# Solihull Metropolitan Borough Council Additional Site Options Ecological Assessment:

# West of Meriden

Habitat Biodiversity Audit Partnership for Warwickshire, Coventry and Solihull

Warwickshire Wildlife Trust

**Ecological Services Warwickshire County Council** 



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### SITE 10: WEST OF MERIDEN

### Area: 4 hectares



**Figure 1 Site Location** 

### **Overview**

West of Meriden is located between the Birmingham Road (B4104) and Maxstoke Lane. The site is a proposed extension to existing housing development to the west of Meriden along Maxstoke Close and Maxstoke Lane to the east. Beyond the Maxstoke Lane lies open countryside. To the south across the Birmingham Road is a former gravel extraction site which is now filled with water, known as Area G of Meriden Quarry Holdings. The gravel quarry is surrounded by broad-leaved plantation woodland.

The site itself contains some existing buildings surrounded by grassland and scrubland. The site also has a large pool on the western edge of the site, and to the north is a small stream. The site is surrounded by hedgerows that have become dense scrub. Housing development has taken place close to the site south of the brook on the northern extent of residential Meriden.

### **Key Features**

• Poor semi-improved grassland

- Scrubland
- Pond
- Hedgerows
- Broad-Leaved Plantation
- Veteran/Notable Trees
- Rejected Local Wildlife Site; Fields (SP28G4)
- Constraints Equate to 21% of the Total Area

### Recommendations

The development parcel contains un-managed grassland and scrub with developing trees which is not of significant ecological quality to warrant a further in-depth LWS survey. Ecological mitigation measures detailed below should be followed but no follow up actions are required as part of the LWS process.

In summary, the curtilage of the development parcel should be retained encompassing standard trees, hedgerows and scrub particularly in the centre and on its boundaries. This will help maintain the development parcels existing green aspect. The pond should also be kept intact. The presence of grassland and scrub still permits the presence of protected reptiles and amphibians and these as such should be surveyed for appropriately.

There are on-site and offsite opportunities to restore a mosaic of scrub and grassland to semi-improved quality, reduce the density of scrub and protect the pond and maintain habitat connectivity along the stream and amongst stretches of hedgerows.

Scrub can be very valuable for a wide range of wildlife, providing a continued source of nectar, fruits, seeds, shelter, breeding and roosting sites. A stand of scrub with varied plant species, age and structure will support a great variety of species. Scrub is the transitory stage between open habitats such as grassland and closed canopy woodland and as such has to be managed to maintain a mosaic within more open habitats.

Scrub is particularly important for invertebrates, amphibians and reptiles, birds and mammals. It is important to maintain a balance between scrub and open habitat with species of particular conservation importance. Work on scrub is preferably best carried out in autumn/winter ideally early February and never between the bird breeding season from March – August. Berry bearing scrub is best delayed until after December has to retain valuable autumn and winter food sources.

The aim would be to establish a scrub of varied age, species and structure maintaining all growth stages, from bare ground through to young and older growth. The scrub should be cut in rotation aiming at retaining these varied ages of scrub by cutting small patches equating to 20% every three years between September and February

To prevent prolific scrub encroachment, accompanying grassland should be cut every 3-5 years. The excessive scrubbing up of the accompanying may will reduce habitat diversity. Cutting rank grasslands can have a great impact on invertebrate and particularly reptile populations. Parts of the site should be left un-cut to accommodate refuges for less mobile species. Sudden management changes should be avoided and may not encourage greater diversity.

Cuttings should be removed to avoid smothering low-growing herbs and fine grasses.

Isolated specimens of scrub should be retained in-situ but maintained by periodic coppicing every 3-5 years.

The brook should be managed and maintained in accordance with the scrub and accompanying hedgerows. It should be cleaned every five years and overhanging branches cut likewise. Cleaning ditches or sections infrequently will keep them moist whilst retaining aquatic plants and decomposing debris. Any marginal habitat should be mown every three years on a rotational basis. Larger trees like willows and sallows should be coppiced on an approximately 3-5 year cycle to maintain young thick growth and the products from coppicing should be stacked as woodpiles.

It is appropriate that any veteran/notable trees amongst shrub be retained and form part of enhanced and extensive green infrastructure planned for the centre of the development parcel.

## Constraints



The areas marked in green and blue on the above constraints map as a component of a very early and preliminary assessment represent existing biodiversity value and should ideally be retained and incorporated into any development proposals. They indicate where development should be avoided, and ecological enhancement encouraged. The maps show's a feasible case scenario with the aim to meet no net loss and the net gain approach. The green and blue areas at the absolute minimum highlight the need for further ecological investigation.

They include:

- 30m buffer around woodland
- 8m buffer either side of adjacent to watercourses
- 8m buffers around ponds
- 5m buffer either side of hedgerows
- Areas of medium to high distinctiveness habitats (Values 4, 5 & 6)
- Local Wildlife Sites
- Veteran/Notable Trees

Ecological constraints composed of scrub, ponds and ditch, broad-leaved plantation and mature trees equate to 21% of the total area of the development parcel.

# **Designated Sites**



**Figure 2 Site Designations** 

A preliminary ecological assessment was undertaken on designated sites within the development parcel with the intention to determine ecological significance and to coincide with methodology as part of the well-established processes of the Local Wildlife Sites project with the Habitat Biodiversity Audit for Warwickshire, Solihull and Coventry.

Local wildlife sites contain features of substantive nature conservation value and the purpose of selection is to provide recognition of those features by affording those sites a degree of protection within potential development plans.

As part of recommendations made in previous reports detailed under the Solihull Metropolitan Borough Council Additional Site Options Ecological Assessment for the West of Meriden development parcel; "A large component of the development encompasses a potential Local Wildlife Site and as a consequence the site should be subject to an LWS standard survey."

To consider the biodiversity value, a follow up preliminary LWS appraisal was carried out to identify any potentially valuable features within the following designated sites including;

#### Potential Local Wildlife Site

#### FIELDS SP28G4<sup>1</sup>

Area; 3.84 ha

Survey Date; 17/08/2017

The potential LWS parcel comprises a mixture of grassland and scrub either side of Maxstoke Lane. The potential LWS compartment east of Maxstoke Lanes comprises of improved grassland heavily grazed by horses. The associated scrub of the cycle path leading north comprises of typical shrubs including bramble (Rubus fruticosus agg.), ivy (Hedera helix), holly (Ilex aquifolium), hazel (Corylus avellana), hawthorn (Crateagus monogyna) and English elm (Ulmus procera). The scrub immediately west is similarly composed and dominates amongst rank poor semi-improved grassland. With the addition of encroaching dense blackthorn which previously marked the field boundary. The dense blackthorn and hawthorn scrub forms immediately behind The Firs Nursing Home and surrounds a pond which was previously noted as holding some ecological value.

The pond is heavily marginalised by bramble, blackthorn, hawthorn, common nettle and hogweed (Heracleum sphondylium) but some open water does exist in its centre. Access to the waterside due to the dense vegetation is very limited.

The southern field parcel comprises of poor semi-improved grassland with the southern boundary marked by palisade fencing and broad-leaved plantation of hawthorn (Crataegus monogyna), ash (Fraxinus excelsior), pedunculate oak (Quercus robur), field maple (Acer campestre), blackthorn (Prunus spinosa), hazel (Corylus avellana), smallleaved lime (Tilia cordata), common nettle (Urtica dioica), guelder rose (Viburnum opulus), dog rose (Rosa canina) and Italian alder (Alnus cordata) with a ground cover of hedgerow crane's-bill (Geranium pyrenaicum) and garlic mustard (Allaria petiolata).

The un-managed grassland comprises of common and coarse grasses of false-oat grass (Arrhenatherum elatius), cock's-foot (Dactylis glomerata), common bent (Agrostis capillaris) and sweet vernal-grass (Anthoxantum odoratum) alongside red fescue (Festuca rubra) with forbs of common sorrel (Rumex acetosa), germander speedwell (Veronica chamaedrys), creeping buttercup (Ranunculus repens), oxford (Senecio squalidus) and common ragwort (S. jacobaea), ribwort plantain (Plantago lancelota), yarrow (Achillea millefolium), common mouse-ear (Cerastium fontanum), common bird's-foot-trefoil (Lotus corniculatus) within the rank grass sward. The line of poplar (Populus spp.) trees marks the north-eastern boundary.

Across the roundabout and the main Maxstoke Lane sits a joint component of the potential LWS. Broad-leaved plantation curtails the roundabout corner where improved grassland is bordered by semi-natural woodland both planted and self-sown with pedunculate oak (Quercus robur) and a line of poplars (Populus spp.). This woodland has been reimbursed by a much younger plantation to the north to form a connective link with that woodland that follows a small brook north of the archery ground.

<sup>&</sup>lt;sup>1</sup> Local Wildlife Sites Project SP28G4 – Fields, 2017, HBA, Warwick

# Habitat Description



**Figure 3 Phase 1 Habitats** 

The site consists of area of poor semi-improved grassland (B6) with a medium habitat distinctiveness and dense scrubland (A21) with a medium distinctiveness. The site contains a large pond (G1) which is a priority habitat with high distinctiveness. Some potentially mature trees (A3) exist within the scrub in the centre of the development parcel.



Figure 4 Habitat Distinctiveness & Target Notes

Distinct habitats of scrub, poor semi-improved grassland, pond and a brook of running water are of particular importance.

### **Target Notes**

Number	Grid Reference	Survey Date
SP28G19	SP2368682553	15/12/1998

Large area of poor semi improved grassland dominated by cock's-foot (Dactylis glomerata) with frequent to abundant false oat-grass (Arrhenatherum elatius), common bent (Agrostis capillaris), ribwort plantain (Plantago lancelota), common ragwort (Senecio jacobaea), common nettle (Urica dioica) and hogweed (Heracleum sphondylium).

### UPDATE 17/08/2017 GP

Patches of rank poor semi-improved within encroaching scrub adjacent to broad-leaved plantation.

#### SP28G20 SP 2370982427

Two horse-grazed semi-improved grasslands which were difficult to assess due to grazing intensity but contains common bent (Agrostis capillaris) with Yorkshire-fog (Holcus lanatus), red clover (Trifolium pratense), common sorrel (Rumex acetosa), creeping (Ranunculus repens) and meadow buttercup (R. acris), yarrow (Achillea millefolium) and autumn hawkbit (Leontodon autumnalis).

The grassland is accompanied by a sizeable pond that contains branched bur-reed (Sparganium erectum), soft rush (Juncus effusus), Yellow water-lily (Nuphar lutea), duckweed (Lemna spp.) and water forget-me-not (Myosotis scorpioides). Good potential for amphibians.

#### **UPDATE 26/06/2013**

Mosaic of scattered scrub developed from poor-semi-improved grassland surrounded by dense scrub off Birmingham Road. Pond was un-accessible due to dense scrub and restricted access.

#### UPDATE 17/08/2017 GP

Continued mosaic of dense scrub and poor semi-improved grassland, which is not of sufficient quality to warrant potential LWS designation.



Figure 5 Section 41 Habitats and Species of Conservation Importance

# Habitat Connectivity



Figure 6 Habitat Connectivity

The open scrub and grassland habitats within and immediately adjacent to the development parcel occupy low to very low habitat connectivity principally due to habitat fragmentation and isolation caused by the intersecting road network with Meriden acting as a residential barrier to the east.

# **Protected Species**



**Figure 7 Protected Species** 

Records for common frog (Rana temporaria) and common toad (Bufo bufo) occurred in 1996 within broad-leaved plantation woodland immediately adjacent to Area G with Meriden Quarry Holdings 225m away from the development parcel.

Likewise, recent records exist from 2011 to 2014 for common frog, common toad and smooth newt (Lissotriton vulgaris) on Leys Lanes lying along the western border of the village of Meriden.

In regard to bat activity, foraging and roosting records do occur within and adjacent to residential properties of Meriden ranging from the years of 1992, 2000, 2010 and 2014 respectively.