

**Wide Lane Sports Centre
Wide Lane
Eastleigh
Southampton
Hampshire
SO18 2HW**

Preliminary Ecological Appraisal

Report prepared by Meghan Porter QCIEEM; reviewed by Sarah Foot MCIEEM
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1 Diesel House, Honey Hill, Wokingham, Berkshire RG40 3BL
Telephone: 0118 327 1810 Mobile: 07979 403099 E-mail: info@wenman-ecology.co.uk
www.wenman-ecology.co.uk

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Registered office: 100 New Wokingham Road, Crowthorne, Berkshire RG45 6JP where you may look at a list of members' names.

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1 EXECUTIVE SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was commissioned by Mr Lars Jaeger on behalf of the University of Southampton to undertake a Preliminary Ecological Appraisal (PEA) of the land at the University of Southampton Wide Lane Sports Centre off of Wide Lane in Eastleigh, Southampton (OS grid reference: SU 44828 17177). The PEA was commissioned to accompany a planning application seeking consent for the addition of two new artificial grass pitches with associated fencing (a later separate application for lighting, accompanied by consideration of the ecological impacts of the lighting, will follow).
- 1.1.2** The site covers an approximate area of 22.2 ha and mostly consisted of modified grass playing fields. There were multiple buildings on site including the main sports centre, a clubhouse and storage sheds, with an asphalt car park covering the south-eastern side. There was woodland along the western and northern boundaries with a tree line and hedgerow along the eastern boundary of the site with a line of broadleaved trees bisecting the site. The following UK Habitat Classification (UKHab) habitats were observed during the site walkover: u1b Developed land / sealed surfaces, u1c Artificial unvegetated / unsealed surface, u1b5 Buildings, g4 Modified grassland, w1f Lowland mixed deciduous woodland, w1g Other broadleaved woodland, w1g6 Line Of Trees, h2a Hedgerow, h3 Native hedgerow and h3h Mixed Scrub. Secondary Codes noted include: 11 Scattered trees, 89 Car park, 510 Natural sports pitches and 512 Artificial sports pitches.
- 1.1.3** The desk study revealed that the site is not statutorily or non-statutorily designated for its wildlife interest. The proposed works to build two new artificial grass pitches with associated fencing on existing areas of modified grassland will not adversely affect nearby designated sites or the habitats of principal importance for conservation on site including the native hedgerow along the eastern boundary and lowland mixed deciduous woodland along the western side of the site.
- 1.1.4** The site has potential to support populations of protected and notable species of local importance. The habitat on site to be directly impacted by the proposals is the modified grassland – a habitat of low ecological value

and unlikely to be used by protected or notable fauna. There may be some indirect impacts on the line of trees adjacent to the proposed footprint that bisects the site from increased lighting and therefore the impacts should be assessed with reference to detailed lighting plans prepared as part of the future application.

1.1.5 Recommendations for ecological protection and mitigation measures are set out and summarised below:

- Enhancing the ecological value of the site by making use of native plant species of local provenance; and creating cover and foraging opportunities for small wildlife by creating log piles and/or open compost heaps around the site.

2 INTRODUCTION

2.1 Background

2.1.1 John Wenman Ecological Consultancy LLP was commissioned by Mr Lars Jaeger on behalf of the University of Southampton to undertake a Preliminary Ecological Appraisal (PEA) of the land at the University of Southampton Wide Lane Sports Centre, Wide Lane in Eastleigh, Southampton.

2.1.2 The PEA was commissioned to accompany a planning application seeking consent for the addition of two new artificial grass pitches with associated fencing. A future application for lighting will follow.

2.2 Site Location and Context

2.2.1 The site is situated on the western side of Wide Lane in Eastleigh, Hampshire (OS Grid reference SU 44828 17177).

2.2.2 The site is bordered by woodland to the south and west, and a hedgerow with trees along the eastern boundary. The northern boundary features a line of trees, beyond which is Lakeside Country Park, a Site of Importance for Nature Conservation (SINC), which contains three lakes and areas of floodplain and grazing marsh and deciduous woodland – Habitats of Principle Importance (HPI) as defined under Section 41 of the NERC Act 2006. Southampton airport is situated across Wide Lane and the trainline approximately 200 metres east of the site, with a large area of open grassland around the runway and bordered by broadleaved woodland. The River Itchen Site of Special Scientific Interest (SSSI) is present just beyond

the airport boundary, with the river flowing approximately 1.3 km east of the site.

- 2.2.3** The open grassland and trees on site and the nearby lakes and woodland, are likely to be of ecological value to a range of birds, mammals, reptiles, amphibians and invertebrates adapted to suburban environments.

2.3 Objectives

- 2.3.1** The aim of this PEA is to understand the nature of the site and assess its ecological value. The key objectives are:

- to identify any likely ecological constraints associated with the planning proposals;
- establish appropriate mitigation measures in accordance with the mitigation hierarchy (i.e., avoid > minimise > remediate > compensate);
- determine any additional surveys following on from this preliminary stage; and
- recognise opportunities for biodiversity enhancement in line with national and local planning policy (i.e., Biodiversity Net Gain).

3 LEGISLATIVE BACKGROUND

3.1 Overview

3.1.1 The following legislation is considered relevant for the purpose of this preliminary ecological appraisal:

- Wildlife and Countryside Act (W&CA) 1981 (as amended)
- Conservation of Habitats and Species Regulations ('Habitat') Regulations 2017
- Countryside and Rights of Way (CROW) Act 2000
- Natural Environment and Rural Communities (NERC) Act 2006
- Protection of Badgers Act 1992
- Wild Mammals (Protection) Act 1996

3.1.2 These acts hold relevance to both protected and invasive species and the degree of protection varies depending on faunal/floral group or species. For example, some species of European importance receive full protection within the UK under the Habitat Regulations (e.g., bats), whereas others, may only be afforded protection through national legislation such as the Wildlife and Countryside Act 1981 (as amended) (e.g., common lizard). For a detailed overview of species-specific legislation, please refer to **Appendix 1**.

3.2 European Protected Species Mitigation Licensing

3.2.1 The government's statutory conservation advisory organisation, Natural England, is responsible for issuing European Protected Species Mitigation Licences (EPSML), which permit activities that would otherwise lead to an infringement of the Habitat Regulations 2019. An EPSML can be issued if the following three tests have been met:

- **Regulation 55(9)(a)** - there is "*no satisfactory alternative*" to the derogation;
- **Regulation 55(9)(b)** - the derogation "*will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range*"; and
- **Regulation 55(2)(e)** - the derogation is for the purposes of "*preserving public health or public safety or other imperative reasons of overriding public interest, including those of a social or economic nature and*

beneficial consequences of primary importance for the environment”.

- 3.2.2** Local Planning Authorities (LPAs) have a statutory duty under Regulation 7(3e) of the Habitat Regulations 2019 to regard requirements of the Habitats Directive in the exercise of their functions. Consequently, the LPA must consider and determine whether these three tests are likely to be satisfied by an application affecting European protected species before granting planning permission.

4 PLANNING POLICY

4.1 National Planning Policy

4.1.1 The ODPM Circular 06/2005 provides guidance on the application of the law relating to planning and nature conservation in England, stating that *'the presence of a protected species is a material consideration when a planning authority is considering a development proposal that, if carried out, would be likely to result in harm to the species or its habitat.'*

4.1.1 The revised National Planning Policy Framework (NPPF), published in July 2021, sets out the Government's planning policies for England and how they should be applied. Section 15 of the NPPF sets out the approach local authorities should adopt to conserve and enhancing the natural environment when preparing planning policy and when considering planning applications. Paragraph 180 sets out the principles local authorities should apply when determining planning applications as follows:

180. When determining planning applications, local planning authorities should apply the following principles:

- a) if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and*
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate*

biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

4.2 Local Planning Policy

4.2.1 The Eastleigh Borough Biodiversity Action Plan has been reviewed in light of the UK National Ecosystem Assessment (NEA), the Lawton Review and the England Biodiversity Strategy 2020. The Eastleigh Borough BAP has the following aims:

1. To establish coherent and resilient ecological networks that safeguard ecosystem services for the benefit of wildlife and people against the challenges of climate change and other pressures.
2. To identify, protect, maintain, restore, create and enhance priority habitats.
3. To identify, protect, maintain, restore and enhance viable populations of priority species.
4. To focus conservation action in Priority Biodiversity Areas and Links to achieve maximum biodiversity benefit.

1) General Approach

- a) *The Council will work with statutory and voluntary agencies and developers, and will determine planning applications, to:*
 - a. *protect, conserve and enhance all:*
 - i) *international, national and local nature conservation designations;*
and
 - ii) *networks of natural habitats and features, including the Local Ecological Network, Priority Biodiversity Areas and Priority Biodiversity Links, watercourses, wetland complexes, woodland trees, and trees and hedgerows important to biodiversity and local character;*
- and facilitate their adaptation to climate change wherever possible;*
- b) *assist in achieving national, county and local biodiversity targets as set out in Biodiversity Action Plans (BAPs);*

- c) *seek a net gain of biodiversity on all development sites (including sites for redevelopment) through the protection, enhancement and connection of existing and provision of new habitats and features of nature conservation interest compatible with the native biodiversity characteristics of the Borough, having regard to local geodiversity and soils; and*
- d) *contribute to major elements of the PfSH Green Infrastructure Strategy and other strategies for the provision and enhancement of multifunctional green infrastructure including green routes, ecological networks and biodiversity enhancements (see strategic policy S9).*

International Designations

- 2) Development which is likely (either individually or in combination with other developments) to adversely affect the integrity of an international or European nature conservation site will not be permitted subject only to imperative reasons of overriding public interest and securing any necessary compensatory measures in the absence of alternative solutions. A 'project level' Habitat Regulations Assessment will be required where there are likely significant effects or uncertainty. Any mitigation measures required to ensure no adverse impact must be implemented at the appropriate time.
- 3) The Council will work with PfSH, Natural England, the Environment Agency and other wildlife organisations to develop and implement with developers a strategic approach to the protection and enhancement of international and European sites from the direct and indirect effects of development. Within Eastleigh Borough this will include:
 - a) *implementing:*
 - i) *the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and*
 - ii) *the interim and any future New Forest Recreation Mitigation Strategy if required; or alternative agreed site specific measures to address recreational disturbance;*
 - b) *preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;*

- c) *protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and*
- d) *seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.*

National and Local Designations

- 4) Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) as shown on the policies map (or on a more recent plan provided by the Hampshire Biodiversity Information Centre) unless it can be demonstrated that:
 - a) *there are no alternative solutions;*
 - b) *the adverse effects are unavoidable;*
 - c) *measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
 - d) *there is an overall biodiversity net gain; and*
 - e) *if there are any residual adverse effects which cannot be avoided, mitigated or compensated, the benefits of the development must clearly outweigh the adverse effects on the nature conservation value of the site and any broader impacts on national and local designations.*

Priority habitats, protected and priority species and the local ecological network

- 5) Development will not be permitted if it is likely (either individually or in combination with other developments) to have a direct or indirect adverse effect on priority habitats, protected or priority species, or on the local ecological network unless it can be demonstrated that:
 - a) *there are no alternative solutions;*
 - b) *the adverse effects are unavoidable;*
 - c) *measures are taken to mitigate or, as a last resort, compensate for the adverse effects;*
 - d) *there is an overall biodiversity net gain; and*

- e) *if there are any residual adverse effects, the benefits of the development clearly outweigh the adverse effects on priority habitats, priority and protected species, and the local ecological network.*

5 SURVEY METHODOLOGY

5.1 Desk Study

- 5.1.1** A desktop study was conducted before and after visiting the site. The study utilised data from the local environmental record centre (Hampshire Biodiversity Information Centre (HBIC)) and online resources to acquire information on the nature of the site and its surroundings and highlight any potential ecological features.
- 5.1.2** HBIC was commissioned to undertake a search of pre-existing records of protected and/or notable species and non-statutorily designated wildlife sites held by them within a 2km radius around a central point inside the site.
- 5.1.3** The DEFRA Data Services Platform and the MAGIC website was used to obtain geospatial datasets for designated sites (i.e., RAMSAR, SPA, SAC, SSSI) and habitat inventories (i.e., Priority Habitat Inventory, Ancient Woodland Inventory) to be analysed in QGIS. The Multi-Agency Geographical Information Centre (MAGIC) website was examined for granted European protected species applications. Furthermore, geospatial datasets and Google Earth satellite imagery were used to determine the extent and connectivity of habitats, how the site is linked to the surrounding landscape and whether the development could have wider scale impacts on biodiversity.
- 5.1.4** Google Earth satellite imagery was consulted to provide insight into historic and current land use; such information helps contextualise the continuity of habitats and determine the importance of existing ecological features.

5.2 Field Survey

- 5.2.1** A site walkover was undertaken on the 3rd October 2022 by Conor Watson – an ecologist with four years' experience and Meghan Porter - a qualifying member of the Chartered Institute of Ecology and Environmental Management (CIEEM). The site was surveyed using the UK Habitat Classification (UKHab) system (Butcher *et al.* 2020) in accordance with the CIEEM Guidelines for Preliminary Ecological Appraisal 2nd Edition (CIEEM 2017). Particular attention was given to evidence of protected and priority species (NERC Act 2006 Section 41 species of principal importance) and

the site's potential to support such species. The walkover included an inspection of all the buildings on site for evidence of use by bats and nesting birds carried out by Conor Watson – an ecologist registered under Natural England Class Licence CL18 (registration number 2016-23859-CLS-CLS) and Meghan Porter – assistant ecologist.

- 5.2.2** Photographs of habitats and other ecological features were taken during the site walkover and mapped by Meghan Porter using QGIS software after the survey visit (**Appendices 2 & 3**). Plant species were recorded to aid habitat classification (**Appendix 4**).

5.3 Survey Constraints

- 5.3.1** Full access was available to the site and therefore there were no significant access constraints. All ecological survey work is subject to seasonal constraints because not all plant and animal species are visible throughout the year and therefore the report represents a snapshot of the site at the time of the survey only. The plant species list (**Appendix 4**) should not be considered a comprehensive list of species present.

6 DESK STUDY FINDINGS

6.1 Designated Sites and Habitats

- 6.1.1** The desktop study revealed that the land at Wide Lane Sports Centre (*'the site'*) is non-statutorily designated for its wildlife interest but does fall within the Impact Risk Zone for the River Itchen, designated as a Special Area of Conservation (SAC) and Site of Specific Scientific Interest (SSSI), 1 kilometre to the east of the site, and approximately 2 kilometres to the south of the site is the Solent and Dorset Special Protection Area (SPA). Further downstream the River Itchen is designated under the Solent and Southampton Water SPA.
- 6.1.2** The River Itchen is a chalk river and is designated as an SPA downstream for numerous important bird species, including the sandwich tern (*Sterna sandvicensis*), little tern (*Sterna albifrons*) and common tern (*Sterna hirundo*). The designation as a SAC is on account of the presence of the following Annex I habitat: *Plain to montane levels with the Ranunculus fluitantis and Callitriche-Batrachion vegetation*. Annex II species that are primary reasons for the SAC designation are southern damselfly (*Coenagrion mercurial*) and bullhead (*Cottus gobio*). Other Annex II species that occur within the SAC are: otter (*Lutra lutra*), white clawed crayfish (*Austropotamobius pallipes*), brook lamprey (*Lampetra planeri*) and Atlantic salmon (*Salmo salar*).
- 6.1.3** The Solent and Southampton Water SPA and RAMSAR site and the Lee-on-Solent to Itchen Estuary SSSI are present approximately 4 kilometres to the south of the site. These are designated for the significant coastal habitats and wetlands which are of great importance for breeding populations of black tailed godwit (*Limosa limosa*), common tern (*Sterna hirundo*), little tern (*Sternula albifrons*), roseate tern (*Sterna dougallii*), sandwich tern (*Thalasseus sandvicensis*) and for internationally important wintering populations of dark bellied brent goose (*Branta bernicla*), as well as nationally important ringed plover (*Charadrius hiaticula*), wigeon (*Mareca penelope*) and teal (*Anas crecca*).
- 6.1.4** There are 29 Sites of Importance for Nature Conservation (SINCs) – non-statutorily designated sites - within the 2km search area. The nearest SINCs

to the site include; Lakeside Country Park, Fen to west of Lakeside North Stoneham Ponds, Chestnut Avenue Meadow and Monks Brook Greenway. Lakeside Country Park SINC was directly north of the site, and noted for its three large lakes, floodplain and grazing marsh and deciduous woodland.

6.2 Protected and Notable Species

6.2.1 The search of the HBIC database revealed recent records (from within the last ten years) for a range of protected and notable species, within the 2km search radius. Included in these records were three species of reptiles; slow worm (*Anguis fragilis*), grass snake (*Natrix helvetica*) – both recorded within Lakeside Country Park in 2014, approximately 140 metres north of the site – and one record of an adder (*Vipera berus*) also in 2014. There were records of the common toad (*Bufo bufo*) just over a kilometre to the north-east of the site in 2016.

6.2.2 The records include multiple bird species from within the search area, including the following species which are all priority species as defined by Section 41 of the NERC Act 2006; lesser redpoll (*Acanthis cabaret*), skylark (*Alauda arvensis*), tree pipit (*Anthus trivialis*), bittern (*Botaurus stellaris*), dark-bellied brent goose (*Branta bernicla*), nightjar (*Caprimulgus europaeus*), hen harrier (*Circus cyaneus*), hawfinch (*Coccothraustes coccothraustes*), corncrake (*Crex crex*), cuckoo (*Cuculus canorus*), reed bunting (*Emberiza schoeniclus*), grasshopper warbler (*Locustella naevia*), woodlark (*Lullula arborea*), common scoter (*Melanitta nigra*), spotted flycatcher (*Muscicapa striata*), curlew (*Numenius arquata*), house sparrow (*Passer domesticus*), wood warbler (*Phylloscopus sibilatrix*), ring ouzel (*Turdus torquatus*) and lapwing (*Vanellus vanellus*). There were records of 27 bird species that are listed under the Schedule 1 Part 1 of the Wildlife and Countryside Act 1981 (as amended) from within the search area, with the closest recorded to the site including; montagu's harrier (*Circus pygargus*), peregrine (*Falco peregrinus*), kingfisher (*Alcedo atthis*), cetti's warbler (*Cettia cetti*), red wing (*Turdus iliacus*), red kite (*Milvus milvus*), fieldfare (*Turdus iliacus*), osprey (*Pandion haliaetus*), hobby (*Falco*

Subbuteo), firecrest (*Regulus ignicapilla*), Cetti's warbler (*Cettia cetti*) and mediterranean gull (*Ichthyaelus melanocephalus*).

- 6.2.3** The HBIC database includes records of at least ten bat species in the search area: common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Nathusius's pipistrelle (*Pipistrellus nathusii*), brown long-eared bat (*Plecotus auritus*), serotine (*Eptesicus serotinus*), Natterer's bat (*Myotis nattereri*), Brandt's bat (*Myotis brandtii*), Daubenton's bat (*Myotis daubentonii*), Leisler's (*Nyctalus leisleri*) and noctule (*Nyctalus noctula*). The nearest records included brown long-eared, common pipistrelle, soprano pipistrelle, Leisler's and noctule bats, all recorded within approximately 500 metres of the site. A search on MAGIC showed that a European Protected Species mitigation licence had been granted for the destruction of a brown long-eared, common pipistrelle and soprano pipistrelle roost within Lakeside Country Park approximately 115 metres north of the site, in 2015 (2014-5470-EPS-MIT).
- 6.2.4** Terrestrial mammal records (excluding bats) include; west European hedgehog (*Erinaceus europaeus*), badger (*Meles meles*), Eurasian otter (*Lutra lutra*), Eurasian water shrew (*Neomys fodiens*), European water vole (*Arvicola amphibius*), harvest mouse (*Micromys minutus*), yellow-necked mouse (*Apodemus flavicollis*) and one record of a polecat (*Mustela putorius*) at Southampton airport in 2016. A search on MAGIC showed that a European Protected Species mitigation licence had been granted for the destruction of a hazel dormouse (*Muscardinus avellanarius*) resting place in 2011, approximately 65 metres south of the site (EPSM2011-3364). West European hedgehog, harvest mouse and yellow-necked mouse have all been recorded in Lakeside country park approximately 200 metres north of the site, the most recent being harvest mice recorded in 2018.
- 6.2.5** Records of notable plants in the database include Jersey cudweed (*Gnaphalium luteoalbum*) – a species protected under Schedule 8 of the Wildlife & Countryside Act 1981 (as amended). The following vulnerable species, as listed on the IUCN red list (BSBI, CEH and Natural England 2001), were recorded within the search radius; chicory (*Cichorium intybus*),

weasel's-snout (*Misopates orontium*), lesser spearwort (*Ranunculus flammula*) and strawberry clover (*Trifolium fragiferum*).

- 6.2.6** The invertebrate records in the database include multiple species of principle importance (SPI), with the closest records to the site including common darter (*Sympetrum striolatum*) and small heath butterfly (*Coenonympha pamphilus*) both recorded in Lakeside Country Park in 2014 and 2020 respectively. Other species recorded within the search radius include; southern damselfly (*Coenagrion mercurial*), white-letter hairstreak (*Satyrrium w-album*) and stag beetle (*Lucanus cervus*).

6.3 Historic and Current Land Use

- 6.3.1** Google Satellite imagery dating from 1999 shows the existing sports centre building, outdoor courts and artificial pitches were constructed in 2005 on existing hard-standing and managed grassland. There has been no change in the use of the site or significant changes in habitats within the site boundary or in the surrounding area.

7 FIELD SURVEY FINDINGS

7.1 Overview

7.1.1 The land within the site boundary comprised mostly of modified grassland, with a line of trees bisecting the site. There was mixed woodland present along the norther, southern and western site boundaries, with a small area of broadleaved woodland in the south-eastern corner of the site. An area of mixed scrub was present in the north-eastern corner of the site bordering a hedgerow with trees, that was present along the eastern boundary. The buildings on site included the sports centre, pavilion and site maintenance sheds towards the south-eastern side of the site, surrounded by an asphalt car park and associated landscaping. To the east of the sports centre were two large artificial pitches and tennis courts.

7.1.2 The following UK Habitat Classification (UKHab) habitats were observed during the site walkover: u1b Developed land / sealed surfaces, u1c Artificial unvegetated / unsealed surface, u1b5 Buildings, g4 Modified grassland, w1f Lowland mixed deciduous woodland, w1g Other broadleaved woodland, w1g6 Line Of Trees, h2a Hedgerow, h3 Native hedgerow and h3h Mixed Scrub. Secondary Codes noted include: 11 Scattered trees, 89 Car park, 510 Natural sports pitches and 512 Artificial sports pitches.

7.1.3 The UKHab primary habitats with secondary codes are detailed below; associated photographs are displayed in **Appendix 2**, the habitat survey is mapped in **Appendix 3** with habitat parcel descriptions in **Appendix 4**.

7.2 w1f – Lowland, Mixed Deciduous Woodland

7.2.1 An area of lowland mixed deciduous woodland was present along the western and north-western boundary of the site (**w1f; Photograph 1**). The woodland included the following tree species; oak (*Quercus robur*), silver birch (*Betula pendula*), sycamore (*Acer pseudoplatanus*), beech (*Fagus sylvatica*), ash (*Fraxinus excelsior*) and red oak (*Quercus rubra*). The ground flora included bramble (*Rubus fruticosus* agg.), hogweed (*Heracleum sphondylium*), germander speedwell (*Veronica chamaedrys*), agrimony (*Agrimonia eupatoria*), bracken (*Pteridium aquilinum*), common nettle (*Urtica dioica*) and ivy (*Hedera helix*). There were two piles of grass cuttings on the

woodland edge and one brash and rubbish pile in the north-western corner of the site (TN1 & TN2; **Photographs 2 & 3**).

7.3 w1g – Other Broadleaved Woodland

7.3.1 A strip of woodland was present along the northern boundary of the site with mixed tree species including sweet chestnut (*Castanea sativa*), black pine (*Pinus nigra*), holm oak (*Quercus ilex*), sycamore (*Acer pseudoplatanus*) and small-leaved elm (*Ulmus minor*) (**w1g; Photograph 4**). There was a woodland edge present along the southern boundary of the site and at the south-eastern corner of the site with ash (*Fraxinus excelsior*), dogwood (*Cornus sanguinea*), holly (*Ilex aquifolium*), hazel (*Corylus avellana*), hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), goat willow (*Salix caprea*) (**w1g; Photograph 5**).

7.4 w1g6 – Line of Trees

7.4.1 A line of Lombardy poplar (*Populus nigra*) and silver birch trees was present across the middle of the site north of the existing artificial pitches (**w1g6; Photograph 6**). A line of Lombardy poplar and London plane (*Platanus x hispanica*) trees connected the centre of the site to the northern boundary (**w1g6; Photograph 7**).

7.5 h3h - Mixed Scrub

7.5.1 A strip of scrub vegetation was situated at the north-eastern corner of the site (**h3h; Photograph 8**). Scrub species present in the area included bramble, creeping thistle (*Cirsium arvense*), burdock (*Arctium lappa*), mugwort (*Artemisia vulgaris*), oxeye daisy (*Leucanthemum vulgare*), greater knapweed (*Centaurea scabiosa*), prickly sowthistle (*Sonchus asper*), false oat grass (*Arrhenatherum elatius*), and common nettle. There was a third pile of grass cuttings adjacent to the area of scrub, and a bug hotel had also been built within the area (**TN1; Photograph 9 & 10**).

7.6 h3 – Native Hedgerow

7.6.1 A native hedgerow was present along the eastern side of the site and included field maple (*Acer campestre*), winter heliotrope (*Petasites*

fragrans), small-leaved elm, dog rose, dogwood, hawthorn and blackthorn (**h3; Photograph 11**).

7.7 g4 - Modified Grassland

7.7.1 Most of the site consisted of outdoor sport pitches on frequently mown modified grassland, consisting of mostly perennial ryegrass (*Lolium perenne*), with occasional daisy (*Bellis perennis*) and cock's foot (*Dactylis glomerata*) (**g4 511; Photograph 11**). There was occasional dandelion (*Taraxacum officinale* agg.), ribwort plantain (*Plantago lanceolata*), ragwort (*Jacobaea vulgaris*), yarrow (*Achillea millefolium*) and dove's-foot crane's-bill (*Geranium mole*) present in the grassland surrounding the artificial pitches and tennis courts (**g4; Photograph 12**). Scattered trees including red oak, ash and cherry were present in an area of longer grass along the track to the south of the site with creeping bent (*Agrostis stolonifera*), creeping thistle, timothy (*Phleum pratense*) and yellow toadflax (*Linaria vulgaris*) present in the rougher grassland (**g4 11; Photograph 13**).

7.8 u1b – Developed Land / Sealed Surface

7.8.1 An asphalt carpark was present at the south-eastern corner of the site in front of the sports centre building, with associated landscaping throughout the car park including introduced shrubs, such as *Contoneaster* sp. (**u1b 89; Photograph 14**). There were two artificial sport pitches and eight tennis courts to the west of the sports centre building with a gravel track surrounding them (**u1b 512; Photograph 15**).

7.9 u1c – Unvegetated / Unsealed Surface and h2a – Other hedgerow

7.9.1 An area of compacted gravel was present along the eastern side of the site with a planted, clipped beech and hazel hedge along the western side of the gravel area (**u1c & h2a; Photograph 16**).

7.10 u1b5 - Buildings

7.10.1 Between the asphalt car park and outdoor sport pitches there was a large sports centre building, which featured sloping roofs and green roofs on two flat-roof sections (**B1; Photographs 17 & 18**). A pavilion was present to the north of the car park (**B2; Photograph 19**). The building had a pitched roof covered in mossy interlocking roof tiles and uneven hanging tiles on the

gable ends (**B2; Photograph 20**). There were maintenance sheds present south of the car park, which were simple metal structures (**B3**).

8 DISCUSSION

8.1 Assessment of Existing Ecological Value

Designated sites

- 8.1.1** The desk study revealed that the site is not statutorily or non-statutorily designated for its wildlife interest and therefore not currently recognised as being of international, national or county level conservation significance.
- 8.1.2** The site falls within the IRZ for the River Itchen SAC/SSSI and the Solent and Dorset Coast SPA, noted for its internationally important coastal and wetland habitats, important populations of breeding and wintering bird populations, and nationally protected species such as the otter (*Lutra lutra*), water vole (*Arvicola amphibius*), harbour seal (*Phoca vitulina*) and Atlantic salmon (*Salmo salar*).

Habitats

- 8.1.3** The site features intact lowland, mixed deciduous woodland and intact hedgerows - both defined as a Habitat of Principal Importance (HPI) for biodiversity as defined as under Section 41 of the NERC Act 2006. The site has areas of other woodland, mixed scrub and a line of trees bisecting the centre of the site, which are habitats that could be of some ecological importance for a range of locally occurring species. The modified grassland, area of gravel, and the sealed surfaces of the car park and artificial sport pitches are of low-to-negligible ecological value to local species.

Bats

- 8.1.4** There were mature trees around the site, including several oak trees noted along the woodland to the west of the site, that had potential roost features for a range of bat species recorded in the local area. The woodland, line of trees, hedgerows and nearby habitats are of high suitability for roosting,

commuting and foraging bats, and the site as a whole, is likely to act as a resource of some importance to bats locally.

Hazel dormice

- 8.1.5** The dense scrub and woodland around the edge of the site is suitable for hazel dormice (*Muscardinus avellanarius*) but is sub-optimal due to a lack of structural diversity within the woodland and species of lower value to foraging dormice. The site is connected to suitable habitat to the north and to the south. There are records of dormice from 2010, approximately 200 metres south of the site, and a license was granted in 2014 approximately 65 metres to the south of the site. For these reasons it is considered likely that dormice may be present on site within the sub-optimal habitat.

Amphibians

- 8.1.6** There is no standing water on site to support breeding amphibians, such as the fully protected species, great crested newt (GCN) (*Triturus cristatus*). There are three large lakes within Lakeside Country Park approximately 60 metres to the north of the site with areas of floodplain grassland and grazing marsh, but no ponds shown on OS mapping within 500m of the site. There are no amphibian records within 1 kilometre of the site, with the only amphibian record of a common toad (*Bufo bufo*) just over a kilometre to the north-east of the site in 2016. The woodland boundary and dense scrub offer some suitable habitats for the common toad and common frog to rest, forage and traverse across from the lakes in the north.

Reptiles

- 8.1.7** The woodland edge, hedgerow and scrub provides diverse habitats suitable for reptiles to bask, forage and take shelter on site. There are no pre-existing records of reptiles on site, with the nearest records of slow worm (*Anguis fragilis*) and grass snake (*Natrix helvetica*) both recorded within Lakeside Country Park in 2014, approximately 140 metres north of the site. There is a chance that individuals could be present around the edge of the site and the piles of grass cuttings around the edge of the site does offer some breeding

opportunities that individuals may use. However individuals are unlikely to traverse through the grassland which is regularly mown.

Nesting birds

- 8.1.8** The woodland, hedgerow and scrub on site, and the proximity to the lakes and further areas of woodland habitat to the north, means the site provides nesting and foraging opportunities for a wide range of bird species, which may include notable species of conservation concern.

Badgers (and other mammals)

- 8.1.9** The site is moderate in size, with connective habitats to the north and west of the site. However, there was no evidence of badger (*Meles meles*) activity (i.e., setts trails, snuffle holes or mammal diggings) on site. No badgers had been recorded within 1 kilometre of the site. As such, it is unlikely that this species is present, and therefore is not considered further in this report.
- 8.1.10** Hedgehog (*Erinaceus europaeus*) – a priority species (NERC Act 2006 Section 41 species of principal importance) and recorded locally in 2014 approximately 500 metres north of the site – may be present on site and seek shelter within the woodland and scrub edges.

Invertebrates

- 8.1.11** The onsite woodland and mature trees could be of some importance for invertebrates, including notable species recorded in the search area, for example the locally recorded stag beetle (*Lucanus cervus*), or assemblages of conservation importance.

8.2 Impact of Proposals

Planning proposals

- 8.2.1** The planning proposals are for the addition of two new artificial grass pitches with associated fencing. The plans propose building these pitches on the modified grassland to the west of the existing artificial pitches and to the north of the tree-line bisecting the site. Two trees (T5 & T8 – refer to Arboricultural Impact Assessment; Enviroarb Solutions) in poor condition will

be felled as part of the proposed work. A later planning application will seek permission for lighting.

Designated sites

- 8.2.2** The site is not statutorily or non-statutorily designated for its wildlife interest and therefore the proposals will have no direct impact on protected sites. The site is within the impact risk zone for the River Itchen SAC/SSSI; however, the scope of the works is small and will involve the addition of artificial sport pitches similar to those that are already present on site. There will not be a significant change in the recreational use of the site, and therefore this will not lead to an increase in pressure on the SSSI/SAC or other indirect impacts.

Habitats

- 8.2.3** The site does feature lowland, mixed deciduous woodland and intact hedgerows - both defined as a Habitat of Principal Importance (HPI) for biodiversity as defined as under Section 41 of the NERC Act 2006. However, the proposals will only involve the removal of modified grassland – a habitat of low ecological importance – and will not lead to the loss of any areas of principal habitats. The proposals will be carried out adjacent to the line of trees that cross the site, which could be of some ecological importance to local species and therefore precautions should be undertaken to reduce any impacts on the tree roots during the works (see recommendations in **Section 9.1**).

Bats

- 8.2.4** Potential roost features for crevice-dwelling bats in the form of uneven hanging tiles on the gable ends of the pavilion (B2) were noted during the walkover. A detailed internal and external inspection of the buildings was not carried out as the works will not directly or indirectly impact any buildings on site, and therefore there will be no impact on these features and no further survey is required.
- 8.2.5** It should be noted that the potential roost features increase the likelihood of the presence of roosting bats within the local area. Furthermore, it is likely

that bats may roost within the woodland and mature trees within the site and utilise the tree-line bisecting the site as a commuting and foraging area; bats have been recorded within a 100m radius. The woodland edge and most of the trees on site are to be retained and unaffected by the proposals, so there will be no significant loss of habitat for potential roosting and foraging bats; however, two trees (T5 & T8) are to be felled and therefore these should be inspected from ground level to determine if they have features of bat roost potential (refer to recommendations in **Section 9.2**)

- 8.2.6** The proposals do not include the installation of lighting for the pitches and therefore there will be no adverse impact on bats from additional lighting. However, there will be a future application for the installation of lighting for the pitches. Lighting can affect bats by deterring them from using foraging and commuting areas or by directly illuminating roosting sites, and this especially the case for light sensitive bat species such as the *Plecotus* and *Myotis* spp. and therefore bat activity surveys will be carried out during the bat active season i.e. April to September to determine the importance of the site for bats and inform the lighting proposals for the future application..

Hazel dormice

- 8.2.7** The woodland on the western edge of the site provides habitat linked to woodland with pre-existing records of dormice and habitat of some suitability but will not be affected by the proposals. The habitats within the application site are unsuitable for dormice and therefore the proposals will have no impact on dormice or their habitats.

Amphibians and reptiles

- 8.2.8** The proposals will not require the removal of any woodland and dense scrub on site, habitats that could be used by protected species, and the proposals will be carried out on modified grassland – an area of habitat of low-negligible value for amphibians and reptiles – situated away from any

suitable habitat. Therefore, it is deemed that there will be no impact on these faunal groups.

Nesting birds

- 8.2.9** The proposals will not require the removal of any woodland or dense scrub on site, which are all habitats that could be used by nesting birds; however, two trees in poor condition are to be felled and therefore precautions should be adopted. Specifically, the tree work should take place outside of the main bird nesting season, which falls between March and August inclusive, or if it takes place during the nesting season, it should be preceded by a survey completed by an ecologist confirming that nesting birds are not present. If nesting birds are present, the work should be delayed until further surveys confirm that young have fledged and have left the nest.

Other mammals

- 8.2.10** The site potentially could be used by mammals such as hedgehog (*Erinaceus europaeus*) – a species of principal importance under Section 41 of the NERC Act 2006. The proposals will not impact on the ability of species to move through the site and the woodland and scrub on site will be retained and remain unaffected by the works. Precautions should be undertaken during the works to ensure there is no accidental harm to individuals that may be present on site (refer to recommendations in **Section 9.3**).

9 RECOMMENDATIONS

9.1 Habitats

- 9.1.1** The retained tree line bisecting the site is situated outside of the demolition/work zone but should be protected throughout the works, using appropriate root protection fencing (temporary Heras fences) as advised and directed by an arboriculturist.

9.2 Bats

- 9.2.1** Trees T5 and T8, which are to be felled, should be inspected from ground level by a licenced ecologist to determine if they have any bat roost potential or evidence of the presence of bats. If the trees have features of bat roost potential, further survey to determine if roosting bats are present or are likely to be absent should be carried out, and this should comprise high level inspection and/or emergence and re-entry surveys.

9.3 Ecological Enhancements

- 9.3.1** The proposals present opportunities for ecological enhancement to increase the value of the site to protected and notable species. The opportunities for enhancement are as follows:
- Enhancement of retained grassland to the south of the artificial pitches and management of the grassland to increase species diversity by leaving areas unmown or seeding with a native wildflower mix.
 - Provision of features that provide foraging opportunities and cover for small mammals such as rockeries and partially buried log piles around the boundary of the site, and retaining deadwood for invertebrates such as the stag beetle which has been recorded locally.
 - Use of native plants in any landscaping to be carried out within the site boundary e.g., species rich turf and native shrub and tree planting.

10 REFERENCES

- Bright, P., Morris, P. & Mitchell-Jones T. (2006). *The dormouse conservation handbook – second edition*. English Nature.
- Butcher, B., Carey, P., Edmonds, R., Norton, L. and Treweek, J. (2020). *The UK Habitat Classification User Manual Version 1.1* at <http://www.ukhab.org/>
- CIEEM (2017) *Guidelines for Preliminary Ecological Appraisal, 2nd edition*. Chartered Institute of Ecology and Environmental Management, Winchester
- Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists – Good Practice Guidelines*. 3rd Edition. Bat Conservation Trust, London.
- English Nature (2001). *Great crested newt mitigation guidelines*. English Nature, Peterborough.
- Fure, A. (2006) *Bats and Lighting*. The London Naturalist, No. 85.
- Langton, T., Beckett, C. & Foster, J. (2001). *Great Crested Newt Conservation Handbook*. Froglife, Halesworth.
- Mitchell-Jones, A. J. (2004). *Bat mitigation guidelines*. English Nature, Peterborough.
- Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers' Manual (3rd Edition)*. JNCC, Peterborough.
- Natural England (2011). *Interim Natural England Advice Note - Dormouse surveys for mitigation licensing – best practice and common misconceptions*. Natural England.
- Stone, E.L., Harris, S., Jones, G. (2015a). *Impacts of artificial lighting on bats: A review of challenges and solutions*. Mammal. Biol. 80, 213-219.
- Stone, E.L., Wakefield, A., Harris, S., Jones, G. (2015b). *The impacts of new street light technologies: experimentally testing the effects on bats of changing from low-pressure sodium to white metal halide*. Philos. T. R. Soc. B. 370, 20140127.

APPENDIX 1 – LEGISLATIVE BACKGROUND

Amphibians

The seven native species of amphibian receive protection under the W&AC 1981 (as amended). The four widespread and common amphibians (common frog, toad, smooth newt and palmate newt) receive only limited protection – making their sale illegal.

The great crested newt (*Triturus cristatus*) receives full protection under the W&CA 1981 (as amended) and under the Habitat Regulations 2019. The combined legislation makes it illegal to:

- intentionally or recklessly kill, injure or take a great crested newt;
- possess or control any live or dead specimen or anything derived from a great crested newt;
- intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a great crested newt; and
- intentionally or recklessly disturb great crested newts; in particular, any disturbance which is likely to impair their ability to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating animals, to hibernate or migrate.

Great crested newts (*T. cristatus*) and common toads (*Bufo bufo*) are species of principal importance for the conservation of biodiversity in England ('*UKBAP Priority Species*') under Section 41 of the NERC Act 2006.

Badgers

Badgers are protected by the Protection of Badgers Act 1992. The Act makes activities such as development that would harm or disturb badgers or damage, obstruct or destroy their setts illegal. If badgers are to be affected

by the proposed development, activities can be undertaken only under a licence issued by Natural England.

Bats

All bat species in Britain are fully protected by the W&CA 1981 (as amended) and by the Habitat Regulations 2019. In summary, the combined legislation makes it an offence to:

- damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a bat;
- deliberately, intentionally or recklessly disturb bats; in particular, any disturbance which is likely to impair the ability of bats to survive, breed or reproduce or nurture their young; or in the case of hibernating or migrating bats, to hibernate or migrate; or to significantly affect the local distribution or abundance of the species; and
- deliberately kill, injure or take any bat.

Birds

All wild birds are protected under the W&CA 1981 (as amended). The Act makes it an offence to kill, injure or take a wild bird or to damage or destroy the nest of a wild bird whilst in use or being built. Species listed on Schedule 1 of the Act, such as barn owls and kingfishers, are afforded additional protection against disturbance while nesting.

Hazel dormice

Hazel dormice receive full protection under the W&CA 1981 (as amended) and under the Habitat Regulations 2019. These make it illegal to:

- intentionally or recklessly kill, injure or take a dormouse;
- possess or control any live or dead specimen or anything derived from a dormouse;
- damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by a dormouse; and
- intentionally or recklessly disturb dormice; in particular, any disturbance which is likely to impair their ability to survive, breed or

reproduce or nurture their young; or in the case of hibernating or migrating animals, to hibernate or migrate.

Invasive non-native plants

The W&CA 1981 (as amended) provides the primary controls on the release of non-native species into the wild in Great Britain. It is an offence under Section 14(2) of the Act to 'plant or otherwise cause to grow in the wild' any plant listed in Schedule 9, Part II. The species listed in the Act include Japanese knotweed (*Fallopia japonica*), giant hogweed (*Heracleum mantegazzianum*) and Himalayan balsam (*Impatiens glandulifera*).

Otters

Otters are fully protected by the W&CA 1981 (as amended) and by the Habitat Regulations 2019. In summary, the combined legislation makes it an offence to:

- damage or destroy a breeding site or resting place or intentionally or recklessly obstruct access to a structure or place used for shelter by an otter;
- deliberately, intentionally or recklessly disturb otters; in particular, any disturbance which is likely to impair the ability of otters to survive, breed or reproduce or nurture their young; or to significantly affect the local distribution or abundance of the species; and
- deliberately kill, injure or take any bat.

Reptiles

The four widespread reptiles most likely to be encountered (adder, grass snake, slow worm and common lizard) are protected under the W&CA 1981

(as amended). The Act makes it an offence to intentionally kill, injure, possess or sell any of the species.

The aforementioned species are all listed as being of principal importance for the conservation of biodiversity in England (*'UKBAP Priority Species'*) under Section 41 of the NERC Act 2006.

Water voles

Since April 2008, water voles have received full protection under Section 9 in Schedule 5 of the W&CA 1981 (as amended). This makes it an offence to intentionally kill, injure or take water voles or to possess or control live or dead water voles or derivatives. It is an offence to intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection or intentionally or recklessly disturb water voles whilst occupying a structure or place used for that purpose.

The water vole is listed as being of principal importance for the conservation of biodiversity in England (*'UKBAP Priority Species'*) under Section 41 of the NERC Act 2006.

Wild mammals

Under the Wild Mammals (Protection) Act 1996 it is an offence to intentionally inflict unnecessary suffering, as specified by the Act, on any wild mammal.

APPENDIX 2 - SITE PHOTOGRAPHS



1. Lowland mixed deciduous woodland along the western side of the site (w1f).



2. Piles of grass cuttings within the woodland along the western side of the site (TN1).



3. Pile of brash and rubbish at the north-western corner of the site (TN2).



4. Mixed woodland along the northern boundary of the site.



5. Woodland along the southern side of the site (w1g).



6. Line of poplar and silver birch trees across the centre of the site (w1g6).



7. Line of poplar and London plane trees from northern boundary to the centre of the site (w1g6).



8. Mixed scrub at the north-eastern corner of the site (h3h).



9. Pile of grass cuttings adjacent to the scrub on the eastern side of the site (TN1).



10. Native hedgerow along the eastern boundary of the site (h2a).



11. Natural sport pitches made of modified grassland (g4 511).



12. Grassland surrounding the artificial sport pitches (g4).



13. Scattered trees within the modified grassland (g4 11).



14. Large car park to the east of the site (u1b 89).



15. Artificial sport pitches (u1b 512)



16. Unsealed unvegetated surface (u1c).



17. Sports centre (B1).



18. Sports centre (B1).

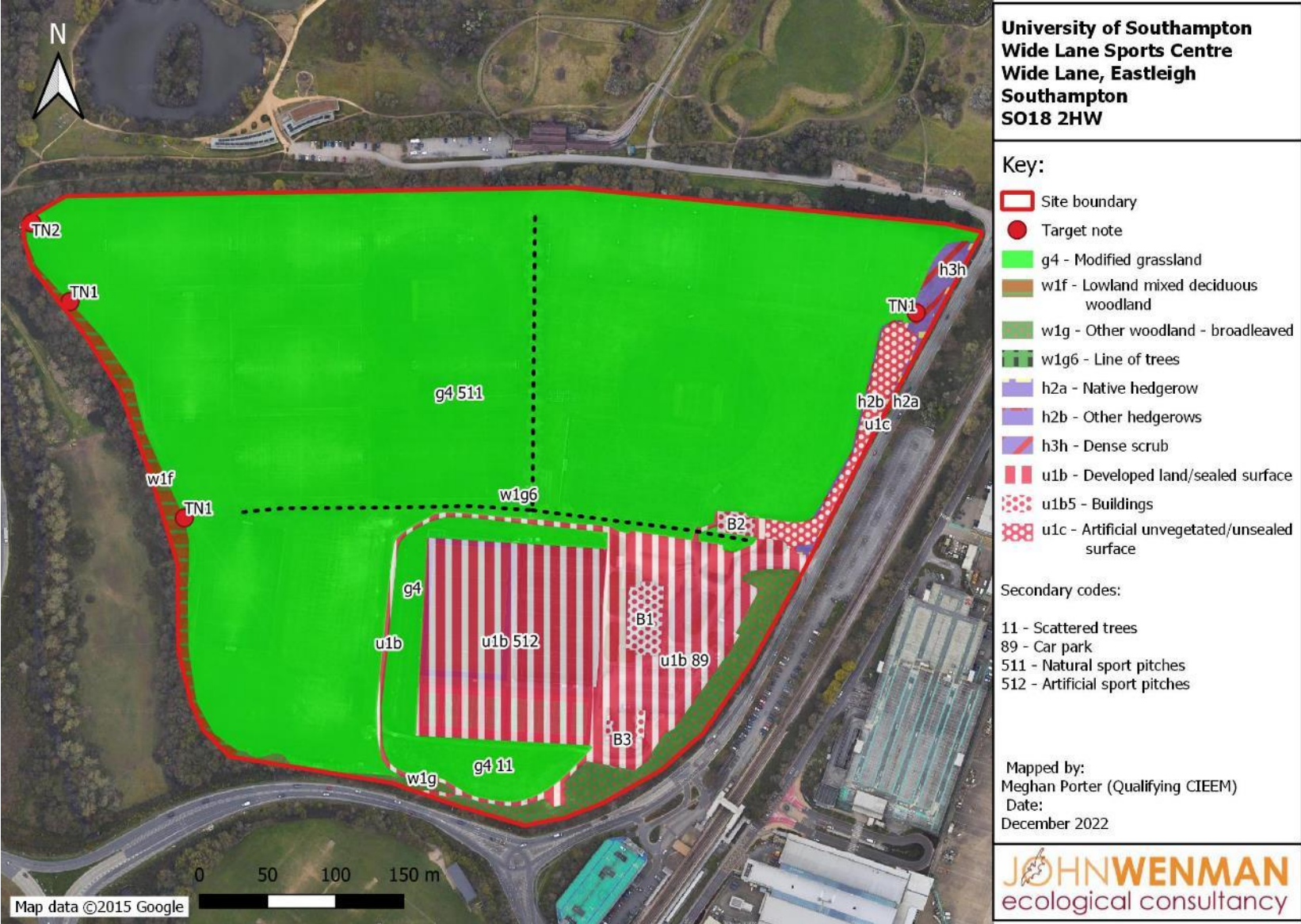


19. Pavilion building (B2).



20. Uneven hanging tiles on the western gable (B2).

APPENDIX 3 – UK HABITAT CLASSIFICATION SURVEY PLAN



John Wenman Ecological Consultancy

APPENDIX 4 - UK HABITAT CLASSIFICATION SURVEY NOTES

Reference	Habitat Description
w1f	Lowland mixed deciduous woodland – (Photograph 1) An area of lowland mixed deciduous woodland was present along the western and north-western boundary of the site. The woodland included the following tree species; oak (<i>Quercus robur</i>), silver birch (<i>Betula pendula</i>), sycamore (<i>Acer pseudoplatanus</i>), beech (<i>Fagus sylvatica</i>), ash (<i>Fraxinus excelsior</i>) and red oak (<i>Quercus rubra</i>). The ground flora included bramble (<i>Rubus fruticosus</i> agg.), hogweed (<i>Heracleum sphondylium</i>), germander speedwell (<i>Veronica chamaedrys</i>), agrimony (<i>Agrimonia eupatoria</i>), bracken (<i>Pteridium aquilinum</i>), common nettle (<i>Urtica dioica</i>) and ivy (<i>Hedera helix</i>).
w1g	Broadleaved woodland – (Photographs 4 & 5) A strip of woodland was present along the northern boundary of the site with mixed tree species including sweet chestnut (<i>Castanea sativa</i>), black pine (<i>Pinus nigra</i>), holm oak (<i>Quercus ilex</i>), sycamore (<i>Acer pseudoplatanus</i>) and small-leaved elm (<i>Ulmus minor</i>). There was a woodland edge present along the southern boundary of the site and at the south-eastern corner of the site with ash (<i>Fraxinus excelsior</i>), dogwood (<i>Cornus sanguinea</i>), holly (<i>Ilex aquifolium</i>), hazel (<i>Corylus avellana</i>), hawthorn (<i>Crataegus monogyna</i>), blackthorn (<i>Prunus spinosa</i>), goat willow (<i>Salix caprea</i>).
w1g6	Line of trees – (Photograph 6 & 7) A line of Lombardy poplar (<i>Populus nigra</i>) and silver birch trees was present across the middle of the site north of the existing artificial pitches. A line of lombardy poplar and London plane (<i>Platanus x hispanica</i>) trees connected the centre of the site to the northern boundary.
h3h	Mixed scrub – (Photograph 8) A strip of scrub vegetation was situated at the north-eastern corner of the site. Shrub species present in the area included bramble (<i>Rubus fruticosus</i> agg.), creeping thistle (<i>Cirsium arvense</i>), burdock (<i>Arctium lappa</i>), mugwort (<i>Artemisia vulgaris</i>), oxeye daisy (<i>Leucanthemum vulgare</i>), greater knapweed (<i>Centaurea scabiosa</i>), prickly sowthistle (<i>Sonchus asper</i>), false oat grass (<i>Arrhenatherum elatius</i>), and common nettle.
h2a	Native hedgerow – (Photograph 10) A native hedgerow was present along the eastern side of the site and included field maple (<i>Acer campestre</i>), winter heliotrope (<i>Petasites fragrans</i>), small-leaved elm, dog rose, dogwood and blackthorn.
h2b	Other hedgerow – (Photograph 16) A planted, clipped beech and hazel hedge surrounding the gravel (u1c) area.
g4 511 11	Modified grassland – (Photograph 11- 13) The majority of the site consisted of outdoor sport pitches on frequently mown modified grassland, consisting of mostly perennial ryegrass (<i>Lolium perenne</i>), with daisy (<i>Bellis perennis</i>), occasional cocksfoot (<i>Dactylis glomerata</i>). There was occasional dandelion (<i>Taraxacum officinale</i>), ribwort plantain (<i>Plantago lanceolata</i>), ragwort (<i>Jacobaea vulgaris</i>), yarrow (<i>Achillea millefolium</i>) and dovesfoot cranesbill (<i>Geranium mole</i>) present in the grassland surrounding the artificial pitches and tennis courts. Scattered trees including red oak (<i>Quercus rubra</i>), ash (<i>Fraxinus excelsior</i>) and cherry (<i>Prunus</i> sp.) were present in an area of longer grass along the track with creeping bent (<i>Agrostis stolonifera</i>), creeping thistle, timothy (<i>Phleum pratense</i>) and yellow toadflax (<i>Linaria vulgaris</i>) present in the rougher grassland along the southern edge of the site.
u1b 89	Developed land / Sealed surface – (Photograph 14) An asphalt carpark was present at the south-eastern corner of the site in front of the sports centre building, with associated landscaping throughout the car park including introduced shrubs, including <i>Contoneaster</i> sp.
u1b 512	Artificial sport pitches – (Photograph 15) There were two artificial sport pitches and eight tennis courts to the west of the sports centre building with a gravel track surrounded them.
u1c	Unvegetated / unsealed surface – (Photograph 16) An area of compacted gravel was present along the eastern side of the site.

u1b5 – B1	Sports centre – (Photograph 17 & 18) Large sports centre between the asphalt car park and outdoor sport pitches, which featured sloping roofs and green roofs on two flat-roofs.
u1b5 – B2	Pavilion – (Photograph 19 – 22) A pavilion was present to the north of the car park.
u1b5 – B3	Maintenance sheds – (Photograph 18) There were maintenance sheds present south of the car park, which were simple metal structures.
TN1	Target note – (Photograph 2) Two piles of grass cuttings in the woodland on the western side of the site. A third grass cutting pile was present on the western side of the site, adjacent to scrub.
TN2	Target note – (Photograph 3) Brash and rubbish pile in the north-western corner of the site.

APPENDIX 5 - PLANT SPECIES RECORDED DURING THE SURVEY

Plant common name	Scientific name
Agrimony	<i>Agrimonia eupatoria</i>
Ash	<i>Fraxinus excelsior</i>
Black pine	<i>Pinus nigra</i>
Blackthorn	<i>Prunus spinosa</i>
Bracken	<i>Pteridium aquilinum</i>
Bramble	<i>Rubus fruticosus</i> agg.
Burdock	<i>Arctium lappa</i>
Cherry	<i>Prunus avium</i>
Cock's-foot	<i>Dactylis glomerata</i>
Common nettle	<i>Urtica dioica</i>
Creeping bent	<i>Agrostis stolonifera</i>
Creeping thistle	<i>Cirsium arvense</i>
Daisy	<i>Bellis perennis</i>
Dandelion	<i>Taraxacum officinale</i> agg.
Dog rose	<i>Rosa canina</i>
Dogwood	<i>Cornus sanguinea</i>
Dove's-foot crane's-bill	<i>Geranium mole</i>
False oat grass	<i>Arrhenatherum elatius</i>
Field maple	<i>Acer campestre</i>
Germader speedwell	<i>Veronica chamaedrys</i>
Goat willow	<i>Salix caprea</i>
Greater knapweed	<i>Centaurea scabiosa</i>
Hawthorn	<i>Crataegus monogyna</i>
Hazel	<i>Corylus avellana</i>
Hogweed	<i>Heracleum sphondylium</i>
Holly	<i>Ilex aquifolium</i>
Holm oak	<i>Quercus ilex</i>
Ivy	<i>Hedera helix</i>
Lombardy poplar	<i>Populus nigra</i>
London plane	<i>Platanus x hispanica</i>
Mugwort	<i>Artemisia vulgaris</i>
Nettle	<i>Urtica dioica</i>
Oak	<i>Quercus robur</i>
Oxeye daisy	<i>Leucanthemum vulgare</i>
Pendulus sedge	<i>Carex pendula</i>
Perennial rye-grass	<i>Lolium perenne</i>
Prickly sowthistle	<i>Sonchus asper</i>
Ragwort	<i>Jacobaea vulgaris</i>
Red oak	<i>Quercus rubra</i>
Ribwort plantain	<i>Plantago lanceolata</i>
Silver birch	<i>Betula pendula</i>
Small-leaved elm	<i>Ulmus minor</i>
Sweet chestnut	<i>Castanea sativa</i>
Sycamore	<i>Acer pseudoplatanus</i>
Timothy	<i>Phleum pratense</i>
Winter helotrope	<i>Petasites fragrans</i>
Yarrow	<i>Achillea millefolium</i>
Yellow toadflax	<i>Linaria vulgaris</i>