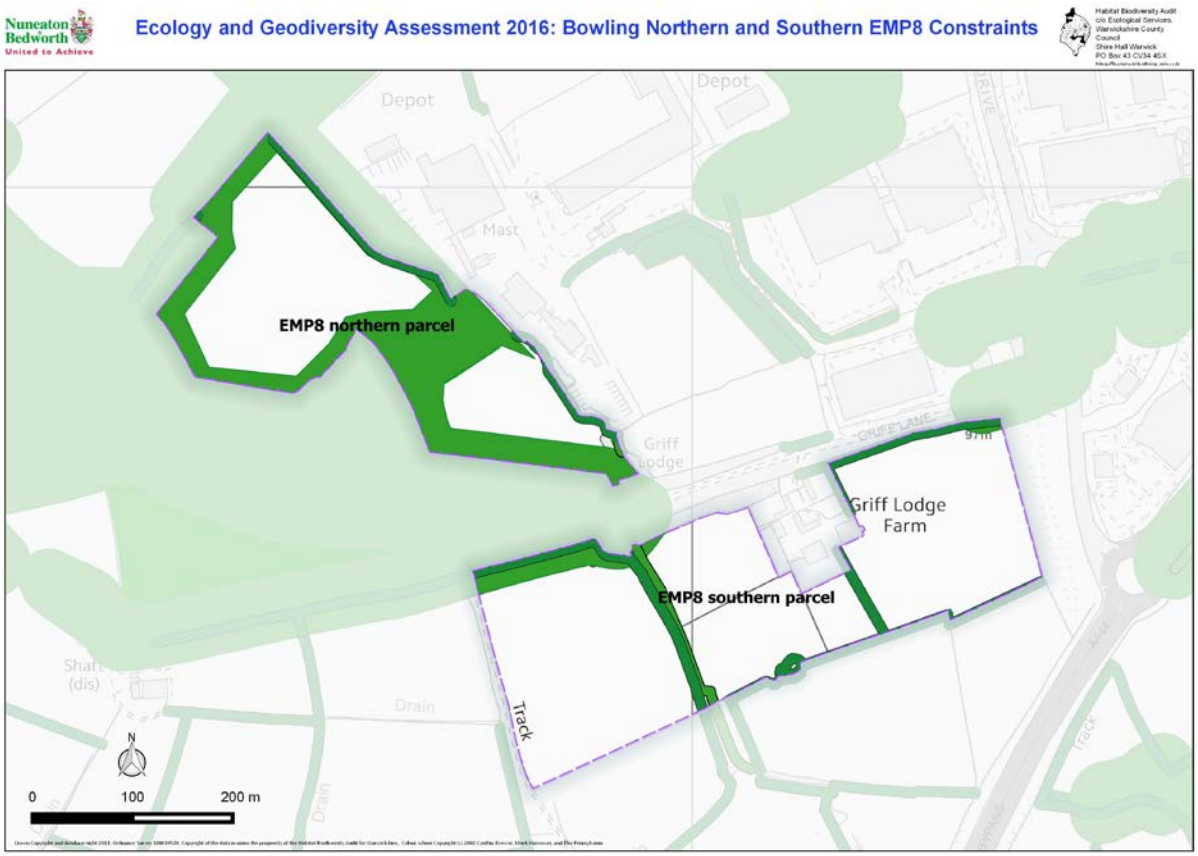
There are no protected and/or important species recorded within the proposed boundary.

There are the following protected and/or important species recorded within 500m of the proposed site boundary:

- Amphibians and Reptiles: grass snake, common lizard and great crested newt
- Mammals: Water vole
- Notable Birds: Lesser Redpoll, skylark, Yellow hammer, Brambling, Linnet, Spotted flycatcher, House sparrow, Tree sparrow, Grey partridge, Willow Tit, Marsh Tit, Turtle Dove, Starling, Redwing, Song Thrush and Fieldfare
- Invertebrates: Anaglyptus mysticus (beetle), Temnocerus tomentosus (beetle), Elodes minuta (beetle), Flax Flea Beetle, Gymnetron villosulum (beetle), Brooklime Gull Weevil (bettle), Wall and Small Heath
- County Rare Plants: Spiny Restharrow and Climbing Corydalis



Constraints Map



The areas marked in green on the above constraints map indicate where development should be avoided and ecological enhancement encouraged.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of intact hedgerows
- Areas of medium to high distinctiveness grassland (values 4, 5 & 6)