Ecological Impact Assessment

of

Coventry Stadium
Binley Woods
Warwickshire

for

Brandon Estates Limited

(5th July 2021)

2020-01(08)

(Revision A)

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PROTECTED SPECIES

This report contains sensitive information relating to protected species. The information contained herein should not be disseminated without the prior advice of Ecolocation.

Survey date: 10th June 2020

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This report has been prepared in accordance with the CIEEM Guidelines for Ecological Report Writing Second Edition (2017) and is compliant with the CIEEM Code of Professional Conduct.

Summary

- An updated ecological impact assessment was carried out at Coventry Stadium, Binley Woods, Warwickshire by a suitably qualified ecologist on 10th June 2020. The survey was undertaken in order to inform a future planning application for a residential development following the proposed demolition of all buildings within the Site boundary.

- The majority of the Site was ecologically low value hardstanding in use as car parking, dog and speedway racing tracks. This habitat does not typically offer suitable habitat to species, and often acts as a dispersal barrier. The high disturbance levels of the Site would also result in species being deterred from entering the Site.

- A number of buildings were present on Site; these were surveyed for bats by Ecolocation the results of which are available in an accompanying Bat Assessment Report.

- The most ecologically valuable area of the Site was a mosaic of habitats on the north-western boundary including semi-natural, broad-leaved woodland, an earth bank with scrub and tall ruderal vegetation, amenity grassland with spoil heaps and scattered trees. This area offered connectivity through the landscape as well as potential foraging and sheltering habitat for reptiles, bats, hedgehog, nesting birds and common amphibians. There was also an area suitable for reptile hibernation in the centre of the Site, however, reptiles would have to disperse over a wide area of hardstanding to reach these areas and its location adjacent to the speedway track would likely deter hibernation. In addition to this mosaic of habitats, the tree lines on the boundaries of the Site and the scattered trees also offered shelter, nesting and foraging opportunities for the aforementioned species.

- There were two ponds (ponds 1 & 2) within the Site, one within the semi-natural, broad-leaved woodland area to the north which was dry and the other (pond 2) on the eastern boundary which held a little water at the time of survey. Pond 2 was subject to a Habitat Suitability Index (HSI) for great crested newts and the results were below average indicating it was unlikely to offer suitable conditions for great crested newts.

- An additional two ponds outside of the Site boundary were subject to an HSI; these scored BELOW AVERAGE indicating they were unlikely to offer opportunities to great crested newts.

- A further reptile survey of the area of amenity grassland with spoil has been undertaken (refer to Ecolocation Reptile Assessment Report). It is also recommended that the western mosaic of habitats, tree lines and scattered trees are retained, where possible, for the connectivity it provides through the countryside as well as a buffer to the adjacent ancient woodland. The results of the reptile survey will inform the layout of the Site and further potential recommendations.

- The semi-natural, broadleaved woodland should be retained and protected due to its proximity and connection to New Close and Birchley Wood, which have been designated Local Wildlife Sites for their ancient woodland habitats. Its retention will act as a buffer to the local wildlife site and provide some screening from light noise and air borne pollution.

- Native tree and hedgerow planting around the site's perimeter is proposed to increase the connectivity of the site to its surrounds as well as provide nesting and foraging and commuting habitat for birds, bats and small mammals.

- Wildflower meadows and native planting of the two attenuation ponds, the green roof and the rain garden is proposed to increase the habitat diversity on the site and to attract local wildlife, in particular invertebrates.
- Further provision for insects and small mammals is proposed.
- A range of bat, and bird boxes is proposed for both the new homes and on trees to be retained.
- A range of insect and mini beast houses and log piles are proposed to further boost invertebrate biodiversity on the site.

Contents

1 Introduction

1.1 Instruction

Ecolocation were commissioned by Brandon Estates Limited to undertake an updated ecological impact assessment of an area of land adjacent to Coventry Stadium, Binley Woods, Warwickshire (hereafter referred to as the 'Site'), which was understood would be subject to a future planning application.

The Site was originally surveyed in 2018 by Ecolocation and, as this survey was more than two years old at the time of writing, an updated survey and assessment was necessary.

1.1.1 Site location

The Site (grid reference SP 40713 77299) was located some 4.5km to the east of the City of Coventry in the West Midlands. It was set in an agricultural landscape with urban and residential areas in close proximity to the Site.

Figure 1: Survey boundary

1.1.2 Proposed Plans

Drawing number 27510-001, Illustrative Landscape Masterplan, Rev I, 01 07 2021. See proposed plans in Appendix 1.

1.2 Survey Purpose

The purpose of the survey was to:

- Identify and provide a description of the habitats present on the Site;
- Identify the potential for the presence of protected species on the Site;
- Determine the need for further ecological surveys;
- Assess the ecological impact of the proposed works and
- Identify any ecological constraints or opportunities on the Site.

1.3 Legislation & Planning Policies

A number of UK and European policies and legislation deal with the conservation of biodiversity. This section briefly outlines the legal and policy protection afforded to species and habitats scoped into this survey and described within the report.

1.3.1 Protected habitats & species.

The Wildlife and Countryside Act 1981 (as amended by the Countryside Rights of Way Act 2000) Section 9 protects otter (*Lutra lutra*), great crested newt (*Triturus cristatus*) and all UK species of bat and their resting places from disturbance, damage and destruction, killing and injury. The Conservation of Habitats and Species Regulations 2010 additionally lists otter, hazel dormouse, great crested newt, white clawed crayfish and all UK species of bat as European Protected Species, and additionally prohibits killing or injury of individuals, as well as protecting their resting places from disturbance and destruction.

Common reptiles (grass snake (*Natrix natrix*), adder (*Vipera berus*), common lizard (*Zootoca vivipara*) and slow worm (*Anguis fragilis*) are listed under Schedule 5 of the Wildlife and Countryside Act (as amended) and are protected from killing and injury.

The Wildlife and Countryside Act 1981 (as amended) provides protection to all species of wild bird and their nests. Under Section 1 it is an offence to intentionally or recklessly take, damage, destroy, or otherwise interfere with nests or eggs, or to obstruct or prevent any wild bird from using its nest.

Under the Protection of Badgers Act 1992 it is an offence to disturb, kill, injure or take a badger (*Meles meles*) or to disturb, damage, obstruct access to, allow a dog to access or destroy a sett.

1.3.2 Priority habitats & species

The NERC Act 2006 places a duty on public authorities to conserve biodiversity. Additionally, this Act states that a list of priority species and actions must be drawn up and published, to contain species and habitats of principal importance for the purpose of conserving biodiversity. These lists of Priority Species and Priority Habitats, which encompass the previous UK Biodiversity Action Plan (BAP) habitats and species, are those identified as being the most threatened and requiring conservation action. Priority habitats and species were chosen based on international importance, rapid decline and high risk. The list contains over 1000 habitats and species in total.

1.3.3 Invasive species

Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) contains introduced species which have been identified as having a severe economic and ecological impact through their introduction. It is an offence to release or allow to escape into the wild any species which is listed under Part I or Part II of Schedule 9, or any species which is not native.

1.3.4 Planning policies

The ODPM Circular 06/05 makes the presence of a protected species a material consideration within the planning process. It states that it is essential for the presence of protected species and the extent they may be affected by proposed development be established through appropriate surveys before the planning permission is granted and encourages the use of planning conditions to secure the long-term protection of the species.

The National Planning Policy Framework (NPPF) section 15 outlines how applications need to conserve and enhance the natural environment. Paragraphs 174 to 177 state that sites with biodiversity value should be protected and enhanced, minimising impacts on biodiversity and establishing ecological connectivity. Furthermore, the

protection of priority sites and species through developments is outlined and states where significant harm is unavoidable through alternatives or mitigation, planning permission should be refused. Finally, this section concludes that developments with aims to conserve or enhance biodiversity should be supported and any improvement around developments should be encouraged to achieve net gains for biodiversity.

In Policy NE1 in the Rugby Borough Council Local plan (adopted 2019) it is stated *(inter alia*), "*Development will be expected to deliver a net gain in biodiversity and be in accordance with the mitigation hierarchy below. Planning permission will be refused if significant harm resulting from development affecting biodiversity cannot be:*

- *Avoided, and where this is not possible;*
- *Mitigated, and if it cannot be fully mitigated, as a last resort;*
- *Compensated for.*

All development proposals in the proximity of ancient woodland shall have buffers having regard to Natural England's standing advice."

2 Methodology

2.1 Desk Study

Prior to the site visit a desk-top data gathering exercise was undertaken. The MAGIC website was accessed to search for statutory designated sites within a 1km radius of the Site. The Warwickshire Biological Record Centre was contacted for information on non-statutory designated sites and protected and notable species records within a 1km radius of the Site.

2.2 Extended Phase 1 Habitat Survey

The Site was visited by suitably qualified ecologist Jeff Grant (Senior Ecologist, MCIEEM) on Wednesday 10th June 2020. The survey took approximately 4 hours and weather conditions at the time of survey were recorded.

2.2.1 Phase 1 Habitats

The walkover survey of the Site was carried out based primarily on the standard methodology for Phase 1 Habitat Assessment (JNCC, 1993). The survey covered all accessible areas of the Site including the boundaries. Habitats were identified, described and mapped and a list of plant species was made, with relative abundances recorded using the DAFOR scale (see Appendix 2). Incidental sightings of fauna were recorded and included within the species list for the Site (Appendix 2).

2.2.2 Protected & Priority Species

The survey additionally included an assessment of the potential for protected and priority species to be present on the Site:

Badger – the Site was searched for areas that might be used for foraging and sett building. Incidental foraging signs, tree scratching, paths, latrines and setts were recorded if found (Harris *et al.*, 1989). The Site itself and land immediately adjacent to the Site and visible from the Site boundaries were included within the survey.

Bats – the Site was subject to a separate survey (Preliminary Roost Assessment) to determine its suitability to support roosting bats and therefore this aspect was scoped out of this report. This report should be read in conjunction with the dedicated bat report produced by Ecolocation in 2020.

Notable mammals – the Site was searched for evidence and suitable habitat for BAP/Priority Species mammals (Cresswell *et al.*, 2012).

Nesting birds – the Site was searched for areas of habitat/structures that could be used for constructing a nest or for foraging and any evidence of current or historic nesting.

Amphibians – water bodies within the Site and a 250m radius of the Site were scored for their suitability for use by breeding great crested newts using the Habitat Suitability Index (ARG UK, 2010). Terrestrial habitat on the Site was assessed for suitability to support amphibians.

Reptiles – the Site was searched for areas that could be used for insolation, shelter, foraging and breeding (Froglife, 1999).

Invertebrates **–** the Site was searched for areas of habitat that may be used for shelter, and include food plants and species suitable for egg-laying.

Invasive species – the Site was searched for evidence of species listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended).

All other protected and notable species were scoped out of the survey work due to an absence of records and lack of suitable habitat within the surrounding area.

2.3 Ecological Impact Assessment

The results of the desk study and field surveys were then used in an assessment of the ecological impacts of the proposed development works, following the Guidelines for Ecological Impact Assessment in the UK and Ireland (2018).

2.4 Limitations

There were no significant limitations at the time of the survey.

3 Results

3.1 Desk Study

3.1.1 Designated Sites

The Site had no statutory or non-statutory designation for nature conservation within or directly adjacent to its boundary.

The Site lay within the impact risk zones of two Sites of Species Scientific Interest (SSSI), namely Brandon Marsh SSSI and Ryton and Brandon Gravel Pits SSSI, some 2.4 km to the south-west. Brandon Marsh is a complex of flooded gravel pits, fen and scrub which is adjacent to the River Avon. It would therefore be particularly sensitive to impact that could adversely affect ground and surface waters. The Site is not within the flood plain of the River Avon (1.1km to the south). Owing to the significant distance from the SSSI with no surface water linkages or habitat linkages it is considered highly unlikely that the proposed development would have an adverse impact on the SSSI Brandon Gravel pits was designated for its geology and was therefore unlikely to be impacted by the proposed development.

Five non-statutory designations (local wildlife sites LWS) were identified within or partially within a 1km radius of the Site boundary, these are set out in Table 1 below. Birchley and New Close Wood is adjacent to the northern Site boundary.

Name of wildlife site	Distance from Site	Description of LWS
Birchley and New Close Wood LWS	Adjacent to northern Site boundary.	Ancient Woodland with oak, birch and hazel coppice. White admiral butterfly record.
Old Pools Wood LWS (Designated as part of New Close and Birchley Wood LWS)	950m north	Open mixed woodland connected to Birchley and New Close Wood, with grassy rides and an avenue of old limes.
Brandon Little Wood LWS	270m west	Semi-natural woodland with open canopy and diverse understory.
Brandon Hall Hotel grounds and sandpit Eco site 20/47	300m south	Parkland walled garden and disused sandpit. Good range of orchid species
Brandon Wood LWS	550m west	Semi-natural ancient woodland with adjacent semi-improved grassland. Dormouse site. Butterflies include white admiral, purple hairstreak and white letter hairstreak.

Table1: Non-statutory wildlife sites.

3.1.2 Habitat Connectivity

The habitat connectivity of the Site was considered to be good, as summarised in Figure 2 (below).

Hedgerows connected the Site to the wider agricultural land to the east whilst deciduous woodland pockets of varying sizes and structures were located within 1km of the Site**.** Immediately adjacent the Site to the west was the A428 trunk road, which may have created a barrier to the free movement of species from this direction. Adjacent the Site to the north, beyond Gossett Lane, stretched New Close and Birchley Wood; both designated Local Wildlife Sites for their ancient woodland habitat. The habitats created by such woodlands may have provided good shelter and forage habitat for a number of species particularly bats birds and butterfies and moths. The increased human influences, such as noise and light pollution, created

by the Site's current use and its close proximity to residential properties and the A428 to the west may have deterred a number of species.

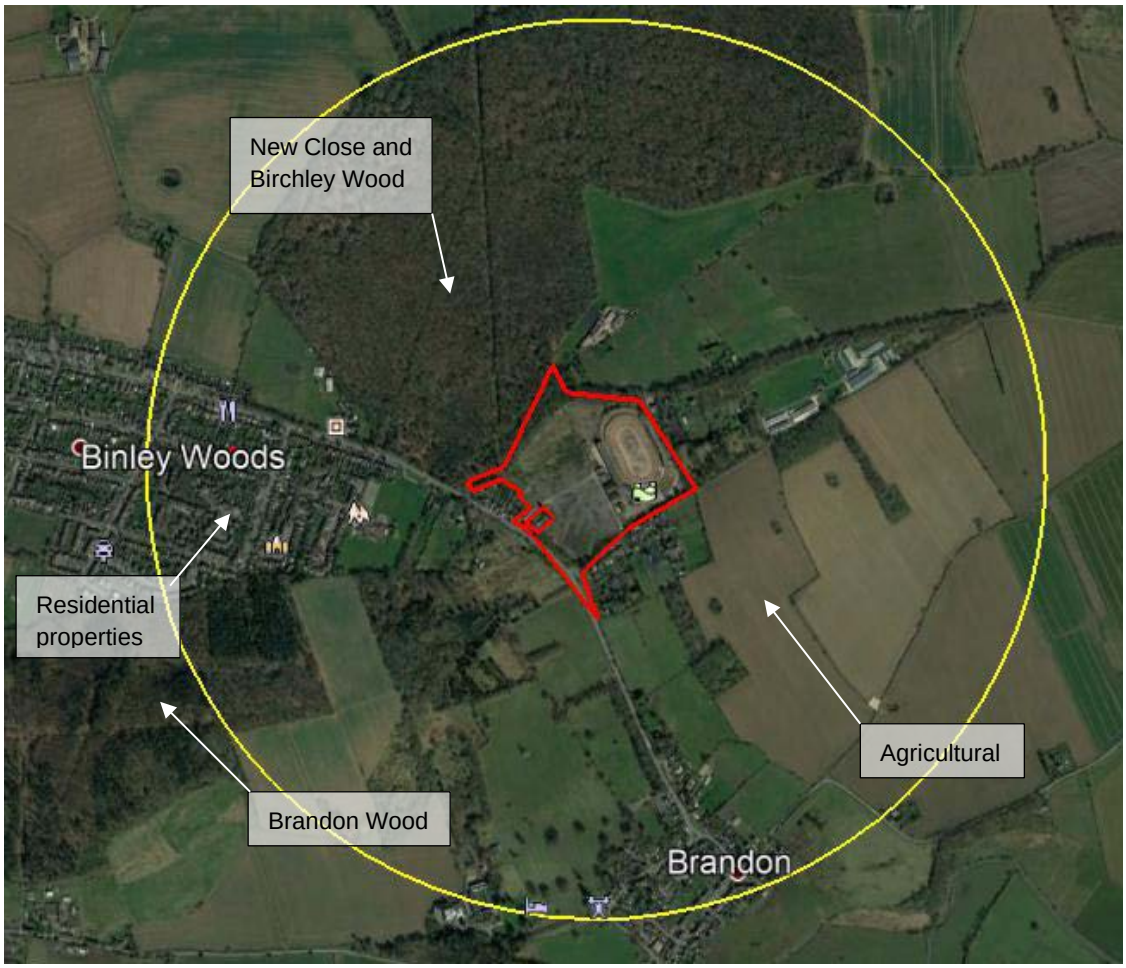


Figure 2: Habitat connectivity features within a 1km radius of the Site

3.2 Protected Species Records

3.2.1 Badger

****** All badger information should be kept confidential and remain out of the public domain******

There were six records for badger setts within the 1km search radius. Three to the west of the A 428 and three to the east. Four road casualties on the A 428 confirmed that badgers were moving from west to east and in the reverse direction. The closest sett to the site was to the north in New Close Wood.

3.2.2 Bats

There was a total of 48 bat records within a 1km radius of the Site. The species recorded were: Brown long-eared bat *(Plecotus auratus)*, Soprano pipistrelle *(Pipistrellus pygmaueus*), common pipistrelle *(Pipistrellus pipistrellus)*, Daubenton's bat *(Myotis daubentonii*) and noctule (*Nyctalus noctula*), as well as records of bats that could not be identified to species. The earliest record is 1997 and the most recent is 2017. There is one record for brown long-

eared bat and 2 indeterminate bat species records for the site recorded in 2016 and a brown long-eared record for the site from 2014.

3.2.3 Notable mammals

There is a record for harvest mouse (*Micromys minutus*) to 640m to the west of the Site and a record for brown hare *(Lepus europaeus*) 750m to the south of the site seen running along field tracks. There are 12 records for hedgehog (*Erinaceus europaeus*), mainly road casualties all of which are between 820m and 950m to the south of the site.

3.2.4 Birds

Notable bird species recorded were swallow (*Hirundo rustica),* house martin (*Delichon urbicum),* house sparrow, (*Passer domesticus),* dunnock *(Prunella modularis*) marsh tit *(Poecile palustris)* Lesser spotted woodpecker (*Dendrocopos minor)* and kestrel (*Falco tinnunculus).* House martin, marsh tit and lesser spotted woodpecker are all red list species.

3.2.5 Amphibians

There were 5 records for common frog *(Rana temoria*), 5 records for common *toad (Bufo bufo),* 3 records for smooth newt *(Lissotriton vulgaris)* and 2 records for great crested newt *(Triturus cristatus)* within a 1km radius of the Site. The two records for great crested newt were in Brandon Little Wood and Brandon Wood respectively, and indeed the majority of the amphibian records came from the western side of the A428.

3.2.6 Reptiles

There was 1 record of slow worm (*Anguis fragilis)* recorded in 1981 within Brandon Wood 860m to the west of the Site, and three records for grass snake *(Natrix natrix)*. One of these records was recorded on the site in 2014.

3.2.7 Invertebrates

There were 144 records of notable invertebrates, with many of the records coming from New Close Wood, of which 54 records were for species of butterfly, 83 for species of moth and 7 for species of beetle. Five species of butterfly were recorded, White admiral (*Limentis Camilla)* which has a GB threat status of vulnerable, White letter hairstreak (*Satyrium w-album)* which is classified as endangered, purple emperor (*Apatura iris*) classified as nationally threatened, small heath (*Coenonymphic pamphilus*) which is classified as vulnerable and Wall (*Lasiommata megera)* which has a GB threat status of near threatened. Three species of beetle are classified as nationally scarce in the Great Britain. The 83 moth records include 20 different species.

3.2.8 Higher Plants

There were 13 records of higher plants comprising 7 different species; Marsh Ragwort (*Senico aquaticus)*, Common Cudweed *(Filago vulgaris)*, Devil's bit scabious (*Succisa pratensis)*, wood sorrel (*Oxalis acetosella)*, corn chamomile (*Anthemis arvensis*), Weasel's snout (*Misopates orontium)* and Greater duckweed (*Spirodela polyrhiza*). Corn chamomile, and Weasel's snout are both rare species in the vice county, and Greater Duckweed is recorded as being scarce.

3.2.9 Invasive Species

Seven invasive species records were returned, covering four species; Yellow archangel *(Lamium galeobdolon subsp. Argentatum)*, Wall cotoneaster *(Cotoneaster horizontalis)*, Montbretia *(Crocosmia pottsii x aurea*) and Rhododendron (*Rhododendron ponticum)*. All these records were 580m or more distant from the Site.

3.3 Extended Phase 1 Habitat Survey

3.3.1 Weather

The weather conditions during the Site visit on 10th June 2020 were as shown in Table 2.

Table 2: Weather conditions during site visit

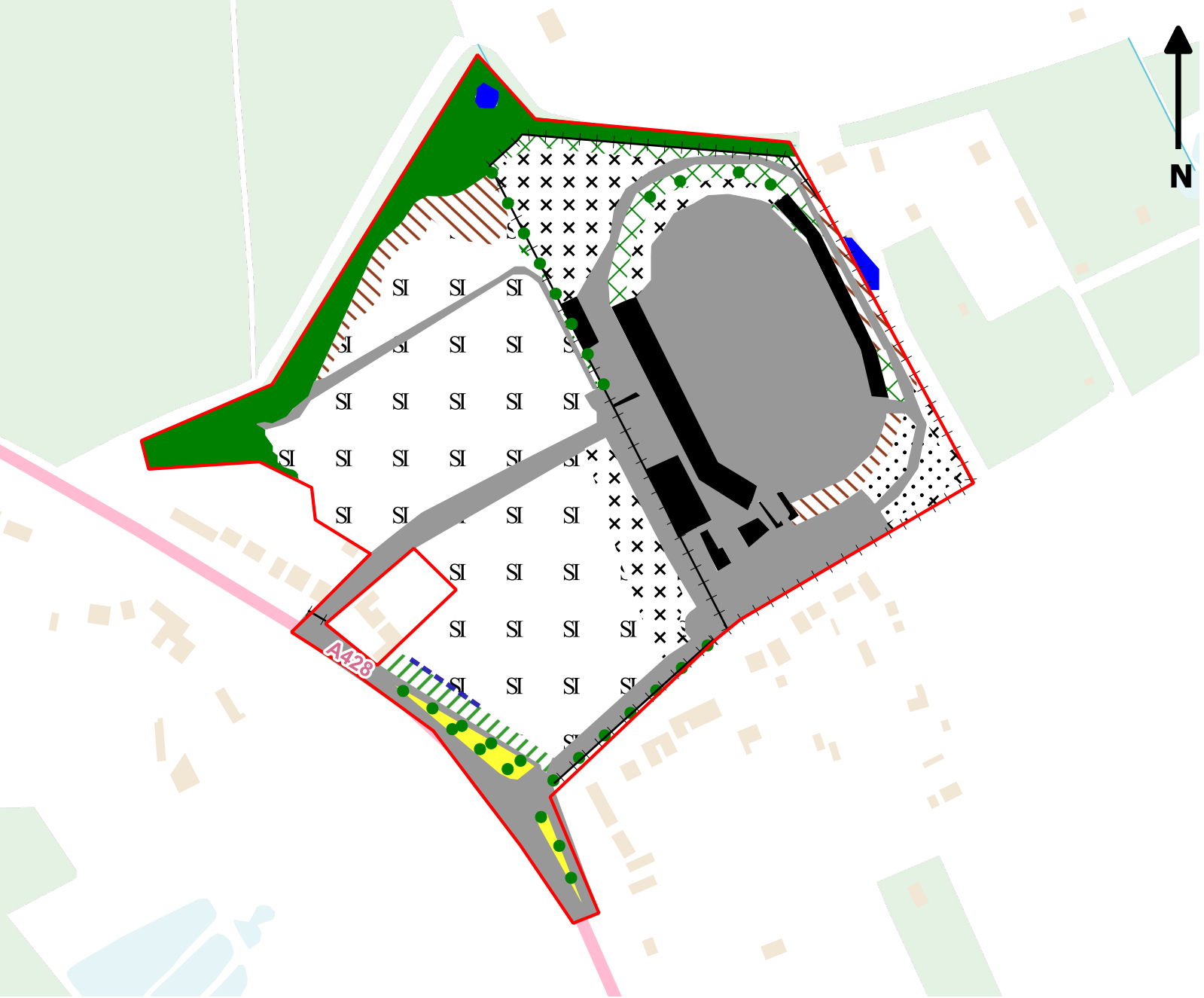
Parameter	Recorded Figure
Temperature	18ºC
Cloud cover	90%
Precipitation	Occasional showers
Wind speed (Beaufort scale)	1 – light air

3.4 Habitats

The Site comprised the now defunct Coventry Stadium, encompassing the stands, a number of outbuildings and the surrounding grounds which comprised a mixture of hardstanding, ephemeral vegetation, grassland and scrub. In the time since its closure the Site has been disused, with the vegetation developing across the Site to display a successional nature from the hardstanding around the stadium to the woodland bordering the Site.

The buildings of the Site were assessed for their potential for bats in the accompanying bat report for the Site (Ecolocation, 2020).

Please see the Phase 1 Habitat Map overleaf:



Phase 1 Habitat Map
Survey Date: 10th June 2020

Coventry Stadium

2020-01(08)

Key

- Site boundary
- Fence
- Wall
- Dry ditch
- Linear trees
- Linear scrub
- Broad-leaved semi-natural woodland
- Dense/continuous scrub
- Species-poor semi-improved grassland
- Tall ruderal vegetation
- Standing water
- Amenity grassland
- Ephemeral/short perennial vegetation
- Buildings
- Bare ground
- Hardstanding

25 0 25 50 75 100 m

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3.4.1 Species-poor semi-improved grassland

The majority of the west of the Site comprised grassland. The sward height was variable, generally longer to the west and to the north and also along diagonal lines across the Site associated with former drainage gullies. The height of the grassland was up to approximately 40cm in height and was largely unmanaged except for a few mown pathways at the western edge where the Site abutted residential properties. The grassland had a high level of invertebrate activity, with a large grasshopper population of the same species noted during the survey.

Species present within the grass included rough meadowgrass (*Poa trivialis*), Yorkshire fog (*Holcus lanatus*), cock's-foot grass (*Dactylis glomerata*), red clover (*Trifolium pratense*), creeping buttercup (*Ranunculus repens*), creeping thistle (*Cirsium arvense*), dandelion (*Taraxacum officinale*) and daisy (*Bellis perrenis*), broad leaved dock (*Rumex obtusifolius*), bird's-foot trefoil (*Lotus corniculatus*), creeping cinquefoil (*Potentilla reptans*), bristly ox-tongue (*Helminthotheca echioides*), poppy (*Papaver* sp.), tufted hair grass (*Deschampsia cespitosa*), curled dock (*Rumex crispus*), rose (*Rosa* sp.), colt's foot (*Tussilago farfara*), ground ivy (*Glechoma hederacea*), occasional foxglove (*Digitalis* sp.) and purple loosestrife (*Lythrum salicaria*) with areas in the south west dominated by soft rush (*Juncus effuses*), silverweed (*Potentilla anserina*), sedge (*Carex* sp.), bramble (*Rubus fruticosus*), common nettle (*Urtica dioica*) and tall ruderal species encroaching at the margins. This habitat would be considered to have low-medium ecological value in the context of the site.

Photo 1: Northwest corner of the grassland with mown paths

Photo 2: Grassland to the west of the stadium complex

3.4.2 Buildings

A total of eight buildings were present at the Site, all of which had been subject to vandalism since the Site was disused. The majority of the windows and doors were broken or boarded over, with ready access to the interiors of the structures available. Internally, there was a variety of damage to the walls and ceilings, with feral pigeon (*Columba domesticus*) noted throughout the main stands with nesting in a number of areas of the roof structure of the main stands.

The eight buildings are shown on Figure 4 and comprised the following:

- 1a and 1b – two large metal framed storage buildings
- 2b – A single storey building with a clay tiled hipped roof. (Part of this building, 2a, had been demolished).
- 3 – A single storey building with a shallow pitched roof
- 4 and 5 – The main stadium stands, 4 comprising a larger stand up to three storeys in height, with building 5 a smaller single storey stand.
- 6 – An area of temporary buildings and structures formerly the pits area of the racetrack
- 7 – A two storey former office building with flat roofs

- 8 - A series of interconnected sections of variable height, with pitched roof elevations with diamond pattern roof tiles.

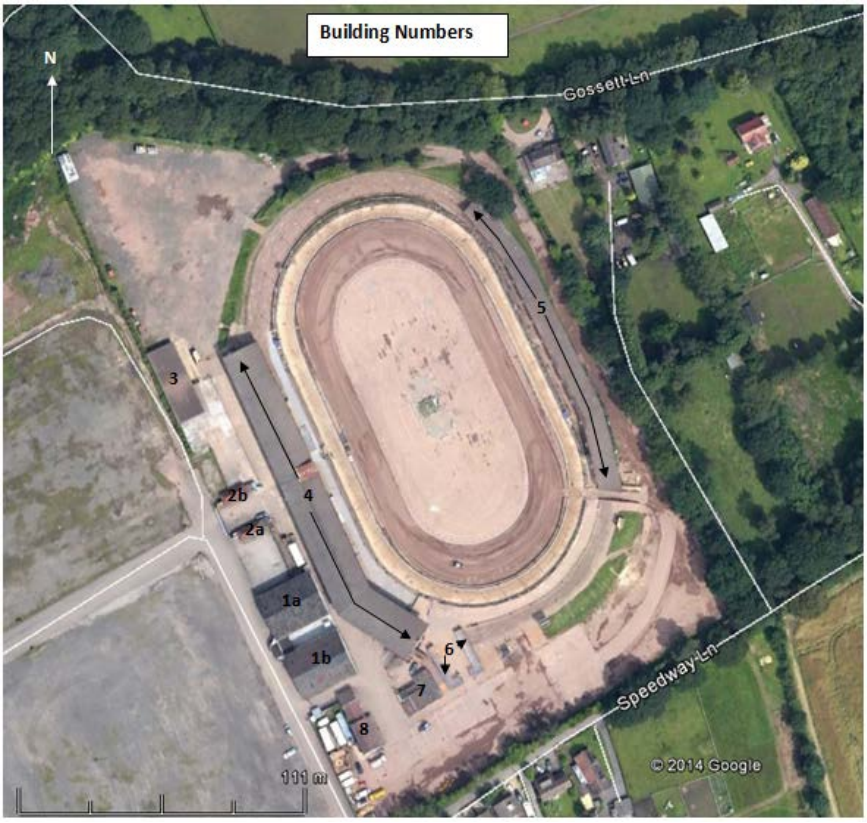

Figure 4: Buildings on site (note building 2A had been demolished at time of survey)

These buildings were assessed for their potential with respect to bats in the accompanying Ecolocation Preliminary Roost Assessment report.

3.4.3 Hardstanding

The Site comprised large areas of asphalt hardstanding which largely formed the access routes and walkways around the stadium buildings. In areas, such as the central area of the stadium, the ground comprised a mix of asphalt (at the centre of the racetrack) and packed earth (forming the track). Hard standing is of negligible ecological value.

Photo 3: Hardstanding typical of the Site.

Photo 4: Central area of the stadium.

3.4.4 Ephemeral / short perennial vegetation

Large areas of the Site comprised packed gravel which had been colonised by ephemeral vegetation in its period of disuse. This vegetation varied in height up to approximately 30cm, with a successional appearance from a short sward height close to the access route grading to taller vegetation as it developed into the grassland and scrub habitats that characterised the outer areas of the Site. A number of shallow drainage channels were present in these areas, with occasional piles of debris (including tyres, soil piles and timber) noted throughout.

Species present included perennial rye-grass (*Lolium perenne*), cock's-foot grass (*Dactylis glomerata*), toadflax (*Linaria vulgaris*), smooth hawk's-beard (*Creppis capillaris*), ribwort plantain (*Plantago lanceolata*), curled dock (*Rumex crispus*), bramble (*Rubus fruticosus* agg.), cleavers (*Galium aparine*), creeping thistle (*Cirsium arvense*) and dandelion (*Taraxacum officinale*), with some silver birch (*Betula pendula*) saplings noted.

This habitat, which is not species rich, is considered to be of low ecological value.

Photo 5: Ephemeral Vegetation colonising packed gravel.

Photo 6: Ephemeral scrub colonising the north of the Site.

3.4.5 Tall Ruderal

Areas of tall ruderal habitat were present on the embankments of the stadium track bends and at the margin of the woodland on the northern boundary. This habitat was up to approximately 60cm in height and interspersed with various log and debris piles. The species mix was dominated by common nettle, bramble, dock species, creeping thistle and species found in the grassland; with areas of dominant yellow corydalis (*Pseudofumaria lutea*).

Areas of common nettle, hogweed (*Heracleum spondhylium*) and cow parsley (*Anthriscus sylvestris*) were present adjacent to building 4 and along the eastern boundary. The southern track embankment had tall ruderal habitat of a similar species mix with various grasses and some buddleja (*Buddleja davidii*) also noted.

Small tortoiseshell *(Aglais urticae),* red admiral (*Vanessa atalanta*), peacock*(Aglais io*) and to a lesser extent comma (*Polygonia c-album*) and painted lady *(Vanessa cardui),* a migratory species, will lay their eggs on common nettle, and it is also the food plant for their caterpillars. Buddleja is also attractive to butterflies and moths as it produces a nectar which has a higher content of sucrose, glucose, and fructose than many other flowering shrubs.

This habitat is assessed as being of low ecological value.

Photo 7: Tall ruderal habitat on woodland edge

Photo 8: Rubble pile in ruderal habitat

3.4.6 Dense scrub

Dense bramble scrub with common nettle and tall ruderal species encroached onto the Site from the wooded boundaries of the Site; and was present on the northern track embankment and around the stands.

This habitat is of value for warbler sp., thrush sp., dunnock (*Prunella modularis*), wren (*Troglodytes troglodytes*) and finch sp., and offers shelter for small mammals, particularly whereas in this case it is adjacent to woodland boundaries.

It is considered of low-medium ecological value.

Photo 9: Dense scrub typical of the Site embankments

3.4.7 Bare Ground

Areas of bare ground were present in the eastern corner of the Site, comprising packed earth which had not yet been colonised by ephemeral species. Flat, packed earth areas do not offer opportunities for insects and reptiles to the same degree as ground that was less compacted and had south facing slopes.

It is considered of low ecological value.

3.4.8 Amenity grassland

The road verge at the southern end of the Site comprised closely mown grassland.

It is considered of low ecological value.

3.4.9 Standing water

Two ponds were present in the woodland at the northern end of the site, and two other ponds were identified just outside the site boundary. Pond 1 within the woodland and was dry at the time of the survey. The area comprised a depression filled with leaf litter within the wooded surroundings. The water in Pond 2 was turbid and there did

not appear to be any invertebrate life within it. Emergent vegetation was limited, though there were a number of willow trees growing from the banks of the pond. It was assessed as having a low suitability for great crested newts.

Ponds are of importance for wildlife, including those that are ephemeral and can be considered to be of medium-high ecological value. However, the HSI assessment confirmed that both of these two ponds were unmanaged and in extremely poor condition and were of minimal ecological value.

Photo 10: Pond 1 (dry at the time of the survey).

Photo 11: Pond 2.

3.4.10 Semi-natural broadleaved woodland

An area of semi-natural, broad-leaved woodland comprising oak (*Quercus robur*), ash (*Fraxinus excelsior*) and willow (*Salix* sp.) with an understorey of scrub including hazel (*Corylus avellana*) and elder (*Sambucus nigra*), holly (*Ilex aquifolium*) and a ground flora dominated by ivy (*Hedera helix*), bramble and bracken (*Pteridium aquilinum)* was present in the northwest of the Site.

This habitat is assessed as being of high ecological value and is an important buffer to the woodland in the adjacent local wildlife site, Birchley and New Close Woodland

Photo 12: Typical woodland of the Site

3.4.11 Broadleaved plantation woodland

A band of woodland was present in the southwest of the Site, comprising a strip of ash, willow and silver birch trees with an ivy dominated ground flora.

This habitat is considered of medium ecological value.

3.4.12 Dry ditch

A dry ditch ran alongside the woodland band at the south of the Site. It appeared to have been excavated by machine and was colonised by species similar to those in the surrounding grassland habitat and is of low-medium ecological value.

3.4.13 Linear and Scattered Trees

Various scattered trees and tree lines were present around the Site. Where the trees were scattered they were characterised by saplings and young trees which appeared to have colonised the areas, including silver birch, goat willow, cherry (*Prunus* sp.) and rowan (*Sorbus aucuparia*).

Linear trees were present along the southeast boundary of the Site, on the northern track embankment and within the area of amenity grassland adjacent to the road at the south of the Site. Species present included oak and ash within the stadium compound, with a mixture of species within the amenity grassland and a line of cypress (*Cupressaceae* sp.) at the southern end of the Site.

This habitat is considered of medium ecological value within the context of the Site.

Photo 13: Southern woodland margin, with tree line in the background.

3.5 Protected & Priority Species

3.5.1 Badger

****** All badger information should be kept confidential and remain out of the public domain******

There was no direct evidence of badger recorded at the Site in the form of latrines, foraging signs or setts; although a number of mammal trails through the grassland and woodland suggested that terrestrial mammals may commute and forage across the Site. The Site was considered to represent suitable foraging habitat for badgers and the woodland of the Site offered suitable commuting habitat, as well as suitable sett building habitat. Although no direct signs of presence were noted during the survey visit, due to the presence of suitable habitat on and in the immediate vicinity of the Site it was considered likely that badgers would utilise the Site in some capacity.

Likelihood of badger activity at the Site: Moderate

3.5.2 Bats

The Site was subject to a separate survey to determine its suitability to support roosting bats and therefore this aspect was scoped out of this report. This report should be read in conjunction with the dedicated Preliminary Roost Assessment report produced by Ecolocation in 2020.

3.5.3 Notable mammals

A number of mammal trails were noted around the Site indicating regular use by mammals. The grassland and woodland of the Site provided excellent foraging habitat for a range of species, with areas suitable for den building and connectivity readily available to other suitable habitats in the wider landscape. It was therefore considered likely that mammals would utilise the Site in some capacity.

Likelihood of notable mammals at the Site: Moderate

3.5.4 Birds

The buildings and vegetation of the site were considered to have suitable structure to support nesting bird and evidence of nesting pigeons was noted in the stadium stands.

The potential for ground nesting birds was considered to be limited due to the nature of the grassland and regular use of the Site by dogwalkers and locals.

Likelihood of nesting birds at the Site: Moderate

3.5.5 Amphibians

There were two on-site ponds (ponds 1 and 2) and a further two within a 250m radius of the Site. Pond 3 was in the ancient woodland of the local wildlife site to the north of Gossett Lane and pond 4 was adjacent to northeast of the Site. Pond 1 in the on -site woodland was dry at the time of the survey, but ponds 2,3 and 4 were subject to a Habitat Suitability Index (HSI) assessment for great crested newts.

The Habitat Suitability Index (HSI) for great crested newts was developed by Oldham *et al.* in 2000 as a measure of habitat suitability in order to estimate presence/absence. A waterbody is assessed based on a geometric mean of ten features, each given a score relating to the current condition of the pond's characteristics and surroundings. Where the overall result is closer to 0 this indicates a more unsuitable habitat and a score closer to 1 represents more optimal habitats.

HSI can be useful in:

- Evaluating the general suitability of a sample of ponds for great crested newt;
- Comparing general suitability of ponds across different areas; and
- Evaluating the suitability of receptor ponds in a proposed mitigation scheme.

HSI is limited by being insufficiently precise to allow one to draw conclusions that a pond with a high score will support Great Crested Newts nor that a pond with a low score will not do so. The results do not allow conclusions on newt populations to be reached. Therefore, an HSI assessment is not a substitute for further great crested newt surveys.

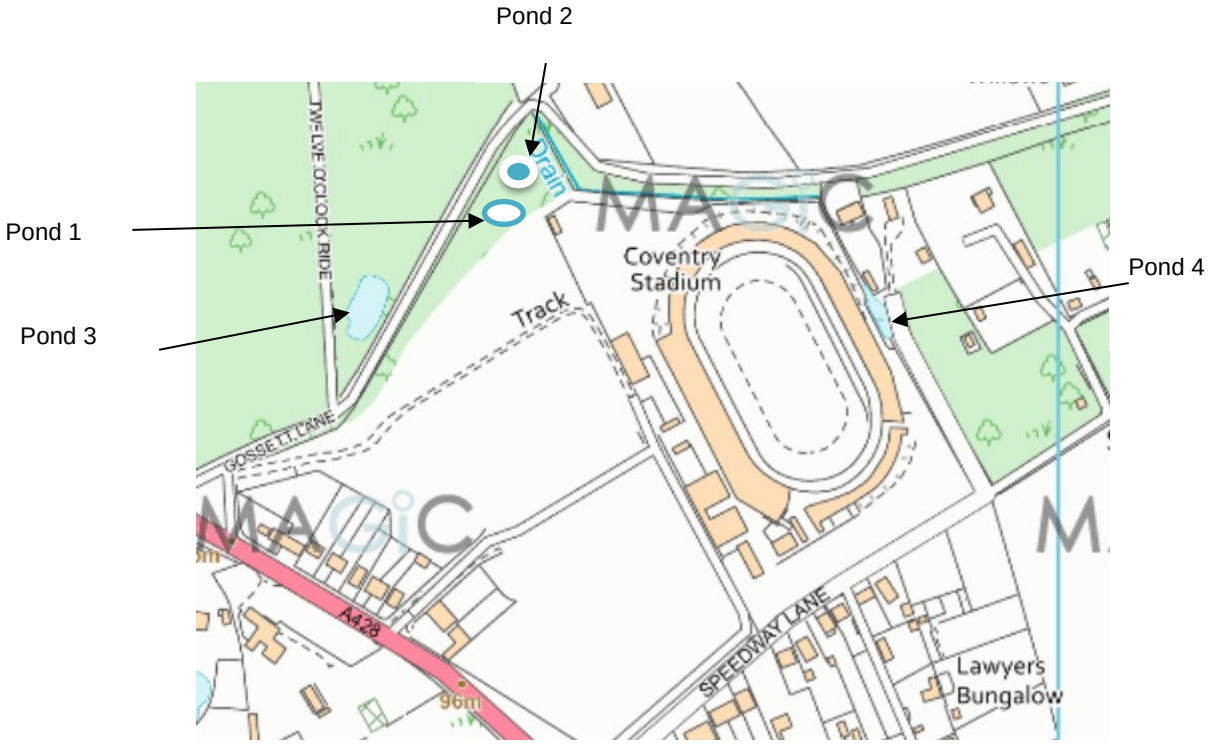

Figure: 5: Ponds surveyed.

Pond 2 was adjacent to the northeast Site boundary between the Site fence and an adjacent access route. The water was turbid and there did not appear to be any invertebrate life within it. Emergent vegetation was limited, though there were a number of willow trees growing from the banks of the pond.

Table 3: HSI calculation for pond 2

Pond 2		
Factor	**Result**	**Suitability Index**
SI 1- Location	A	1
SI 2- Pond area	20m^2	0.1
SI 3-Pond drying	Never	0.9
SI 4-Water quality	Poor	0.33
SI 5-Shade	60%	1
SI 6-Fowl	Absent	1
SI 7-Fish	Absent	1
SI 8-Ponds	3	0.5
SI 9-Terrestrial	Good	1
SI 10-Macrophytes	0%	0.3
SI1 x SI2 x SI3 x SI4 x SI5 x SI6 x SI7 x SI8 x SI9 x SI10 (1x0.1x0.9x0.33x1x1x1x0.5x1x0.3) $^{1/10}$ = 0.58 equates to **"below average"** habitat suitability for great crested newts		

Table 4: HSI calculation for pond 3

Pond 3		
Factor	**Factor**	**Factor**
SI 1- Location	A	1
SI 2- Pond area	900m²	0.98
SI 3-Pond drying	Rarely	1
SI 4-Water quality	Poor	0.33
SI 5-Shade	100%	0.2
SI 6-Fowl	minor	0.67
SI 7-Fish	possible	0.67
SI 8-Ponds	9	0.81
SI 9-Terrestrial	Moderate	0.67
SI 10-Macrophytes	0%	0.3
SI1 x SI2 x SI3 x SI4 x SI5 x SI6 x SI7 x SI8 x SI9 x SI10 $(1x0.98x1x0.33x0.2x0.67x0.67x0.81x0.67x0.3)^{1/10}$ = 0.58 equates to **"below average"** habitat suitability for great crested newts		

Table 5: HSI calculation for pond 4

Pond 4		
Factor	**Factor**	**Factor**
SI 1- Location	A	1
SI 2- Pond area	50 m²	0.13
SI 3-Pond drying	Sometimes	0.5
SI 4-Water quality	Moderate	0.67
SI 5-Shade	90 %	0.4
SI 6-Fowl	minor	0.67
SI 7-Fish	possible	0.67
SI 8-Ponds	9	0.81
SI 9-Terrestrial	Moderate	0.67
SI 10-Macrophytes	0 %	0.3
SI1 x SI2 x SI3 x SI4 x SI5 x SI6 x SI7 x SI8 x SI9 x SI10 $(1x0.13x0.5x0.67x0.4x0.67x0.67x0.81x0.67x0.3)^{1/10}$=0.51 equates to "**below average**" habitat suitability for Great Crested Newts		

This result indicates pond 2 is unlikely to offer suitable conditions for great crested newts. It is possible that more tolerant and common species of amphibian including common toads and common frogs could use this pond.

The two offsite ponds were also assessed as having below average suitability for great crested newts, although again these may support the more common species of amphibians.

The woodland, tall ruderal and scrub habitats of the Site offered potential shelter and commuting routes for amphibians. The grassland was likely to support common invertebrates and in turn provide a foraging source for amphibians. Overall, the habitats on the Site were considered to offer suitable terrestrial habitat for great crested newts. Therefore, the potential presence of amphibians, including great crested newts, could not be ruled out at this stage.

3.5.6 Reptiles

Similar to amphibians, the scrub, tall ruderal habitat, grassland and woodland of the Site was considered suitable to support reptiles. The species-poor grassland supported abundant common invertebrates and in turn provided a foraging source for reptiles. These habitats provided potential foraging areas, basking habitat, various refugia in the form of the rubble piles, and a connective link to the wider landscape to other reptile opportunities in the wider landscape.

The Site was subject to a separate survey to determine the presence or likely absence of reptiles so is scoped out of this report. This report should be read in conjunction with the dedicated Reptile Assessment (presence/ absence) report produced by Ecolocation in 2020.

3.5.7 Invertebrates

An abundant number of grasshoppers were noted during the Site visit, with invertebrate noise noted across the grassland throughout the survey. However, due to the limited complexity and young age of the grassland present, the Site was not considered suitable to support dependant populations of notable or priority invertebrates. The mature woodland was considered likely to support notable assemblages of notable invertebrates based on its age and structure.

Likelihood of assemblages of notable invertebrates at the Site: MODERATE within the woodland only.

3.5.8 Invasive Species

No signs of invasive species were noted during the Site visit.

4 Assessment of Ecological Impacts

Poor semi-improved grassland was the predominant habitat of the western half of the Site, with compacted bare earth, hard standing and buildings with some small areas of tall ruderal and ephemeral vegetation. Woodland and trees were present on the northern boundary and parts of the western and southern boundaries. The most important of these was the area of semi-natural broad-leaved woodland on the northern and north-western corner of the Site, adjacent to Birchley and New Close woodland, a local wildlife site.

Birchley and New Close wood is a wildlife site of local importance. It is an area of ancient oak-birch woodland with hazel coppice. It is an important site for moths and butterflies, most notably the white admiral butterfly. The woodland is known to support badger and it is very likely that woodland will be important to nesting birds and bats. Although the local wildlife site will not be subject to direct adverse impact, indirect adverse impact during both the construction and operational phase from noise, light spillage, dust and pollution and human activity may occur.

The main impact with any development is an initial loss of habitat to accommodate the development footprint. The habitats which fall within the footprint for this Site comprise poor semi-improved grassland, compacted bare ground, buildings, hardstanding, tall ruderal, dense scrub and ephemeral communities. These habitats are all of negligible, low or low-medium ecological value within the context of the site. The loss of these habitats could affect nesting birds, mammals and reptiles, as the evaluation of these species' categories indicated a moderate potential to be present on the Site. (Refer to Ecolocation Bat activity report and Reptile assessment report).

Outside of the initial loss of habitat there is a risk from direct impact on areas of on-site habitat that are to be retained, namely woodland and trees through damage from construction vehicle collisions, light, noise, dust, airborne pollution and human activity during the construction period. Once the construction is completed the risk of human disturbance, light pollution and noise remains.

Woodland, trees and dense and scattered scrub were present around the perimeter of the Site. The northern and north-western area of semi-natural broad-leaved woodland will be retained within the development as will the broadleaved plantation woodland in the southwest corner of the Site. Scattered trees along parts of the southern and western boundary should also be retained where feasible as these form important corridors for wildlife, particularly bats. Areas of dense and scattered scrub will be lost.

The main impact will be a short term loss of biodiversity accruing from the loss of poor semi-improved grassland, ephemeral and tall ruderal communities and areas of scrub. The retention of the northern woodland will provide an important buffer to the adjacent local wildlife site, during both the construction and operational phase of the development. Existing wildlife corridors of woodland and scattered trees will be retained around the perimeter of the Site. The majority of the habitats lost were of no importance other than at a site level.

4.1 Areas not affected.

Woodland, trees and dense and scattered scrub were present around the perimeter of the site. The most important of these was the area of semi-natural broad-leaved woodland on the northern Site boundary, adjacent to Birchley and New Close woodland, a local wildlife site. This northern and north-western area of semi-natural broad-leaved woodland will be retained within the development as will the broadleaved plantation woodland in the southwest corner of the Site. Scattered trees along parts of the southern and western boundary should also be retained where feasible as these form important corridors for wildlife, particularly bats.

The dry pond within the northern woodland will not be adversely affected by the development.

4.2 Affected areas.

Poor semi-improved grassland was the predominant habitat on the western half of the site. This was not species rich, although birds foot trefoil was recorded, which is the main food plant for the six-spot burnet moth and the common blue butterfly *(Polyommatus icarus*). It is also an important nectar source for bees. This habitat is assessed as being of low-medium ecological value. The development will result in the loss of this habitat.

The eastern half of the site is predominantly compacted bare ground, hard standing and buildings. The flat compacted bare ground and the area of hard standing are of negligible ecological value, and their loss will not be significant in biodiversity terms. The existing buildings on the site will be demolished. Their potential for bats is assessed in the Bat Assessment Report. Whilst no evidence of nesting birds was recorded in the walkover survey undertaken for the bat roost assessment, incidental use of building 4 by an unknown bird species was also noted. Whilst no evidence of nesting birds was recorded during the surveys, there remains a good suitability for birds to access both buildings and nest under tiles, behind hanging tiles or on top of walls. The majority of species of nesting bird are protected under the Wildlife & Countryside Act 1981 and as amended by the Countryside & Rights of Way Act 2000. The site should therefore be surveyed for nesting birds prior to commencement of works by a person competent to do so and due vigilance also be maintained during construction to ensure that no breeding birds are disturbed during the construction process should nesting commence thereafter. Birds typically nest between March-September inclusive though some species will nest at any time of year. If evidence of nesting birds is found, no works should be undertaken that may cause disturbance until after all the chicks have fledged.

Areas of tall ruderal vegetation were present on the embankments, track bends and adjacent to the woodland on the northern boundary. These areas of habitat were not species rich however common nettle and buddleja are valuable food sources for a range of butterflies. The development of the site will result in the loss of this habitat, which is assessed as being of low ecological value.

Areas of the Site comprised packed gravel which had been colonised by ephemeral vegetation during the period of disuse. This habitat demonstrated signs of seral success from colonising species of herbs and grasses through grassland to scrub and with early woodland colonising by birch. The development of the site will result in the loss of this transitional habitat, which is assessed as being of low ecological value at the site level.

An area of dense scrub was present along part of the northern boundary and around part of the former track. The majority of this habitat will be lost. The value of this habitat varies between low-medium. It is of medium value where it forms part of a woodland edge, but of low value where it is an isolated stand.

5 Avoidance, Mitigation and Compensation

The National Planning Policy Framework paragraph 174 states that "To protect and enhance biodiversity and geodiversity, planning policies should: ...promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species populations". In order to ensure no net loss of biodiversity in accordance with NPPF & Circular 06/2005 recommendations are made below.

5.1 Avoidance & Protection of High Value Features

- The northern and north-western area of semi-natural broad-leaved woodland will be retained within the development as will the broadleaved plantation woodland in the southwest corner of the Site. Scattered trees along parts of the southern and western boundary will also be retained. Their root protection areas will be respected and defined by robust secure fencing in accordance with BS5837:2012 'Trees in relation to construction'. This will be maintained throughout the site clearance and construction periods for the purposes of ensuring a buffer to the local wildlife site and that bird nesting habitat and sheltering habitat for other notable species such as badger and hedgehog, as well as potentially valuable connective corridors through the landscape are maintained.

- A sensitive lighting strategy to inform how lighting will be managed through the construction phase and post development should be in place prior to the development commencing, detailing lighting cowled to the ground and directed away from ecologically valuable features such as the retained boundary woodland to the north, north-west and the south-east, to maintain these areas as dark-zones suitable for bat and badger foraging.

5.2 Further Survey Work

- **Further survey work for reptiles** should be undertaken in accordance with Froglife Advice Sheet 10: Reptile Surveys to determine the presence or likely absence of reptiles within habitats in the western part of the Site and estimate the population size of any reptile species present. The result of this assessment should be used to inform any subsequent mitigation required for the proposed development of the Site.

- **Further survey work for bats** should be undertaken in accordance with Bat Conservation Trust 'Bat Surveys for Ecologists, Good practice guidelines, 3rd Edition 2016 to determine the likelihood of bats roosting in the buildings to be demolished. The results of this assessment should be used to inform any subsequent mitigation that may be required and the need or otherwise for a mitigation licence

5.3 Mitigation

All recommendations and mitigation measures set out as a result of species-specific surveys on Site to be followed in full.

5.3.1 General

- A **toolbox talk** shall be carried out by a suitably qualified ecologist prior to any works commencing on Site to ensure that all personnel working on Site are aware of the potential presence of protected and notable species and the procedure if such species are found during works.

- Lighting during works and permanent lighting once the development has been completed should be cowled to direct light towards the ground and away from bat, badger foraging, commuting and roosting areas such as trees, woodland and scrub.

- Pollution prevention guidelines must be adhered to during works to ensure there are no adverse impacts to the nearby ponds.

- Although it is not considered likely that the proposed works will impact additional notable mammals, nevertheless, as a precautionary measure, any excavations that need to be left overnight should be covered or fitted with mammal ramps to ensure that any animals that enter can safely escape. Any open pipework with an outside diameter of greater than 120mm must be covered at the end of each workday to prevent animals entering or becoming trapped.

5.3.2 Nesting Birds

- The demolition of buildings and the removal of scrub around the screening around the former track and any necessary additional tree and scrub removal, should be carried out outside of the nesting bird season (March to September inclusive) or alternatively these areas should be checked by a suitably qualified ecologist immediately prior to commencement of these works.

  If nesting birds are found to be present during works a 5m buffer of no disturbance must be maintained around the nest(s) until all of the young have naturally fledged and permanently left the nest.

5.3.3 Reptiles and Amphibians

The Site survey identified some potential for common reptiles and amphibians to be present within the grassland and tall ruderal communities on the site. Reptiles and amphibians may occasionally shelter within the woodland and scrub areas of the Site and therefore pass through the area of grassland and ruderal communities that will be lost as a result of the proposed development. There is therefore a small risk of disturbance to these species groups during the site clearance and construction phases of the development and therefore the following best sensitive working methodology is recommended during the clearance of the site.

- Prior to the start of works and following an appropriate pre-works check for nesting birds (or outside of nesting bird season), the grassland and tall ruderal should be strimmed to a short sward length (50mm high) to ensure it remains unsuitable for reptiles and common amphibians and to deter animals from entering this area and becoming harmed through the works. This sward height should be maintained at this length until the vegetation has been removed.
- It is recommended that clearance of vegetation should be undertaken under the supervision of a suitably qualified ecologist.
- Works should be carried out during the active season (April – October in prolonged temperatures over 5ºC).
- Clearance works must be carried out in a phased and directional manner towards retained vegetation to enable reptiles and amphibians within the works area to escape.
- Any reptiles, amphibians or other protected species found during the clearance works should be moved carefully by hand to an area to be left undisturbed by the works in a similar habitat.

5.3.4 Other protected and notable species

- Prior to works commencing, an updated badger check by a suitably qualified ecologist is required, to confirm absence of badger setts within the Site boundary. Where required, any obscuring vegetation, such as bramble scrub, should be removed using hand tools (i.e., strimmer) under supervision by a suitably qualified ecologist and in line with any additional protected species mitigation strategy or licences to avoid impact to other protected species. Should a sett be discovered, further survey work and mitigation may be required in order to ensure badgers are safeguarded through the proposed development.

- Bats are expected to be present within the surrounding area of the Site, however the roosting opportunities all fall within the areas of woodland, which will be retained. Sensitive lighting will be used during and post-works as per Section 5.1. The demolition of the buildings will be undertaken in accordance with the recommendations set out in the Ecolocation Bat Assessment Report 2020.

- Should non-protected animals such as hedgehog, frog, smooth newt or toad be found during works these should be moved carefully by hand to an area to be left undisturbed by works.

- Should evidence of protected species, such as nesting birds, great crested newts or reptiles, be discovered during works, works should temporarily stop while Ecolocation or the local office of Natural England are contacted for advice on the best way to proceed.

5.4 Compensation for Residual Biodiversity Loss

The National Planning Policy Framework paragraph 175 states that "Opportunities to incorporate biodiversity in and around developments should be encouraged". Therefore, additional recommendations for biodiversity enhancements across the Site are provided below:

- Any new landscaping proposed should make use of native species, preferably of local provenance, which are of higher value to local wildlife. The planting of native species which are appropriate to the landscape character may improve local species diversity as well as increase the potential for use of the Site by wildlife. In particular, new tree and shrub planting along the boundaries of the Site, such as a new species-rich hedgerow, or a row or block trees of would improve the connectivity on this side of the Site, increasing the value to wildlife.

- Reinforcement of the woodland boundary between the site and the local wildlife site to the north should be undertaken again using native species that are frequent in the adjacent wildlife site. This is required to provide an improved buffer between the new development and the local wildlife site and to help to improve the screening of the floodlighting from the proposed sports pitch.

- Areas of green open space, particularly those Wildflower meadow and wetland communities should be sown with a wildflower meadow mix. Suitable seed mixes can be sourced from Emorsgate Seeds (http://wildseed.co.uk/) and in particular: EM2 - Standard General Purpose Meadow Mixture for general areas whilst EM2F – Standard General Purpose wildflower mix is considered suitable for the areas identified as a wildflower meadow; these were considered to be a good match for the Site. This mix is considered to increase the attractiveness of the Site to invertebrate species. Advice will be sought from the seed merchant to ensure the final seed mixture incorporates appropriate mixes for the Site and excludes seeds of species unlikely to thrive.

- A green roof could be provided on the sports pavilion to provide habitat for a range of insects including beetles spiders and other invertebrates. Green roofs can also provide important habitat for butterflies, bees and other pollen reliant animals if it is designed to flower at least in the summer months.

- Any waterbodies/SUDS proposed on Site could provide some ecological gains if designed with biodiversity in mind. Areas which will hold water for longer lengths of time could be designed as wildlife ponds. New ponds could be planted with native aquatic and marginal plants and excavated in such a way as to allow ease of access by faunal species such as small mammals, amphibians, reptiles and invertebrates.

- A rain garden could provide the opportunity to include native plants that will flourish in damp areas. Suitable plants are Lady's smock (*Cardamine pratensis*), Ragged robin (*Lychnis flos-cuculi*), Devil's bit scabious (*Succisa pratensis*), Purple loosestrife (*Lythrum salicaria*), Angelica *(Angelica sylvestris)*, Meadow sweet (*Filipendula ulmaria*), and Marsh marigold (*Caltha palustris)*

- Bat boxes could be erected on retained trees particularly some of those on the northern boundary of the site and on new buildings, in order to provide additional opportunities for roosting bats. Robust boxes should be placed in a south-facing direction between 4 and 5m high. Ecolocation would be happy to offer further advice on this if necessary.

- Nest boxes could be provided on Site to maintain and enhance the existing breeding possibilities. Such nesting facilities should be sited away from roads, erected on any suitable proposed buildings and facing away from prevailing wind and rain. Sparrow terraces, house martin & swift nest boxes, tit and robin boxes would be suitable.

- Consideration could be given to creating **log piles** of locally sourced native timber within areas of open green space, SUDS features or along hedgerows to provide suitable habitat for invertebrates and shelter for amphibians, reptiles and small mammals. These should be sited in shady places and the lowest logs should be buried a few centimetres into the soil to keep them damp.

- Hedgehogs are a UKBAP Priority Species and have suffered a significant decline in numbers in recent years. In order to preserve the opportunities for hedgehogs to move freely through any proposed development and take advantage of foraging in gardens it is recommended that a hole around 15cm in diameter is left at any point along each garden fence. The access hole can be achieved by digging a hole underneath a fence, leaving a brick or two out of the base of a wall or cutting a small hole in the base of the fence.

- A variety of invertebrate houses could be positioned within/close to appropriate vegetation in the areas of open space. These could comprise bee huts, mini insect houses and a minibeast HQ. Bee huts should be place in warm sunny spots on suitable trees or wooden posts with no vegetation obstructing the holes. Mini insect houses offer shelter to insects including solitary bees. These should be hung on suitable trees around the perimeter of the Site or on wooden posts in sheltered locations, no more than 2m above ground level. The minibeast HQ provides a ready-made habitat for insects including solitary bees, lacewings, spiders and woodlice. The bottom chambers are left empty so they can be filled with materials such as twigs, straw, hay or leaflitter. The bottom of the mini beast HQ is a mammal house which provides refuge for shrews, voles, field and wood mice, plus toads and frogs. It should be positioned so that it receives some of the day's sun and is set at ground level within the wildflower meadow.

- Two log piles should be created in shaded areas close to the attenuation ponds to provide habitat for invertebrates and shelter for amphibians, reptiles and small mammals.

The above proposals will compensate for the loss of local biodiversity and are designed to generate biodiversity gain.

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Warwickshire Biological Records Centre[JW1]

Appendix 1 – Proposed Plans

Appendix 2 – Species List 10/06/2020

Common Name	***Scientific Name***
DAFOR scale. D – dominant, A – abundant, F – frequent, O – occasional, R - rare	
Trees/Shrubs	
Hazel	*Corylus avellana O*
Hawthorn	*Crataegus monogyna F*
Hornbeam	*Carpinus betulus R*
Rose	*Rosa Spp. O*
Field maple	*Acer campestre O*
Ash	*Fraxinus excelsior O*
Silver birch	*Betula pendula O*
Willow	*Salix spp. O*
Elder	*Sambucus nigra F*
Oak	*Quecus robur R*
Apple	*Malus spp. R*
Conifer	*Pinophyta spp. R*
Snowberry	*Symphoricarpos albus O*
Scotts pine	*Pinus sylvestris R*
Herbs	
Ivy	*Hedra helix O*
White dead nettle	*Epilobium angustifolium F*
Rose bay willowherb	*Lamium album O*
Dandelion	*Taraxacum spp. F*
Common nettle	*Urtica dioica F*
Ribwort plantain	*Plantago lanceolata F*
Creeping buttercup	*Ranunculus repens A*
Soft rush	*Juncus effuses F*
Broadleaved dock	*Rumex obtusifolius F*
Creeping thistle	*Cirsium arvense F*
Trefoil	*Lotus spp. F*
Forget-me-not	*Myosotis spp. O*
Bluebell	*Hyacinthoides spp. R*
Lawn daisy	*Bellis perennis F*
Common thistle	*Cirsium vulgare R*
Bramble	*Rubus fruticosus O*
Greater plantain	*Plantago major F*
Hedge bindweed	*Convolvulus arvensis O*
Crane's bill	*Geranium spp. O*
Common ragwort	*Jacobaea vulgaris O*
Yarrow	*Achillea millefolium O*
Silverweed	*Argentina anserine R*
Creeping cinquefoil	*Potentilla reptans O*
Honeysuckle	*Lonicera spp O*
Hedge garlic	*Alliaria petiolata O*
Cow parsley	*Anthriscus sylvestris F*
Cleavers	*Galium aparine F*
Ground ivy	*Glechoma hederacea R*
Self heal	*Prunella O*
Ground elder	*Aegopodium podagraria F*
Vetchling	*Lathyrus spp. R*
Meadow buttercup	*Ranunuculus acris R*
Stitchwort	*Stellaria spp. R*
Hogweed	*Heracleum sphondylim O*
Cuckoo pint	*Arum maculatum R*

The scaling of this drawing cannot be assured

Revision	Date	Drn	Ckd
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LEGEND

Boundaries and Rights of Way

- Site Boundary
- Existing PROW- Footpath
- Existing PROW- Bridleway
- Existing PROW- Twelve O'Clock Ride

EXISTING ELEMENTS

- Existing Tree/ Hedgerow Planting

PROPOSED ELEMENTS

Planting

- Proposed Trees/ Hedgerow Planting around Boundary
- Proposed trees
- Proposed hedges
- Proposed Boundary Hedge & fence: the extent and alignment of new hedge will be subject to detailed condition survey of existing vegetation
- Wetland Planting
- Meadow Grassland
- Bunding
- Proposed Rain Garden
- Proposed Grass Planting
- Proposed Car Parking
- Proposed Overflow Parking

Surfacing and Paving

- Cycle/Footpath - Bitmac with crushed stone surface dressing
- Informal Path - Worn/Mown Grass
- Enhanced Highway Paving
- Enhanced Pedestrian Paving

Waterbodies

- Attenuation Ponds & Basins

Playspaces

- Play Area
- 3G ATP Pitch
- Trim Trail
- Sculpture / Public Art

Buildings

- Proposed Pavillion with Green Roof

0 15 30 60m

N

Project
Brandon Stadium
Coventry

Drawing Title
Illustrative Landscape Masterplan

Date	Scale	Drawn by	Check by
01/07/21	1:1000 @ A1	LA	RMcW

Project No	Drawing No	Revision
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