

**Prospect Park Pavilion
Liebenrood Road
Reading
Berkshire
RG30 2ND**

Preliminary Ecological Appraisal

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1 SUMMARY

- 1.1.1** John Wenman Ecological Consultancy LLP was commissioned by Reading Borough Council to carry out a preliminary ecological appraisal of the buildings and land around the Pavilion situated towards the north-eastern corner of Prospect Park. The survey was undertaken in connection with proposals to seek planning consent to provide a new play service at the existing pavilion and surrounding land, including the refurbishment of parts of the existing pavilion building, the creation of new outdoor play areas, a cafe and enclosed education zones within the survey site.
- 1.1.2** A Phase 1 walkover survey completed in February 2021 has shown that the site comprised of the Pavilion building with introduced shrubs and patches of amenity grassland with scattered broadleaved trees to the front, and bare ground with a strip of coniferous trees and scattered scrub towards the rear. A car park was present to the east, hardstanding to the west of the building and several footpaths amongst the amenity grassland to the front northern side of the building. The buildings included the Pavilion (B1) covering the centre of the site, a toilet block (B2) towards the north western end of the site, and three metal containers towards the southern side (B3, B4 & B5).
- 1.1.3** The pre-existing data held by Thames Valley Environmental Records Centre (TVERC) has shown that the survey site is not statutorily designated for its wildlife interest and therefore not recognised as being of international, national or county level conservation significance. The site is surrounded by Prospect Park (& the Rookery), a non-statutorily designated Local Wildlife Site (LWS), so is recognised for its wildlife importance within Berkshire.
- 1.1.4** The survey has shown that on the whole the site supports species poor amenity grassland with beds of introduced shrubs with occasional scattered broadleaved trees of no conservation importance beyond the site. The scattered scrub offered some potential for widespread nesting birds but was not an example of a priority habitat. The mature oak trees on site and one veteran tree just outside of the boundary are examples of a UK Priority Habitat and therefore of conservation importance.
- 1.1.5** The proposals involve the removal of a small patch of scattered scrub, amenity grassland and introduced shrubs. The proposals are unlikely to have an impact on protected and notable species and habitats, but some

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proposed habitat and protected species avoidance and mitigation measures and recommendations have been outlined including:

- Precautionary measures during the removal of trees and a section of scrub to avoid impacts to mammals, amphibians and reptiles;
- Precautionary measures to prevent disturbance of nesting birds.

1.1.6 The proposals present opportunities for ecological enhancements in order to achieve a net gain in biodiversity value and include:

- The provision of features for invertebrates, small mammals, amphibians and reptiles such as rockeries or partially buried log piles.
- Any new planting as part of the landscaping should make use of native ground cover plants.

2 INTRODUCTION

2.1 Background

2.1.1 John Wenman Ecological Consultancy LLP was commissioned by Reading Borough Council to undertake preliminary ecological appraisal of the buildings and an area of land at Prospect Park Pavilion in Reading, Berkshire.

2.1.2 The survey was undertaken in connection with proposals to seek planning consent to provide a new play service at the existing pavilion and surrounding land, including the part refurbishment of the existing pavilion building, the creation of new outdoor play areas, a cafe and enclosed education zones within the survey site.

2.2 Site Location and Context

2.2.1 The survey site is situated within Prospect Park, in Reading, Berkshire (OS grid reference: SU 69116 72816).

2.2.2 The survey site is a small area of approximately 0.27 hectares, situated towards the north-eastern corner of Prospect Park, and is a part of a wider green space, with open grassland and scattered trees to the west, east and north of the site. To the north of the site there was an access road and a large car park to the east of the Pavilion building. There were several multi-use games areas and tennis courts to the west of the Pavilion, with scattered mature trees to the east and west of the site. The scattered trees connected to a larger area of broadleaved woodland approximately 180 metres to the west of the site. There was a pond within Prospect Park, that was situated approximately 90 metres to the south-west of the survey site.

2.3 Report Format

2.3.1 There follows: an overview of the protected species legislation in **Section 3** and of the national and local wildlife policy background in **Section 4**; details of the survey methods in **Section 5**; relevant background data search findings in and phase 1 habitat survey findings in **Section 6**; building inspection findings in **Section 7**; a discussion of the survey findings in **Section 9** and recommendations in **Section 9**. The appendices present: photographs (**Appendix 1**); a phase 1 habitat survey plan (**Appendix 2**); a building inspection plan with associated target notes (**Appendix 3**); a list of

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plant species recorded during the phase 1 habitat survey (**Appendix 4**) and proposed plans (**Appendix 5**).

3 LEGISLATIVE BACKGROUND – PROTECTED SPECIES

3.1 Amphibians

3.1.1 The seven native species of amphibian receive protection under the Wildlife & Countryside Act 1981 (as amended). The four widespread and common amphibians (common frog, toad, smooth and palmate newts) receive limited protection – making their sale illegal.

3.1.2 Great crested newts receives full protection under the Wildlife & Countryside Act 1981 (as amended) and under the Conservation (Natural Habitats &c.) Regulations 2017 ('Habitat Regulations') (as amended). These make 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;
- 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.

3.1.3 The great crested newt and common toad are listed as being of principal importance for the conservation of biodiversity in England, under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006, (commonly referred to as a UK Priority Species).

3.2 Reptiles

3.2.1 The four widespread reptiles most likely to be encountered (adder, grass snake, slow worm and viviparous lizard) are protected under the Wildlife & Countryside Act 1981 (as amended). The Act makes it an offence to intentionally kill, injure, possess or sell any of the species.

3.2.2 The four reptile species are listed as being of principal importance for the conservation of biodiversity in England, under Section 41 of the Natural Environment and Rural Communities Act 2006, (commonly referred to as a UKBAP Priority Species).

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3.3 Birds

3.3.1 All wild birds are protected under the Wildlife & Countryside Act 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.

3.3.2 Less common bird species of conservation concern, such as the barn owl and kingfisher, are listed on Schedule 1 of the Act, which makes it an offence to disturb the birds whilst nesting also.

3.4 Bats

3.4.1 All British bat species are fully protected by the Wildlife & Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 ('Habitat Regulations'). In summary, the legislation combined 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 affect significantly the local distribution or abundance of the species;
- Deliberately kill, injure or take any bat.

3.5 Badgers

3.5.1 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.

3.6 Otters

3.6.1 Otters are fully protected by the Wildlife & Countryside Act 1981 (as amended) and by the Conservation of Habitats and Species Regulations 2017 ('Habitat Regulations'). In summary, the legislation combined 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 affect significantly the local distribution or abundance of the species;
- Deliberately kill, injure or take any otter.

3.7 Hazel Dormice

3.7.1 Hazel dormice receive full protection under the Wildlife & Countryside Act 1981 (as amended) and under the Conservation (Natural Habitats &c.) Regulations 2017 ('Habitat Regulations') (as amended). 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;
- 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.

3.7.2 The government's statutory conservation advisory organisation, Natural England, is responsible for issuing European Protected Species licences that would permit activities that would otherwise lead to an infringement of the Habitat Regulations. A licence can be issued if the following three tests have been met:

- **Regulation 55(9)(a)** - there is “no satisfactory alternative” to the derogation, and;
- **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”.

3.7.3 Local authorities have a statutory duty under Regulation 7(3e) of the Habitat Regulations to have regard to requirements of the Habitats Directive in the exercise of their functions. The Council must therefore consider and determine whether these three tests are likely to be satisfied by an application affecting European protected species before granting planning permission. **N.B. the requirements set out in 4.7.2 and 4.7.3 apply to development that would affect bats, great crested newts and otters, which are European Protected Species also.**

3.8 Water Voles

3.8.1 Since April 2008, water voles have received full protection under Section 9 of the Wildlife & Countryside Act 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.

3.8.2 The water vole is listed as being of principal importance for the conservation of biodiversity in England, under Section 41 of the Natural Environment and Rural Communities Act 2006, (commonly referred to as a UKBAP Priority species).

3.9 Invasive Non-Native Plants

3.9.1 The Wildlife and Countryside Act 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 includes Japanese knotweed (*Fallopia japonica*), giant hogweed (*Heracleum mantegazzianum*) and himalayan balsam (*Impatiens glandulifera*).

3.10 Injurious Weeds

3.10.1 Five native plants are listed as injurious weeds under the Weeds Act 1959: common ragwort (*Senecio jacobaea*), spear thistle (*Cirsium vulgare*), creeping or field thistle (*Cirsium arvense*), broad-leaved dock (*Rumex obtusifolius*) and curled dock (*Rumex Crispus*). The Act means it is not an offence to have these weeds growing on your land and species such as ragwort have significant conservation benefits. However they must not be allowed to spread to agricultural land, particularly grazing areas or land which is used to produce conserved forage. Enforcement notices can be issued following complaints requiring landowners to take action to prevent the spread of these weeds.

3.11 Wild Mammals

3.11.1 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.

4 POLICY BACKGROUND

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 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.'*

4.1.2 The Natural Environment and Rural Communities (NERC) Act 2006 requires all public bodies, including local authorities, to have regard to biodiversity conservation when carrying out their functions. This is commonly referred to as the 'Biodiversity Duty'.

4.1.3 The revised National Planning Policy Framework (NPPF), published in February 2019, 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 enhance the natural environment when preparing planning policy and when considering planning applications. Paragraph 175 sets out the principles local authorities should apply when determining planning applications as follows:

175. 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 Reading Borough Council makes planning decisions based on the policies within the Core Strategy (adopted January 2008) which sets out their overall planning strategy and important principles for development in Reading.

4.2.2 Policy CS36 within the Strategy sets out the Council's approach to biodiversity and geology when considering planning applications as follows:

- a) Development should retain, protect and incorporate features of biodiversity or geological interest (including protected species and their habitats) found within the application site into their schemes.

On sites with recognised biodiversity or geological value, development will not be permitted where there would be a direct or indirect adverse impact on the site, unless it can be clearly demonstrated that: -

i. The need for development clearly outweighs the need to protect the value of the site; and

ii. Appropriate compensation, impact minimization, mitigation and compensation are provided.

- b) Local Nature Reserves and Wildlife Heritage Sites will be safeguarded and where possible, enhanced. Permission will not be granted for any development that would adversely affect a designated nature reserve or Wildlife Heritage Site.

- c) Any development that would sever or threaten the integrity of an established wildlife link, as indicated on an adopted proposals map, will not be permitted. Where applicable, developments should be designed to protect, consolidate, extend and enhance the network of wildlife links and corridors in and adjoining the Borough, working with neighbouring

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authorities where appropriate.

5 SURVEY METHOD

5.1 Walkover Survey

5.1.1 A walkover survey was undertaken on the 23rd February 2021 by a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM) and assisting ecologist. During the survey the habitats present were noted and plotted on a site plan (**Appendix 2**) using definitions based on the standard phase 1 ecological survey definitions (JNCC 2010). Key features of the site were photographed (**Appendix 1**) and plotted on the site plan using target notes (**Appendix 2**).

5.1.2 Any features of ecological importance were recorded, and plant species observed during the survey noted (**Appendix 4**). Particular attention was given to any evidence of the presence of protected species and the site's potential to support such species and those of principle importance for nature conservation (as defined within Section 41 of the NERC Act 2006).

5.2 Building Inspection

5.2.1 An external survey of the Pavilion building for evidence of roosting bats and nesting birds was undertaken by an ecologist registered under Natural England Class Licence CL18 and assistant ecologist on the 23rd February 2021.

5.2.2 The search was undertaken with the aid of binoculars and a high power (1 million candle power) torch. Signs of occupation by bats and features that could offer potential roosting sites following standard survey guidelines were looked for (Collins 2016; Mitchell-Jones 2004; Mitchell-Jones & McLeish 2004).

5.2.3 The following may indicate the presence of a bat roost within a building:

- Bat droppings (these can be found externally, especially in sheltered areas such as window sills, underneath roost entrances or internally within a roof space);
- Piles of insect remains e.g. moth wings (these are indicative of regular feeding sites used by species such as brown long eared bat);
- Staining at roost entrances or within the roost (urine and oil from fur can leave stains on timbers when bats are gathered for long periods);
- Bats (live or dead).

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5.2.4 Residential and commercial properties may offer potential roosting sites in a number of locations, favoured locations include:

- Under roof and ridge tiles, especially when loose or missing tiles are present or sections of mortar are missing;
- At the eaves – gaining access via gaps between the soffits and wall;
- At the gable ends – access is typically gained at the roof apex via gaps in the soffits or under roof tiles;
- Within an enclosed roof space – long-eared bats (*Plecotus* sp.) for example, will often cluster at the ridge beam.

5.2.5 The building was inspected also for evidence of nesting birds and this comprised a search for nesting material, feathers, droppings, birds (dead and alive) and listening for the calls of young birds occupying nests.

5.3 Biological Records Search

5.3.1 The Thames Valley Environmental Records Centre (TVERC) was commissioned to undertake a search of the data they held on protected and notable species and sites (statutory and non-statutory sites) within a 1 kilometre radius of the site.

5.4 Survey Constraints

5.4.1 The ecological survey had no access constraints; however, all ecological survey 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 presented should not be considered a comprehensive list of species present.

5.4.2 Access was restricted to the buildings on the site as the Pavilion was being used as a COVID testing centre and therefore an internal survey was not possible at the time of the survey due to restricted access inside the building. Externally, access was also restricted with Heras fencing around the car park and the rear of the building being visible only from the fence.

6 PHASE 1 HABITAT SURVEY FINDINGS AND ASSESSMENT

6.1 Designated Sites

6.1.1 The search of data held by Thames Valley Environmental Records Centre (TVERC) and on the Multi-Agency Geographic Information for the Countryside (MAGIC) shows that the survey site is not designated as a wildlife site but is directly surrounded by Prospect Park (& the Rookery), a non-statutorily designated Berkshire Local Wildlife Site (LWS), for its wildlife importance within Berkshire. Prospect Park is an historic parkland site consisting primarily of closely mown amenity grassland and associated public amenities, with several mature and veteran trees. The site is bordered to the south by hedgerows and areas of scrub and scrub woodland and contains a pond. The site also includes the Rookery a lowland mixed deciduous woodland 180 metres to the west of the site.

6.1.2 There are two other Local Wildlife Sites (LWS) situated within a 1km radius of the site: Meadway Fringe and Louisehill Copse, both situated to the west of the site, and both a part of the West Reading Woodlands - a Biodiversity Opportunity Area (BOA).

6.1.3 There are several statutorily designated wildlife sites within 5km of the survey site. The nearest to the survey site was Louisehill Copse, a Local Nature Reserve (LNR) and LWS, approximately 560 metres to the north-west of the site, which is noted for its semi-ancient oak and hazel woodland. There were three further LNR's to the north-west of the site: Blundells Copse LNR, Round Copse LNR and Mclloy Park LNR. There are two Sites of Special Scientific Interest (SSSI) within 5 kilometres of the survey site: Pincents Kiln SSSI, and Sulham and Tidmarsh Woods and Meadows SSSI, and as such the site falls within the SSSI Impact zone.

6.2 Protected/Notable Species

6.2.1 The TVERC database includes some records of protected and notable habitats and species within the 1km radius search area as follows:

6.2.2 There are records of three amphibian species within the 1km search area: smooth newt (*Lissotriton vulgaris*), palmate newt (*Lissotriton helveticus*), and common frog (*Rana temporaria*). Common frog has been recorded historically (in 2007 and 2010) in the pond within Prospect Park

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approximately 90 metres from the survey site. Smooth newt and palmate newt have been recorded at a Louisehill Copse LWS just over 600 metres to the northwest, with records from 2018.

6.2.3 There are numerous contemporary records (<10 years old) of protected and notable birds inside the 1 km search radius, including: barn owl (*Tyto alba*), fieldfare (*Turdus pilaris*), Cetti's warbler (*Cettia cetti*), kingfisher (*Alcedo atthis*), firecrest (*Regulus ignicapilla*), redwing (*Turdus iliacus*) and red kite (*Milvus milvus*) – all species which are protected under Schedule 1 of the Wildlife & Countryside Act 1981 (as amended). Bird species that have been recorded within Prospect Park include common tern (*Sterna hirundo*), dunnock (*Prunella modularis*), fieldfare (*Turdus pilaris*), firecrest (*Regulus ignicapilla*), house sparrow (*Passer domesticus*), kestrel (*Falco tinnunculus*), lapwing (*Vanellus vanellus*), mallard (*Anas platyrhynchos*), marsh tit (*Poecile palustris*), meadow pipit (*Anthus pratensis*), mistle thrush (*Turdus viscivorus*), pied flycatcher (*Ficedula hypoleuca*), red kite (*Milvus milvus*), redwing (*Turdus iliacus*), song thrush (*Turdus philomelos*), spotted flycatcher (*Muscicapa striata*), starling (*Sturnus vulgaris*), stock dove (*Columba oenas*), tawny owl (*Strix aluco*) and willow warbler (*Phylloscopus trochilus*). Other notable bird species recorded elsewhere in the search radius include cuckoo (*Cuculus canorus*), grasshopper warbler (*Locustella naevia*), grey wagtail (*Motacilla cinerea*), lesser redpoll (*Acanthis cabaret*), lesser spotted woodpecker (*Dendrocopos minor*), turtle dove (*Streptopelia turtur*), whinchat (*Saxicola rubetra*) and yellow wagtail (*Motacilla flava*).

6.2.4 At least 6 bat species have been recorded widely within the last ten years in the 1km search area including: brown long-eared (*Plecotus auritus*), common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), Daubenton's (*Myotis daubentonii*), noctule (*Nyctalus noctula*) and serotine (*Eptesicus serotinus*).

6.2.5 Notable terrestrial mammals recorded in the last ten years within the search area are: hedgehog (*Erinaceus europaeus*) – a UK Priority Species; and badger (*Meles meles*) – a species protected under the Badgers Act 1992. Hedgehog have been recorded between 2012 and 2019, with the closest being just over 430m to the northeast. Badger has been recorded along the A4 approximately 440 metres to the south of the site recorded in 2015 and to the west of the site, in Louisehill Copse, with the most recent record of a

sett dating from 2018.

6.2.6 Botanical records within the search include bluebell (*Hyacinthoides non-scripta*), a protected species, recorded in 2008 in a grid square to the south-west, within the area of Prospect Park. Historical records include goldenrod (*Solidago virgaurea*) was recorded in 1997 and quaking grass (*Briza media*) was recorded in 2010 within the area of Prospect Park.

6.2.7 The database includes records of two notable invertebrates recorded within the last ten years: stag beetle (*Lucanus cervus*) – a UK Priority Species and listed on Annex 2 of the European Habitats Directive – has been recorded at several sites within the search area, with the most recent and closest record approximately 215 metres to the east in 2018. It was recorded historically at Prospect Park in 1997.

6.3 Site Description and Context

6.3.1 The survey site comprised of the Pavilion building with introduced shrubs and patches of amenity grassland with scattered broadleaved trees to the front, and bare ground with a strip of coniferous trees and scattered scrub towards the rear. A car park was situated to the east, hardstanding was present to the west of the building and several footpaths were amongst the amenity grassland to the front (northern) side of the building. The buildings included the Pavilion (B1) covering the centre of the site, a toilet block (B2) towards the north western end of the site, and three metal containers towards the rear (southern) side of the site (B3, B4 & B5).

6.4 Habitat Overview

6.4.1 The following phase 1 habitat types were observed during the survey: scattered scrub, introduced shrub, amenity grassland, scattered broadleaved and coniferous trees, bare ground, other habitats and buildings.

6.4.2 The habitat types are described below in detail; its distribution is shown on the site plan with associated target notes in **Appendix 2** and the site photographs are in **Appendix 1**.

6.5 Scattered Scrub (SS1)

6.5.1 A strip of scattered scrub was present at the southern side of the site (**SS1; Photograph 1**). The scrub was dominated by holly (*Ilex aquifolium*),

bramble (*Rubus fruticosus* agg.), willow (*Salix* sp.), bamboo (*Arundinaria* sp.), *Elaeagnus*, *Mahonia japonica* and ground flora species along the northernmost edge included ivy (*Hedera helix*), nettle (*Urtica dioica*), bluebell (*Hyacinthoides non-scripta*), cleavers (*Galium aparine*), cow parsley (*Anthriscus sylvestris*) and daffodils (*Narcissus* hybrids) (**Photograph 2**). The southern side comprised of bare ground, which was shaded by the trees.

6.6 Introduced shrub (IS1 & IS2)

6.6.1 Two formal areas to the front of the pavilion had been planted with introduced shrubs (**IS1**) around a groups of young paperbark birch (*Betula papyrifera*) trees (**SBW2**) and amenity grassland with crocus (*Crocus tommasinianus*) (**AM2**) plants growing amongst them. Species present in the flowerbeds included rose (*Rosa* sp.), *Bergenia* and pendulous sedge (*Carex pendula*) (**Photographs 3 & 4; IS1**).

6.6.2 Further formal planted beds were present directly around the edge of the pavilion which included daffodil (*Narcissus* hybrids), pendulous sedge (*Carex pendula*), and *Mahonia japonica* (**Photograph 5; IS2**). The ground around the beds had no ground cover and consisted of bare earth or areas of pebbles.

6.7 Amenity Grassland (AM1 & AM2)

6.7.1 A patch of grassland was present under the scattered mature trees at the north eastern corner of the site and along the sides of the toilet block towards the north western corner of the site. The grassland had been kept short (**Photograph 6; AM1**). Species present within the grass sward included perennial rye grass (*Lolium perenne*), which dominated the sward and cocksfoot occasionally (*Dactylis glomerata*), with a few herbaceous species including buttercup (*Ranunculus* sp.), clover (*Trifolium* sp.), daisy (*Bellis perennis*), yarrow (*Achillea millefolium*), cow parsley (*Anthriscus sylvestris*) and under the trees a few crocuses (*Crocus tommasinianus*) were growing.

6.7.2 Two square formal patches of amenity grassland were situated towards the centre of the area to the front (northern) side of the pavilion. The grassland was kept relatively short and had the same species composition as the rest of the amenity grassland. The main difference was numerous crocuses

(*Crocus tommasinianus*) growing amongst the grassland (**AM2**) and young paperbark birch (*Betula papyrifera*) trees (**Photograph 7; SBW2**).

6.8 Scattered Broadleaved Trees (SBW1, SBW2 & SBW3)

6.8.1 Two mature oak (*Quercus robur*) trees grew in the north western corner of the site amongst amenity grassland (**Photograph 8; SBW1**). Two groups of three young paper-bark birch (*Betula papyrifera*) tree were present amongst planted flower beds towards the northern side of the site (**Photograph 9; SBW2**). A veteran oak (*Quercus robur*) tree was growing just outside of the development boundary towards the southwest of the site; the tree had several features, which could be used by roosting bats including a wound on the trunk and deadwood (**Photograph 10; SBW3**).

6.9 Scattered Coniferous Trees (SCW1) and Fence (F1)

6.9.1 A strip of conifers was growing along a timber panelled fence at the rear southern side of the pavilion (**Photograph 11; SCW1 & F1**).

6.10 Bare ground (BG1)

6.10.1 The ground around the southern side of the pavilion and underneath the southern side of the conifers comprised of bare earth (**BG1; Photograph 12**). The area towards the south of the trees had been used by the public, with piles of rubbish visible on the floor.

6.11 Other Habitats (OH1) and Wall (W1)

6.11.1 Several footpaths crossed through the flowerbeds towards the northern side of the pavilion, the eastern side of the site comprised of a tarmac car park and the western side comprised of tarmac pavement with a brick wall running along the edge of the site (**OH1 & W1; Photographs 13 & 14**).

6.12 Buildings (B1, B2, B3 & B4)

6.12.1 The buildings onsite included the Pavilion (**B1**), which is detailed in section 7 covering the central footprint of the site, a toilet block (**Photograph 15; B2**) towards the north western end of the site, and three metal containers towards the rear southern side of the site (**Photographs 16 & 17; B3, B4 & B5**). The metal containers were of simple construction with limited potential for use by bats.

7 BUILDING INSPECTION FINDINGS

7.1 Introduction

- 7.1.1** Photographs of the Pavilion (**B1**) are presented in **Appendix 1**, its location is illustrated on the walkover plan in **Appendix 2** and associated target notes are mapped on the building inspection plan in **Appendix 3**.

7.2 External survey

- 7.2.1** The Pavilion building had a hipped roof covered tightly in moulded bitumen felt sheet tiles and a metal container with a corrugated metal sheet roof was attached to the rear (southern) side of the building (**Photograph 18; Target notes 1 & 2**). The walls were of brickwork construction (**Photograph 19**). Bitumen felt was visible at the eaves, which had a couple of tears visible with boarding visible behind along the northern side of the building (**Photographs 20 & 21; Target notes 3 & 4**). An old bird nest was resting on some guttering towards the northern side of the building (**Photograph 22; Target note 5**). A gap was present on the central hipped roof at the northern side of the building where the hipped roof and eaves joined the brickwork (**Photograph 23; Target note 6**).
- 7.2.2** No evidence of bats was visible on the exterior of the Pavilion during the survey.

8 DISCUSSION

8.1 Assessment of Existing Ecological Value

Habitats

- 8.1.1** The scattered broadleaved trees along the northern boundary of the site, and scattered coniferous trees along the southern side of the pavilion, were relatively structurally diverse and offer habitats of ecological value at the site and local level, with the potential to support protected species i.e. nesting birds and foraging bats. The oak tree towards the south west of the site, outside of the development site, was also a habitat of high ecological value, offering potential habitat for a range of species such as invertebrates, small mammals, nesting birds and roosting bats.
- 8.1.2** The small strip of scattered scrub and shrubs towards the south of the site offered habitat of some structural diversity; however, the habitat was relatively fragmented, surrounded by disturbed bare ground and amenity grassland in a wider context, but at the site level, have potential to support protected species i.e., nesting birds. A few bluebells were growing up along the southern most side of the scrub, which are found locally abundant on site, in particular, at the Rookery LWS.
- 8.1.3** The small area of amenity grassland on site supported a low number of native grassland and herbaceous species and did not have the characteristics typical of grasslands of Habitat of Principal Importance (HPI) and therefore is of no conservation importance. The young, planted non-native trees and introduced shrubs with low number of species with limited structural diversity were of limited conservation importance.
- 8.1.4** The survey site is surrounded by the Prospect Park LWS, which includes the historic parkland site with mature and veteran trees and the lowland mixed deciduous woodland of the Rookery situated approximately 180 metres to the west.

Bats

- 8.1.5** Six bat species have been recorded within the search radius and with the parkland location they are likely to be present in the vicinity of the site. The scattered trees on site offer suitable commuting and foraging habitat for

bats, and a couple of trees offer roosting opportunities for bats, in particular the mature oak trees. However, all the trees will be retained and therefore there will be no impact on roosting potential for bats.

- 8.1.6** The scattered scrub to be removed towards the south of the site offered no opportunities for roosting bats. They had no features suitable for roosting bats and were unsuitable for bats to access for roosting.
- 8.1.7** The Pavilion building (B1) was assessed to offer low bat roost potential with only limited suitable features. The toilet (B2) and outbuildings (B3, B4 & B5) were assessed to have negligible bat roost potential.

Hazel Dormice

- 8.1.8** The small strip of scattered scrub on site, offers potential foraging and nesting habitat for hazel dormouse (*Muscardinus avellanarius*). However, the scrub is fragmented by amenity grassland and bare ground that was relatively disturbed to the rear of the pavilion. Furthermore, it did not link directly to woodland and there are no records of hazel dormice within a 2 kilometre radius of the site, and therefore the likelihood of their presence on site is considered to be negligible and this species is not considered further.

Amphibians

- 8.1.9** There is one pond surrounded by amenity grassland and scattered trees 90 metres to the southwest of the site. The LWS describes the pond as a species poor shaded pond and there are only records for common frog at Prospect park. There are no records for the great crested newt (*Triturus cristatus*) which receives full legal protection – that require still freshwater to breed. There was very limited cover under the scattered coniferous trees where the ground was primarily shaded bare earth towards the rear southern side of the pavilion. There was also limited cover provided by the amenity grassland and introduced shrubs towards the north of the pavilion and hardstanding towards the sides of the building. The area of scrub on site provides some limited sheltering opportunities, however, it is relatively isolated from other suitable habitats by the amenity grassland and as such unlikely to support notable and protected amphibians.

Badgers (and other mammals)

8.1.10 There is one record of the badger (*Meles meles*) within close vicinity of the site along the A4 approximately 440 metres radius of the site; however, there were no signs of activity by this species on the development site, such as latrines or sett entrances, and therefore it is considered unlikely that badgers are found on site currently.

8.1.11 The scattered scrub on the southern boundary of the site was suitable for other small mammal species to commute, forage and take refuge including hedgehog.

Nesting birds

8.1.12 The scattered trees and scrub habitats on site are of ecological value at the local level as a habitat for widespread bird species to forage and nest, which may include notable species of conservation importance typical of such habitats.

Reptiles

8.1.13 The bare ground, hard standing, beds of introduced shrubs and amenity grassland provided no potential sheltering opportunities for reptiles such as the slow worm (*Anguis fragilis*) and grass snake (*Natrix helvetica*), which are UK Priority Species and legally protected. The scattered scrub habitat did offer some limited sheltering and foraging opportunities for reptiles such as the grass snake (*Natrix helvetica*), however, the habitats were relatively fragmented by unsuitable barriers such as the areas of bare ground, hard standing and short amenity grassland. Furthermore, TVERC holds no records for reptiles within the 1 kilometre search radius and as such it is unlikely that reptiles are present on site.

Invertebrates

8.1.14 The crocus plants amongst the amenity grassland were full of bees during the survey; however, the site, in the main, is unlikely to provide the structural and botanical diversity required to support a diverse and abundant invertebrate fauna. The veteran tree in close vicinity to the site is likely to support a more diverse invertebrate fauna.

8.2 Impact of Proposals

Development Proposals Overview

- 8.2.1** The proposals are for the internal changes to a small section to the western side of the Pavilion building, the removal of one metal container and change of use of two containers to storage and a garage. The land towards the northern side of the Pavilion will be cleared, including the introduced shrubs and amenity grassland. A small section to rear (southern) side of the Pavilion will be altered including the bare ground beneath the coniferous trees and a small section of the scattered scrub. The mature oak trees and young birch trees will all be retained to the northern side of the site. The conifer trees to the rear southern side of the site will be retained but pruned to allow light into the area,

Statutory Designated Sites

- 8.2.2** The site is part of the registered park at Prospect Park but does not fall within the other statutory or non-statutory designation including Prospect Park LWS, which surrounds the development site and therefore the proposals will have no direct impact on a wildlife.
- 8.2.3** The area to be impacted by the works does not include the wider open grassland, scattered trees and woodland available within the whole park, which is designated as a LWS, and therefore will have little to no impact on statutorily or non-statutorily designated wildlife sites.

Habitats

- 8.2.4** The proposals will result in the clearance of beds of introduced shrubs and the patches of amenity grassland with the crocus bulbs, and small sections of the strip of scattered scrub, as well as patches of bare ground. The habitats to be impacted had limited ecological value, and therefore the development is considered highly unlikely to have any impact on habitats of conservation importance. The mature trees along the site's boundaries will all be retained to continue to provide habitat for wildlife in the long-term.

Bats

- 8.2.5** The scattered trees on the site boundaries are to be retained unaffected maintaining a commuting route for bats, including the oak trees, which had

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features that offered potential for roosting bats.

- 8.2.6** The removal of the scrub, which had no features suitable for use by roosting bats, would not negatively affect a commuting route used by bats or lead to the loss of roosts.
- 8.2.7** The proposals to the buildings include internal changes to the Pavilion (**B1**) only, the change of use of the metal containers (**B3 & B4**) and removal a metal container (**B5**). The toilet block (**B2**) is being retained as existing. The buildings all had had limited crevices and the planned internal alterations to the Pavilion are unlikely to have an impact on roosting bats.
- 8.2.8** Artificial lighting has been shown to alter the activity of nocturnal species and certain bat species have been found to be especially averse to lighting and actively avoid lit areas. Bats that emerge later in the evening, such as *Plecotus* and *Myotis* species, have a reduced tolerance to lighting. As the intensity of light increases, even species that are relatively light tolerant, such as *Pipistrellus* species, are delayed in their emergence from their roosts (Fure 2006). Pipistrelle bats can cope with light levels above 14 lux whilst light-sensitive species such as Daubenton's bat struggle with light levels above 1 lux (Fure 2006). The proposals for changes to the Pavilion building, which is already in use, and new amenities are unlikely to result in an increase in artificial light on site. Therefore, the proposals are unlikely to have an impact on bats, but in order to avoid disturbance to bats using the site as a foraging and commuting resource, no additional external lighting should be installed or if necessary, the lighting should be kept to a minimum e.g. by using lighting controlled by passive infra-red motion-sensors, and/or low-level and low intensity lighting wherever possible (refer to recommendations in **Section 9.2**).

Amphibians

- 8.2.9** The site does not have any waterbodies offering breeding opportunities for amphibians (particularly great crested newts) and only limited terrestrial habitat. The scattered scrub is fragmented, and the proposals would be unlikely to have a significant impact on amphibians which are considered unlikely to be present on site. The works are small in scale and in the long-term, the ecological functionality of local amphibians populations would not be adversely impacted by the works; a precautionary approach to any scrub removal is recommended to avoid any harm to individual animals (refer to recommendations in **Section 9.3**).

Badgers and other mammals

- 8.2.10** There were no active or inactive badger sett entrances or other mammal entrances visible on site at the time of the survey, and no signs of foraging badgers, and as such, adverse impacts on badgers are highly unlikely. Other mammals, including the notable species hedgehog may be found on site, particularly using the scattered scrub, and therefore precautions should be adopted during site clearance and construction (refer to recommendations in **Section 9.3**).

Nesting birds

- 8.2.11** The scattered trees and scrub provide nesting opportunities for common and widespread bird species. On the whole, the scattered trees are to be retained unaffected by the proposals. The patches of scrub proposed for removal will not significantly reduce the nesting opportunities for birds. Timing precautions for the removal of the trees and scrub must be adhered to in order to avoid disturbing nesting birds (refer to recommendations in **Section 9.4**).

Reptiles

- 8.2.12** The works are small in scale and in the long-term, the ecological functionality of local reptile populations would not be adversely impacted by the works; however, a precautionary approach to any scrub removal is recommended to avoid the small risk of any harm to individual animals (refer to recommendations in **Section 9.3**).

Invertebrates

- 8.2.13** There are no habitats on site that would support a diverse invertebrate population and therefore the development is not considered to have a detrimental impact on invertebrates.

9 RECOMMENDATIONS

9.1 Habitats (Protection, Avoidance and Mitigation Measures)

9.1.1 The retained scattered mature trees on site and veteran tree to the south west of the site should be protected during the clearance of the existing area and during construction to prevent direct or indirect impacts on the habitats and species dependent on them. The following protection measures are recommended:

- Erection of Heras fencing around the mature trees in advance of site clearance, enclosing the tree root protection areas;
- Prohibition of construction activities, material storage, use of vehicles, fires etc. within the fenced area to prevent damage to tree roots and compaction of the soil;
- Maintenance of an adequate water supply to the trees both during and after construction.

9.2 Bats

9.2.1 During construction, lighting should be kept to a minimum and if security lighting is required, this should be controlled by passive infra-red motion-sensors with no light spillage on to any existing linear features likely used by bats.

9.2.2 In the long-term, external lighting should be avoided, but any lighting should be designed to retain dark corridors along the riverside boundaries thereby maintaining foraging and commuting corridors for bats across the site. Column height, light source, motion-sensors and light spillage should be considered when designing the lighting to minimise the impacts. Lighting should be low intensity and have low or no UV content such as warm white LEDs. High pressure sodium or mercury and metal halides lamps should be avoided. Directional light accessories should be used to ensure that light spillage is avoided (BCT and ILE, 2008). Turning off lighting at night will avoid extended periods of time when areas would be lit and this can be tailored to suit human health and safety as well as wildlife needs.

9.3 Amphibians, Reptiles and Small Mammals

9.3.1 In order to avoid contravening the legislation and harming individual animals during the works, the following precautionary avoidance measures should be

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adopted during the course of the construction:

- The scattered scrub will be cut back carefully in phases using handheld tools e.g., brush cutters only.
- During construction, any open excavations and trenches should be backfilled before nightfall, or alternatively, escape ramps should be installed to allow animals to escape if they become trapped.
- Any building materials or materials excavated during the development that need to be stored on site prior to use/disposal should be positioned on hard standing and raised off the ground on pallets or in skips to avoid them providing temporary resting places or hibernation sites for amphibians or reptiles;
- If great crested newts or reptiles are encountered during the course of the work, work must stop immediately, and a licensed ecologist called to site to provide further advice; work will continue only once further written advice has been received.

9.4 Nesting Birds

- 9.4.1** The section of scrub should be removed outside of the bird nesting season (March to August) or if that is unavoidable, this should be carried out after an ecologist has inspected the trees and scrub and confirmed active birds' nests are not present. Prior to alterations to the Pavilion the building should be inspected to confirm nesting birds are not present.

9.5 Proposed Ecological Enhancements and Creation

- 9.5.1** The development proposals provide opportunities for the enhancement of the site's biodiversity value in order to achieve a net gain. The inclusion of the following recommendations would be of ecological benefit and be in line with the National Planning Policy Framework (NPPF):

- The site could include features that provide foraging opportunities and cover for invertebrates, small mammals, amphibians and reptiles such as rockeries or partially buried log piles.
- Any new planting as part of the landscaping should make use of native plants of UK provenance sourced from suppliers following the Flora

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Locale Code of Practice.

10 REFERENCES

Bat Conservation Trust and Institute of Lighting Engineers (ILE) (2018). *Bats and Artificial Lighting in the UK*. Bats and the Built Environment Series. Guidance Note 08/18.

Collins, J. (ed.) (2016). *Bat Surveys for Professional Ecologists – Good Practice Guidelines*. 3rd Edition. Bat Conservation Trust, London.

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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.

APPENDIX 1 – SITE PHOTOGRAPHS



1. Strip of scattered scrub along the southern side of the site viewed from the south (SS1)



2. Bare ground towards the northern side of the scattered scrub (SS1)



3. Patches of introduced shrub along the front northern side of the pavilion around the birch trees (IS1)



4. Patch of introduced shrub along the front (northern) side of the pavilion (IS1)



5. Patch of introduced shrub along the front (northern) side of the pavilion (IS2)



6. Amenity grassland present at the front (north eastern) side of the site under mature oak trees (AM1)



7. Formal patches of grassland towards the front (northern) side of the pavilion building (AM2)



8. Two mature oak trees in the north eastern corner of the site (SBW1)



9. Paper-bark birch trees amongst flower beds to the north of pavilion (SBW2)



10. Veteran oak tree just outside of the survey boundary towards the south west of the site (SBW3)



11. Strip of conifers along a timber fence at the rear southern side of the pavilion (SCW1 & F1)



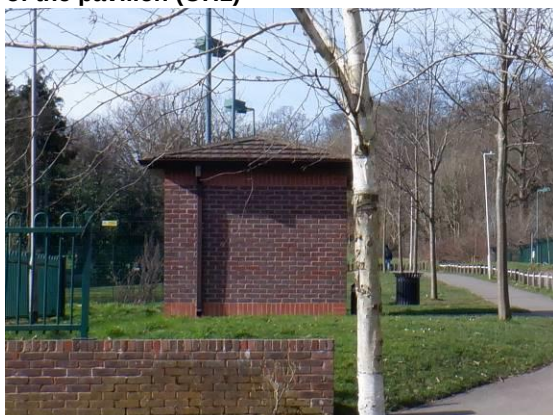
12. Bare ground beneath the conifer trees and behind the rear (southern) side of the pavilion (BG1).



13. Tarmac area at the front (north western) side of the pavilion (OH1)



14. Brick wall and tarmac areas towards the west of the pavilion (OH1 & W1)



15. Toilet block towards the north western side of the site (B2)



16. Metal container towards the rear (south western) side of the pavilion (B3)



17. Metal container toward the rear (southern) side of the pavilion (B5)



18. Pavilion building with a hipped roof covered in moulded bitumen roof tiles (B1)



19. Pavilion building with brick walls and a hipped roof covered in moulded bitumen roof tiles (B1)



20. Tear in roofing felt at the eaves on the northern side of the pavilion (B1)



21. Tear in roofing felt at the eaves on the northern side of the pavilion (B1)

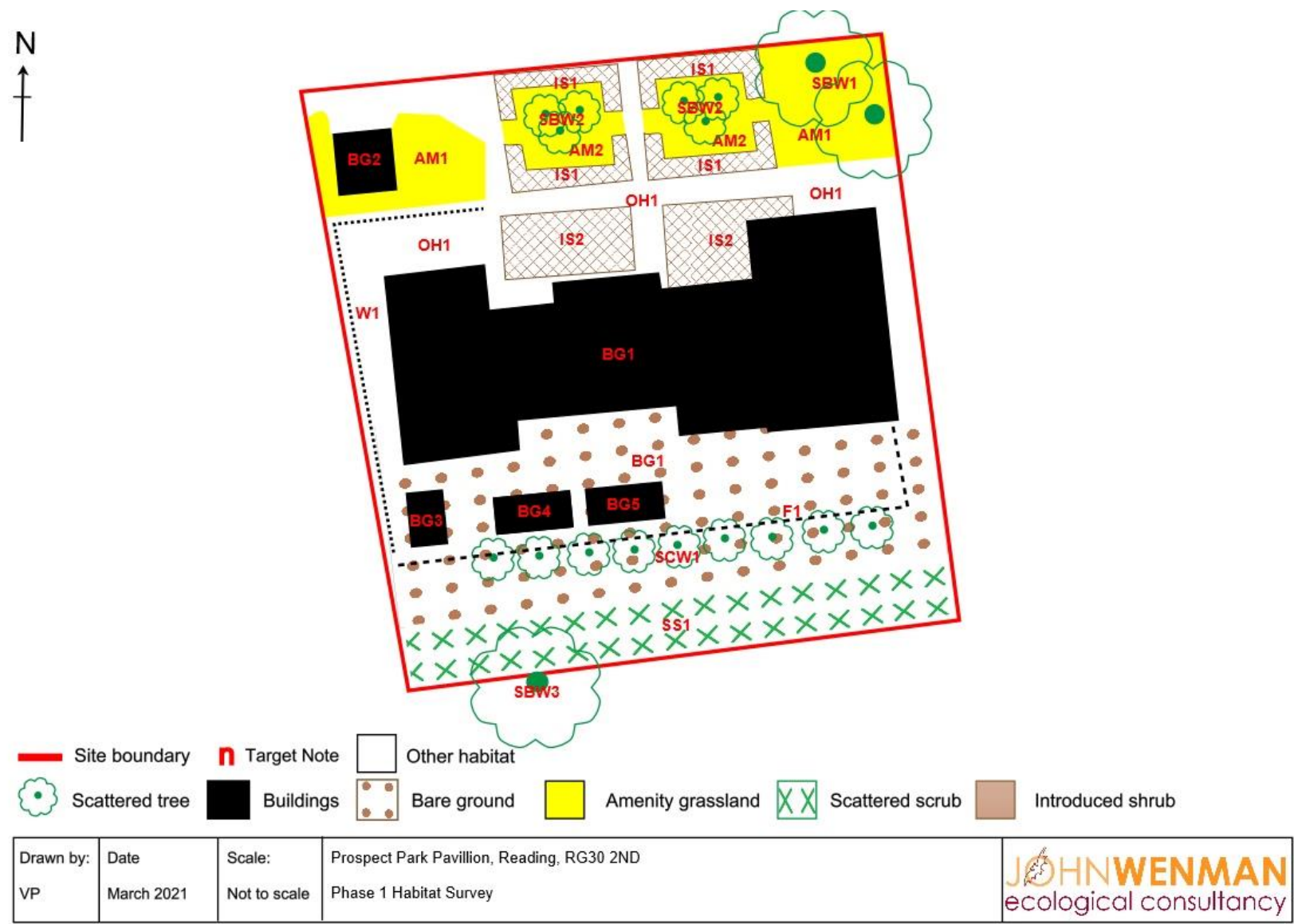


22. Bird nest on some guttering towards the northern side of the pavilion (B1)



23. Gap on the central hipped roof at the northern side of the building where the hipped roof and eaves joined the brickwork

APPENDIX 2 - PHASE 1 HABITAT MAP AND HABITAT DESCRIPTIONS

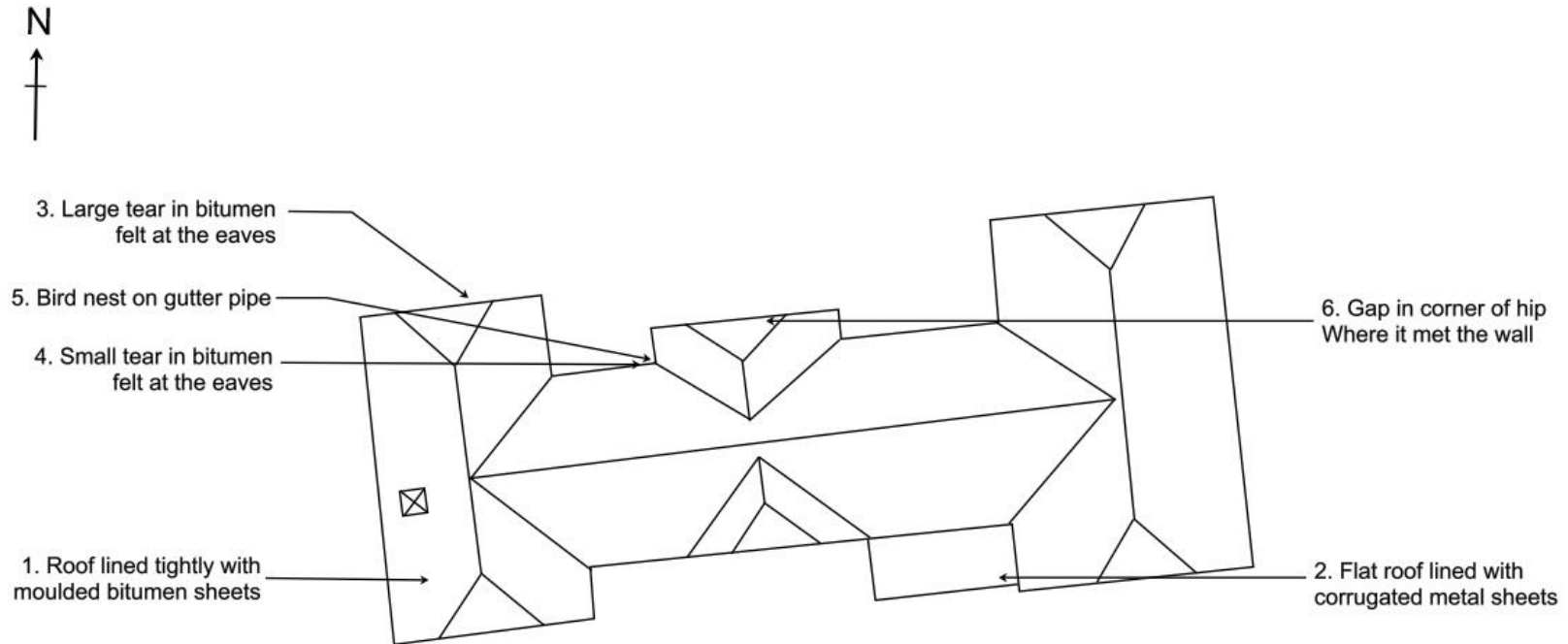


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Target Notes

Habitat Code (area/length)	Comments
SS1	Scattered scrub – A strip of scattered scrub was present at the southern side of the site (Photograph 1). The scrub was dominated by holly (<i>Ilex aquifolium</i>), bramble (<i>Rubus fruticosus</i> agg.), willow (<i>Salix</i> sp.), bamboo (<i>Arundinaria</i> sp.), <i>Elaeagnus</i> , <i>Mahonia japonica</i> and ground species along the northernmost edge included ivy (<i>Hedera helix</i>), nettle (<i>Urtica dioica</i>), bluebell (<i>Hyacinthoides non-scripta</i>), cleavers (<i>Galium aparine</i>), cow parsley (<i>Anthriscus sylvestris</i>) and daffodils (<i>Narcissus</i> hybrids) (Photograph 2). The southern side comprised of bare ground which was shaded by the trees.
IS1	Introduced shrubs - Two formal areas to the front of the pavilion had been planted with introduced shrubs. Species present included rose (<i>Rosa</i> sp.), <i>Bergenia</i> and pendulous sedge (<i>Carex pendula</i>) (Photographs 3 & 4).
IS1	Introduced shrubs - Further formal planted beds were present directly around the edge of the pavilion which included daffodil (<i>Narcissus</i> hybrids), pendulous sedge (<i>Carex pendula</i>), and <i>Mahonia japonica</i> (Photograph 5). The ground around the beds had no ground cover and consisted of bare earth or areas of pebbles.
AM1	Amenity grassland – A patch of grassland was present under the scattered mature trees at the north eastern corner of the site and along the sides of the toilet block towards the north western corner of the site. The grassland had been kept short (Photograph 6). Species present within the grass sward included perennial rye grass (<i>Lolium perenne</i>) which dominated the sward and cocksfoot occasionally (<i>Dactylis glomerata</i>), with a few herbaceous species including buttercup (<i>Ranunculus</i> sp.), clover (<i>Trifolium</i> sp.), daisy (<i>Bellis perennis</i>), yarrow (<i>Achillea millefolium</i>), cow parsley (<i>Anthriscus sylvestris</i>) and under the trees a few crocuses (<i>Crocus tommasinianus</i>) were present.
AM2	Amenity grassland – Two square formal patches of amenity grassland were present towards the centre of the area to the front northern side of the pavilion. The grassland was kept relatively short and had the same species composition as the rest of the amenity grassland. The main difference was numerous crocuses (<i>Crocus tommasinianus</i>) growing amongst the grassland and young paper-bark birch (<i>Betula papyrifera</i>) (Photograph 7).
SBW1	Scattered broadleaved trees – Two mature oak (<i>Quercus robur</i>) trees were present in the north western corner of the site amongst amenity grassland (Photograph 8).
SBW2	Scattered broadleaved trees - Two groups of three young paper-bark birch (<i>Betula papyrifera</i>) tree were present amongst planted flower beds towards the northern side of the site (Photograph 9).
SBW3	Scattered broadleaved trees - A veteran oak (<i>Quercus robur</i>) tree was present just outside of the development boundary towards the southwest of the site, which had several features, which could be used by roosting bats including wounds on the trunk and deadwood (Photograph 10).
SCW1 & F1	Scattered coniferous trees and Fence – A strip of conifers was growing along a timber panelled fence at the rear southern side of the pavilion (Photograph 11).
BG1	Bare ground - The ground around the rear southern side of the pavilion and underneath the southern side of the conifers comprised of bare earth (Photograph 12). The area towards the south of the trees had been used by the public, with piles of rubbish visible on the floor.
OH1	Other Habitats – Several footpaths crossed through the flowerbeds towards the northern side of the pavilion, the eastern side of the site comprised of a tarmac car park and tarmac pavement was present towards the western end of the pavilion (Photograph 13).
W1	Wall – Brick wall running along the western edge of the site (Photograph 14)
B1	Building – Main Pavilion (B1) building with a hipped roof with low bat potential.
B2	Building – toilet block towards the north western end of the site with a hipped roof (Photograph 15) with negligible bat potential.
B3	Building – Metal container (Photograph 16) with negligible bat potential.
B4	Building – Metal container with negligible bat potential.
B5	Building – Metal container (Photograph 17) with negligible bat potential

APPENDIX 3 - BUILDING INSPECTION PLAN



n. External Target Note

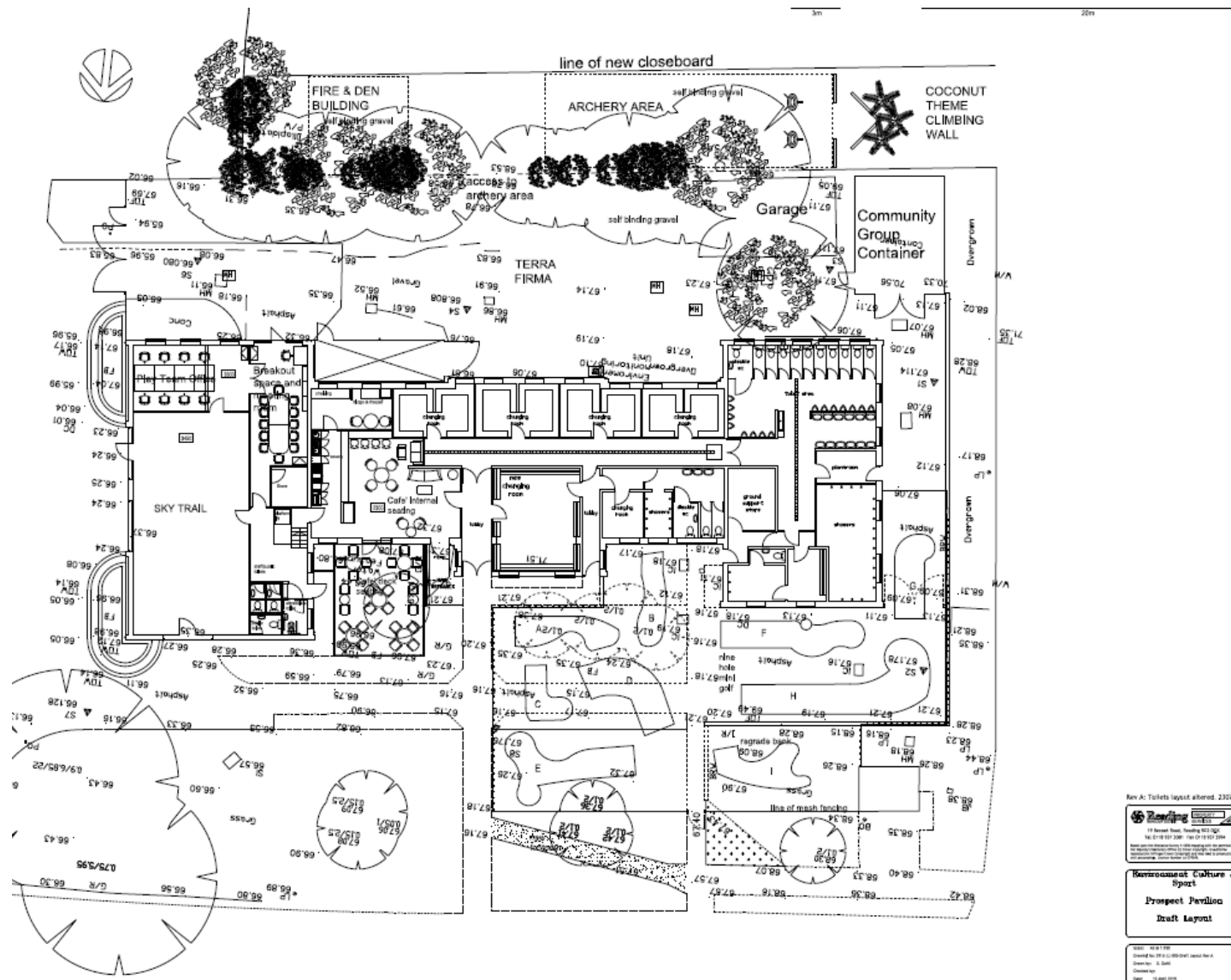
Drawn by:	Date	Scale:	Propsect Park Pavillion Reading	
VP	March 2021	Not to scale	Preliminary Bat Roost Assessment Findings	

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APPENDIX 4 - PLANT SPECIES LIST RECORDED ON SITE

Plant common name	Scientific name
Bamboo	<i>Arundinaria</i> sp.
	<i>Bergenia</i>
Bluebell	<i>Hyacinthoides non-scripta</i>
Bramble	<i>Rubus fruticosus</i> agg.
Buttercup	<i>Ranunculus</i> sp.
Cleavers	<i>Galium aparine</i>
Clover	<i>Trifolium</i> sp.
Cocksfoot	<i>Dactylis glomerata</i>
Cow parsley	<i>Anthriscus sylvestris</i>
Crocus	<i>Crocus tommasinianus</i>
Daffodil	<i>Narcissus hybrids</i>
Daisy	<i>Bellis perennis</i>
	<i>Elaeagnus</i>
Holly	<i>Ilex aquifolium</i>
Ivy	<i>Hedera helix</i>
	<i>Mahonia japonica</i>
Nettle	<i>Urtica dioica</i>
Oak	<i>Quercus robur</i>
Paperbark birch	<i>Betula papyrifera</i>
Pendulous sedge	<i>Carex pendula</i>
Perennial rye grass	<i>Lolium perenne</i>
Rose	<i>Rosa</i> sp.
Willow	<i>Salix</i> sp.
Yarrow	<i>Achillea millefolium</i>

APPENDIX 5 – PROPOSED PLANS



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