

Newcore Capital

Riverhill Yard, Riverhill, Old Malden lane, Worcester Park

ECOLOGICAL APPRAISAL

August 2023

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1.0 NON-TECHNICAL SUMMARY

Report Scope and Methodology

- FPCR were commissioned by the Newcore Capital to undertake an Ecological Appraisal at Riverhill Yard,
 Worcester Park to provide an ecological baseline for the Site and determine its ecological importance.
- The Site is proposed for use as a garden centre storage area.
- An extended Phase 1 Habitat survey and desktop study have been completed or are underway by FPCR to inform this assessment.

Key Findings

- A number of internationally designated Sites of Nature conservation Importance are located within 15km
 of the Site. No significant effects are anticipated on these due to the small-scale nature of the proposals
 and the intervening distance between the Site and these designated sites
- A number of Sites of Nature Conservation Importance are located within 1km of the Site. Given the small-scale nature of works, indirect impacts on designated sites are extremely unlikely to occur.
- The Site is dominated by bare ground, ephemeral/short perennial vegetation and tall ruderal vegetation.

 These were considered to be of no more than local importance.
- There are two stands of the Wildlife and Countryside Act 1981 (as amended) Schedule 9 species Himalayan balsam present onsite.
- Woodlands surrounding the Site are to be retained and protected throughout the proposals.
- The proposals include the losses of a small number of mature trees that are considered to be of limited value owing to historic disturbance which has been detrimental to their health.
- The Site provided some degree of suitable habitat for a range of protected/notable species including bats, breeding birds and reptiles. Further surveys are recommended for these species groups.

Recommended Mitigation and Enhancements

- All woodland and mature trees should be retained wherever possible.
- Himalayan balsam should be removed from the Site through a program of targeted removal.
- Vegetation clearance works will be undertaken following a precautionary working method statement to ensure reptiles and breeding birds (Mar-Aug inclusive) are not harmed.
- The proposals include the provision of species rich grasslands that will compensate for the losses of ephemeral/short perennial and tall ruderal vegetation anticipated.
- Additional mitigation and recommendations for enhancement will be provided upon the completion of the protected species surveys. Such measures will ensure their Favourable Conservation Status.



2.0 INTRODUCTION

2.1 The following Ecological Appraisal has been prepared by FPCR Environment & Design Ltd. on behalf of Newcore Capital for Land off Old Malden Lane, Worcester Park (central OS Grid Reference: TQ 20879 65603) herein referred to as 'the Site'. The survey comprised an Extended Phase 1 Habitat Survey including initial observations of any suitable habitats for, or evidence of, protected/notable species.

Site Location and Context

- 2.2 The Site is located to the west of Old Malden Lane and is dominated by an artificial hardcore substrate that has been colonised by ephemeral vegetation in places. Numerous temporary structures, storage containers, garden sheds and pallets are present across the Site which are currently being used to store gardening equipment and supplies. Five buildings are present on the Site which include a series of portacabin office units in the south of the Site and a barn structure in the North-West. An earth bund surrounds the site which has become dominated by ephemeral, ruderal vegetation. A belt of woodland is present around the bund in the South, East and North of the Site while scattered individual trees are present along the western Boundary.
- 2.3 The Hogsmill River abuts the southern boundary of the Site before the landscape to the South extends into residential environs. Playing fields dominate the landscape to the North and West, while an area of mature woodland extends to the North-West. Immediately to the East of the Site a mixed area of woodland and pasture is present, before the landscape extends into further residential environs. Buildings associated with the River Club are present to the North.

Site Proposals

2.4 The proposals include the use of the Site for a nursery for the propagation and growing of saplings and the associated storage and distribution of Christmas trees and the installation of a single storey modular office, storage containers, poly tunnels, hard and soft landscaping and creation of a new vehicle access.



3.0 LEGISLATION AND POLICY

- 3.1 Details on the relevant national and local policy and legislation for ecology in relation to development sites are provided in Appendix A. The national policy and legislation most relevant here are:
 - The Conservation of Habitats and Species Regulations ("The Habitats Regulations")
 (Amendment) 2017 in relation to the European Protected Species (EPS) great crested newt,
 (GCN), bats (all species) and dormouse; and European protected sites i.e. Special Areas of
 Conservation (SAC), Special Protection Areas (SPAs) and Internationally protected "Ramsar
 Sites" (collectively known as "Natura 2000 sites"). Annex II bat species of particular relevance
 in relation to SACs designated for bats.
 - The Wildlife and Countryside Act 1981 (WCA) (as amended) in relation to all wild birds (including Schedule 1 species), other animals (notably Schedule 5 species), flora (those listed in Schedules 8 and 9) and Sites of Special Scientific Interest (SSSI);
 - · Protection of Badgers Act 1992;
 - Natural Environmental and Rural Communities (NERC) Act 2006 in relation to various priority species and habitats;
 - Hedgerow Regulations 1997 made under Section 97 of the Environment Act 1995;
 - National Planning Policy Framework (NPPF) (2021);
 - The London Plan 2021;
 - Local Planning Policy contained within the Kingston upon Thames Core Strategy (2012).
 Policies relevant to this assessment include Policy CS 3 The Natural and Green Environment,
 Policy DM 5 Green Belt, Metropolitan Open Land (MOL) and Open Space Needs and Policy DM6 Biodiversity.
 - Local Nature Reserves (LNR) as designated most recently by the NERC Act 2006;
 - Non-statutory protected local sites including County Wildlife Sites (CWS), Sites of Importance for Nature Conservation (SINC), Local Wildlife Sites (LWS) and Ancient Woodland Inventory (AWI) sites;
 - Local Biodiversity Action Plans (LBAP); and
 - Birds of Conservation Concern (BoCC).



4.0 METHODOLOGY

Desk Study

- 4.1 In order to compile existing baseline information, relevant ecological information was requested from the following consultees and sources:
 - Multi Agency Geographic Information for the Countryside (MAGIC) website¹;
 - Colour 1:25,000 OS base maps²;
 - Aerial photographs from Google Earth³.
 - Greenspace Information for Greater London (GIGL).
- 4.2 The search area for biodiversity information was related to the significance of sites and species and potential zones of influence, as follows:
 - 15km around the application area for sites of International Importance (e.g. Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Ramsar sites).
 - 2km around the application area for sites of National or Regional Importance (e.g. Sites of Special Scientific Interest (SSSIs).
 - 1km around the application site for sites of County Importance (e.g. Biological Heritage Sites (BHS)) and species records (e.g. protected, Local Biodiversity Action Plan (LBAP) or notable species).

Habitats/Flora

- 4.3 Survey methods followed the extended Phase 1 Survey (JNCC, 2010) methodology technique as recommended by CIEEM⁴. This involved a systematic walk over of the site to classify the broad habitat types and identify any Habitats of Principal Importance (HPI) for the conservation of biodiversity as listed within Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006.
- 4.4 Where feasible, target notes and species lists were compiled for individual areas and assessments of abundance were made using the DAFOR scale. Vascular plant nomenclature follows Stace (2010)⁵. Whilst the species lists collected should not be regarded as exhaustive, sufficient information was gained during the survey to enable classification and assessment of broad habitat types and identify features likely to be of interest
- 4.5 Also, where appropriate, hedgerows were broadly assessed against the Wildlife and Landscape criteria contained within The Hedgerow Regulations 1997 to determine whether they qualified as 'Important Hedgerows'. This was achieved using a methodology in accordance with both the Regulations and DEFRA guidance.

^{1 [}Online]. http://magic.defra.gov.uk/

^{2 [}Online]. www.ordnancesurvey.co.uk

^{3 [}Online]. www.maps.google.co.uk

⁴ CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered institute of Ecology and Environmental Management, Winchester.

⁵ Stace, C.A. (2010). New Flora of the British Isles. (3rd Ed.). Cambridge: Cambridge University Press



Preliminary Protected Species Assessment

- 4.6 During the extended Phase 1 Habitat survey, observations, identification and signs of any species protected under the following list of Acts and Regulations (collectively referred to herein as 'Protected Species') were recorded:
 - Schedule 1 of the Wildlife and Countryside Act 1981 (as amended);
 - · The Protection of Badgers Act 1992; and
 - The Conservation of Habitats and Species Regulations 2019.
- 4.7 Consideration was also given to the existence and use of the site by other fauna listed as one or more of the following (collectively referred to herein as 'Notable Species'):
 - Species of Principal Importance (SPI) for the conservation of biodiversity in England on the Natural Environment and Rural Communities (NERC) Act, Section 41 (S41)
 - Species listed on any Local Biodiversity Action Plan (LBAP) initiatives
 - · Red Data Book (RDB) species.
- 4.8 The likely presence or absence of protected and notable species has been assessed by a number of factors including the availability of suitable habitat, connectivity, known species distribution, local records and an understanding of the ecology and habitats requirement of the individual species assessed. Examples of the types of criteria for likely presence/absence used as part of this assessment are provided in *Table 1*.

Table 1: Criteria for Assessing Presence/ Likely Absence of Protected/Notable Species.

Likelihood of Presence	Example Criteria
Negligible	Where one or more of the following is true for the site: it offers no suitable habitat; it is isolated from known areas of suitable habitats/species presence; displays no evidence of use by the species in question; it is outside of the known local/regional/national distribution for the species; and there are no desk study records are present during the data search.
Low	Where one or more of the following is true for the site: the habitats present are of poor to moderate suitability; it is limited or restricted connectivity to areas of suitable offsite habitat or areas with known presence; it is in a location where the species distribution is known to be sparse at a local or regional scale; the desk study indicates the presence of the species in the locality in small to moderate numbers.
Moderate	Where one or more of the following is true for the site: the habitats present are of moderate to high suitability; it is clearly connected to suitable offsite habitat offsite habitat or areas with known presence; it is in a location where the species is known to be well distributed; the desk study indicates the presence of the species in the locality in moderate to good numbers.
High	Where one or more of the following is true for the site: the habitats present are of optimal suitability; it is adjacent to areas of suitable offsite habitat offsite habitat or areas with known presence; it is in a location where the species is known to be well distributed; there are field signs evidencing that a species has been present on the site; the desk study indicates the presence of the species has been historically present on or within the immediate vicinity of the site.



Likelihood of Presence	Example Criteria
Present	The species was observed using the site during the extended phase 1 habitat survey or, where appropriate for certain species, field signs indicate the regular use
	of the site i.e. the presence of a badger sett.

Survey Personnel and Conditions

4.9 An initial habitat survey was undertaken on the Site on 9 June 2017 by James Warren, a Senior Ecologist at FPCR. And updated habitat survey was then undertaken by Oliver Grice-Jackson, an Associate Ecologist with over eight years of experience in Ecological Consultancy, who is experienced in botanical surveys having achieved a level 4 on the Botanical Society of Britain and Ireland's (BSBI) Field Identification Skills Competency (FISC), equivalent to tutor level identification skills. The Phase 1 survey was undertaken on January 2021 during clear weather with some cloud cover (approximately 30%) with no rain and a light breeze (3 on the Beaufort Scale).

Survey Limitations

4.10 No other limitations specific to this report influenced this assessment.



5.0 RESULTS

Desk Study

Statutory Sites

Internationally Designated Sites of Nature Conservation Importance

5.1 Three internationally designated site were location within the search area as demonstrated in *Table*1

Table 1: Internationally Designated Sites of Nature Conservation Importance within 15km of the Site.

Site Name	Designation	Distance from Site (at closest point)	Description
Richmond Park	SAC	5km North	Richmond Park is of importance for its diverse deadwood beetle fauna associated with the ancient trees found throughout the parkland. Many of these beetles are indicative of ancient forest areas where there has been a long continuous presence of overmature timber. Qualifying species include Stag Beetle Lucanus cervus.
Wimbledon Common	SAC	5km North	Wimbledon Common supports an extensive area of open, wet heath on acidic soil and also contains a variety of other acidic heath and grassland communities. Qualifying habitats include European Dry Heaths and Northern Atlantic Wet Heaths. Qualifying species include Stag Beetle <i>Lucanus cervus</i> .
South West London Waterbodies	SPA/Ramsar	8.65km West	The South West London Waterbodies site comprises a series of reservoirs and former gravel pits that support internationally important numbers of wintering <i>Anas strepera</i> and <i>Anas clypeata</i> .
Mole Gap to Reigate Escarpment	SAC	11.25km South	Woodland, chalk grassland, chalk scrub and heathland form an interrelated mosaic at this site on the North Downs. Qualifying habitats include <i>Taxus baccata</i> woodlands, <i>Asperulo-Fagetum</i> beech forests, European Dry Heaths, Semi-natural dry grassland and scrubland facies: on calcareous soils, Stable Xerothermophilous formations with <i>Buxus sempervirens</i> on rock slopes. Qualifying species include Bechstein's bat <i>Myosotis bechsteinii</i> and great crested newt <i>Triturus cristatus</i> .
Thames Basin Heaths	SPA/Ramsar	13.7km South-west	This site supports and important mosaic of woodland, heathland and scrub. Qualifying species include nightjar Caprimulgus europaeus, woodlark Lullula arborea and Dartford warbler Sylvia undata.



Nationally Designated Sites of Nature Conservation Importance

5.2 There are no nationally designated statutory sites of nature conservation importance were located within the 2km search area.

SSSI Risk Impact Zones

- 5.3 Part of the site sits within Natural England's SSSI Rick Impact zone for the following proposals:
 - Infrastructure: Airports, helipads and other aviation proposals.
 - Air pollution: Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, livestock & poultry units with floorspace > 500m², slurry lagoons & digestate stores > 750m², manure stores > 250t).
 - Combustion: General combustion processes >50MW energy input. Incl: energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/ combustion.

Non-Statutory Sites

There were three Local Nature reserves located within the 1km search area as described in *Table* 2.

Table 2: Local Nature Reserves within 1km of the Site.

Site Name	Distance from Site (at closest point)	Description
Hogsmill	10m South-west	A combination of open grassy rides and woodland copses with the Hogsmill River running through. Notable species include nesting kingfishers.
Southwood Open Space	500m North	The site is mainly dominated by grassland with hedgerows and elm scrub.
Tolworth Court Farm Fields	685m South-west	An ancient farmland areas which supports hedgerows, ditches, ancient trees and hay meadows.

5.5 There were five Sites of Nature Conservation Importance (SINCs) located within the 1km search area as described in *Table 3*.

Table 1: Sites of Nature Conservation Importance within 1km of the Site.

Site Name	Distance from Site (at closest point)	Description
Riverhill House	Adjacent	A complex site consisting of woodland, pasture and various wetland habitats, where birds, insects and wildflowers abound.
Hogsmill Valley	Adjacent	This premier Local Nature Reserve encompasses the entire Hogsmill river corridor from Berrylands railway station south to London's border with Surrey, and comprises a varied mosaic of floodplain habitats.



Site Name	Distance from Site (at closest point)	Description
Castle Hill & Bonesgate Open Space	340m North-east	A small, long-established woodland, associated with the site of a former medieval hunting lodge, and the largely natural Bonesgate Stream, providing habitats important for their diverse woodland birds and wild flowers.
Tolworth Court Farm Fields and Medieval Moated Manor	373m West	A large area of farmland, with a field system of pastures, hedgerows and woodland. The site also includes the remains of a medieval moated manor house, where there are important wetland habitats.

Protected/Notable Species

5.6 A number of species records were returned from the GiGL as summarised in *Table 4*.

Table 4: Desktop Study Results - Protected Species

Species	Relevant National Legislation	Approximate Location Relative to Site Boundary		
Amphibians				
Common toad	NERC S41	523m North-west		
Bufo bufo				
Common frog	NERC S41	379m South-west		
Rana temporaria				
Reptiles				
Slow-worm	NERC S41, WCA Sch 5	471m West		
Anguis fragilis				
Mammals (Bats)				
Common pipistrelle	Hab Reg Sch2, WCA	516m South-west		
Pipistrellus pipistrellus	Sch5, NERC S41			
Serotine	Hab Reg Sch2, WCA	966m South-west		
Eptesicus serotinus	Sch5, NERC S41			
Soprano pipistrelle	Hab Reg Sch2, WCA	516m South-west		
Pipistrellus pygmaeus	Sch5, NERC S41			
A bat	Hab Reg Sch2, WCA	813m South-west		
Vespertilionidae sp.	Sch5, NERC S41			
Mammals (Excluding Bats)				
Water vole	WCA Sch5, Hab Reg	645m North		
Arvicola amphibius	Anx4, NERC S41			
Hedgehog	NERC S41	516m South-west		
Erinaceus europaeus				

- 5.7 Please note, coarse resolution records have not been included in *Table 4* as their precise location cannot be determined. Additional species records provided by SBIC and GIGL include daubenton's bat *Myosotis daubentoniid*, smooth newt *Lissotriton vulgaris*, brown long-eared bat *Plecotus auratus* and grass snake *Natrix helvetica*.
- 5.8 A number of species records from the previous ten years were provided for the area by GIGL and SBIC. These largely included a range of bird species including kingfisher *Alcedo atthis*, a species listed on WCA Sch.1.



Habitats/Flora

5.9 The locations of the habitats described below are illustrated in *Figure 1*: Phase 1 Habitat Plan and a botanical species list is provided in *Appendix B*.

Bare Ground and Short Perennial/Ephemeral Vegetation

5.10 The Site is dominated by a hardcore substrate which is characteristic of its previously developed nature. This included large areas of bare ground which has been recently disturbed, however in areas where less recent disturbance has taken place, ephemeral plants have begun to colonise. Species included frequent black medic *Medicago lupulina*, with occasional rosebay willowherb *Chamaenerion angustifolium*, nipplewort *Lapsana communis* and cleavers *Gallium aparine*. A number of species were recorded rarely within this habitat including pendulous sedge *Carex pendula*, rough meadowgrass *Poa trivialis* and pineappleweed *Matricaria discoidea*.









Tall Ruderal Vegetation

5.11 The bund that surrounded the levelled area of the Site was dominated by tall ruderal vegetation that was varied across the Site with different species becoming locally abundant in different areas of the Site including hemlock *Conium maculatum*, lesser swine-cress *Lepidium didymus* and garlic mustard *Alliaria petiolata*. Cow parsley *Anthriscus sylvestris*, common poppy *Papaver rhoea* and spear thistle *Cirsium vulgaris* were occasionally recorded while scarlet pimpernel *Anagallis arvensis*, greater plantain *Plantago major* and common evening primrose *Oenothera arvensis* were rarely encountered.





Woodland

5.12 The canopy of the woodland belt in the North, East and South of the Site including pedunculate oak *Quercus robur*, ash *Fraxinus excelsior* and sycamore *Acer pseudoplanatus* while the shrub layer comprised bramble *Rubus fruticosus*, elder *Sambucus nigra* and holly *Ilex aquilonium*. The woodland supported limited ground flora including cow parsley, cleavers, ivy *Hedera helix* and common nettle *Urtica dioica*.



Individual Trees

5.13 Several mature and semi-mature trees were present along the western boundary of the Site with species including horse chestnut *Aesculus hippocastanum*, London plane *Platanus x hispanica* and sycamore. A line of yew trees *Taxus baccata* is also present along this boundary.

Line of Trees



5.14 A line of mature Yew trees is present along the western boundary of the Site which has been regularly managed to create screening for views from the Site.

Buildings

- 5.15 A total of five buildings were present on Site. These are described in table 5.
- 5.16 In additional to buildings B1-B5, a series of shipping containers and timber garden sheds are scattered across the Site.

Reference	Description	Photo
B1	Portacabin which is very light inside on account of windows. No roof void and a well-sealed building. Negligible Bat roosting potential	RECE
B2	Portacabin constructed out of metal sheeting which is very light inside on account of window and open doorway. No roof void and a well-sealed building. Negligible bat roosting potential.	
B3	Portacabin which is very light inside on account of windows. No roof void and a well-sealed building. Negligible Bat roosting potential	



Reference	Description	Photo
B4	Single skinned, metal barn with pitched roof. Open doorway and clear plastic roof panels create a very lit building interior. Used to store garden equipment. Negligible bat roosting potential.	
B5	Large new series of portacabin offices currently in use. Very light inside on account of windows. No roof void and a well-sealed building. Negligible Bat roosting potential	

Invasive Species

5.17 Two stands of Himalayan balsam *Impatiens glandulifera* were identified onsite during the phase 1 habitat survey as shown on figure 1. Further stands of this species were also identified adjacent to the Site, along Hogsmill River.

Preliminary Protected Species Assessment

- 5.18 The potential for the site to support protected and notable surveys has been assessed based on the desktop study results, the habitats present on site and their connectivity to suitable offsite habitats. Based on an evaluation of these factors, the habitats present on site are considered to have potential to support to the following protected/notable species as discussed in *Table 6*.
 - Bats
 - Badgers
 - Great Crested Newts
 - Hedgehog
 - Nesting Birds
 - Reptiles



Table 6: Preliminary Protected/Notable Species Assessment

Species	Relevant Legislation	Site Assessment	Likelihood of Presence
Badgers	РВА	No records of badger were located within 1km of the Site. The hardcore environs which dominated the Site offered limited suitability for foraging badgers. The bund offered some foraging opportunities, however there were likely to be limited due to the heavy nature of the soils present. The woodlands offered better quality foraging and sett building habitat for this species, though no evidence of activity was observed. Therefore, this species does not currently pose a constraint to the proposals and is not considered further in this report.	Low
Bats	WCA, CHSR	The woodland habitats surrounding the main Site area provide suitable foraging and commuting habitats for bats, however the bare ground/ephemeral vegetation which form the core of the Site were considered to offer limited value for foraging and commuting bats. Mature trees within woodland habitats also provided potential roosting sites for bats. There were five buildings present onsite as described in <i>Table 5</i> . These included temporary portacabin offices, shipping containers and a single skinned open barn structure. All were considered to provide negligible bat roosting potential.	High (commuting and Foraging Moderate (roosting in trees) Low (roosting in Buildings
Great Crested Newt	CHSR, WCA	No records of GCN were located within 1km of the Site. No suitable aquatic breeding habitat was recorded on site. One site habitat provided some suitability as foraging habitats with woodlands also providing commuting opportunities. The closest waterbody to the site was located over 500m away, within the Tolworth Court Farm Fields & Medieval Moated Manor. There is consequently considered to be an extremely low likelihood of GCN being present on site and this species therefore does not currently pose a constraint to the proposals and is not considered further in this report	Low
Reptiles	WCA	Records of slow worm were located within 1km of the Site. The habitats on site were generally considered to be suitable for reptiles as they provided areas of basking habitat closely associated with some areas of limited suitability for foraging. The Hogsmill River adjacent to the Site likely provided commuting habitat, particularly for grass snake.	Moderate
Hedgehog	NERC S.41	On site habitats provide some foraging opportunities for hedgehog, with commuting habitat provide by habitats associated with Hogsmill River. Several records of hedgehog were provided by GiGL.	Moderate
Nesting Birds	WCA	Numerous records for a range of bird species were provided by GiGL.	High



Species	Relevant Legislation	Site Assessment	Likelihood of Presence
		During the extended phase 1 habitat a range of common and widespread species were recorded robin, blackbird and a range of common finch and tit species. A range of nesting opportunities was provided within woodlands and	
		scattered trees for a range of common and widespread species.	

WCA = Wildlife and Countryside Act 1981, CHSR = Conservation of Habitats and Species Regulations 2019, NERC S41 = Natural Environments and Rural Communities Act 2006 Section 41 and PBA = Protection of Badgers Act 1992.

6.0 DISCUSSION AND RECOMMENDATIONS

- 6.1 The proposals have been assessed against the current ecological baseline to review the potential impacts anticipated and to provide recommendations for mitigation, compensation and/or ecological enhancement where appropriate. This report aims to provide an early assessment based on surveys undertaken and employing a precautionary approach. Further assessment and recommendations will be provided within updated protected species reports which will be submitted at a later date following completion of the relevant survey elements. The assessment of impacts and recommendations for mitigation are based on the most up-to-date indicative proposals for the development.
- Relevant legislation and policy for each species is discussed below where relevant and is summarised in *Appendix A* and included within the accompanying reports.

Desk Study

Statutory Designated Sites

Nationally Designated Site of Nature Conservation Importance

6.3 The small-scale, commercial nature of the proposals is considered extremely unlikely to lead to a significant negative effect on any of the internationally designated Sites within the search area as all were over 5km from the Site. While small scale increases in traffic may result from the proposals, these are considered likely to be trivial in the heavily urbanised location of the Site.

Non-Statutory Designated Sites

- 6.4 The closest non-statutory designated Sites to the proposals include the Hogsmill and the Riverhill SINC sites which were both adjacent to the Site boundary. No direct impacts are anticipated on these Site as a result of the proposals.
- The proposals will be small-scale in nature, consisting of the installation of a single storey modular office and storage containers. No significant groundworks are anticipated as a result of the proposals and as such, it is considered extremely unlikely that the works would lead to any indirect impacts on the adjacent SINC sites.
- No indirect impacts to the other non-statutory designated sites located within the search area due to the small-scale nature of works.

Habitats

6.7 Habitats present within the Site are limited both in their range and diversity with hard-standing, highly disturbed habitats predominating the Site, which supported a range of common and widespread floral species. Ephemeral vegetation was limited in extent and lacked the varied structure and diversity to be expected within more ecologically valuable urban habitats such as the Priority Habitat Open Mosaic Habitat on Previously Developed Land. The topography of the Site was largely uniform and did not support small pools which would introduce additional opportunities for floral diversity. The loss of bare ground, tall ruderal vegetation and areas of ephemeral/short perennial vegetation are therefore not considered to represent a constraint to the proposals

- 6.8 Woodland habitats, the line of yew trees and the mature individual trees surrounding the Site offered inherent value owing to the structural diversity they provided. For the most part, these habitats are anticipated to be retained throughout the proposals with the exception of a small number of trees at the site entrance, which are considered to be of low value due to damage they have sustained as a result of disturbance onsite. In addition, the proposals include the creation of a range of habitats including species-rich shade-tolerant grassland habitats around the bund to replace the existing tall ruderal vegetation with a more diverse and ecologically valuable swards.
- 6.9 An urban greening factor assessment has been completed for the Site as detailed in the accompanying UGF Masterplan (Drawing No 7906-FPCR-L-02) which demonstrates that the scheme is compliant with The London Plan and the NPPF requirement to demonstrate an improvement in biodiversity on this urban Site.
- 6.10 During construction works, all retained woodland habitats and trees will be protected through the implementation of appropriate measures including root protection areas and protective fencing in accordance with BS 5837 (2012) Trees in Relation to Design, Demolition and Construction and/or as indicated by any Arboricultural Assessment.

Invasive Non-Native Species

6.11 Two stands of Himalayan balsam, an invasive species listed on Schedule 9 of the Wildlife and Countryside act, were identified onsite. It is therefore recommended that a programme of Himalayan balsam removal is initiated through physical removal (through hand-pulling or strimming) and burning of the specimens removed. The extent of stands of Himalayan balsam will be identified and demarcating through fencing throughout the removal program. The seedbank for Himalayan balsam can remain viable for several years, and so it is recommended that hand pulling treatment should be undertaken for a minimum period of 5 years with a programme of monitoring initiated to determine success.

Protected and/or Notable Species

- 6.12 Principal pieces of legislation protecting wild species are Part 1 of the Wildlife and Countryside Act 1981(as amended) and the Conservation of Habitats and Species Regulations 2019 (EU Exit) (as amended). Some species, for example badgers, also have their own protective legislation (Protection of Badger Act 1992). The impact that this legislation has on the Planning system is outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation Statutory obligations and their Impact within the Planning System.
- 6.13 In addition to protected species, there are those that are otherwise of conservation merit, such as Species of Principal Importance for the purpose of conserving biodiversity under NERC Act 2006. The implications that various identified species or those that are thought reasonably likely to occur may have for developmental design and programming considerations are outlined below.
- 6.14 Details on relevant legislation and policy for protected and notable species is provided in *Appendix A*.

Bats

- 6.15 The woodland and mature tree habitats around the Site provide suitable foraging and potential roosting habitats for bats. The Site should be subject to further survey for bats prior to the commencement of any works to assess whether it has any potential to provide a significant foraging resource for local bat populations. This should comprise activity surveys in accordance with best practice guidance recommended by CIEEM.
- 6.16 All trees that will be removed by the proposals should be subject to further assessment for their potential to support roosting bats. In the first instance this should comprised ground-based roosting suitability assessment surveys to determine whether further emergence surveys would be required.
- 6.17 The buildings present onsite all supported negligible roosting potential and their loss is not considered to pose a constraint to the proposals.
- 6.18 To minimise impacts of lighting on bats, proposals will adopt a sensitive external lighting scheme, which will be designed to minimise light spill on retained, and proposed habitats of value to commuting and foraging bats, particularly the woodland belt surrounding the Site. The lighting scheme will be designed with regards to current guidance provided by the Bat Conservation Trust and the Institution of Lighting Professionals⁶ and adopt the following principles:
 - The avoidance of direct lighting of existing trees, hedgerows, scrub, woodland, or proposed areas of habitat creation/landscape planting;
 - Buffer zones and GI are not to be illuminated;
 - During the construction period, no lighting should be used in proximity to boundary features, if needed lights will be directionally focused/shrouded; and
 - Directional lighting and avoidance of upward lighting and/or light spillage.
- 6.19 Dark corridors will be designed, based on the above principles, to ensure retention, and incorporation, of habitats of value to bats for foraging, potential roosting and commuting into the wider landscape. The implementation of buffers around woodland areas and linear linkage areas across the site, within which existing and created areas of vegetation will not be illuminated by artificial lighting, will maintain darkened corridors of movement for bats, particularly light sensitive species such as barbastelle.
- 6.20 Roads and buildings in close proximity to any GI and existing boundary habitats will also have lighting sensitively positioned, so as to avoid illumination of canopies, which can further disrupt the flight patterns of bats.

Birds

As a result of the special protection afforded to breeding birds, in the event that any removal of woody vegetation (including trees and scrub) is necessary, it is recommended that this takes place outside of the bird breeding season (March to August inclusive) to minimise the risk of disturbance to breeding birds. If this is not possible, such vegetation should be checked prior to removal by a suitably experienced ecologist. If active nests are found, vegetation should be left untouched and suitably buffered from works until all birds have fledged. Specific ecological advice should be sought prior to undertaking the clearance.

⁶ Bats and artificial lighting in the UK: Bats and the Built Environment series. Bat Conservation Trust and Institution of lighting professionals Guidance note 08/18 (2018).

Reptiles

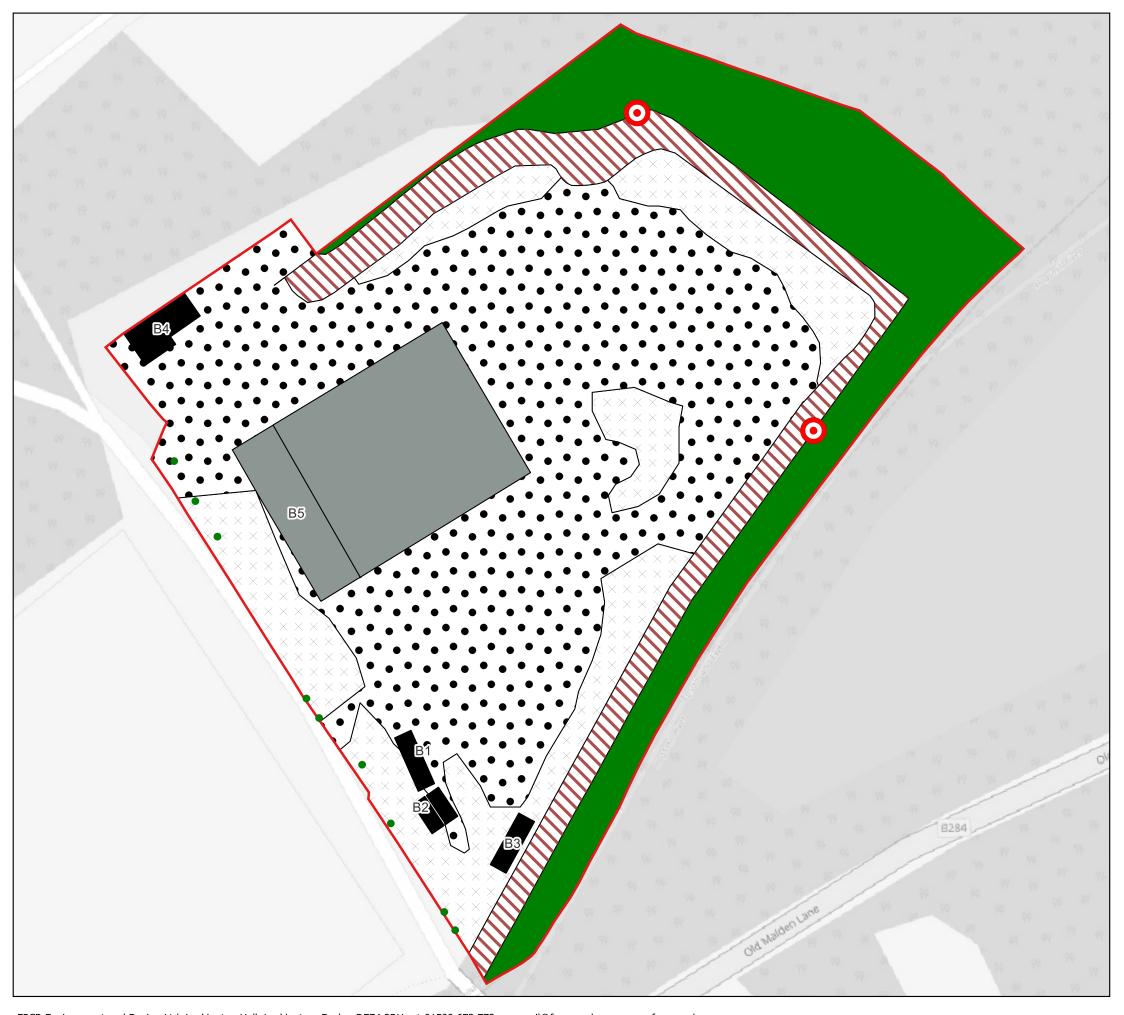
- 6.22 The Site contains several suitable area for basking, particularly in associated within building bases, storage pallets and shed bases that are present across the Site. These areas are largely associated with foraging areas of limited suitability within ephemeral vegetation, however they are also close to tall ruderal vegetation along the bunding surrounding the main Site area that provides good foraging habitats.
- 6.23 The Site should be subject to presence/absence and population assessment surveys for rptilesprior to the commencement of any works to assess whether it support a reptile population. This survey should be completed in accordance with best practice guidance recommended by CIEEM.

Hedgehogs

6.24 Given the urban landscape that the Site is situated within and owing to the presence of suitable habitat onsite within woodlands, there is the potential for the Site to support this species. No significant groundworks are anticipated during the works and so it is considered extremely unlikely that works will lead to any risk of hedgehogs becoming trapped or harmed.

Enhancement Opportunities

- 6.25 The proposals green infrastructure provides a range of opportunities for additional habitat creation and faunal species measures that will provide ecological benefits to the Site.
- 6.26 In addition to the faunal enhancement detailed above, A 'hedgehog highway' should be incorporated within the design of landscaping which will include gaps under fences across the Site to allow this species free movement across the whole of the Site. Consideration should also be given to providing hedgehog houses within retained woodlands.
- 6.27 Consideration should be given to the provision of a range of bird, bat and invertebrate boxes on retained trees around the Site to provide opportunities for these species/groups.



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Key

Site Boundary

Bare ground

Broadleaved woodland - semi-natural

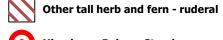


Buildings



Recently installed buildings/polytunnel frames





Himalayan Balsam Stand

Broadleaved tree



Newcore Capital

Riverhill Yard, Riverhill, Old Malden Lane, Worcester Park

drawing title
PHASE 1 HABITAT PLAN



DS / OGJ

issue date 16/8/2023

Figure 1



APPENDIX A: RELEVANT LEGISLATION, POLICY AND GUIDANCE

Legislative Framework

- 1.1 The applicable legislative framework is summarised as follows:
 - Natural Environment and Rural Communities (NERC) Act 2006.
 - Wildlife and Countryside Act (WCA) 1981 (as amended).
 - The EC Birds Directive (Directive 79/409/EEC) as translated into UK law by The Conservation of Habitats and Species Regulations (CHSR) 2017 (as amended).
 - The EC Habitats Directive (Directive 92/43/EEC) as translated into UK law by the CHSR 2017 (as amended).
 - Environment Act 2021.
 - The Protection of Badgers Act (PBA) 1992.
- 1.2 Section 41 (S41) of the NERC Act 2006 places a duty on the Secretary of State to publish, review and revise lists of living organisms and types of habitat in England that are of principal importance for the purpose of conserving English biodiversity, and to consult Natural England before doing so.
- 1.3 The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under Section 40 of the NERC Act 2006, to have regard to the conservation of biodiversity in England, when carrying out their normal functions.
- 1.4 The Environment Act 2021 came into force on 9th November 2021. Of particular relevance is the requirement for all developments subject to the Town and Country Planning Act to provide an at least 10% biodiversity net gain (BNG), with habitat used for net gain to be secured for a minimum of 30 years. Delivery of BNG may be on site, off-site or undertaken using statutory biodiversity credits. The requirement for BNG does not over-ride the need to apply the mitigation hierarchy (avoidance, mitigation and compensation) when considering biodiversity assets and their loss and does not change existing environmental and wildlife legal protection.
- 1.5 Whilst the Act mandates a 10% BNG delivery and for this to be a condition of planning permissions (Part 6 section 98 and Schedule 14 part 1), section 147 (3) states that this will only come into force once the secondary legislation is in place to support this requirement. Therefore, there is a transition period (the length of which is not defined but anticipated as being around 2 years) until the mandated 10% is required under law.

Habitats

- 1.6 The degree to which habitats receive consideration within the planning system relies on many mechanisms, including:
 - Inclusion within a specific policy, for example, veteran trees, ancient woodland and linear habitats within the National Planning Policy Framework (NPPF) 2021, or local planning policies.
 - A non-statutory site designation (e.g. Local Wildlife Site).
 - Habitats of Principal Importance for the conservation of biodiversity and species as listed within Section 41 of the NERC Act 2006.
 - Habitats identified as being a Priority Habitat within the Local Biodiversity Action Plan (LBAP).



Protected/Notable Species

- 1.7 Principal pieces of legislation protecting wild species are Part 1 of the WCA 1981 (as amended) and the CHSR 2017 (as amended). Some species, for example badgers, also have their own protective legislation (PBA 1992). The impact that this legislation has on the planning system is outlined in ODPM 06/2005 Government Circular: Biodiversity and Geological Conservation Statutory Obligations and their Impact within the Planning System.
- 1.8 This guidance states that the presence of protected species is a material consideration in any planning decision, and it is therefore essential that the presence or otherwise of protected species, and the extent to which they are affected by proposals, is established prior to planning permission being granted. Furthermore, where protected species are present and proposals may result in harm to the species or its habitat, steps should be taken to ensure the long-term protection of the species, such as through attaching appropriate planning conditions, for example.
- 1.9 In addition to protected species, there are those that are of conservation merit, such as those listed as species of principal importance for the purpose of conserving biodiversity under the NERC Act 2006. These are recognised in the NPPF which advises that when determining planning applications, local planning authorities (LPAs) should aim to conserve and enhance biodiversity by applying a set of principles including:
 - If significant harm resulting from a development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;
 - Development proposals where the primary objective is to conserve or enhance biodiversity should be encouraged.

Bats

- 1.10 Bats and their habitats are protected under the WCA 1981 (as amended) and by the CHSR 2017 (as amended). In summary, this makes it an offence to:
 - Damage destroy or obstruct any place used by bats for breeding and shelter.
 - Disturb a bat, or kill, injure or take a bat.
- 1.11 Seven bat species are listed as Species of Principal Importance under the NERC Act 2006: Barbastelle Barbastella barbastellus, Bechstein's Myotis bechsteinii, noctule Nyctalus noctula, soprano pipistrelle Pipistrellus pygmaeus, brown long-eared Plecotus auritus, greater horseshoe Rhinolophus ferrumequinum and lesser horseshoe R. hipposideros.

<u>Birds</u>

- 1.12 The WCA 1981 (as amended) is the principal legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected bylaw and it is an offence, with certain exceptions, to recklessly or intentionally:
 - Kill, injure or take any wild bird.
 - Take, damage or destroy the nest of any wild bird while in use or being built.
 - Take or destroy the egg of any wild bird.
- 1.13 Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are specially protected at all times.

Great Crested Newts



- 1.14 Great crested newts *Triturus cristatus* and the places they use for shelter or protection are protected under the CHSR 2017 (as amended) and Schedule 2 of the WCA 1981 (as amended). In summary, it is an offence to:
 - Deliberately or recklessly to take, injure or kill a great crested newt.
 - Intentionally or recklessly damage, destroy or obstruct access to any structure or place used for breeding, shelter or protection by the species.
 - Intentionally or recklessly disturb while it is occupying a structure or place which it uses for such purpose; or intentionally take or destroy the eggs of a great crested newt.

Hazel Dormice

- 1.15 Hazel dormice Muscardinus avellanarius and their places of shelter are protected under CHSR 2017 (as amended) and Schedule 5 of the WCA 1981 (as amended). This is also a species of principal importance for the conservation of biodiversity under S41 of the NERC Act 2006. In summary, it is an offence to:
 - Intentionally or deliberately kill, injure or capture dormice.
 - Intentionally, deliberately or recklessly disturb dormice in such as a way as to significantly affect their ability to survey, breed, rear/nurture their young or significantly affect their local distribution and abundance.
 - Intentionally or recklessly damage, destroy or obstruct access to places used by dormice for shelter or protection (whether occupied or not) or disturb a dormouse whilst occupying such places.
 - Damage or destroy a dormouse breeding site or resting place.
 - Possess or transport a dormouse (or any part thereof) unless under licence and sell or exchange dormice.

Reptiles

1.16 All common reptile species (grass snake *Natrix helvetica*, slow worm *Anguis fragilis*, common lizard *Zootoca vivipara* and adder *Vipera berus*) are partially protected under the Wildlife and Countryside Act 1981. In summary, this legislation protects the species from intentional killing, injury or sale, offering for sale, or possessing, transporting or publishing advertisements for the purposes of sale.

Relevant Planning Policy

National Planning Policy Framework (NPPF)

- 1.17 The latest version of the NPPF was published in February 2021. The premise of 'presumption in favour of sustainable development' embedded within the previous versions of the NPPF has been carried forward to the current version. The NPPF considers that to achieve this, the planning system has three overarching objectives: economic, social and environmental. It considers these to be inter-dependent with a need for them to be mutually supportive of one another. For specific development proposals the NPPF considers applying a presumption in favour of sustainable development means:
 - "...c) approving development proposals that accord with an up-to-date development plan without delay..." [para.11].



"They [decision makers] should use the full range of planning tools available, including brownfield registers and permission in principle, and work proactively with applicants to secure developments that will improve the economic, social and environmental conditions of the area". [para. 38.].

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

- ...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 integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate biodiversity." [para. 180].
- 1.18 In terms of 'environmental objects' (one of the three core planning objectives), the NPPF states that:
 - "Planning policies and decisions should contribute to and enhance the natural and local environment by:
 - a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
 - b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;
 - c) maintaining the character of the undeveloped coast, while improving public access to it where appropriate;
 - d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
 - e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
 - f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate". [para 174].

Relevant Local Planning Policy

1.19 The Kingston upon Thames Core Strategy (2012) include the following policies of relevance:

Policy CS 3: The Natural and Green Environment

The Council will protect and improve Kingston's valued natural and green environment by:

- a) seeking to ensure that residents have access to an interconnected network of safe, well managed and maintained areas of open space through the implementation of routes in the 'South West London Greenways Network Expansion - Feasibility Report', Kingston's Green Spaces Strategy, Park Management Plans and Annual Implementation Plans
- b) protecting Kingston's open space network from inappropriate development through its open spaces designations; Green Belt, Metropolitan Open Land (MOL), Thames Policy Area, Sites of Importance for Nature Conservation (SINCs), Local Nature Reserves, Local Open Space, School Open Spaces, LDF Core Strategy Adopted April 2012 Thematic Policies 6 117 Green Corridors, Green Chains and Allotments, as shown on the Proposals Map



- facilitating regeneration, infrastructure upgrades and environmental improvement to the Hogsmill Environs
- d) incorporating appropriate elements of public open space into new developments and/or making a financial contribution to improving existing open spaces, with additional facilities and better management to Green Flag standards
- e) promoting the management of biodiversity in light of the threats arising from climate change and future development growth, by working in partnership with a range of organisations on projects to protect and enhance Kingston's Open Space Network. This will not only provide increased wildlife habitats, but will also link wider parts of Kingston, allowing easier movement and reducing isolation of habitats.
- f) protecting and enhancing Kingston's playing fields and ensuring that opportunities for the extension of existing provision or new recreation, children's play and sports facilities are encouraged; especially those that meet identified needs

Policy DM 5 Green Belt, Metropolitan Open Land (MOL) and Open Space Needs

The Council will:

- a) only allow development on sites adjacent to the Green Belt, MOL or other open space designation that does not have a detrimental impact on its visual amenities and respects the size, form and use of that open space, in accordance with national guidance (currently PPG2)
- b) ensure new development contributes to the provision and improvement of the quality, quantity, variety and accessibility of public open space, play and sports facilities, to meet the needs it generates in accordance with the local provision and accessibility standards set out in Annex 3 and the Planning Obligations SPD, or Community Infrastructure Levy charge
- ensure that development proposals do not result in the whole or partial loss of public open space, outdoor recreation facilities or allotments unless a replacement site or facility provides a net benefit to the local community and visitors in terms of the quality, availability and accessibility of open space or recreational opportunities
- d) ensure that development proposals do not harm open spaces which:
 - i. contribute to the character, appearance and heritage value of the Borough's open space network
 - ii. create focal points and valuable amenity space within the built up area
 - iii. form part of an area of value for wildlife, sport or recreation
- e) ensure all new provision of sports and play meet qualitative standards and optimise accessibility to all users, including the local community and visitors

Policy DM 6 – Biodiversity

The Council will:

a) ensure new developments protect and promote biodiversity as part of sustainable design, through the inclusion of sustainable drainage, tree planting, soft landscaping, habitat



- enhancement and/or improvement, green roofs and new or improved semi-natural habitats, where appropriate
- b) require an ecological assessment on major development proposals, or where a site contains or is next to significant areas of habitat or wildlife potential. This should be completed before design work or submission of the planning application.
- c) ensure that new development does not result in a net loss of biodiversity and, where appropriate, should include new or improved habitats and provision for natural and seminatural public green space, as set out in the Planning Obligations SPD or Community Infrastructure Levy charge.



APPENDIX B - BOTANICAL SPECIES LIST

Species		Abundance (DAFOR)	
Species		Abundance (DAFOR)	
Common Name	Scientific Name	Bare Ground and Short Perennial/Ephemeral	Tall Ruderal
Ribwort plantain	Plantago lanceolata	R	R
Bramble	Rubus fruticosus	0	F/LA
Ash	Fraxinus excelsior	R	
Rosebay willowherb	Chamaenerion angustifolium	0	R
Pendulous sedge	Carex pendula	R	
Hedge bindweed	Calystegia sepium	0	O/LA
Broadleaved willowherb	Epilobium montanum	R	R
Creeping thistle	Cirsium arvense	R	R
Garlic mustard	Alliaria petiolata	0	F/LA
Hemlock	Conium maculatum	R	F/LD
Black medic	Medicago lupulina	F/LA	F/LA
Prickly sow-thistle	Sonchus asper	R	
Dandelion	Taraxacum agg.	R	R
Common nettle	Urtica dioica	0	O/LF
Sterile brome	Bromus sterilis	R	O/LF
Rough meadow-grass	Poa trivialis	R	R
Annual meadow-grass	Poa annua	R	
Charlock	Sinapis arvensis	R	R
Nipplewort	Lapsana communis	0	0
Canadian fleabane	Conyza canadensis	R	R
Yorkshire fog	Holcus lanatus	R	
Cleavers	Gallium aparine	0	0
Mugwort	Artemisia vulgaris	0	LF
Spear thistle	Cirsium vulgaris	R	0
Perforate St. John's wort	Hypericum perforatum	0	R
Common toadflax	Linaria vulgaris	R	R
Creeping bent	Agrostis stolonifera	0	R
Green alkanet	Pentaglottis sempervirens	R	
Herb robert	Geranium robertianum	R	
Pineappleweed	Matricaria discoidea	R	
Cow parlsey	Anthriscus sylvestris	R	0
Redshank	Polygonum persicaria	R	R
Knotweed	Polygonum aviculara	0	0
Toad rush	Juncus bufonius	0	
Greater plantain	Plantago major	0	R
A goosefoot	Chenopodium sp.	0	O/LF
Opium poppy	Papaver somniferum	R	O/LF
Lesser swine-cress	Lepidium didymus	0	F/LA



A cudweed	Filago sp.	R	
Smooth meadow-grass	Poa pratensis	R	
Scarlet pimpernel	Anagallis arvensis	R	R
Yarrow	Achillea millefolium	R	R
Shepherd's purse	Capsella bursa-pastoris	0	0
Bristly oxtongue	Helminthotheca echioides	R	R
Common poppy	Papaver rhoea		0
Cock's foot	Dactylis glomerata	R	R
Hedge mustard	Sisymbrium officianale	R	F
Ploughman's spikenard	Inula conyza	R	0
Scented mayweed	Matricaria chamomilla	0	0
Tall fescue	Festuca arundinacea		0
Smooth sow-thistle	Sonchus oleraceus	R	0
Creeping cinquefoil	Potentilla reptans		0
Common chickweed	Stellaria media		R
Petty spurge	Euphorbia peplus	R	R
Himalayan balsam	Impatiens glandulifera		R/LF
Dove's-foot crane's-bill	Geranium molle	R	
Common evening-primrose	Oenothera biennis	R	R
Wood avens	Geum urbanum		R
Early forget-me-not	Myosotis ramosissima	R	R
Buddleja	Buddleja sp.	R	
Hawkweed oxtongue	Picris hieracioides	R	

Woodland Canopy Species	
Troducing carropy openies	
Scientific Name	Common Name
Tilia x europaea	Common Lime
Taxus baccata	Yew
Acer pseudoplanatus	Sycamore
Robinia pseudacacia	Black locust
Fraxinus excelsior	Ash
Planatus x hispanica	London plane
Salix cinerea	Grey willow
Salix caprea	Goat willow
Quercus robur	Pedunculate Oak
Betula pubescens	Downy birch
Acer platanoides	Norway maple
Aesculus hippocastanum	Horse chestnut
Abies spp.	Fir sp.
Salix fragilis	Crack willow
Scrub Layer	
Rubus fruticosus	Bramble
Sambucus nigra	Elder
Rosa canina	Dog rose
llex aquifolium	Holly



Prunus laurocerasus	Cherry Laurel
Ligustrum vulgare	Privet
Prunus avium	Wild cherry
Crataegus monogyna	Hawthorn
Buddleja sp.	Buddleja