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Bridges Healthcare (Richmond) Limited



RICHMOND INN

Preliminary Ecological Appraisal Greengage

Greengage



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Richmond Inn Hotel - Preliminary Ecological Appraisal

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1.0 EXECUTIVE SUMMARY

- 1.1 Greengage Environmental Ltd was commissioned to undertake a Preliminary Ecological Appraisal (PEA) by Bridges Healthcare (Richmond) Limited of a site known as Richmond Inn Hotel, London Borough of Richmond (the "Site").
- 1.2 This document is a report of this survey and has been produced to support a planning submission for the Site which seeks to implement the regeneration of the existing buildings with associated green infrastructure delivery.
- 1.3 This survey aimed to establish the ecological value of this Site and the presence/likely absence of notable and/or legally protected species in order to inform appropriate mitigation, compensation and enhancement actions in light of the proposed development works.
- 1.4 The survey area extended 0.1 hectares (ha) and predominantly comprised common and widespread habitats that included areas of hardstanding, buildings, introduced shrub and scattered trees.
- 1.5 The Site survey, alongside data received from Greenspace Information for Greater London, confirmed that the site has the potential to support the following notable and protected species:
 - Low potential to support roosting bats; and
 - Low potential to support nesting birds;
- 1.6 A single emergence survey is recommended on one building to be undertaken between August and September 2021. Appropriate mitigation and compensation measures can then be determined upon completion of this further work.
- 1.7 Mitigation measures in relation to protected species has also been provided, including minimising the impacts of proposed lighting on bats, the soft felling of a single tree, ensuring vegetation is removed outside of the bird nesting season or after the vegetation has been checked by an ecologist.
- 1.8 Recommendations to enhance the sites ecological value post-development are made in Section 5 of this report. These enhancements target UK, London and Richmond Biodiversity Action Plan (BAP) species. These enhancements should aim to create a net gain in biodiversity value on site using the Defra Metric 3.0 Methodology, therefore ensuring the development meets both national, regional and local standards in planning and biodiversity.
- 1.9 Key actions should be included within an Ecological Management Plan (EMP for the site which could be secured through planning condition.
 - Assuming these recommendations are implemented effectively, then no adverse impacts on biodiversity within or adjoining the site are predicted.



2.0 INTRODUCTION

- 2.1 Greengage was commissioned to undertake a Preliminary Ecological Appraisal (PEA) by Bridges Fund Management Limited of a site known as Richmond Inn Hotel, London Borough of Richmond.
- 2.2 This document is a report of this survey and has been produced to support a planning submission for the Site which seeks to implement the regeneration of the existing site and buildings with associated green infrastructure delivery.
- 2.3 This survey aimed to establish the ecological value of this Site and the presence/likely-absence of notable and/or legally protected species in order to inform appropriate mitigation, compensation and enhancement actions in light of proposed development works.

SITE DESCRIPTION

- 2.4 The survey area extends to approximately 0.1 ha and is centred on National Grid Reference TQ 183 750. The Site predominantly comprised hardstanding, buildings, introduced shrub and scattered trees.
- 2.5 The Site is in the centre of Richmond Upon Thames, surrounded immediately by residential housing and private gardens. Richmond Park lies approximately 1km to the south and the River Thames 800m west of the site.



3.0 METHODOLOGY

- 3.1 The PEA (which included an Extended Ecological Phase 1 Survey) was undertaken in accordance with guidance in the Joint Nature Conservation Committee (JNCC) (2010) Handbook for Phase 1 Habitat Survey¹ and the Chartered Institute of Ecological and Environmental Management (CIEEM) (2017) Guidelines for Preliminary Ecological Appraisal², in accordance with BS42020:2013: Biodiversity³. The overall assessment consisted of:
 - Site specific biological information gained from statutory and non-statutory consultation; and
 - A site walkover, protected species scoping assessment and phase 1 habitat survey.
- 3.2 The site-specific consultation provided the ecological context for the site survey carried out on the 16th August 2021.
- 3.3 The survey boundary and existing Site is shown at Figure 1.
- 3.4 Greengage undertook the Site walkover during mild weather conditions. Features within the Site boundary and accessible features immediately bordering it were evaluated and the extent and distribution of habitats and plant communities were recorded, and supplemented with target notes on areas or species requiring further commentary. Fauna using the area were recorded and areas of habitat suitable for statutorily protected species were identified where present, with an active search carried out for evidence of such use.

DESK TOP REVIEW

3.5 A review of readily available ecological information and other relevant environmental databases (included Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) website⁴) was undertaken for the site and its vicinity. In addition, the National Biodiversity Network (NBN) online Gateway mapping tool⁵, and a biological records search from Greenspace Information for Greater London CIC (GIGL) were reviewed to identify the location and citations of local non-statutory designated sites and presence of records for notable and protected species. This provided the overall ecological context for the site, to better inform the Phase 1 Survey.

ON SITE SURVEYS

Flora

3.6 The extent and distribution of different habitats on site were identified and mapped according to the standard Phase 1 Survey methodologies, supplemented with target notes describing the dominant botanical species and any features of interest. Any



present protected plant species and invasive/non-natives were also noted. A habitat map has been produced to illustrate the results, as shown at Figure 1.

Fauna

- 3.7 The Phase 1 Survey specifically included assessments to identify the potential value for notable, rare and protected species at site. This involved identifying potential habitats in terms of refugia, breeding sites and foraging areas in the context of species known to be present locally and regionally.
- 3.8 The likelihood of occurrence is ranked as follows:
 - Negligible While presence cannot be absolutely discounted, the site includes very limited or poor-quality habitat for a particular species. The site may also be outside the known national range for a species;
 - Low On-site habitat is poor to moderate quality for a given species, with few or no
 information about their presence from desk top study. However, presence cannot
 be discounted due to the national distribution of the species or the nature of on-site
 and surrounding habitats;
 - Moderate The on-site habitats are of moderate quality, providing most or all of the key requirements for a species. Several factors may limit the likelihood of occurrence, habitat severance, habitat disturbance and small habitat area;
 - High On-site habitat of high quality for given species. Site is within a regional or national stronghold for that particular species with good quality surroundings and good connectivity; and
 - Present Presence confirmed for the survey itself or recent, confirmed records from information gathered through desk top study.
- 3.9 The species surveyed for included:

Badger (Meles meles)

3.10 The potential for badger to inhabit or forage within the study area was assessed. Evidence of badger activity includes the identification of setts (a system of underground tunnels and nesting chambers), grubbed up grassland (caused by the animals digging for earthworms, slugs, beetles etc.), badger hairs, paths, latrines and paw prints.

Bat Species (Chiroptera)

3.11 The site visit was undertaken in daylight and the evaluation of bat potential comprised an assessment of natural features on site that aimed to identify characteristics suitable for bat roosts, foraging and commuting. In accordance with Bat Conservation Trust's Good Practice Guidelines⁶ and methods given in English Nature's (now Natural England) Bat Mitigation Guidelines⁷ consideration was given to:



- The availability of access to roosts for bats;
- The presence and suitability of crevices and other places as roosts; and
- Signs of bat activity or presence.
- 3.12 Definite signs of bat activity were taken to be:
 - The bats themselves;
 - Droppings;
 - Grease marks;
 - Scratch marks; and
 - Urine spatter.
- 3.13 Signs of possible bat presence were taken to be:
 - Stains; and
 - Moth and butterfly wings.
- 3.14 Features with potential as roost sites include mature trees with holes, crevices or splits (the most utilised trees being oak, ash, beech, willow and Scots pine), caves, bridges, tunnels and buildings with cracks or gaps serving as possible access points to voids or crevices.
- 3.15 Additionally, linear natural features such as tree lines, hedgerows and river corridors are often considered valuable for commuting and semi-natural habitats such as woodland, meadows and waterbodies can provide important foraging resources. Consideration was given to the presence of these features both immediately within and adjacent to the assessment area.

Great Crested Newt (Triturus cristatus)

3.16 An assessment was carried out to identify any potential habitats that may support great crested newt (GCN) and other native amphibians. The aquatic and terrestrial habitats required generally include small, still ponds or water bodies suitable for breeding; and woodland or grassland areas where there is optimal invertebrate prey potential.

Reptiles

3.17 The potential for reptile species on site was assessed during the walkover survey. Possible species include grass snake (*Natrix natrix*), smooth snake (*Coronella austriaca*), adder (*Vipera berus*), common and sand lizard (*Lacerta vivipara* and *L. agilis*) and slow worm (*Anguis fragilis*). These native reptile species generally require open areas with low, mixed-height vegetation, such as heathland, rough grassland, and open scrub or, in the case of grass snake, waterbody margins. Suitable well drained and frost-free areas are needed so they can survive the winter.



Dormouse (Muscardinus avellanarius)

3.18 During the walkover survey the potential for dormouse to be present on site was assessed. This included observations for suitable habitat such as well-layered woodland, scrub and linking hedgerows, particularly those comprised of species offering suitable food sources such as honeysuckle and hazel, in addition to direct evidence such as characteristically gnawed hazelnuts, chewed ash keys and honeysuckle flowers, or nests.

Water Vole (Arvicola terrestris)

3.19 Water vole potential was assessed during the walkover survey. The potential is identified by the presence of ditches, rivers, dykes and lakes with holes and runs along the banks. Latrines, footprints or piles of food can also be noted.

Otter (Lutra lutra)

3.20 Where desktop review or consultation indicates the presence of otter in a river catchment, the presence of water bodies with good cover and potential holt (den) sites would be noted. Spraint, footprints or food remains can also be noted.

Birds

3.21 During the walkover survey, the potential for breeding, wintering and migratory birds was assessed. In particular, this includes areas of trees, scrub, heathland and wetlands that could support nests for common or notable species.

Invertebrates

3.22 As part of the walkover survey the quality of invertebrate habitat and the potential for notable terrestrial and aquatic invertebrate species was considered. There is a wide variety of habitats suitable for invertebrates including wetland areas, heathland, areas of bare sandy soil, ephemeral brownfield vegetation and meadows.

Biodiversity Action Plan priority species/ Species of Principal Importance

3.23 Where consultation and desk-study indicates the presence of BAP priority species (Species of Principal Importance) not protected by statute, effort was made to establish the potential for the site to support these species.

SURVEYORS

3.24 Sam Barker, who undertook the site survey and wrote this report has an undergraduate degree in Environmental Science (BSc Hons) and is an Associate member of CIEEM with four years' experience of carrying out Phase 1 Habitat surveys and writing PEA's.



- 3.25 Mitch Cooke, who reviewed this repot, has a degree in Ecology (Hons), an MSc in Environmental Assessment and Management, and is a Full member of CIEEM with over 35 years' experience in ecological survey and assessment. Mitch has set up and developed ecological and environmental teams for nearly 20 years and has undertaken and managed numerous ecological surveys and assessments. He is the Director at Greengage and manages the team.
- 3.26 This report was written by Sam Barker and reviewed by Mitch Cooke who confirms in writing (see the QA sheet at the front of this report) that the report is in line with the following:
 - Represents sound industry practice;
 - Reports and recommends correctly, truthfully and objectively;
 - Is appropriate given the local site conditions and scope of works proposed; and
 - Avoids invalid, biased and exaggerated statements.

CONSTRAINTS

- 3.27 The PEA was undertaken during an optimal time of year during ideal conditions by a suitably qualified ecologist. It was possible to access all areas of the site.
- 3.28 No significant constraints that stand to impact conclusions drawn in this report therefore presented themselves.



4.0 RESULTS

DESK TOP REVIEW

Designations

- 4.1 Consultations with the GIGL and the Multi-Agency Geographic Information for the Countryside (MAGIC) dataset have confirmed that there are no statutory designations of national or international importance within the boundary of the site.
- 4.2 Richmond Park, designated as a Special Area of Conservation (SAC), Site of Special Scientific Interest (SSSI) and National Nature Reserve (NNR) as well as Syon Park SSSI and Isleworth Ait Local Nature Reserve (LNR) were present within a 2km radius from the site.
- 4.3 Wimbledon Common SAC was present within a 5km radius from the site.
- 4.4 Records from GIGL also identified 18 Sites of Importance for Nature Conservation (SINCs) within 2km of the site boundary. SINCs are recognised by the Greater London Authority and London borough councils as important wildlife sites.
- 4.5 There are three main tiers of sites:
 - Sites of Metropolitan Importance;
 - Sites of Borough Importance (borough I and II); and
 - Sites of Local Importance.
- 4.6 Table 4.1 below gives the locations and descriptions of a selection of the nearest/most relevant local designations.

Table 4.1 Statutory and Non-Statutory Designated Sites within Search Radius

Site Name	Approximate Location	Description		
Statutory Desi	Statutory Designations			
Richmond Park SAC, SSSI, NNR	1.02km south	The site is of importance for its diverse deadwood beetle assemblages associated with the ancient trees found throughout the park. Many of the beetles are indicative of ancient forest areas, including stag beetle for which the site is designated an SAC.		
Syon Park SSSI	1.60km north	The only known area of tall grass washland along the Thames in Greater London. It contains several invertebrate species that have restricted local and national distributions.		
Isleworth Ait LNR	1.62km north west	Designated for its tall canopy of mixed woodland of mainly poplar and willow, rooted on a ground that is regularly flooded. The island provides an undisturbed sanctuary for a variety of bird species.		



Site Name	Approximate Location	Description
Wimbledon Common SAC	4.51km south east	The most extensive area of open, wet heath on acidic soil in Greater London. The site also contains a variety of other acidic heath and grassland communities.
Non-Statutory		
River Thames and tidal tributaries Site of Metropolitan Importance	800m west	The River Thames and the tidal sections of creeks and rivers which flow into it comprise a number of valuable habitats not found elsewhere in London. The mud-flats, shingle beach, intertidal vegetation, islands and river channel itself support many species from freshwater, estuarine and marine communities which are rare in London. The site is of particular importance for wildfowl and wading birds. The river walls, particularly in south and east London, also provide important feeding areas for the nationally rare and specially-protected black redstart
Royal Mid-Surrey Golf Course – Site of Borough I Importance	780m north	the golf course supports fine acid grassland, especially in the northern half where there is a thriving population of heath groundsel.
Terrace Field and Terrace Garden – Site of Local Importance	715m south west	Grassland of moderate diversity, with some fine old field maples. A very rare spider <i>Philodromus praedatus</i> , has been found in the roadside trees.
East Sheen and Richmond Cemeteries and Pesthouse common – Site of Local Importance	645m south east	Three open spaces, adjacent to Richmond Park, provide a range of wildlife habitats, complementing the higher quality habitats in the adjacent NNR.
Twickenham Road Meadow	779m north west	A narrow strip of rough grassland between Twickenham Road and the railway. Formerly part of the Old Deer Park, that regularly floods creating a mix of rank and dry meadow grassland.

Biodiversity Action Plans

- 4.7 UK Biodiversity Action Plans (BAPs) have been developed which set priorities for nationally important habitats and species. To support the BAPs, Species/Habitat Statements (otherwise known as Species/Habitat Action Plans) were produced that provide an overview of the status of the species and set out the broad policies that can be developed to conserve them. A list of priority species of conservation importance was also developed.
- 4.8 The UK BAP was succeeded in 2012 by the *UK-Post 2012 Biodiversity Framework* which informed the creation of the *Biodiversity 2020* strategy; England's contribution towards the UK's commitments under the *United Nations Convention of Biological Diversity*.
- 4.9 Despite this, the UK BAP priority species lists and conservation objectives still remain valid through integration with local BAPs (which remain valid), and in the form of the



Habitats and Species of Principle Importance list (as required under section 41 of the Natural Environment and Rural Communities (NERC) Act).

- 4.10 There were no UK priority habitats identified on site.
- 4.11 Local Biodiversity Action Plans (LBAPs) ensure that national action plans (the UK BAP/Biodiversity 2020) are translated into effective action at the local level and establish targets and actions for locally characteristic species and habitats.

London BAP

- 4.12 The London BAP lists 214 priority species and eight Species Action Plans (SAPs), in addition to four priority habitats and 11 Habitat Action Plans (HPAs). There are also many species listed on the BAP which are priority species and are of conservation concern. Of these, the features relevant to this report include:
 - Bats (SAP);
 - House sparrow (SAP); and
 - Built structures listed as a priority habitat.

Richmond Upon Thames BAP8

- 4.13 The Richmond upon Thames BAP lists eleven habitats and nine species considered to be a priority for biodiversity conservation in the London Borough of Richmond upon Thames. Of these, the features relevant to this report include:
 - Private Gardens (HAP);
 - Bats (SAP);
 - House sparrows (SAP);
 - Song thrush (SAP); and
 - Swifts (SAP).

Species Record

- 4.14 The information provided in the biological data search from GIGL identified records of a number of protected and BAP priority species within 2km search radius of the site. Among others these include the following species of relevance to the site; primarily these are species that are known to be in the area that may be impacted by any proposals at the site, or that stand to benefit as a consequence of potential ecological enhancements at the site:
 - Bird species included swift (Apus apus), redwing (Turdus iliacus) and song thrush (Turdus philomelos);



- Bat species including serotine (Eptesicus serotinus), natterer's bat (Myotis nattereri), daubenton's bat (Myotis daubentonii), noctule (Nyctalus noctule), nathusius' pipistrelle (Pipistrellus nathusii), common pipistrelle (Pipistrellus pipistrellus), soprano pipistrelle (Pipistrellus pygmaeus) and brown long-eared bat (Plecotus auritus); and
- Hedgehog (*Erinaceus europaeus*)
- 4.15 The species listed above are primarily those known to be in the area that may be impacted by any proposals at the site, or that stand to benefit as a consequence of potential ecological enhancements at the site and inform site-specific mitigation and enhancement recommendations described in the following chapter.

Detailed Description of Site: Habitats

- 4.16 The habitats presented across the assessment site consist of the following Joint Nature Conservation Committee (JNCC) Phase 1 Habitat categories, as mapped at Figure 1:
 - Scattered broadleaved tree (A3.1)
 - Introduced shrub (J1.4)
 - Species-poor hedge (J2.1.2)
 - Buildings (J3.6)
 - Other (Hardstanding) (J5)

Scattered broadleaved trees

4.17 A single mature horse chestnut (*Aesculus hippocastanum*) was identified in the centre of the site. A semi-mature copper beech (*Fagus sylvatica f. purpurea*) and semi-mature red sensation palm tree (*Cordyline australis*) were identified along the eastern site boundary.

Figure 4.1: Mature horse chestnut tree in centre of the site.





Introduced shrub

4.18 Around the site there were several prepared beds with a range of ornamental shrubs planted. These shrubs included ornamental roses (*Rosa sp.*), cherry laurel (*Prunus laurocerasus*).

Figure 4.2: Example of the shrub planting around the site.





Species-poor hedge

4.19 Around the front of the building a 1m high box (*Buxus sempervirens*) hedge was identified.





Buildings

- 4.20 The majority of the site was dominated by a single building (Building 1).
- 4.21 The building was three storeys tall and built from brick with pebble-dash rendering in places several extensions had clearly been added over the years but used the same materials as the original building. The original part of the building had a tiled roof whilst the newer areas had lead sheet roofing.
- 4.22 A glass conservatory style atrium had been added to the rear of the building. This spanned the full height of the building and was accessible from all levels.
- 4.23 A built in store cupboard with a three-quarter length wooden door was identified along the northern side of the building.





Figure 4.4: Outside storeroom and three-quarter length door.

Other (Hardstanding)

- 4.24 The carpark in the north east of the Site, the paths around the site and the patio in the south of the site were all formed of brick paving. Weeds that included dandelion (*Taraxacum sp.*), nipplewort (*Lapsana communis*) and ribwort plantain (*Plantago lanceolata*) grew through areas where the cement had been dislodged. In the north west corner of the site a small stand of buddleia (*Buddleja davidii*) was also present.
- 4.25 Around the north of the building artificial turf had been laid in places.



Figure 4.5: Area of artificial turf around the north of the hotel.



Detailed description of Site: Species

Bats

Foraging and commuting

- 4.26 Records from GiGL identified a total of ten bat species within 2km of the site. Several more records that were not identified to species level and could account for additional species.
- 4.27 There were minimal areas of suitable habitat on Site and in the immediate surrounding urban landscape and high levels of street and residential lighting. The Site is therefore unlikely to provide suitable feeding areas or commuting lines for bats moving through the area.
- 4.28 Therefore, with all of the above taken into consideration, in particular the high levels of lighting, the Site and the green spaces within its zone of influence, has been determined to provide negligible potential to support the commuting and foraging behaviour of bats.

Roosting



- 4.29 The building and trees within the Site boundary were assessed for their potential to support roosting bats.
- 4.30 Building 1 was found to have low roosting potential, with the majority of features being superficial missing mortar along the ridge line of the roof, slightly loose ridge tiles and lead roofing coming away from the wall in places above two bay windows on the west side of the building. The three-quarter length door for the outside storage room provided an entrance and a potential area for bats to roost but this was a feature low to the ground with a wall immediately in front of the door, reducing the potential for bats to utilise the space. Roosting features of the building can be found in Appendix A.
- 4.31 The mature horse chestnut tree was in overall good condition, but there were a couple of knot holes on the south and south east facing limbs that provided potential small cavities. Based on these small features the tree was identified as having low bat roosting potential.
- 4.32 All other trees were semi-mature and in good condition and therefore were found to have negligible potential to support roosting bats.

Birds

- 4.33 Records provided from GIGL identified a variety of bird species within 2km of the site.
- 4.34 The scattered trees on site provided occasional suitable nesting habitat for a range of common and widespread bird species.
- 4.35 Therefore, the site provides low potential to support nesting birds.

Invasive/Non-native species

- 4.36 During the Phase 1 habitat survey several invasive species were identified on site.
- 4.37 Two of these species Buddleia and cherry laurel are listed by the London Invasive Species Initiative (LISI)⁹. These species both fall under category 3.
- 4.38 Category 3 species are those of high impact or concern which are widespread in London and require concerted, coordinated and extensive action to control/eradicate. These species are species currently causing large scale impacts across London.



5.0 EVALUATION AND DISCUSSION

BASELINE SUMMARY

5.1 The assessment Site and its surroundings have potential to support the following ecological receptors of note, which could therefore be impacted upon by any future prospective development proposals, as indicated in Table 5.2 below. Comment on further recommendations for each receptor is provided; further detail and discussion can be found at paragraph 5.2 onward:

Table 5.2 Baseline Summary

Receptor	Presence/Potential Presence	Comments
Designated Sites: Statutory	Confirmed	Richmond Park SAC, SSSI and LNR, Syon Park SSSI and Isleworth Ait were all located over 1km from site. Wimbledon Common SAC was located over 4km from the site.
		Given the size of the site and the distance of the site from the designated sites, the development is considered to have no impact on these sites during the construction phase.
		Given that there is likely going to be no increase or only a very small increase in population, during the operational phase, from the current baseline levels, there would be no significant increase on recreational pressures on any of the designated sites.
		Given these findings and the localities of the SAC's there is no further need to assess the impact of the development on these internationally designated sites.
Designated Sites: Non-Statutory	Confirmed	East Sheen and Richmond Cemeteries and Pesthouse common SINC, was located approximately 650m south east of the site. Six other SINCs were located within 1km of the site.
		Given the distance of the site from these SINCs there is likely to be no significant impact of the development on these.
		No further assessment or mitigation measures would therefore be required.
Foraging bats	Negligible	The few trees present across the site provide isolated and limited foraging habitat or commuting corridors for bats utilising the site and surrounding areas. Given this assessment no further surveys to identify bat activity are recommended.
		However, measures to enhance the site for bats have been included in the paragraphs below.



Receptor	Presence/Potential Presence	Comments
Roosting bats	Low	One building and all the trees on the site were assessed for their potential to support roosting bats by establishing the presence of Potential Roosting Features (PRFs).
		The building was identified as having low potential to support roosting bats. In order to establish the presence/likely absence of roosting bats within the building, further surveys are recommended. These surveys would be undertaken in the form of emergence or re-entry surveys. Details of these surveys can be found in the paragraphs below.
Birds	Low	The trees and shrubs on site have some potential to support a range of common and widespread bird species. The limited and low quality value of the habitat means that further breeding bird surveys are not required.
		However, mitigation measures to ensure that no individuals or active nests are harmed during the site clearance work are included below.
Invasive/Non-native species	Present	Two LISI species were identified during the Phase 1 walkover, further surveys for invasive species are not required, but mitigation measures to ensure these species don't spread further in the wild is included in the paragraphs below.

DISCUSSION AND RECOMMENDATIONS

5.2 Discussion is provided below on the key ecological receptors that stand to be impacted/benefit from proposed works; high level commentary on appropriate mitigation, compensation and enhancement actions is also provided.

BAP species and habitats

Bats

- 5.3 The habitats on Site provide negligible suitability to support bats. However general measures for the enhancement of the Site for bats, post construction, should be incorporated into the design.
- 5.4 Artificial lighting can cause disturbance to bat roosting, foraging and commuting activity.

 Bat sensitive lighting should be incorporated into the scheme to minimise any potential impacts of increased lighting levels on foraging, commuting and socialising bats.



- 5.5 Lighting design should follow the guidance provided by the Institute of Lighting Professionals and Bat Conservation Trust. This involves the use of low-UV warm-white LED bulbs with directional, downward facing lights which point away from green features such as trees, hedgerows and areas of planting. External lights should be subject to curfew controls where possible with lights on movement sensors to reduce light pollution when not needed.
- 5.6 The use of cowls, louvres and hoods should be incorporated onto any external lighting to reduce upward light spill and direct light to where it is needed. Lighting at the Site should be modelled by a lighting specialist to confirm predicted intensity and spill.

Roosting

- 5.7 As the building on Site was identified as having low potential to support roosting bats, further surveys to establish the presence/likely absence of roosting bats is required. These further surveys should take the form of a single emergence or re-entry survey, undertaken in accordance with BCT Good Practice Guidelines6, carried out between May August.
- 5.8 If the removal of the mature horse chestnut identified as having low bat roosting potential in the centre of the Site is required, this should be done via soft felling during September and October. Soft felling is a process by which the trees are felled in sections, with each section lowered slowly to the floor and then left on Site for at least 24 hours to allow any bats present to escape. This methodology is in line with bat mitigation quidelines⁷.
- 5.9 Mitigation and compensation requirements in relation to any roosting bat(s) in the buildings is to be fully determined following the completion of the recommended emergence/re-entry survey.

Birds

- 5.10 Birds and their nests are protected from being killed/injured/damaged/destroyed (Appendix 2) and it is therefore recommended that any clearance of any trees, buildings and shrub on Site is undertaken outside of the bird nesting season (March to September (inclusive)). If clearance cannot be avoided within this period, it must only take place after a suitably qualified ecologist has confirmed the absence of nesting birds.
- 5.11 To compensate for the loss in nesting bird habitat, landscaping proposals should include native tree and shrub planting, as well as include bird boxes hung from any retained trees. Compensatory planting should focus on the provision of winter berry producing species that could include holly, rowan and blackthorn, as well as species with dense shrubby growth (elder, hazel, dog rose and hawthorn) within which birds may construct nests. This will not only provide nesting opportunities, but also deliver vital food resource for birds over the winter months.



Invasive/Non-native species

- 5.12 It is important that these species are removed sensitively from the Site during the clearance works and destroyed in such a way that prevents their spread. Clearance should follow guidance from LISI¹.
- 5.13 LISI also details actions to help prevent, control and where feasible eradicate invasive non-native species in London. The following steps should be taken before, during and after site clearance to help control these species:
 - Identify areas where these species are present and assess the risk of if and how they would be spread;
 - Set up monitoring schemes on the site; and
 - Raise awareness of these species through notices on site to help prevent the spread.

ENHANCEMENT

- 5.14 In accordance with the National Planning Policy Framework and local policy drivers (Appendix 2) proposals should provide net gains in biodiversity under the Defra Metric 3.0 methodology.
- 5.15 Green infrastructure should be planned at a site wide level, considering wider ecological features and green corridors. Any proposed green space should be multifunctional with high floral diversity and support native species where possible.
- 5.16 Measures that could be included into the landscape proposals:
 - The retention of the mature horse chestnut on Site;
 - Use of flower, shrub and tree species that are of value to wildlife but resilient to climate change, including night scented flowers (honeysuckle, evening primrose, night scented stock etc) that attract insects, which would then attract bats;
 - Provision of a dark corridor for bats to commute down;
 - Green walls, taking the form of trellis systems with climbing plants such as ivy, honeysuckle, star jasmine and hops;
 - Substrate-based biodiverse green roofs, with rooftop enhancements including sandy piles, log piles, rope piles and ephemeral wetlands;
 - Wildlife friendly landscaping at ground level, incorporating native tree, shrub and hedgerow planting as well as planting of herbaceous species of known biodiversity value;
 - Bird boxes targeting sparrow and swift, incorporated within the built form of buildings, ideally to fit within the brickwork;



- Bat boxes, targeting crevice dwelling species, incorporated within the built form of the buildings. Where this is not possible boxes should be attached to the building in appropriate locations; and
- Invertebrate habitat features in the form of bee bricks, bee posts, invertebrate hotels and buried log piles. These should be incorporated into the design of the development located close to shrub and herbaceous planting.

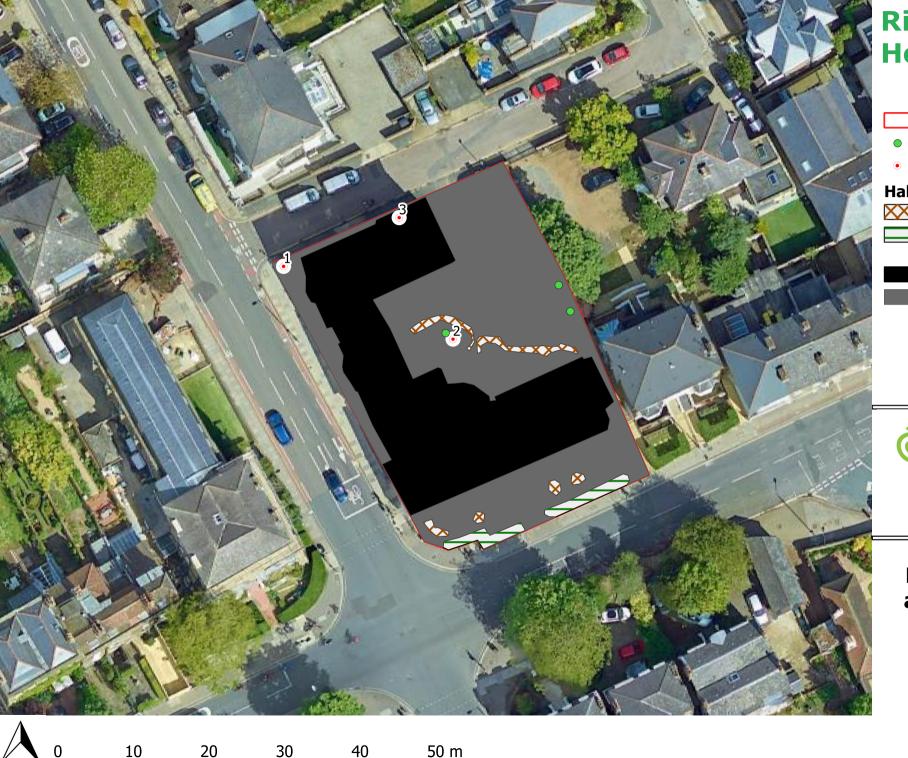


6.0 SUMMARY & CONCLUSION

- 6.1 Greengage Environmental Ltd was commissioned to undertake a Preliminary Ecological Appraisal (PEA) by Bridges Fund Management Limited of a site known as Richmond Inn Hotel in the London Borough of Richmond in order to establish the ecological value of this site and its potential to support notable and/or legally protected species.
- 6.2 The PEA identified value for a number of notable and protected species and habitats, including roosting bats and nesting birds. Further surveys to establish the presence/likely absence of bats roosting in the building is required. The results of these surveys should be used to inform the need for additional mitigation and compensation actions required to allow the development to proceed lawfully.
- 6.3 Mitigation measures in relation to protected species has also been provided, including:
 - Minimising the impacts of proposed lighting on bats;
 - Soft felling of one tree with roosting bat potential;
 - Ensuring vegetation is removed outside of the bird nesting season or after the vegetation has been checked by an ecologist; and
 - Ensuring that LISI species are dealt with in an appropriate manner to avoid the further spread of these species.
- 6.4 Key enhancement measures have been described in this report and target UK, London and Richmond Biodiversity Action Plan species, to help increase the qualitative biodiversity value of the Site. These enhancement measures should be described in detail within an EMP, along with their management requirements, which could be secured by planning condition.
- 6.5 The enhancements should aim to create a net gain in biodiversity value on Site under the Defra Metric 3.0 methodology, therefore ensuring the development meets national, regional and local standards in planning and biodiversity.



FIGURE 1 SITE PLAN AND HABITAT MAP



Richmond Inn Hotel

- Site boundary
- Scattered Trees
- Target Notes

Habitats

- XX J1.4 Introduced shrub
- J2.1.2 Intact species-poor hedge
- J3.6 Buildings
- J3.6.1 Hardstanding

<a> Greengage

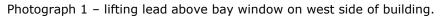
Greengage Environmental Ltd 9 Holyrood Street, London SE1 2FL

Fig 1.0 Site Plan and Habitat Map

Project Number 551829 September 2021 1 to 500 at A3



APPENDIX 1 PHOTOGRAPHS OF POTENTIAL ROOST FEATURES ON BUILDING 1





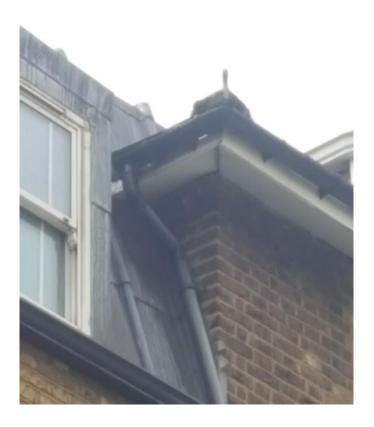


Photograph 2 – one of three air vents with no vent cover at the front of the building.





Photograph 3 – Ridge line with missing tiles and opening on northern aspect.





APPENDIX 2 RELEVANT LEGISLATION AND POLICY

LEGISLATION

Current key legislation relating to ecology includes the Wildlife and Countryside Act 1981 (as amended)¹⁰; The Conservation of Habitats and Species Regulations 2019 ('Habitats & Species Regulations')¹¹, The Countryside and Rights of Way Act 2000 (CRoW Act)¹², and The Natural Environment and Rural Communities Act, 2006¹³.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

The Conservation of Habitats & Species Regulations replace The Conservation (Natural Habitats, etc.) Regulations 1994 (as amended)¹⁴, and transpose Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('EU Habitats Directive')¹⁵, and Council Directive 79/409/EEC on the Conservation of Wild Birds ('Birds Directive')¹⁶ into UK law (in conjunction with the Wildlife and Countryside Act).

Regulation 43 and 47 respectively of the Conservation of Habitats & Species Regulations makes it an offence (subject to exceptions) to deliberately capture, kill, disturb, or trade in the animals listed in Schedule 2 (European protected species of animals), or pick, collect, cut, uproot, destroy, or trade in the plants listed in Schedule 5 (European protected species of plant). Development that would contravene the protection afforded to European protected species requires a derogation (in the form of a licence) from the provisions of the Habitats Directive.

Regulation 63 (1) states: 'A competent authority, before deciding to undertake, or give any consent, permission or other authorisation for, a plan or project which -

- (a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects); and
- (b) is not directly connected with or necessary to the management of that site;

must make an appropriate assessment of the implications for that site in view of that site's conservation objectives.'

Wildlife and Countryside Act 1981 (as amended)

The Wildlife and Countryside Act 1981 (as amended) is the principal mechanism for the legislative protection of wildlife in Great Britain. This legislation is the means by which the Convention on the Conservation of European Wildlife and Natural Habitats¹⁷ (the 'Bern Convention') and the Birds Directive and EU Habitats Directive are implemented in Great Britain.

The Countryside and Rights of Way Act 2000



The Wildlife and Countryside Act has been updated by the CRoW Act. The CRoW Act amends the law relating to nature conservation and protection of wildlife. In relation to threatened species it strengthens the legal protection and adds the word 'reckless' to the offences of damaging, disturbing, or obstructing access to any structure or place a protected species uses for shelter or protection, and disturbing any protected species whilst it is occupying a structure or place it uses for shelter or protection.

The Natural Environment and Rural Communities Act 2006

The Natural Environment and Rural Communities Act 2006 states that every public authority must, in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity. Biodiversity Action Plans provide a framework for prioritising conservation actions for biodiversity.

Section 41 of the Natural Environment and Rural Communities Act requires the Secretary of State to publish a list of species of flora and fauna and habitats considered to be of principal importance for the purpose of conserving biodiversity. The list, a result of the most comprehensive analysis ever undertaken in the UK, currently contains 1,149 species, including for example, hedgehog (*Erinaceus europaeus*), and 65 habitats that were listed as priorities for conservation action under the now defunct UK Biodiversity Action Plan¹⁸ (UK BAP). Despite the devolution of the UK BAP and succession of the UK Post-2010 Biodiversity Framework¹⁹ (and Biodiversity 2020 strategy²⁰ in England), as a response to the Convention on Biological Diversity's (CBD's) Strategic Plan for Biodiversity 2011-2020²¹ and EU Biodiversity Strategy (EUBS)²², this list (now referred to as the list of Species and Habitats of Principal Importance in England) will be used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 41 of the Natural Environment and Rural Communities Act 2006 'to have regard' to the conservation of biodiversity in England, when carrying out their normal functions.

Biodiversity Action Plans

Non-statutory Biodiversity Action Plans (BAPs) have been prepared on a local and regional scale throughout the UK over the past 15 years. Such plans provide a mechanism for implementing the government's broad strategy for conserving and enhancing the most endangered ('priority') habitats and species in the UK for the next 20 years. As described above the UK BAP was succeeded in England by Biodiversity 2020 although the list of priority habitats and species remains valid as the list of *Species of Principal Importance for Nature Conservation*.

Regional and local BAPs are still valid however and continue to be updated and produced.

Detail on the relevant BAPs for this site are provided in the main text of this report.

Legislation Relating to Nesting Birds



Nesting birds, with certain exceptions, are protected from intentional killing, destruction of nests and destruction/taking of eggs under the Wildlife and Countryside Act 1981 (as amended) and the CRoW Act. Any clearance of dense vegetation should therefore be undertaken outside of the nesting bird season, taken to run conservatively from March to August (inclusive), unless an ecologist confirms the absence of active nests prior to clearance.

Legislation Relating to Bats

All UK bats and their roosts are protected by law. Since the first legislation was introduced in 1981, which gave strong legal protection to all bat species and their roosts in England, Scotland and Wales, additional legislation and amendments have been implemented throughout the UK.

Six of the 18 British species of bat have Biodiversity Action Plans (BAPs) assigned to them, which highlights the importance of specific habitats to species, details of the threats they face and proposes measures to aid in the reduction of population declines.

Although habitats that are important for bats are not legally protected, care should be taken when dealing with the modification or development of an area if aspects of it are deemed important to bats such as flight corridors and foraging areas.

The Wildlife & Countryside Act 1981 (WCA) was the first legislation to provide protection for all bats and their roosts in England, Scotland and Wales (earlier legislation gave protection to horseshoe bats only.)

All eighteen British bat species are listed in Schedule 5 of the Wildlife and Countryside Act, 1981 and under Annexe IV of the Habitats Directive, 1992 as a European protected species. They are therefore fully protected under Section 9 of the 1981 Act and under Regulation 43 of the Conservation of Habitats and Species Regulations 2017, which transposes the Habitats Directive into UK law. Consequently, it is an offence to:

- Deliberately capture, injure or kill a bat;
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats;
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time);
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat; and
- Intentionally or recklessly obstruct access to a bat roost.

This legislation applies to all bat life stages.

The implications of the above in relation to the proposals are that where it is necessary during construction to remove trees, buildings or structures in which bats roost, it must first be determined that work is compulsory and if so, appropriate licenses must be obtained from Natural England.



Legislation Relating to Reptiles

All species of reptile native to the UK are protected to some degree under national and/or international legislation, which provides mechanisms to protect the species, their habitats and sites occupied by the species.

Sand lizards and smooth snakes are European protected species and are afforded full protection under Section 9 of the Wildlife and Countryside Act 1981 and Regulation 43 of the Conservation of Habitats and Species Regulations 2017. However, these species are rare and highly localised. Their occurrence is not considered as relevant in this instance, as the ranges and specialist habitats of these species do not occur at this site.

The remaining widespread species of native reptiles (adder, grass snake, slow worm and viviparous lizard) are protected under part of Section 9(1) and all of Section 9(5) of the Wildlife and Countryside Act 1981. They are protected against intentional killing and injury and against sale, transporting for sale etc. The habitat of these species is not protected. However, in terms of development, disturbing or destroying reptile habitat during the course of development activities while reptiles are present is likely to lead to an offence under the Wildlife and Countryside Act 1981. It is therefore important to identify the presence of these species within a potential development site. If any of these species are confirmed, all reasonable measures must then be taken to ensure the species are removed to avoid the threat of injury or death associated with development activities.

Each species of native reptile has specific habitat requirements but general shared features include a structurally diverse habitat that provides for shelter, basking, foraging and hibernating.

All reptiles are BAP species and as such are also of material consideration in the planning process due to the NPPF.

Legislation Relating to Dormice

Dormice are given full protection under Schedule 5 of the Wildlife and Countryside Act 1981, as amended. Protection to the species is also afforded by Regulation 43 of the Conservation of Habitats and Species Regulations 2017, making the hazel dormouse a European Protected Species. These two pieces of legislation operate in parallel, although there are some small differences in scope and wording. Under the provisions of Section 9 of the Wildlife & Countryside Act, it is an offence to:

- Intentionally kill, injure or take a dormouse;
- Possess or control and live or dead specimen or anything derived from a dormouse (unless it can be shown to have been legally acquired);
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a dormouse; and



• Intentionally or recklessly disturb a dormouse while it is occupying a structure or place which it uses for that purpose.

Regulation 43 of the Conservation of Habitats and Species Regulations 2017 makes it an offence to:

- Deliberately capture or kill a dormouse;
- Deliberately disturb a dormouse;
- Damage or destroy a breeding site or resting place of a dormouse; and
- Keep transport, sell or exchange, or offer for sale or exchange a live or dead dormouse or any part of a dormouse.

Legislation Relating to Natura 2000 Sites and Habitats Directive Annex I/II Species

European Commission Council Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora ('EU Habitats Directive'), and Council Directive 79/409/EEC on the Conservation of Wild Birds ('Birds Directive') form the cornerstones of nature conservation legislation across EU member states. Priority species requiring protection across Europe are listed in the Annexes of these Directives. Regulation 63(1) of the Conservation of Habitats and Species Regulations 2017 and Offshore Marine Conservation Regulations, 2007 (as amended) transpose these directives into UK law and set the basis for the designations of protected sites (known as Natura 2000 sites; Special Areas of Conservation under the Habitat Directive and Special Areas of Protection under the Birds Directive) that are of importance for habitats, species or assemblages listed on the directive Annexes. In the UK Ramsar sites are also offered the same level of protection as SPAs and SACs however the qualifying species for the designation may differ; Ramsar sites being designated specifically as important wetland habitats.

Under article 6(3) of the Habitats Directive, where projects stand to have likely significant effect (in accordance with the European Court of Justice ruling of C-127/02 Waddenzee cockle fishing) upon the integrity of conservation objectives (i.e. conservation status of the qualifying species or habitats) within the designated sites then the Competent Authority must undertake an Appropriate Assessment.

PLANNING POLICY

National

National Planning Policy Framework

Guidance on nature conservation within planning is issued by the Government within the National Planning Policy Framework. This Framework document acts as guidance for



local planning authorities on the content of their Local Plans but is also a material consideration in determining planning applications.

The NPPF has replaced, among other planning guidance documents, Planning Policy Statement 9: Biological and Geological Conservation. However, the accompaniment to PPS9, government circular 06/05: Biodiversity and Geological Conservation - Statutory Obligations and Their Impact within the Planning System, remains valid. The prevention of harm to biodiversity through prudent planning decisions is the key principle in the NPPF when considering planning and the natural environment; set out in section 11.

Within the NPPF the Government's vision for conserving and enhancing biological diversity in England within the planning system is set out. The Governments objectives for planning from an ecological perspective are, among others, to recognise the wider benefits of ecosystem services, minimise the impacts on biodiversity and provide net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, which will include the establishment of coherent ecological networks that are more resilient to current and future pressures.

Of particular note to ecological impact assessment is paragraph 152 of the Plan-Making Section which states:

"Local planning authorities should seek opportunities to achieve each of the economic, social and environmental dimensions of sustainable development, and net gains across all three. Significant adverse impacts on any of these dimensions should be avoided and, wherever possible, alternative options which reduce or eliminate such impacts should be pursued. Where adverse impacts are unavoidable, measures to mitigate the impact should be considered. Where adequate mitigation measures are not possible, compensatory measures may be appropriate".

As a result of the NPPF any species or habitats of principal importance found on the application site, in addition to statutorily protected species, are of material consideration in the planning process.

Regional

The London Plan: Spatial Development Strategy for Greater London²³

The London Plan is comprised of separate chapters relating to a number of areas, including London's Places, People, Economy and Transport. The following policies have been identified within the London Plan, which relate specifically to ecology and this development.

Policy 2.18 Green Infrastructure



Policy 2.18 aims to protect, promote, expand and manage the extent and quality of, and access to, London's network of open and green spaces.

Policy 5.10 Urban Greening

This policy encourages the 'greening of London's buildings and spaces and specifically those in central London by including a target for increasing the area of green space (including green roofs etc) within the Central Activities Zone'.

Policy 5.11 Green Roofs and Development Site Environs

Policy 5.11 specifically supports the inclusion of planting within developments and encourages boroughs to support the inclusion of green roofs.

Policy 5.13 Sustainable Drainage

Policy 5.13 promotes the inclusion of sustainable urban drainage systems in developments and sets out a drainage hierarchy that developers should follow when designing their schemes.

Policy 7.19 Biodiversity and Access to Nature

'The Mayor will work with all the relevant partners to ensure a proactive approach to the protection, enhancement, creation, promotion and management of biodiversity in support of the Mayors Biodiversity Strategy.'

The Draft New London Plan (emerging)

Policy G1 Green infrastructure

- A. London's network of green and open spaces, and green features in the built environment such as green roofs and street trees, should be protected, planned, designed and managed as integrated features of green infrastructure.
- B. Boroughs should prepare green infrastructure strategies that integrate objectives relating to open space provision, biodiversity conservation, flood management, health and wellbeing, sport and recreation.
- C. Development Plans and Opportunity Area Planning Frameworks should:
 - 1. identify key green infrastructure assets, their function and their potential function
 - 2. identify opportunities for addressing environmental and social challenges through strategic green infrastructure interventions.

Policy G2 London's Green Belt



- A. The Green Belt should be protected from inappropriate development:
 - 1. development proposals that would harm the Green Belt should be refused
 - 2. the enhancement of the Green Belt to provide appropriate multi-functional uses for Londoners should be supported.

Policy G5 Urban greening

- A. Major development proposals should contribute to the greening of London by including urban greening as a fundamental element of site and building design, and by incorporating measures such as high-quality landscaping (including trees), green roofs, green walls and nature-based sustainable drainage.
- B. Boroughs should develop an Urban Greening Factor (UGF) to identify the appropriate amount of urban greening required in new developments. The UGF should be based on the factors set out in Table 8.2 but tailored to local circumstances. In the interim, the Mayor recommends a target score of 0.4 for developments that are predominately residential, and a target score of 0.3 for predominately commercial development.

Policy G6 Biodiversity and access to nature

- C. Where harm to a SINC (other than a European (International) designated site) is unavoidable, the following approach should be applied to minimise development impacts:
 - 1. avoid adverse impact to the special biodiversity interest of the site
 - 2. minimise the spatial impact and mitigate it by improving the quality or management of the rest of the site
 - seek appropriate off-site compensation only in exceptional cases where the benefits of the development proposal clearly outweigh the biodiversity impacts.
- D. Biodiversity enhancement should be considered from the start of the development process.
- E. Proposals which create new or improved habitats that result in positive gains for biodiversity should be considered positively, as should measures to reduce deficiencies in access to wildlife sites.

Policy G7 Trees and woodlands

C. Development proposals should ensure that, wherever possible, existing trees of quality are retained [Category A and B]. If it is imperative that trees have to be removed, there should be adequate replacement based on the existing value of the



benefits of the trees removed, determined by, for example, i-tree or CAVAT. The planting of additional trees should generally be included in new developments – particularly large-canopied species which provide a wider range of benefits because of the larger surface area of their canopy.

Supplementary Planning Guidance (SPG): Sustainable Design and Construction 2014

As part of the London Plan 2011 implementation framework, the SPG, relating to sustainable design and construction, was adopted in April 2014 and includes the following sections detailing Mayoral priorities in relation to biodiversity of relevance to The Site.

Nature conservation and biodiversity

The Mayor's priorities include ensuring 'developers make a contribution to biodiversity on their development Site'.

Overheating

Where priorities include the inclusions of 'measures, in the design of schemes, in line with the cooling hierarchy set out in London Plan policy 5.9 to prevent overheating over the scheme's lifetime'

Urban greening

A Priority is for developers to 'integrate green infrastructure into development schemes, including by creating links with wider green infrastructure network'.

Use less energy

'The design of developments should prioritise passive measures' which can include 'green roofs, green walls and other green infrastructure which can keep buildings warm or cool and improve biodiversity and contribute to sustainable urban drainage'.

London Environment Strategy 2018²⁴

The Mayor's Environment Strategy was published in May 2018. This document sets out the strategic vision for the environment throughout London. Although not primarily a planning guidance document, it does set strategic objectives, policies and proposals that are of relevance to the delivery of new development in a planning context, including:

Objective 5.1 Make more than half of London green by 2050

Policy 5.1.1 Protect, enhance and increase green areas in the city, to provide green infrastructure services and benefits that London needs now.



This policy states:

"New development proposals should avoid reducing the overall amount of green cover and, where possible, seek to enhance the wider green infrastructure network to increase the benefits this provides. [...] New developments should aim to avoid fragmentation of existing green space, reduce storm water run-off rates by using sustainable drainage, and include new tree planting, wildlife-friendly landscaping, or features such as green roofs to mitigate any unavoidable loss".

This supports the 'environmental net gain' approach promoted by government in the 25 Year Environment Plan.

Proposal 5.1.1.d The London Plan includes policies to green streets and buildings, including increasing the extent of green roofs, green walls and sustainable drainage.

Objective 5.2 conserving and enhancement wildlife and natural habitats

Policy 5.2.1 Protect a core network of nature conservation sites and ensure a net gain in biodiversity

This policy requires new development to include new wildlife habitat, nesting and roosting sites, and ecologically appropriate landscaping will provide more resources for wildlife and help to strengthen ecological corridors. It states:

"Opportunities should be sought to create or restore priority habitats (previously known as UK Biodiversity Action Plan habitats) that have been identified as conservation priorities in London [and] all land managers and landowners should take BAP priority species into account".

Local

London Borough of Richmond Local Plan 2018-2033²⁵

Policy LP12 Green Infrastructure

The policy states:

"Green infrastructure is a network of multi-functional green spaces and green features, which provides multiple benefits for people, nature and the economy.

To ensure all development proposals protect, and where opportunities arise enhance, green infrastructure, the following will be taken into account when assessing development proposals:

a) The need to protect the integrity of the green spaces and features that are part
of the wider green infrastructure network; improvements and enhancements to
the green infrastructure network are supported;



- b) Its contribution to the wider green infrastructure network by delivering landscape enhancement, restoration or re-creation;
- c) Incorporating green infrastructure features, which make a positive contribution to the wider green infrastructure network."

Policy LP15 Biodiversity

- A. The council will protect and enhance the borough's biodiversity, in particular, but not exclusively, the sites designated for their biodiversity and nature conservation value, including connectivity between habitats. Weighted priority in terms of their importance will be afforded to protected species and priority species and habitats including National Nature Reserves, SSSIs and other SINCs as set out in the Biodiversity Strategy for England, and the London and Richmond upon Thames BAPs. This will be achieved by:
 - Protecting biodiversity in, and adjacent to, the borough's designated sites for biodiversity and nature conservation importance (including buffer zones), as well as other existing habitats and features of biodiversity value;
 - 2. Supporting enhancements to biodiversity;
 - Incorporating and creating new habitats or biodiversity features, including trees, into development sites and into the design of buildings themselves where appropriate; major developments are required to deliver net gain for biodiversity, through incorporation of ecological enhancements, wherever possible;
 - 4. Ensuring new biodiversity features or habitats connect to the wider ecological enhancements wherever possible;
 - 5. Enhancing wildlife corridors for the movement of species, including river corridors, where opportunities arise; and
 - Maximising the provision of soft landscaping, including trees, shrubs and other vegetation that support the borough-wide Biodiversity Action Plan.

Policy LP17 Green roofs and walls

Green roofs and/or brown roofs should be incorporated into new major developments with roof plate area of 100sqm or more where technically feasible and subject to considerations of visual impact. The aim should be to use at least 70% of any potential roof plate area as a green/brown roof.

The use of green/brown roofs and green walls is encouraged and supported in smaller developments, renovations, conversions and extensions.



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